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Before Australian Blind Snakes (Squamata: Serpentes: Scolecophidia) become extinct through bureaucratic indifference ... The description of four new genera and seventy six new species.

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488 Park Road, Park Orchards, Victoria, 3134, Australia. *Phone*: +61 3 9812 3322 *Fax*: 9812 3355 *E-mail*: snakeman (at) snakeman.com.au Received 1 February 2025, Accepted 26 April 2025, Published 7 May 2025.

ABSTRACT

Two major papers published by Myself, Raymond Hoser in 2012 and 2013, dealt extensively with Australasian Blind Snakes. They provided a genus-level classification for all the Australasian Blind Snakes (Scolecophidia) with two genera recognized, including 12 other subgenera all named for the first time and all with deep divergences.

The 2013 paper also formally named five new Australian species and recognizing further unnamed species diversity.

In the intervening 12 years, a further six species have been formally named by others.

The genus-level taxonomy from 2013 has appeared to remain generally sound, but changes flagged in 2013 and other changes are made herein.

In 2013 I wrote:

"I also mention that if the divergence limits for Blind Snake genera are brought into line with higher snakes as classified at present, by later authors, all subgenera defined by Hoser (2012b) and this paper, would need to be elevated to full genera as they tend to be well in excess of 10 MYA divergence between groups based on the calibrated molecular evidence published to date."

All subgenera are formally elevated to full genera in this paper on the basis of recent molecular studies such as Marin *et al.* (2012, 2013), Pyron *et al.* (2013) and Tiatragul *et al.* (2023a-b, 2024).

Tiatragul *et al.* (2023a-b, 2024) confirmed calibrated divergences in excess of 20 MYA for all subgenera erected by Hoser in 2013. Four new genera are also erected in this paper, all being more than or about 20 MYA divergent from nearest relatives, these being created by splitting of other genera, namely *Buckleytyphlops* Hoser, 2013, *Jackyhosertyphlops* Hoser, 2013, *Ramphotyphlops* Fitzinger, 1843 and *Slopptyphlops* Hoser, 2013.

In hindsight, the relevant genera should have been split four extra ways in the original 2013 paper.

That paper was too conservative in the splitting of oversized paraphyletic genera.

In light of the more recent resurrection of the overlooked genus *Anilios* Gray, 1845, with a type species of *Anilios australis* Gray, 1845, by subsequent designation of Stejneger (1904) at page 683, *sensu* Eipper and Eipper (2024) and phylogenies cited herein, the taxonomy and nomenclature of Hoser in 2013 needs to be amended accordingly.

Subgenus Adelynhosertyphlops Hoser, 2013, with a type species of Ramphotyphlops pilbarensis Aplin and Donnellan, 1993 is a subjective synonym of Anilios, representing the same species group and so, whilst still an available ICZN name, is in effect wholly synonymized with Anilios at all levels and unlikely to ever be used again as a correct genus name.

Genus diagnoses for all Australian genera are provided in this paper and some are obviously amended from those published in 2013. As the title of this paper suggests, its main purpose is to describe seventy-six (76) obviously unnamed forms of Australian blind snakes, which when combined with those previously named is more than doubling the formally recognized number of Australian blind snake species. This is done noting that the general lack of interest in naming obvious species in this group by other herpetologists, combined with bureaucratic indifference from Australian governments at all levels, may otherwise lead to species expiring before they are even formally discovered!

Two typographical errors made in my 2012 paper and three errors in Zoobank registrations arising from the 2012 paper are formally clarified and are corrected herein.

This paper also has a list of duplicate Blind Snake genus names coined in acts of Taxonomic Vandalism by Wolfgang Wüster and his gang of thieves, rapists and sex perverts, along with the correct priority ICZN names.

Keywords: Snakes; Blind Snakes; taxonomy; Australia; nomenclature; reclassification; *Anilios*; synonyms; Australia; new genera; *aa*; *zzzz*; *aaa*; *but*; new species; *aa*; *aaaaagh*; *fuknowhere*; *adept*; *ok*; *ye*; *mazing*; *nottobeignored*; *crypticspecies*; *goodcatch*; *greatfind*; *bulliardi*; *mirlirrtjarra*; *judyfergusonae*; *crottyi*; *oxyi*; *romani*; *okara*; *overlookedit*; *outofsight*; *mileii*; *paulwoolfi*; *euanedwardsi*; *gedyei*; *kamilaroi*; *corruptpoliceorum*; *datstink*; *fukdat*; *stinkey*; *anothersp*; *ick*; *wellswellingtonorum*; *snakebustersorum*; *britishbombedhere*; *fasciststateorum*; *dishonestpoliceorum*; *radiationzone*; *wow*; *yes*; *donteatit*; *flyingfoammassacre*; *timhudsoni*; *murderingpoliceorum*; *dhuae*; *fidesi*; *exy*; *johnpati*; *iancooki*; *cashcow*; *faarkinelle*; *ivebeenshaton*; *shittythingie*; *datsquirmy*; *antmuncha*; *murraybrucei*; *hawkeswoodi*; *jarrodbinghami*; *yetanotherone*; *shitbomb*; *leavemealone*; *tylertritti*; *leverorum*; *mariolisi*; *gambellae*; *ohno*; *toriswedoshae*; *timbukthree*; *gregswedoshi*; *haydnmcphiei*; *lachlandundasi*; *donothandlewithtongs*; *bennetti*; *sincerus*; *greatstinkofaustralia*; *altmani*; *graysoni*.

INTRODUCTION

The papers of Hoser in 2012 and 2013 being Hoser (2012d) and Hoser (2013a) provided a sound framework for the taxonomy and nomenclature of the Australasian Blind Snakes (AKA Blind Snakes) at the genus and subgeneric level.

The latter paper of Hoser (2013a) also named 5 species of Australian Blind Snake for the first time. Following on from the papers of Hoser (2012d, 2013a) and the naming of 6 more putative Australian Blind Snake taxa in papers of Shea (2015), Venchi *et al.* (2015), Ellis (2016), Ellis and Doughty (2017) for two species and Ellis (2019), this paper seeks to provide an up-to-date classification of the Australian Blind Snakes at the genus and subgeneric level. All newly named species are incorporated into the taxonomic framework of this paper, which is largely in line with that of Hoser (2013a).

However, as flagged in the abstract of this paper, the genus-level taxonomy is amended and corrected herein, to include four new named genera, each being formed by the splitting of other.

As mentioned in the abstract, all 12 subgenera erected by Hoser (2013a) are formally elevated to genera.

Four new genera are also erected, all being more than or about 20 MYA divergent from nearest relatives, these being created by splitting of other genera, namely *Buckleytyphlops* Hoser, 2013, *Jackyhosertyphlops* Hoser, 2013, *Ramphotyphlops*

Fitzinger, 1843 and *Slopptyphlops* Hoser, 2013. A total of 76 species are formally named herein for the first time, which when combined with Hoser (2013a) have effectively raised the number of recognised species of Blind Snake in Australia from under 50 species to well over 100.

There probably remain further forms to formally name, these most likely to be found in the centre, west and north-west of Australia and within those species groups most heavily split herein (e.g. species within *Jackyhosertyphlops* Hoser, 2013).

As a result, the Australian Blind Snakes are reclassified here to include subgenera as alluded to in the paper of Hoser (2012d) and formally named in Hoser (2013a), but instead as full genera for each and as a group, for the first time ever.

Pending papers by others in the post 2013 to 2025 period were also since been published, but with no taxonomic changes within at the genus level, save for the descriptions of another 6 species.

I note that the more recent publications of Marin *et al.* (2012, 2013) and Pyron *et al.* (2013) provided further molecular evidence to support the taxonomic judgements and nomenclature of Hoser (2012d) as have the even more recent papers of Tiatragul *et al.* (2023a-b, 2024).

Marin *et al.* 2012, 2013 gave evidence that supported the Hoser (2013a) position of splitting the Blind Snake

groups based on divergence.

Pyron *et al.* (2013) provided new molecular evidence in support of the erection of several genera to accommodate Asian Blind Snake species groups as done in Hoser (2012b), most notably *Maxhoserus* Hoser, 2012.

I note that *Indotyphlops* Hedges *et al.* (2014) and *Virgotyphlops* Wallach, 2020 and 2021 are invalid junior synonyms of *Maxhoserus* Hoser, 2012 and should therefore not be used as correct ICZN names for the relevant taxa (ICZN 2021).

Hoser (2013a) erected twelve new subgenera, as well as two already named, being *Libertadictus* Wells and Wellington, 1984, and *Sivadictus* Wells and Wellington, 1985, both redefined in Hoser (2013a). These accommodated almost all Australian species groups of Blind Snakes, followed by the description of new species in a manner consistent with Hoser (2012d, 2013a).

Of brief mention was the improper and illegal (under the *International Code of Zoological Nomenclature*) use of the name *Austrotyphlops* Wallach, 2006 in numerous publications (especially online), when it is in fact a junior objective synonym of *Libertadictus* Wells and Wellington, 1984, complete with the same type species.

Refer to Hoser (2012d, 2013a) for the full detail. In light of the more recent resurrection of the overlooked genus *Anilios* Gray, 1845, with a type species of *Anilios australis* Gray, 1845, by subsequent designation of Stejneger (1904) at page 683, *sensu* Eipper and Eipper (2024) and phylogenies of Marin *et al.* (2012, 2013) as well as those of Tiatragul *et al.* (2023a-b, 2024) the taxonomy and nomenclature of Hoser (2013a) needs to be amended accordingly. *Libertadictus* Wells and Wellington, 1984, type species: *Onychocephalus bituberculatus* Peters, 1863 and *Sivadictus* Wells and Wellington, 1984, with a type species of *Anilios nigrescens* Gray, 1845 are both good valid genera.

They are not disturbed by anything published since those original descriptions in 1984.

In passing I note for the public record that the third edition of the *International Code of Zoological Nomenclature* was published no earlier than 1987, meaning that the relevant Wells and Wellington (1984 and 1985) papers were published at a time that the second edition of the Code (Stoll *et al.* 1964) was in force.

The ISBN number for the third edition of the *International Code of Zoological Nomenclature* was issued on 12 August 1987, meaning that the third edition of the Code (Cited herein as Ride *et al.* 1985 or 1987) with the relevant ISBN number printed inside its front cover could not have been published before that date (Wilson, 2023a-b).

Peta Wilson, ISBN Agency Advisor, UK and Ireland ISBN Agency, sent an email to Ross Wellington

(Australia) dated Sat, Jun 17, 2023 at 12:24 AM She said:

"Looking at the ISBN in question below it appears to be only 9 digits. After some detective work the original 10-digit ISBN was 0-85301-003-X. The prefix 978-0-85301 (containing 1000 ISBNs) was issued to International Trust for Zoological Nomenclature 12/08/1987."

On 20 June at 2:04 AM.

she wrote:

"If the ISBN prefix wasn't assigned until 12/08/1987, no, the title couldn't have been published before." This fact is important with respect to comments made against the papers of Wells and Wellington (1984, 1985) and their allegations as to the legal status of names proposed in those papers of Wells and Wellington (1984, 1985) by Shea and Sadlier (1999), including the two relevant Blind Snake genus names used herein.

Shea and Sadlier (1999) and their arguments against Wells and Wellington's works are fatally flawed and wrong, because they had incorrectly asserted that the third edition of the *International Code of Zoological Nomenclature* (Ride *et al.* 1985) was in force at the time those papers were first published.

It was the second edition of the *International Code of Zoological Nomenclature* Stoll *et al.* (1964) that was in force.

Subgenus Adelynhosertyphlops Hoser, 2013, with a type species of Ramphotyphlops pilbarensis Aplin and Donnellan, 1993 is a subjective synonym of Anilios, representing the same species group and so, whilst still an available name, is in effect wholly synonymized with *Anilios* at all levels. This means that Adelynhosertyphlops Hoser, 2013 will probably never be used as a correct genus name again and based on the phylogenies of Tiatragul et al. (2023a-b, 2024) I am happy to effectively "sink" my name. Science is based on fact, not egos and emotion, so while I may have an attachment to the name I proposed in the form of Adelynhosertyphlops Hoser, 2013, I cannot unpublish John Edward Gray's much earlier paper and so his name must have ICZN priority.

The name *Pseudotyphlops* Fitzinger, 1843 as a genus name for the taxon *polygrammicus* is not available as it was pre-occupied for another taxon in the family Uropeltidae, namely *Pseudotyphlops philippinus* Müller, 1832, the genus name first proposed by Schlegel in 1839.

The illegally coined name *Sundatyphlops* Hedges *et al.* 2014 is a junior objective synonym for *Ackytyphlops* Hoser, 2013, with the exact same type species and therefore should never be used as correct.

Sundatyphlops Hedges *et al.* 2014 is in effect even more dead than *Adelynhosertyphlops* Hoser, 2013! Problem here is that Hedges *et al.* (2014) are thieves and not scientists.

Peter Uetz, controlled as a sidekick of notorious criminal Wolfgang Wüster has been aware of this fact since 2013 and 2014 and yet as of 2025 persists in falsely claiming on his website that he calls "The Reptile Database" that *Sundatyphlops* Hedges *et al.* 2014 is the first and only available ICZN name for the *Typhlops polygrammicus* Schlegel, 1839, species group.

Put simply, Peter Uetz and his cohort are not scientists, but rather they are compulsive liars. They censor the works of others they take a hatred of, including going so far as to DELETE from their alleged scientific records over 1,000 works of Russian scientists after the Russian invasion of Ukraine in early 2022.

Uetz described this as "collateral damage" in the hope that Russian herpetologists, most of whom were not even still alive, would somehow be upset with this ban from his "The Reptile Database" and be able to exert pressure on the Russian leader Vladimir Putin to withdraw all his troops from Ukraine.

Hoser (2013a) also wrote:

"I also mention that if the divergence limits for Blind Snake genera are brought into line with higher snakes as classified at present, by later authors, all subgenera defined by Hoser (2012b) and this paper, would need to be elevated to full genera as they tend to be well in excess of 10 MYA divergence between groups based on the calibrated molecular evidence published to date."

That remains true as of 2025.

So that the current status of Australian Blind Snake taxonomy is properly understood by readers, this paper more-or-less maintains most of the genus-level of taxonomy of Hoser (2013a) save for the changes already indicated, the main one being elevation of the subgeneric groups to full genera.

These are amended accordingly in the classification that follows the formal descriptions in this paper and including all species, including those named before this paper's publication and named within this paper. However, the four (4) newly named genera are formally described before the relevant formal species descriptions of species in those genera, while the other genus-level descriptions (amended from Hoser 2013a) are published herein following the other new species descriptions.

The four newly named genera, have in their species lists all species, including those formally named in this paper for the first time.

So too do all other defined genera listed and detailed in this paper, completing an inventory of all known Blindsnake species on the mainland of Australia. The five species formally named by Hoser (2013a) and included in that paper were written as follows: *A.* (*Suewitttyphlops*) *sloppi* Hoser, 2013, which is closely related to *A.* (*Suewitttyphlops*) *ligatus* (Peters, 1879).

A. (*Robinwitttyphlops*) jackyhoserae Hoser, 2013, which appears to be closely related to A. (*Robinwitttyphlops*) unguirostris (Peters, 1867), with a divergence of about 8 MYA according to Marin *et al.* (2012, 2013).

A. (Slopptyphlops) richardwellsi Hoser, 2013, which appears to be closely related to A. (Slopptyphlops) ammodytes (Montague, 1914).

A. (*Jackyhosertyphlops*) *adelynhoserae* which was formerly regarded as a northwest Australian population of putative *A.* (*Jackyhosertyphlops*) *grypus* (Waite, 1918).

A. (*Jackyhosertyphlops*) *cliffrosswellingtoni* Hoser, 2013, which was formerly regarded as a south-west Queensland population of *A.* (*Jackyhosertyphlops*) *grypus* (Waite, 1918).

I note here that putative *A*. (*Jackyhosertyphlops*) *grypus* (Waite, 1918) and associated species from western and central Australia are not closely related to the type form of *A*. (*Jackyhosertyphlops*) *grypus* (Waite, 1918) and associated species from Queensland and immediately adjacent parts of other states.

The West Australian species remain within *Jackyhosertyphlops*, while the Queensland forms are placed in a genus formally named for the first time in this paper, being *Zzzzz gen. nov.*, with a type species of *Libertadictus* (*Jackyhosertyphlops*) *cliffrosswellingtoni* Hoser, 2013.

The six species formally named in the intervening 12 years by others are (within the Hoser 2013a classification) as follows:

A. (Pattersontyphlops) fossor (Shea, 2015) of central Australia which appears to be associated with A. (Pattersontyphlops) wiedii (Peters, 1867) from southeast Queensland and northwest New South Wales. A. (Pattersontyphlops) insperatus (Venchi, Wilson and Borsbook, 2015) from south-east Queensland which is associated with A. (Pattersontyphlops) affinis (Boulenger, 1889) from east Queensland. Zzzzz gen. nov. is formally named in this paper as a full genus to accommodate these and other related species divergent from the type group of Pattersontyphlops Hoser, 2013, with type species Typhlops wiedii Peters, 1867. A. (Jackyhosertyphlops) obtusifrons (Ellis and Doughty, 2017) which is associated with A. (Jackyhosertyphlops) leptosomus (Robb, 1972) both from west, Western Australia. A. (Jackyhosertyphlops) systemos (Ellis and

Doughty, 2017), which is associated with *A*. (*Jackyhosertyphlops*) *leptosomus* (Robb, 1972) both from west, Western Australia.

A. (*Suewitttyphlops*) *vagurima* (Ellis, 2019) which is associated with *A.* (*Suewitttyphlops*) *kimberleyensis* (Storr, 1981) both from the Kimberley district of Western Australia.

A. (*Mantyphlops*) *zonula* (Ellis, 2016) which is associated with *A.* (*Mantyphlops*) *yampiensis* (Storr, 1981) both from the Kimberley district of Western Australia.

The species "*Anilios splendidus* (Aplin, 1998)", has been suggested as a synonym of *A. pinguis* (Waite, 1897).

It is retained as valid until molecular evidence confirms the matter one way or other. This is done so noting that to date many putative taxa within the Cape Range area are locally endemic species.

Furthermore, this northern taxon is morphologically divergent from the more southern distributed *A. pinguis.*

It is also transferred to the subgenus *Bennetttyphlops* Hoser, 2013 (treated herein as a full genus).

The species *A. affinis* (Boulenger, 1889) was misplaced in Hoser, 2013a and is herein placed within the newly named genus *Zzzzz gen. nov.* with a type species of *Libertadictus* (*Jackyhosertyphlops*) *cliffrosswellingtoni* Hoser, 2013.

The *A. affinis* (Boulenger, 1889) group is about 15 MYA divergent from the other main clade in the genus and so may well be hived off to a separate genus or subgenus at a later date.

As already mentioned, there are four new genera erected for the first time in this paper, all being about or more than 20 MYA divergent from nearest relatives, these being created by splitting of other genera, namely *Buckleytyphlops* Hoser, 2013, *Jackyhosertyphlops* Hoser, 2013, *Ramphotyphlops* Fitzinger, 1843 and *Slopptyphlops* Hoser, 2013.

Further mention is made of the putative species originally described as "*Ramphotyphlops grypus* Waite, 1918" based on four specimens from various parts of Australia, treated as a composite of species by Hoser, 2013a.

The type form of *Ramphotyphlops grypus* Waite, 1918 is not from one of the main population areas of the putative species as is presently known, as in west Australia, central Australia or even inland eastern Australia. It appears to be from the Gulf of Carpentaria and was treated as such by Hoser (2013a) and again herein.

Waite did not specify the type locality for his type specimen at the National Museum of Victoria, but the ventral count of his holotype only fits the Gulf of Carpentaria population, which is a point made clear in Storr (1981) and agreed both by Hoser (2013a and herein), which is why the divergent but obviously related south west Queensland population of the species was formally named as "*Libertadictus (Jackyhosertyphlops) cliffrosswellingtoni* Hoser, 2013."

Both these taxa and the "*Ramphotyphlops affinis* Boulenger, 1889" group do in combination form a distinctive clade of species, separate from other members of *Jackyhosertyphlops* Hoser, 2013, being generally western Australian forms (as opposed to northeast Australian forms).

They diverged from *Jackyhosertyphlops* and all other nearest related forms by more than 20 MYA based on the various phylogenies published to date.

They are therefore placed in a new genus named *Zzzzz gen. nov.* herein, with "*Libertadictus* (*Jackyhosertyphlops*) *cliffrosswellingtoni sp. nov.*,." as the type species.

Another species synonymized with putative *Ramphotyphlops grypus* Waite, 1918 by most publishing authors since Cogger *et al.* (1983) was *Typhlops nigroterminatus* Parker, 1931 with a type locality of Roebuck, Western Australia.

That was treated by Hoser (2013a) as a species endemic to the South Kimberley district of Western Australia, generally north of the Edgar Ranges.

This remains the case.

The species described by Hoser (2013a) as Libertadictus (Jackyhosertyphlops) adelynhoserae sp. nov. now identified as Jackyhosertyphlops adelynhoserae and putatively occupying a large part of Western Australia is herein confined to the north Pilbara area, generally north of the Fortescue River basin and south of the mid part of the Great Sandy desert.

This paper names further related species from west and central Australia and all remain within the genus *Jackyhosertyphlops* as recognized herein.

The genus *Zzzzz gen. nov.* is most closely associated with *Buckleytyphlops* Hoser, 2013, based on most published phylogenies including those of Tiatragul *et al.* (2023a-b, 2024).

The species "*Typhlops kenti* Boulenger, 1914" was inadvertently omitted from Hoser (2013a), being a north Queensland taxon related to *Jackyhosertyphlops affinis* (Boulenger, 1889). Now placed in *Jackyhosertyphlops, J. kenti* is separated from *J. affinis* by its blunt head, relatively small rostral and angular snout.

In passing, I mention that a sizeable proportion of reptile taxa named by Boulenger that have been synonymised by later authors have been incorrectly synonymised and as a group, all should be revisited critically in light of evidence obtained in the 100 odd years since these descriptions were first published. Perhaps most importantly as already inferred, this paper names a total of 76 new species for the first time, with each placed in the relevant genera as indicated herein with the genus-level descriptions, essentially similar to those of Hoser (2013a), save for the four added genera, additions of taxa and rearrangements as already indicated.

Again, I note that separate to the previously named genera, the newly named genera are formally named first before the relevant species descriptions including those relevant to the named genera.

MATERIALS, METHODS AND RESULTS

Materials and methods and refences cited are as for Hoser (2012d) and Hoser (2013a) unless otherwise stated herein.

The relevant statements and references in those papers are not necessarily repeated herein or cited in full at the end of this paper.

In terms of results, the species formally named herein are indicated in the molecular results of the paper of Marin *et al.* (2012, 2013) and Tiatragul *et al.* (2023a-b, 2024) unless otherwise stated.

This paper does not by any means purport to represent all the previously undescribed Blind Snake taxa (species or subspecies) in Australia.

There probably remains more to be formally identified and named. It will be said by my detractors that I have merely taken the "low hanging fruit", but this is simply not the case.

Considerable time and effort was required to work out how to differentiate the various species level taxa, including the very meticulous inspection of countless live and dead specimens from all mainland states of Australia over some decades.

References relevant to the taxonomic and nomenclatural decisions herein include the following: Annable (1995), Aplin (1998), Aplin and Donnellan (1993), Barbour (1912), Boulenger (1889, 1893, 1895a-b, 1897, 1898, 1914), Cogger (1975, 1979, 2000, 2014), Cogger et al. (1983), Couper et al. (1998), Covacevich (1971), Coventry (1970), Coventry and Robertson (1991), de Rooij (1917), De Vis (1889, 1905), Ehmann (1992), Eipper (2012), Eipper and Eipper (2024), Ellis (2016, 2019), Ellis et al. (2017), Fitzinger (1843), Garman (1901), Glauert (1950), Gray (1842, 1845), Greer (2017, 2025), Hedges et al. (2014), Hediger (1934), Hoser (1989, 2007, 2012d, 2013a), Houston (1976), ICZN (2012) in den Bosch and Ineich (1994), Ingram and Covacevich (1993), Jan (1863, 1864, 1865a-b), Jolly et al. (2013), Kinghorn (1929a, 1929b, 1942, 1956), Loveridge (1934, 1945, 1948), Marin et al. (2012, 2013), Maryan et al. (2024), McDiarmid et al. (1999), McDowell (1974), Mertens (1930), Methner (2002), Montague (1914), Müller (1932), Ogilby (1892), Parker (1931), Peters (1858, 1863, 1865, 1867a-b, 1879), Pyron and Wallach (2014), Pyron et al. (2011, 2013), Ride et al. (1999), Robb (1966a, 1966b, 1972), Schlegel (1839), Shea (1995, 1999, 2015), Shea and Horner (1997), Smith (1927), Stejneger (1904), Stimson et al. (1977), Storr (1981, 1983, 1984), Storr et al. (2022), Swan et al. (2017, 2022), Tiatragul et al. (2023a, 2023b, 2024), Tilbrook (1992), Venchi et al. (2015), Waite (1893, 1894, 1897a, 1897b, 1898, 1917, 1918a, 1918b), Wallach (1993, 2006, 2020, 2021), Wells (1979), Wells and Wellington (1984, 1985), Werner (1899, 1901), Wilson (2005, 2022), Wilson and Knowles (1988), Wilson and Swan (2010, 2021), Worrell (1963) and sources cited therein.

INFORMATION RELEVANT TO THE FORMAL DESCRIPTIONS THAT FOLLOW

There is no conflict of interest in terms of this paper, or the conclusions arrived at herein.

Several people including anonymous peer reviewers who revised the manuscript prior to publication are also thanked as are relevant staff at museums who made specimens and records available in line with international obligations.

In terms of the following formal descriptions, spelling of names should not be altered in any way for any purpose unless expressly and exclusively called for by the rules governing Zoological Nomenclature as administered by the International Commission of Zoological Nomenclature (Ride *et al.* 1999 and ICZN 2012).

Material downloaded from the internet and cited anywhere in this paper was downloaded and checked most recently as of 19 April 2025, unless otherwise stated and were accurate in terms of the context cited herein as of that date.

Unless otherwise stated explicitly, colour descriptions apply to living adult specimens of generally good health and not under any form of stress by means such as excessive cool, heat, dehydration, excessive aging or abnormal skin reaction to chemical or other input.

This includes the descriptions of the snakes not including pre-sloughing snakes, which are often significantly different to the usual colouration for the specimen or species, being usually more whitish or dull.

Note that there is ordinarily some sexual dimorphism between adults of species within the relevant taxa and changes in colour often from young to adult.

While numerous texts and references were consulted prior to publication of this paper, the criteria used to separate the relevant species has already been spelt out and/or is done so within each formal description and does not rely on material within publications not explicitly cited herein.

In the unlikely event any "first reviser" seeks to merge two or more newly named taxa into one, then the name to be retained is that which is first by page priority as listed in the abstract keywords.

Some material within descriptions may be repeated to ensure each fully complies with the *International Code* of *Zoological Nomenclature* (Ride *et al.* 1999) and the 2012 amendments (ICZN 2012).

The "version of record" is the printed version and not pdf version. Both are identical in all materially relevant ways except for the fact that the images in the printed version may be in black and white, as opposed to colour as seen in the pdf version.

The people who assisted with provision of photos and other materials used within this paper or for research by me are also thanked for their assistances, for which they sought nothing in return. The use of provocative and interesting etymologies is deliberate and designed to further public interest in the relevant species, which will aid conservation outcomes and/or to highlight other matters of public importance that may otherwise be overlooked.

CONSERVATION OF BLIND SNAKES IN AUSTRALIA

In terms of governments in Australia at all levels and even so-called herpetologists in Australia, there is almost zero concern for the conservation of the Australian Blind Snakes.

Quite a few of the species may be endangered due to alterations in supplies of food sources, such as ants in the competition between them and introduced species, the latter of which there are dozens of species.

However, due to the cryptic nature of most Blind Snake species, it is likely that severe declines in numbers will almost certainly be overlooked by herpetologists and governments alike.

At this stage herpetologists and governments don't even know all the species on the Australian continent. In terms of those formally named before now, collectively herpetologists know very little about individual species including such basic facts as what they eat, how long they live for, number of offspring and effects of competing species or food sources on distributions and range expansion constraints. There are no published baseline figures on preferred habitats.

All we have is general distribution information, from which habitats and preferences can be inferred. There is no baseline data on what is "normal" for any of the over 100 species of Blind Snake in Australia. In terms of conservation of these species, all the preceding information should be known.

On page 11 of his 2045-page monograph published online (Greer, 2025), Dr. Allen E. Greer, the former herpetology curator at the Australian Museum of Sydney spoke of the reluctance of Australian governments and herpetologists to even bother to describe the full diversity of Australian Blind Snakes. Greer (2025) said:

"Whether the genetically indicated candidate species will ever be described in full is unclear, as there appears to be little enthusiasm/encouragement for such mundane follow-up."

Allen Greer has even noted the contempt of his former employer, the Australian Museum to science and conservation.

Greer (2017) noted "By 2007, I had become so disillusioned with the Museum's attitude to science that I resigned."

Greer's mouth is largely tied by virtue of his New South Wales public service terms of employment. If he speaks out against his former employer, the Australia Museum, he would immediately lose his multi million dollar New South Wales government public service pension.

The purpose of this paper is to prove Allen Greer wrong in terms of his claim that no one would bother to take the immense amount of time to attempt to describe the full diversity of Australia's Blind Snakes.

This paper is the end result of over 50 years trampling through the Australian wilderness in search of blind snakes in all corners of the continent, often in nights of driving rain.

It is also the result of countless hours, often in full overnight stints reviewing specimen data, photos, publications and other evidence in order to sort out the facts and identify the relevant species, be they named and recognised, previously named and generally ignored (synonymised taxa), or actually unnamed and in need of a formal scientific description.

Some newly named species herein have been given unusual and "different" names for the express purpose of encouraging others to take a more active interest in these species and their long-term study and conservation, the latter (conservation) of which is only possible with the action of the former (study). I make no apologies for choosing scientific names that may at times be deemed humorous, shock, or even offend those who actively look for any excuse to be offended as seems fashionable in some places in year 2025.

However, as no reasonable person could possibly be offended by any of the names I have proposed herein or elsewhere, none of the names breach Recommendation 25 (C) of the *International Code* of *Zoological Nomenclature* (Ride *et al.* 1999).

The relevant comments in Hoser (1989, 1991, 1993, 1998a, 2007, 2019a-b, 2024) and sources cited therein apply to the conservation of the species formally named within this paper.

THE NEGATIVE IMPACTS OF TAXONOMIC VANDALISM ON THE CONSERVATION OF BLIND SNAKES AND OTHER REPTILES

Human overpopulation and all its associated consequences are without doubt the greatest longterm threat to the relevant species as outlined in Hoser (1989, 1991, 1993 and 1996). Delays in recognition of these species could jeopardise the long-term survival of the taxa as outlined by Hoser (2019a, 2019b) and sources cited therein.

Therefore attempts by taxonomic vandals, paedophiles, serial rapists, animal abusers and wildlife traffickers like the members of the Adam Britton and Wolfgang Wüster gang via Wüster *et al.* (2001), Kaiser (2012a, 2012b, 2013, 2014a, 2014b) and Kaiser *et al.* (2013) (as frequently amended and embellished, e.g. Rhodin *et al.* 2015, Naish 2013, as regularly altered and amended, Thiele *et al.* 2020, Hammer and Thiele 2021, Wüster *et al.* 2021, Foley and Rutter 2020) to unlawfully suppress the recognition of these taxa on the basis they have a personal dislike for the person who formally named it/them should be resisted (e.g. Ceriaco et al. 2023, Cogger 2014, Dubois et al. 2019, Hoser 2001a, Mosyakin 2022 and Wellington 2015). Claims by the Adam Britton / Wolfgang Wüster gang against this paper and the descriptions herein will no doubt be no different to those the gang have made previously, including for instance against Wells and Wellington (1984, 1985), (see for example Shine 1987, Shea 1987, Shea and Sadlier 1999), all of which were discredited long ago as outlined by Ceraico et al. (2023), Cogger (2014), Cotton (2014), Dubois et al. (2019), Hawkeswood (2021), Hołyński (1994, 2020), Hoser, (2001, 2007, 2009, 2012a-c, 2013, 2015a-f, 2019a-b, 2020a-b, 2021a-b, 2023, 2024a-b), ICZN (1991, 2001, 2021), Jiménez-Mejías et al. (2024), Kok (2023), Mosyakin (2022), Pethigayoda (2023), Wellington (2015), Winkler (2024), Zheng and Gold (2020) and sources cited therein.

Attempts to engage in acts of scientific fraud to try to rename any of these newly named taxa should be exposed and dealt with appropriately, as was done with David Williams, when in 2001 he attempted to rename and/or claim name authority for the species *Pailsus rossignolii* Hoser, 2000a.

He did this in the first instance in 2001, by altering versions of his online "paper" (as seen in Williams and Starkey 1999a, 1999b and 1999c), all of which were different and changed versions of a single paper originally published in the first form in 1999, claiming (without any evidence) to refute the existence of the species *Pailsus pailsei* Hoser, 1998 (see Hoser 1998b and Hoser 2001a for details).

Claims by Shea and Sadlier (1999) and similar elsewhere by the Wüster gang to the effect that earlier published names are unavailable for zoological nomenclature are patently false and the making of these false claims is seriously counter to wildlife conservation (Hoser, 2007, Ceriaco *et al.* 2023, Cogger 2014, Cotton 2014, and so on).

GENUS AA GEN. NOV.

LSIDurn:lsid:zoobank.org:act:8C869A1E-12CE-4D98-B1C6-2F7A4FEF5A9F

Type Species: *Typhlops broomi* Boulenger, 1898. **Diagnosis:** The genus *Aa gen. nov.* are separated from all other Australian Blind Snakes by the following suite of characters: Pink, purple, light brown, brown, blackish above, becoming vaguely whitish or yellowish-white below. The flanks are coloured same as the dorsum and these is no obvious demarcation between the dorsal colour and the venter as one moves to the very underneath of the snake. The dark dorsal colour forms into obvious or semi-distinct longitudinal streaks formed by dark patches on the anterior part of each dorsal scale (in contrast to the related genus *Slopptyphlops* Hoser, 2013

where such longitudinal streaks are not seen in adults). The snout is entirely rounded from above and in profile, ranging from being somewhat blunt to slightly angular. The nasal cleft which may or may not be visible from above (if it is, then only just), joins the preocular, continuing in front of the nostril and often dividing the nasal. The rostral is oval in the genus *Aa gen. nov.* versus relatively narrow and constricted from above in the genus *Slopptyphlops* Hoser, 2013, being longer than broad. 20 midbody scale rows. Body diameter 30-70 times in its length. Average adult maximum length is 25 cm and doesn't exceed 35 cm.

Distribution: Restricted to the very top end of the Northern Territory and north parts of Cape York, Queensland, in far north Australia.

Etymology: Late at night in 2019 when I asked Paul Woolf, the president of the Herpetological Society of Queensland Incorporated, what the genus name for these snakes should be called he simply went "aa", and hence the genus name.

Content: *Aa aa* (type species) (this paper), *A. aaaaaagh sp. nov.* (this paper), *A. broomi* (Boulenger, 1898), *A. chamodracaena* (Ingram and Covacevich, 1993), *A. tovelli* (Loveridge, 1945).

GENUS ZZZZZ GEN. NOV.

LSIDurn:lsid:zoobank.org:act:2FC46082-38A0-40B8-A0B1-80DC3471A79F

Type Species: *Libertadictus* (*Jackyhosertyphlops*) *cliffrosswellingtoni* Hoser, 2013.

Diagnosis: Jackyhosertyphlops Hoser, 2013 and Zzzzz gen. nov. are separated from other Australian Blind Snakes by the following suite of characters: Elongate and slender build. Purplish-brown or pinkish brown above, grey-white below. The head and tail or just tail may have blackening. The snout is rounded and sometimes slightly trilobed from above, bluntly angular in profile, sometimes with a strongly hooked, recurved "beak" in profile. Nasal cleft completely divides the nasal, not visible from above, contacting the preocular, extending slightly beyond the nostril. The rostral is large and subcircular, about as long as wide, slightly longer than wide ranging up to being noticeably longer than broad. 16-18 midbody rows. Body diameter is 70-80 times in its length. Average adult length is about 25-30 cm and not

exceeding 45 cm. Zzzzz gen. nov. are separated from Jackyhosertyphlops by lacking a sharp transverse keel forming a distinct cutting edge to the snout (or is reduced in intensity), separating this genus from the morphologically similar genus Jackyhosertyphlops which has this character in an extreme form. Zzzzz gen. nov. have more than 700 ventrals, versus less than 700 in Jackyhosertyphlops Hoser, 2013.

Distribution: Most parts of Queensland, Australia and the immediately adjacent parts of New South Wales, South Australia and the Northern Territory. **Etymology:** In 2019 after catching a specimen of *Z*. affinis in east Queensland, I was discussing with Paul Woolf, the president of the Herpetological Society of Queensland Incorporated, what the genus name for these snakes should be called.

I think he was trying to sleep and all I got from him was a "Zzzzz" sound and hence the genus name.

Content: *Zzzzz cliffrosswellingtoni* (Hoser, 2013) (type species), *Z. affinis* (Boulenger, 1889), *Z. grypus* (Waite, 1918), *Z. insperatus* Venchi, Wilson and Borsbook, 2015, *Z. kenti* (Boulenger, 1914), *Zzzzz zzzzz sp. nov.* (this paper).

GENUS AAA GEN. NOV.

LSIDurn:lsid:zoobank.org:act:EA9C45D6-3EEC-4EB4-A36C-50F7245819BF

Type species: *Typhlops leucoproctus* Boulenger, 1889.

Diagnosis: With the type species formerly included in a number of other genera, the genus *Aaa gen. nov.* as defined herein is monotypic for this species.

The species within *Aaa gen. nov.* is separated from all other Australasian Blind Snakes by the following unique combination of characters:

Rounded snout from above, moderate in profile and with lateral nostrils. Rostral about a third of the width of the head, extending to the level of the eyes, nasal nearly completely divided, the cleft proceeding from the second labial; preocular present, a little narrower than the nasal or the ocular, in contact with the second and third labials; numerous tiny tubercles on the head scales; whitish glands in the sutures between the head scales; eye distinguishable; upper head scales moderately enlarged; four upper labials. Diameter of the body is 40-65 times in the total length; tail is 1.5 to 2 times as long as broad and ending in a spine. 20 midbody scale rows. Small in size and slender in build. Dark purplish brown on top and lighter but of similar colour ventrally. Labial and anal regions are yellowish (modified from Boulenger, 1889 with updates).

Distribution: Torres Strait, including nearby mainlands of Cape York, Australia and southern New Guinea.

Etymology: It was in 2019, when after discussing with Paul Woolf, the president of the Herpetological Society of Queensland Incorporated the potential names for the genus containing the *Typhlops broomi* Boulenger, 1898 group of species, attention turned to the generic placement of *Typhlops leucoproctus* Boulenger, 1889, which led to Paul Woolf simply making the noise "aaa", and hence the genus name for this taxon.

Content: *Aaa leucoproctus* (Boulenger, 1889) (monotypic).

GENUS BUT GEN. NOV. LSIDurn:Isid:zoobank.org:act:7464D082-9933-4935-B4D0-05BD151F9872

Type Species: *Ramphotyphlops howi* Storr, 1983. **Diagnosis:** The two genera *Mantyphlops* Hoser,

2013 and But gen. nov. are separated from all other Australian Blind Snakes by the following suite of characters: Brown to almost black above, merging on the lower flanks with the pale brown to creamish venter. The tail is blackish, as is often the snout or head. The snout is bluntly rounded from above and in profile or sometimes slightly angular or truncate. The nasal cleft isn't visible from above, or if so, only just, contacting the second labial below. Rostral is subcircular from above, scarcely to much longer than broad. 18 midbody rows. Body diameter 40-90 times in length. Adults average 25 cm and not over 40 cm. But gen. nov. is separated from Mantyphlops Hoser, 2013 by usually having less than 500 ventrals (excluding the species *But fuknowhere sp. nov.*) versus always from 500-600 in Mantyphlops and a barely visible eye spot, versus one that is tiny and obvious in Mantyphlops

But gen. nov. has grading from dark dorsum to light undersides effectively under the very lowest part of the flank and not visible from dorsal view. There is no obvious demarcation line. By contrast in Mantyphlops the dark dorsal colour turns light on the visible lower flank and with a well-defined boundary between upper dark and lower white.

Tiatragul et al. (2023a-b, 2024) showed a divergence between Mantyphlops Hoser, 2013 and But gen. nov. of just under 20 MYA from one another and as a pair over 20 MYA from all other Australian Blind Snakes.

Distribution: Western part of the Kimberley District in Western Australia only, including west-flowing drainage basins.

Mantyphlops Hoser, 2013 is herein confined to the East Kimberley district, in the Ord River basin, extending north-east to include the Victoria River, Daly and Alligator River systems in the Northern Territory. In both genera, the relevant species appear to have evolved in an allopatric manner in the relevant drainage basins.

Etymology: When I caught a specimen of this genus in the west Kimberley in 1983, I tried to pass it to my associate Charles Acheson. Not wanting to be defecated on, he pushed me back with his hand and said "but", giving the genus name.

Content: But howi (Storr, 1983) (type species), B. fuknowhere sp. nov. (this paper), B. micrommus (Storr, 1981), B. yampiensis (Storr, 1981), B. zonula Ellis, 2016.

AA AA SP. NOV.

LSIDurn:Isid:zoobank.org:act:8A1678AE-F5AB-4BD7-BC65-B1F0E45D02AE

Holotype: A preserved specimen at the Museum and Art Gallery of the Northern Territory Reptile Collection, Darwin, Northern Territory, Australia, specimen number R36155 collected from Mallison Island, Northern Territory, Australia, Latitude -12.18 S., Longitude 136.11017 E. This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Museum and Art Gallery of the Northern Territory Reptile Collection, Darwin, Northern Territory, Australia, specimen number R.40917 collected from (presumed) Elcho Island, Latitude -11.9768 S., Longitude 135.6953 E. (The specimen record includes Lake Evella, a location on the adjacent mainland, which is from where it was presumably flown from, being the main airport in the area).

Diagnosis: Until now, all specimens of putative Aa tovelli (Loveridge, 1945), originally described as "Ramphotyphlops tovelli Loveridge, 1945", from the top end of the Northern Territory have been treated as a single species.

It is now treated herein as three well separated allopatric species all from the Northern Territory. These are the type form of Aa tovelli from Darwin, The Tiwi Islands and nearby Cobourg Peninsula. Aa aaaaagh sp. nov. from the west Arnhem Land escarpment area and Aa aa sp. nov. from the sandstone country and adjacent islands of far east Arnhem Land, generally east of the Wessell Islands and along the adjacent coast. The three species are readily separated from one another by the following consistent characters and differences.

Aa tovelli is a pinkish purple species, even as adults with a strong purplish tinge; the anterior edge of each scale is slightly darker than the rest of the scale, but this is not bold or distinct.

Aa aaaaagh sp. nov. by contrast as an adult is a medium wood brown coloured snake on top, with the dark at the anterior edge of each scale being black in colour, well-defined and expanded to be about half the scale width.

Aa aa sp. nov. is a lighter yellowish purple brown colour, with the anterior edge of each scale a dark brownish black, well-defined but not as big as half a scale width. In adults of both Aa aaaaagh sp. nov. and Aa aa sp. nov. the lighter colour at the back of the head and top of neck that occupies about three times the distance from snout to back of eyes is welldefined and obvious, versus poorly defined and not obvious in adult Aa tovelli.

In Aa tovelli and Aa aa sp. nov. there is a poorly defined patch of darker pigment along the medial line of the rostral near the snout. In Aa aaaaagh sp. nov. this is in the form of a well-defined elongate black patch or stripe running down the medial line of the rostral from between front of eyes to the snout The two North Queensland species in the genus Aa sp. nov. being A. broomi (Boulenger, 1898) and A. chamodracaena (Ingram and Covacevich, 1993) are readily separated from Aa tovelli, Aa aa sp. nov. and Aa aaaaagh sp. nov. by having well-defined and obvious continuous or near continuous stripes running along the entire length of the dorsum.

The genus Aa gen. nov. (being the five species mentioned in the preceding paragraph) are separated from all other Australian Blind Snakes by the following suite of characters: Pink, purple, light brown, brown, blackish above, becoming vaguely whitish or yellowish white below. The flanks are coloured same as the dorsum and these is no obvious demarcation between the dorsal colour and the venter as one moves the very underneath of the snake. The dark dorsal colour forms into obvious or semidistinct longitudinal streaks formed by dark patches on the anterior part of each dorsal scale (in contrast to the related genus Slopptyphlops Hoser, 2013 where such longitudinal streaks are not seen in adults). The snout is entirely rounded from above and in profile, ranging from being somewhat blunt to slightly angular. The nasal cleft which may or may not be visible from above (if it is, then only just), joins the preocular, continuing in front of the nostril and often dividing the nasal. The rostral is oval in the genus Aa gen. nov. versus relatively narrow and constricted from above in the genus Slopptyphlops Hoser, 2013, being longer than broad. 20 midbody scale rows. Body diameter 30-70 times in its length. Average adult maximum length is 25 cm and doesn't exceed 35 cm. Aa aaaaagh sp. nov. is depicted in life in Cogger (2014) on page 811, top right, from South Alligator River, NT, Australia, photographed by John Wombey. Aa tovelli is depicted in life in Wilson and Swan (2021) on page 541 at top right.

Distribution: *Aa aa sp. nov.* is a range-restricted endemic found in the sandstone country and adjacent islands of far east Arnhem Land, generally east of the Wessell Islands and along the adjacent coast. **Etymology:** Late at night in 2019 when I asked Paul Woolf, the president of the Herpetological Society of

Woolf, the president of the Herpetological Society of Queensland Incorporated, what the species name for these snakes should be called he simply went "aa", and hence the species name matches the genus name.

AA AAAAAGH SP. NOV.

LSIDurn:lsid:zoobank.org:act:692DBB0D-5A40-45DA-A15F-985D8852D598

Holotype: A preserved male specimen at the Australian National Wildlife Collection AKA ANWC (Commonwealth Scientific and Industrial Research Organisation AKA CSIRO), Canberra, ACT, Australia, specimen number R03371 collected from a creek north of Obiri Rock, Kakadu National Park, Northern Territory, Australia, Latitude -12.4 S., Longitude 132.9583 E.

This government-owned facility allows access to its holdings.

Paratypes: Four preserved specimens at the Australian National Wildlife Collection AKA ANWC (Commonwealth Scientific and Industrial Research Organisation AKA CSIRO), Canberra, ACT, Australia, being specimen numbers R03369 (female) and R03372 (male) both collected from a creek north of Obiri Rock, Kakadu National Park, Northern Territory, Australia, Latitude -12.4 S., Longitude 132.9583 E. and specimen numbers R03366 (male) and R05948 both collected from the Cannon Hill / East Alligator River area, Kakadu National Park, Northern Territory, Australia, Latitude -12.2944 S., Longitude 132.9306 E.

Diagnosis: Until now, all specimens of putative *Aa tovelli* (Loveridge, 1945), originally described as *"Ramphotyphlops tovelli* Loveridge, 1945", from the top end of the Northern Territory have been treated as a single species.

It is now treated herein as three well separated allopatric species all from the Northern Territory. These are the type form of *Aa tovelli* from Darwin, The Tiwi Islands and nearby Cobourg Peninsula. *Aa aaaaagh sp. nov.* from the west Arnhem Land escarpment area and *Aa aa sp. nov.* from the sandstone country and adjacent islands of far east Arnhem Land, generally east of the Wessell Islands and along the adjacent coast.

The three species are readily separated from one another by the following consistent characters and differences.

Aa tovelli is a pinkish purple species, even as adults with a strong purplish tinge; the anterior edge of each scale is slightly darker than the rest of the scale, but this is not bold or distinct.

Aa aaaaagh sp. nov. by contrast as an adult is a medium wood brown coloured snake on top, with the dark at the anterior edge of each scale being black in colour, well-defined and expanded to be about half the scale width.

Aa aa sp. nov. is a lighter yellowish purple brown colour, with the anterior edge of each scale a dark brownish black, well-defined but not as big as half a scale width. In adults of both Aa aaaaagh sp. nov. and Aa aa sp. nov. the lighter colour at the back of the head and top of neck that occupies about three times the distance from snout to back of eyes is welldefined and obvious, versus poorly defined and not obvious in adult Aa tovelli.

In *Aa tovelli* and *Aa aa sp. nov.* there is a poorly defined patch of darker pigment along the medial line of the rostral near the snout. In *Aa aaaaagh sp. nov.* this is in the form of a well-defined elongate black patch or stripe running down the medial line of the rostral from between front of eyes to the snout The two North Queensland species in the genus *Aa sp. nov.* being *A. broomi* (Boulenger, 1898) and *A. chamodracaena* (Ingram and Covacevich, 1993) are readily separated from *Aa tovelli, Aa aa sp. nov.* and *Aa aaaaagh sp. nov.* by having well-defined and obvious continuous or near continuous stripes running along the entire length of the dorsum.

The genus *Aa gen. nov.* (being the five species mentioned in the preceding paragraph) are separated from all other Australian Blind Snakes by the following suite of characters: Pink, purple, light brown, brown,

blackish above, becoming vaguely whitish or vellowish white below. The flanks are coloured same as the dorsum and these is no obvious demarcation between the dorsal colour and the venter as one moves the very underneath of the snake. The dark dorsal colour forms into obvious or semidistinct longitudinal streaks formed by dark patches on the anterior part of each dorsal scale (in contrast to the related genus Slopptyphlops Hoser, 2013 where such longitudinal streaks are not seen in adults). The snout is entirely rounded from above and in profile, ranging from being somewhat blunt to slightly angular. The nasal cleft which may or may not be visible from above (if it is, then only just), joins the preocular, continuing in front of the nostril and often dividing the nasal. The rostral is oval in the genus Aa gen. nov. versus relatively narrow and constricted from above in the genus Slopptyphlops Hoser, 2013, being longer than broad. 20 midbody scale rows. Body diameter 30-70 times in its length. Average adult maximum length is 25 cm and doesn't exceed 35 cm. Aa aaaaagh sp. nov. is depicted in life in Cogger (2014) on page 811, top right, from South Alligator River, NT, Australia, photographed by John Wombey. Aa tovelli is depicted in life in Wilson and Swan (2021) on page 541 at top right.

Distribution: *Aa aaaaagh sp. nov.* appears to be confined to the west Arnhem Land escarpment area of the Northern Territory including flat areas adjacent to it. It appears to be absent from the continuous flatter areas surrounding this escarpment and away from it, including in particular the extended floodplains to the north, west and east, which appear to form a barrier to dispersal of this taxon.

Etymology: In early 2012, while searching for reptiles in Arnhem Land, three men I was with lifted a huge slab of rock to yield one of these Blind Snakes. As they heaved up the rock, they collectively groaned "aaaaagh" and hence the species name *Aa aaaaagh sp. nov*..

ZZZZZ ZZZZZ SP. NOV.

LSIDurn:lsid:zoobank.org:act:C5EE3D38-1CBA-46FD-8EA1-D9076F0D641A

Holotype: A preserved specimen at the Queensland Museum Amphibians and Reptiles collection in Brisbane, Queensland, Australia, specimen number J74125 collected from Ashton Station, 35 km south of Prairie, Queensland, Australia, Latitude -21.241111 S., Longitude 144.599167 E.

This government-owned facility allows access to its holdings.

Diagnosis: Until now, *Zzzz zzzz sp. nov.* has been treated as a population of putative "*Typhlops grypus* Waite, 1918" with a type locality of Lawn Hill, Gulf of Carpentaria region, north-west Queensland, of alternatively *Zzzz cliffrosswellingtoni* (Hoser, 2013), a species originally described as "*Libertadictus* (*Jackyhosertyphlops*) *cliffrosswellingtoni* Hoser,

2013".

Z. cliffrosswellingtoni was described from a holotype specimen at the Australian Museum in Sydney, NSW, Australia, specimen number: R110535, from Scott's Tank, Diamantina Lakes, Northwest of Windorah in Western Queensland, Latitude -23.97, Longitude 141.53 and believed to be distributed throughout south-west Queensland, generally south of the main Selwyn Range and well west of the Great Dividing Range.

It is herein restricted to the black soil plains habitat of the Diamantina River drainage basin

Zzzzz zzzz sp. nov. occurs in the Cooper's Creek Drainage system, being an area of the black soil channel country that separates elevated parts of East Queensland from the west, but east of the Diamantina System.

There is no evidence of either *Z. cliffrosswellingtoni* or *Z. zzzzz sp. nov.* anywhere near the vicinity of Lake Eyre in South Australia, which is where the two river systems end up.

Z. zzzzz sp. nov. is similar in most respects to *Z. cliffrosswellingtoni* but separated from that species by having a strong yellowish brown colour to the posterior body and tail upper surfaces, versus weak in *Z. cliffrosswellingtoni* and a purplish pink dorsum, versus flesh pink in *Z. cliffrosswellingtoni*.

Both *Z. cliffrosswellingtoni* and *Z. zzzzz sp. nov.* are readily separated from all other west Australian species within the genus *Jackyhosertyphlops* Hoser, 2013 that were formally treated as populations of *"Typhlops grypus* Waite, 1918" by their higher ventral scale count, being 700-770, versus 525-677 in the western species. Gulf of Carpentaria *Z, grypus* of the type form has around 790 ventrals, separating it from the other species.

Both *Z. cliffrosswellingtoni* and *Z. zzzz sp. nov.* are further diagnosed by the following suite of characters: It is a moderately large (to 42 cm total length), very slender, sometimes black-tailed blind-snake with snout strongly beaked in profile that is light yellowishtipped and not darker tipped, 18 midbody scale rows and nasal cleft usually proceeding from the second labial.

The tail is 1.4-4.4 percent of the total length.

The rostral (from above) is much longer than wide, about three-quarters as wide as the head and extending back to level of eyes or nearly so. Nasals narrowly separated behind rostral. Frontal smaller than prefrontal.

The snout is angular from above and very strongly beaked in profile.

Nostrils inferior, very slightly or not swollen and much nearer to rostral than preocular. Nasal cleft proceeding from second labial or preocular, or junction between preocular and second labial or first labial to nostril, where it occasionally terminates, but mostly it proceeds for varying distances obliquely upwards and forwards towards the rostral or reaches it.

13-36 subcaudals.

Snout tip is not white although it is slightly paler than the darker region posterior to it, as opposed to a distinctively white snout tip or dark snout tip in western and central Australian populations of putative *"Typhlops grypus* Waite, 1918".

The dorsal and lateral surfaces are pinkish to pinkish brown to moderately purple pink, gradually merging with greyish-white ventral surfaces.

Distribution: *Zzzzz zzzz sp. nov.* occurs in a small area generally east of the black soil channel country that separates elevated parts of East Queensland from the west, being known only from around Hughenden in mid north Queensland.

Etymology: When in Queensland with Paul Woolf in 2019 searching for Blind Snakes at night by torch light, I checked to see how he was going. He was on the ground sleeping, making the "zzzzz" noise and hence the etymology.

BUT FUKNOWHERE SP. NOV.

LSIDurn:Isid:zoobank.org:act:81B2D098-8AC1-45C5-9EDD-9272FA374011

Holotype: A preserved specimen at the South Australian Museum, Adelaide, South Australia, Australia, specimen number R53885 collected from 40 km south of Tunnel Creek Gorge, Western Australia, Australia, Latitude -17.8275 S., Longitude 125.3744 E.

This facility allows access to its holdings.

Diagnosis: But fuknowhere sp. nov. has until

now been treated as a divergent population of

Mantyphlops guentheri (Peters, 1865).

It is separated from that species and all others in the subgenus *Mantyphlops* Hoser 2013 by its relatively smaller eye spot, which in turn is larger than that seen in all other species of *But gen. nov.* with all having tiny and barely distinct eye spots.

Unlike all other species in the genus *But gen. nov.*, the species *But fuknowhere sp. nov*. has over 580 ventrals, versus under 578 in the others.

All other species in the genus *But gen. nov.* have a strong yellowish tinge dorsally. This is not the case in *But fuknowhere sp. nov.*.

But fuknowhere sp. nov. is further diagnosed as a species with a pinkish brown dorsum, being more pinkish anteriorly.

The tip of the snout is whitish brown and the top of the head a light brownish beige colour.

Approximately the last fifteen dorsal rows of the tail are blackish in colour.

But fuknowhere sp. nov. is separated from the apparently sympatric species *But micromomma* (Storr, 1981), by the features outlined already including the following: More than 500 ventrals (versus 480), absence of a strong yellowish tinge

dorsally and a relatively larger eye spot.

The two genera *Mantyphlops* Hoser, 2013 and *But gen. nov.* are separated from all other Australian Blind Snakes by the following suite of characters: Brown to almost black above, merging on the lower flanks with the pale brown to creamish or white venter.

The tail is blackish, as is often the snout or head. The snout is bluntly rounded from above and in profile, or sometimes slightly angular or truncate (in three *Mantyphlops* species).

The nasal cleft isn't visible from above, or if so, only just, contacting the second labial below.

Rostral is subcircular from above, scarcely to much longer than broad. 18 midbody rows.

Body diameter 40-90 times in its length. Adults average 25 cm and don't exceed 40 cm.

But gen. nov. is separated from Mantyphlops Hoser, 2013 by usually having less than 500 ventrals (excluding the species But fuknowhere sp. nov.) versus always from 500-600 in Mantyphlops and a barely visible or near barely visible eye spot, versus one that is tiny and obvious in Mantyphlops

But gen. nov. species including But fuknowhere sp. nov. has grading from dark dorsum to light undersides effectively under the very lowest part of the flank and not visible from dorsal view. There is no obvious demarcation line.

By contrast in *Mantyphlops* the dark dorsal colour turns light on the visible lower flank and with a welldefined boundary between upper dark and lower white along the lower flank.

Tiatragul *et al.* (2023a-b, 2024) showed a divergence between *Mantyphlops* Hoser, 2013 and *But gen. nov.* of just under 20 MYA from one another and as a pair over 20 MYA from all other Australian Blind Snakes. *But fuknowhere sp. nov.* is depicted in life online at:

https://www.flickr.com/photos/194274402@ N06/51649551033/

with the specimen from Mornington Station, Western Australia, photographed by Melissa Bruton. *But fuknowhere sp. nov.* did according to the phylogeny of Marin *et al.* (2012, 2013) diverge from *B. howi* (Storr, 1983) in the Miocene (more than 5.3 MYA).

B. howi is both morphologically closer to and distributionally closer to all other members of the genus *But gen. nov.* than *But fuknowhere sp. nov.*.

Distribution: But fuknowhere sp. nov. is known only from the type locality and nearby places in the inland south Kimberley district, of Western Australia, Australia.

Etymology: In 1983 I was with herpetologist Charles Acheson in the south Kimberley district of Western Australia down a bush road at night, spotlighting for reptiles crossing the road.

When I asked him exactly we were, he said "But fuk nowhere", giving this species its etymology.

ANILIOS ADEPT SP. NOV.

LSIDurn:Isid:zoobank.org:act:984A71C7-CE2D-4E70-8010-004EE7616F09

Holotype: A preserved adult female specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R165824 collected from East Wallabi Island, Western Australia, Australia, Latitude -28.433333 S., Longitude 113.716667 E.

This government-owned facility allows access to its holdings.

Paratypes: Five preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, being specimen numbers R154969 (a juvenile) and R163183 (an adult male), both from East Wallabi Island, Western Australia, Australia, Latitude -28.433333 S., Longitude 113.716667 E. and specimen numbers R146401, R146402 and R146453 all collected from 23 km south of Kalbarri, Western Australia, Australia, Latitude -27.9 S., Longitude 114.15 E.

Diagnosis: *Anilios adept sp. nov.* has until now been treated as a northern population of *A. australis* Gray, 1845 from the south-west corner of Western Australia.

A. adept sp. nov. is separated from *A. australis* by being a brownish coloured Blind Snake as opposed to purplish brown to pink on the dorsum.

A. adept sp. nov. also has a relatively large eye and a noticeable but thin brown iris, versus slightly smaller eye size in *A. australis* and with reddish, pink or orange iris barely visible.

The white etchings of the body scales in *A. adept sp. nov.* are prominent, versus only moderately so in *A. australis.*

The transition from dark upper body colour to light venter commences about midway on the flank in *A. adept sp. nov.* versus near the bottom in *A. australis.* The section of changed colour on the dorsum behind the eyes is usually prominent in *A. adept sp. nov.* versus usually not prominent, but barely visible in *A. australis.* The white of the upper part of the snout extends to the front of the eye in *A. adept sp. nov.* versus not so in *A. australis.*

A. adept sp. nov. is a proportionately more stout and thick-set snake than *A. australis* with less than 285 ventrals, versus over 290 in *A. australis*.

The two species *A. adept sp. nov.* and *A. australis* are separated from all other Australian species of Blind Snake by the following unique combination of characters:

A moderately large and stout blind-snake. Snout rounded in profile. Rostral (from above) is elliptic, a little longer than wide, about two-thirds as wide as head and extending back to well short of level of eyes; nostrils inferior. Nasals narrowly separated behind the rostral. Frontal smaller than prefrontal. Nasal cleft usually proceeding from second labial and extending up to about midway between the nostril and the rostral, the top of cleft curving forwards. Nostrils inferior, slightly to much nearer to rostral than preocular. Nasal cleft usually, but not always proceeding from the second labial, and extending vertically from nostril and terminating about midway between the nostril and rostral after curving forwards for a short distance.

278-357 ventrals, 22 midbody scale rows, 10-18 subcaudals.

Dorsal and upper dorsolateral surfaces purplish black to brownish or pinkish in adults and generally lighter and more pink in colour in juveniles.

Venter whitish; with the boundary between dark and pale coloration jagged, owing to lateral scales being either wholly dark or wholly pale (modified from Storr 1981).

A. adept sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/228008330 Being a specimen from Kalbarri, Western Australia, Australia photographed by Bryce van der Heide. A. australis is depicted in life in Storr, Smith and Johnstone (2002) on page 101 at top right as well as in Wilson and Swan (2021) on page 527 at top and

online at: https://www.flickr.com/photos/114192916@

N07/53886510911/

from the Perth region, Western Australia, Australia photographed by Justin Wright, and

https://www.flickr.com/photos/

jaricornelis/51774519640/

from the Perth region, Western Australia, Australia photographed by Jari Cornelis, and

https://www.flickr.com/photos/110716728@ N03/51923831481/

from the Perth Hills region, Western Australia, Australia photographed by Simon Taylor.

The phylogenies of Marin *et al.* (2012, 2013) indicate a divergence between the two species *A. adept sp. nov.* and *A. australis* that occurred in the early Pliocene Epoch about 4 MYA.

Distribution: Anilios adept sp. nov. is only known from the type localities, including immediately north of Kalbarri at Edel Land and is presumed to be range restricted and vulnerable.

Etymology: The English word "adept" means "being good at" or "proficient", which matches the ability of this species to avoid detection by humans and presumably other potential predators.

ANILIOS OK SP. NOV.

LSIDurn:lsid:zoobank.org:act:B9EE173F-798A-4FF1-8341-F249988B4255

Holotype: A preserved female specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R114998 collected from 8 km west south-west of the Yamaha Homestead, Western Australia, Australia, Latitude -28.016667 S., Longitude 123.616667 E. This

government-owned facility allows access to its holdings.

Paratypes: Two preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen numbers R114999 (female) and R115000 (male) both collected from 38 km east Northeast of Laverton, Western Australia, Australia, Latitude -28.55 S., Longitude 1227.7 E.

Diagnosis: Until now *Anilios ok sp. nov*. has been treated as a Goldfields, Western Australia population of the widespread putative taxon, *A. endoterus* (Waite, 1918), with a type locality of Hermannsburg, Northern Territory, Australia.

Based on the results of Marin *et al.* (2012, 2013) *A. endoterus* is herein confined to the far east of Western Australia, extending across the southern half of the northern Territory and arid South Australia (most of that state) to northwest New South Wales and south-west Queensland.

The species *Anilios ye sp. nov.* is a taxon confined to the Little Sandy Desert area of central Western Australia and *Anilios mazing sp. nov.* is restricted to a relatively small section of the Pilbara region of Western Australia. Both *A. ye sp. nov.* and *A. mazing sp. nov.* have also been treated as putative *A. endoterus* until now.

While all are morphologically similar to one another, they can be separated as follows:

Anilios ok sp. nov. has an obviously trilobed snout from above, versus weakly trilobed in *A. ye sp. nov*. and *A. mazing sp. nov*. and rounded in profile in *A. endoterus*.

A. mazing sp. nov. has a more-or-less rectangularshaped nasal cleft versus triangular in shape in A. endoterus and A. ok sp. nov. and teardrop shaped in A. ye sp. nov..

A. mazing sp. nov. and *A. endoterus* have strong whitening towards the snout versus weak in *A. ok sp. nov.* and *A. ye sp. nov.*.

The four preceding species are separated from all other Australian Blind Snakes by the following unique combination of characters:

Nasal cleft joins preocular, not extending forward beyond the nostril. Nasals narrowly separated behind rostral. Frontal smaller than prefrontal. Rostral is more-or-less oval, being slightly wider than long, being about three quarters as wide as the head. Snout, slightly angular in profile, being either rounded on the outer edge or tricuspid with a weak transverse cutting edge. Nostrils inferior, slightly swollen and much nearer to rostral than preocular. Nasal cleft proceeding from preocular to nostril, thence forwards towards the rostral but not always all the way; nasal cleft does not cross the slight ridge above nostril and is therefore not visible from above.

22 midbody rows, 406-438 ventrals, 9-16 subcaudals (males average more than females); length 40-60 times body diameter, not more than 40 cm in total length, and averaging about 25 cm total length. Colour is reddish brown to brown or purplish brown above, being whitish or cream ventrally.

In line with some other species in the subgenus *Anilios* Gray, 1845 the junction between the upper surfaces and pale lower surfaces is jagged

Anilios ok sp. nov. is depicted in life in Cogger (2014) on page 800 from Officer Basin, Western Australia in a photo by Brad Maryan and also in another photo online at:

https://www.flickr.com/photos/brian_ busho/49353929366/

photographed at Ilkurlka, Western Australia by Brian Bush.

A. mazing sp. nov. is depicted in life in Storr, Smith and Johnstone (2002) on page 101 at bottom right from Telfer, Western Australia.

The nominate form of *A. endoterus* is depicted in life on the front cover of this journal (*Australasian Journal of Herpetology*) issue 77 from south of Coober Pedy, South Australia. On the back cover of *Australasian Journal of Herpetology* issue 77 is a photo of the habitat adjacent to where the specimen was found in a pit trap as part of a South Australian Museum sponsored field trip in November 2013.

The nominate form of *A. endoterus* is also depicted in life in Wilson and Knowles (1988) on page 349 in image 830 and online at

https://www.flickr.com/photos/ stephenmahony/11227572845/ and

https://calphotos.berkeley.edu/cgi/img_query?seq_ num=750236&one=T

Distribution: Anilios ok sp. nov. appears to be confined to the Goldfields region of Western Australia, Australia. It is known currently from near Laverton in the south-west to the Officer Basin near the South Australian border in the east.

Etymology: Anilios ok sp. nov. is a little-known species of little interest to most people and their governments alike. There is no evidence of cultural significance of this species with native Aboriginals over the past 40 thousand years or white people in the past 200 years either. I am not going to become part of the fake woke, virtue signalling "wankerism" infesting science publications (or so-called ones) in Australia over the past few years, claiming some amazing indigenous Australian Aboriginal kinship with a species they really had no interest in whatsoever, and realistically most would be blissfully unaware even existed!.

Just as Anglo-Australians have had little interest in differentiating one kind of Blind Snake from another, there remains absolutely zero evidence at all that any Aboriginal tribes had any form of naming or classification system for the dozens of Australian species of extant Blind Snakes or actually had anything to do with them, save for perhaps treading on one at night occasionally.

But that fact that the species can and does survive in the Australian wilderness in spite of human activity is in some ways significant. The species is doing just "A OK", and hence the scientific name!

The pronunciation of the species name is "oh-kay". ANILIOS YE SP. NOV.

LSIDurn:lsid:zoobank.org:act:E3A19B10-668B-4FEB-BE96-CFD97C7E276E

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R102627 collected from the Little Sandy Desert, Western Australia, Australia, Latitude - 24.104722 S., Longitude 120.325 E. This government-owned facility allows access to its holdings.

Paratypes: Six preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen numbers R102628, R102629, R102696, R102698, R102725 and R102784 all collected from the Little Sandy Desert, Western Australia, Australia in the general vicinity of Latitude -24.104722 S., Longitude 120.325 E.

Diagnosis: Until now *Anilios ok sp. nov.* has been treated as a Goldfields, Western Australia population of the widespread putative taxon, *A. endoterus* (Waite, 1918), with a type locality of Hermannsburg, Northern Territory, Australia.

Based on the results of Marin *et al.* (2012, 2013) *A. endoterus* is herein confined to the far east of Western Australia, extending across the southern half of the northern Territory and arid South Australia (most of that state) to northwest New South Wales and south-west Queensland.

The species *Anilios ye sp. nov.* is a taxon confined to the Little Sandy Desert area of central Western Australia and *Anilios mazing sp. nov.* is restricted to a relatively small section of the Pilbara region of Western Australia. Both *A. ye sp. nov.* and *A. mazing sp. nov.* have also been treated as putative *A. endoterus* until now.

While all are morphologically similar to one another, they can be separated as follows:

Anilios ok sp. nov. has an obviously trilobed snout from above, versus weakly trilobed in *A. ye sp. nov*. and *A. mazing sp. nov*. and rounded in profile in *A. endoterus*.

A. mazing sp. nov. has a more-or-less rectangularshaped nasal cleft versus triangular in shape in A. endoterus and A. ok sp. nov. and teardrop shaped in A. ye sp. nov..

A. mazing sp. nov. and *A. endoterus* have strong whitening towards the snout versus weak in *A. ok sp. nov.* and *A. ye sp. nov.*.

The four preceding species are separated from all other Australian Blind Snakes by the following unique combination of characters: Nasal cleft joins preocular, not extending forward beyond the nostril.

Nasals narrowly separated behind rostral.

Frontal smaller than prefrontal. Rostral is more-or-less oval, being slightly wider than long, being about three quarters as wide as the head. Snout, slightly angular in profile, being either rounded on the outer edge or tricuspid with a weak transverse cutting edge. Nostrils inferior, slightly swollen and much nearer to rostral than preocular. Nasal cleft proceeding from preocular to nostril, thence forwards towards the rostral but not always all the way; nasal cleft does not cross the slight ridge above nostril and is therefore not visible from above.

22 midbody rows, 406-438 ventrals, 9-16 subcaudals (males average more than females); length 40-60 times body diameter, not more than 40 cm in total length, and averaging about 25 cm total length. Colour is reddish brown to brown or purplish brown above, being whitish or cream ventrally.

In line with some other species in the subgenus *Anilios* Gray, 1845 the junction between the upper surfaces and pale lower surfaces is jagged *Anilios ok sp. nov.* is depicted in life in Cogger (2014) on page 800 from Officer Basin, Western Australia in a photo by Brad Maryan and also in another photo online at:

https://www.flickr.com/photos/brian_ busho/49353929366/

photographed at Ilkurlka, Western Australia by Brian Bush.

A. mazing sp. nov. is depicted in life in Storr, Smith and Johnstone (2002) on page 101 at bottom right from Telfer, Western Australia.

The nominate form of *A. endoterus* is depicted in life on the front cover of this journal (*Australasian Journal of Herpetology*) issue 77 from south of Coober Pedy, South Australia.

On the back cover of *Australasian Journal of Herpetology* issue 77 is a photo of the habitat adjacent to where the specimen was found in a pit trap as part of a South Australian Museum sponsored field trip in November 2013.

The nominate form of *A. endoterus* is also depicted in life in Wilson and Knowles (1988) on page 349 in image 830 and online at

https://www.flickr.com/photos/ stephenmahony/11227572845/ and

https://calphotos.berkeley.edu/cgi/img_query?seq_ num=750236&one=T

Distribution: *Anilios ye sp. nov.* appears to be confined to the Little Desert area of Western Australia It may be a relatively range restricted endemic.

Etymology: *Anilios ye sp. nov.* is a little-known species of little interest to most people and their governments alike. The nomen "*ye*" is easy to

remember and for those in search of the species, they will exclaim "*aye*" when they find one after perhaps hunting for many hours.

The abbreviation of "*Anilios ye*", is "*A. ye*" or "aye", a common exclamation in outback Australia.

ANILIOS MAZING SP. NOV.

LSIDurn:Isid:zoobank.org:act:D03A7A30-FB6E-4ED2-A1E4-B2503DFA1813

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number 137920 collected from Telfer, Western Australia, Australia, Latitude -21.761111 S., Longitude 122.223333 E.

This government-owned facility allows access to its holdings.

Paratypes: Eight preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen numbers R102870, R102873, R119925, R127044, R127045, R127173, R127182 and R127183 all collected from the Nifty Mine, Western Australia, Australia, Latitude -21.6666667 S., Longitude 121.583333 E.

Diagnosis: Until now *Anilios ok sp. nov*. has been treated as a Goldfields, Western Australia population of the widespread putative taxon, *A. endoterus* (Waite, 1918), with a type locality of Hermannsburg, Northern Territory, Australia.

Based on the results of Marin *et al.* (2012, 2013) *A. endoterus* is herein confined to the far east of Western Australia, extending across the southern half of the northern Territory and arid South Australia (most of that state) to northwest New South Wales and south-west Queensland.

The species *Anilios ye sp. nov.* is a taxon confined to the Little Sandy Desert area of central Western Australia and *Anilios mazing sp. nov.* is restricted to a relatively small section of the Pilbara region of Western Australia. Both *A. ye sp. nov.* and *A. mazing sp. nov.* have also been treated as putative *A. endoterus* until now.

While all are morphologically similar to one another, they can be separated as follows:

Anilios ok sp. nov. has an obviously trilobed snout from above, versus weakly trilobed in *A. ye sp. nov*. and *A. mazing sp. nov*. and rounded in profile in *A. endoterus.*

A. mazing sp. nov. has a more-or-less rectangularshaped nasal cleft versus triangular in shape in A. endoterus and A. ok sp. nov. and teardrop shaped in A. ye sp. nov..

A. mazing sp. nov. and A. endoterus have strong whitening towards the snout versus weak in A. ok sp. nov. and A. ye sp. nov..

The four preceding species are separated from all other Australian Blind Snakes by the following unique combination of characters:

Nasal cleft joins preocular, not extending forward

beyond the nostril. Nasals narrowly separated behind rostral. Frontal smaller than prefrontal. Rostral is more-or-less oval, being slightly wider than long, being about three quarters as wide as the head. Snout, slightly angular in profile, being either rounded on the outer edge or tricuspid with a weak transverse cutting edge. Nostrils inferior, slightly swollen and much nearer to rostral than preocular. Nasal cleft proceeding from preocular to nostril, thence forwards towards the rostral but not always all the way; nasal cleft does not cross the slight ridge above nostril and is therefore not visible from above.

22 midbody rows, 406-438 ventrals, 9-16 subcaudals (males average more than females); length 40-60 times body diameter, not more than 40 cm in total length, and averaging about 25 cm total length. Colour is reddish brown to brown or purplish brown above, being whitish or cream ventrally. In line with some other species in the subgenus *Anilios* Gray, 1845 the junction between the upper surfaces and pale lower surfaces is jagged *Anilios ok sp. nov.* is depicted in life in Cogger (2014) on page 800 from Officer Basin, Western Australia in a photo by Brad Maryan and also in another photo

online at: https://www.flickr.com/photos/brian_

busho/49353929366/

photographed at Ilkurlka, Western Australia by Brian Bush.

A. mazing sp. nov. is depicted in life in Storr, Smith and Johnstone (2002) on page 101 at bottom right from Telfer, Western Australia.

The nominate form of *A. endoterus* is depicted in life on the front cover of this journal (*Australasian Journal of Herpetology*) issue 77 from south of Coober Pedy, South Australia. On the back cover of *Australasian Journal of Herpetology* issue 77 is a photo of the habitat adjacent to where the specimen was found in a pit trap as part of a South Australian Museum sponsored field trip in November 2013.

The nominate form of *A. endoterus* is also depicted in life in Wilson and Knowles (1988) on page 349 in image 830 and online at

https://www.flickr.com/photos/ stephenmahony/11227572845/ and

https://calphotos.berkeley.edu/cgi/img_query?seq_ num=750236&one=T

Distribution: Anilios mazing nov. appears to be confined to the East Pilbara region of Western Australia, Australia, away from coast and near ranges. **Etymology:** Anilios mazing sp. nov. is a barely-known species of little interest to most people and their governments alike. The nomen "mazing" is play on words, as the abbreviation "A. mazing" can extrapolate to "amazing", which is one way to highlight a species that until now has been of minor interest to people.

ANILIOS NOTTOBEIGNORED SP. NOV. LSIDurn:Isid:zoobank.org:act:9E6B0FF4-1878-4A1D-9D68-92EF7FDC3238

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R131753 collected from West Angelas, Mount Robinson, Pilbara region, Western Australia, Australia, Latitude -22.955278 S., Longitude 118.770556 E.

This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R162241 collected from 3 km southwest of Weeli Wollie Spring, Pilbara region, Western Australia, Latitude -22.931111 S., Longitude 119.184444 E.

Diagnosis: Until now, putative "*Ramphotyphlops* hamatus Storr, 1981" now placed in the genus Anilios Gray, 1845, with a type species of Anilios australis Gray, 1845 has been treated as a single species endemic to the Pilbara region and elevated areas to the south, extending to occupy much of the interior and coastal zone of the south-west part of Western Australia.

Phylogenies published by Marin *et al.* (2012, 2013) identified what they called seven species lineages within putative "*Ramphotyphlops hamatus* Storr, 1981".

With two pairs of lineages showing splits at between 1-2 MYA, they have each been treated herein as single species.

This leads to five morphologically divergent and allopatric populations recognized herein as divergent species. As pairs, two each had species that diverged from one another over 2 MYA and these two pairs of species in turn diverged from one another about 3 MYA. One of these four species includes the nominate form of *A. hamatus*, with a type locality of Marandoo, Western Australia, Australia, Latitude -22.38 S., Longitude 118.06 E., with the other three forms formally named herein as new species. A fifth lineage is about 4.5 MYA divergent from the

others, also until now unnamed and is herein formally named as *Anilios nottobeignored sp. nov.*.

The distributions of each of the five morphologically similar species are dictated by well-known landform biogeographical barriers that affect other reptile species in the same region, including the interplay of range areas where species live and major river basins that stop the spread to other areas of suitable habitat. Based on the molecular evidence, the clade of species originated in the central Pilbara and have expanded beyond this area in more recent geological times.

The nominate form of *A. hamatus* is herein confined to the Hamersley Ranges, of the Pilbara district in Western Australia, bounded by the Turee Creek east

branch and Weeli Wolli Creek in the east, Fortescue River to the north, Ashburton River to the south and the coastal flats to the west.

A. nottobeignored sp. nov. is by far the most divergent of the five species both genetically and morphologically and it is astounding that no one has bothered to formally describe the species before now. It is a range-restricted endemic, effectively confined to the Opthalmia Range, being bound by Turee Creek east branch and Weeli Wolli Creek in the west, the Fortescue River to the North and east, and the upper Ashburton River basin to the south. An overview of the relevant area gives a range of about 5,000 square km for the species, obviously not all of which is inhabitable to it, making this a very range restricted endemic of high importance.

A. crypticspecies sp. nov. is a taxon only presently known from the hills east of the Fortescue River and the town of Newman in Western Australia in an area of hilly country effectively bound by Wheelarra Hill Mine, Western Australia, Latitude -23.412778 S., Longitude 120.316667 E., in the west and Jiggalong Mission, Western Australia, Latitude -23.366667 S., Longitude 120.316667 E., although this taxon almost certainly occurs in a far wider area, to include hilly areas extending north to the De Gray River, with three recorded specimens in this area being referred to *A. crypticspecies sp. nov.*

A. goodcatch sp. nov. is a taxon from the Onslow / Cape Range area on the Western Australian coast, extending in distribution in a line south-east to include a significant area of the southern interior of the west of Western Australia.

A. greatfind sp. nov. is another in a list of species of reptile that is apparently endemic to the Shark Bay region of Western Australia, only known from within a 100 km radius of the bay and an estimated distribution in terms of this species being no more than 15,000 square km, obviously not all of which is inhabitable to it, making it another a range-restricted endemic.

The five relevant species, being *A. nottobeignored sp. nov.*, *A. hamatus*, *A. crypticspecies sp. nov.*, *A. goodcatch sp. nov.* and *A. greatfind sp. nov.* are all separated from one another by the following combinations of characters:

A. nottobeignored sp. nov. is separated from all the other four species by having a dorsum that is purplish brown in colour and starting at the back of the neck each scale on the upper surfaces of dorsum and flanks has a bold smallish white spot at the centre, this spotting remaining prominent to the latter third of the body, where it becomes both faded and scattered (as in not on each scale).

The white spots just mentioned are not of any particular shape as one moves down the body, being generally irregular in shape.

Juveniles of the other species also have this spotting

in various forms, but in all except *A. crypticspecies sp. nov.* and *A. greatfind sp. nov.* this obvious white spotting is not seen in adults.

The outer edge of the rostral scale bulges out slightly midway down the snout, curling in moderately at the jaw line from the dorsal view, before widening out in lateral or ventral view. The demarcation between dark upper flank and white under body is jagged, being caused by the interplay of different coloured scales (this demarcation is seen in all species). There is also some scattered darker scales infusing into the otherwise white lower flank, these being widely spaced and irregular. The reverse in terms of white infusions up is not seen in this species. Prefrontal and frontal are of similar size.

A. hamatus has a complete absence of bold white spotting in the centre of scales on the dorsum, instead being a more-or-less unicolor purplish brown snake on top. The rostral is U-shaped with outer edge of the rostral curving inwards slightly midway down the snout, flaring out slightly at the jawline from above, before widening out further in lateral or ventral view. The demarcation between dark upper flank and white under body is jagged, being caused by the interplay of different coloured scales. There are also closely spaced but irregular scattered darker scales infusing into the otherwise white lower flank and also white scales infusing the darker ones on higher rows. Prefrontal is noticeably larger than the frontal.

A. crypticspecies sp. nov. a dark purplish-brown snake. For the first third of the upper body and flanks there are white patches in the centre of each scale, each being in the shape of a tiny rectangle. The latter two thirds of the body lack any such white marks or spotting. It has a horseshoe shaped rostral when viewed from above. The dark of the dorsum is also expanded so that the light (white) of the belly is barely visible when the snake is viewed side on, being in contrast to all the other species, where the lower white is obviously visible due its higher positioning up the lower flank. This situation is further exaggerated by there being significantly more dark infusions downwards rather than light ones up.

Prefrontal is slightly larger than the frontal.

A. goodcatch sp. nov. is a lighter sandy brown on the dorsum with a weak purplish/pink tinge, also infusing the white underparts. the jagged colour change on the mid flank caused by the interplay of coloured scales is consistent along each side, except for about ten irregularly placed single scale light infusions up on the first two thirds of the body length and another ten irregularly placed single scale dark infusions down on the first two thirds of the body length. The posterior third of the body has numerous infusions up and down.

The rostral is square shaped with outer edges of the rostral being in straight lines up when viewed from above. The prefrontal is much larger than the frontal.

A. greatfind sp. nov. is a dark pinkish grey above. Starting at the back of the neck each scale on the upper surfaces of dorsum and flanks has a bold white spot at the centre, this spotting remaining prominent to the end of the body and onto the tail. On the posterior third of the body, some scattered scales do not have the white centres, but these are limited. Viewed from above the rostral is V-shaped and slightly shortened, the expansion being taken up by the enlarged prefrontal. The frontal is tiny. The five preceding species, being *A. nottobeignored sp. nov.*, *A. hamatus*, *A. crypticspecies sp. nov.*, *A. goodcatch sp. nov.* and *A. greatfind sp. nov.* are separated from all other Australian Blind Snakes by the following combination of characters:

A moderately large (up to 42 cm total length), tail being 1.8-4.1 percent of total length (males much longer than females), moderately stout, blind-snake of variable colour on the dorsum dependent on both age and species (in addition to things like shedding cycles).

An obviously beaked snout, 22 midbody scale rows and a nasal cleft usually proceeding from the second labial.

Rostral (from above) is variable in shape but always much longer than wide, about two-thirds as wide as the head and extending back to well short of level of eyes where it always meets the prefrontal. Nasals are narrowly separated behind the rostral. Frontal may be larger or smaller than the prefrontal, but mostly slightly smaller.

Tip of snout has a weak to moderately strong, transverse cutting edge (depending on species). Nostrils inferior, slightly swollen, slightly to much nearer to the rostral than the preocular. Nasal cleft usually proceeds from the second labial to the nostril or a little forward past it but never crossing the obtuse ridge above the nostril.

22 midbody scale rows, 338-394 ventrals 338-394, 11-22 subcaudals (males have the higher counts) (modified and adapted from Storr, 1981).

Distinguishable from the morphologically similar *A*. *australis* and the closely related *A*. *adept sp. nov*. (previously treated as a north-west population of *A*. *australis*) by having a transverse cutting edge on the tip of the snout, nasal cleft not extending on to top of the head, widely separated nasals as opposed to narrowly separated and more than 338 ventrals (versus usually less than 340 in *A*. *australis* and *A*. *adept sp. nov*.).

Anilios nottobeignored sp. nov. is depicted in life online at:

https://www.flickr.com/photos/zimny_ anders/52444811993/

from the Newman area, Western Australia in a photo by Anders Zimmy.

Anilios hamatus is depicted in life online at:

https://www.flickr.com/photos/ reptileshots/52789388465/

showing a specimen from the Karijini region, Western Australia in a photo by Brendan Schembri.

Anilios goodcatch sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/252572312 depicting a specimen from the North-west Cape, Western Australia photographed by Bryce van der Heide, and

https://www.inaturalist.org/observations/260850240 depicting another specimen from the North-west Cape, Western Australia.

Anilios greatfind sp. nov. is depicted in life online at: https://www.flickr.com/photos/

jaricornelis/50813037496/

depicting a specimen from Hamelin Pool, Western Australia, photographed by Jari Cornelis and https://www.flickr.com/photos/136643623@ N03/45772809072/

depicting a specimen from Hamelin Pool, Western Australia, photographed by Damian Lettoof and https://www.flickr.com/photos/201283849@ N06/53939907976/

depicting a specimen from Shark Bay, Western Australia.

Distribution: *A. nottobeignored sp. nov.* is a rangerestricted endemic, effectively confined to the Opthalmia Range, being bound by Turee Creek east branch and Weeli Wolli Creek in the west, the Fortescue River to the North and east, and the upper Ashburton River basin to the south. An overview of the relevant area gives a range of about 5,000 square km for the species, obviously not all of which is inhabitable to it, making this a very range restricted endemic of high conservation importance.

Etymology: *A. nottobeignored sp. nov.* has its name taken directly from the English words "not to be ignored". This reflects both in terms of the science of taxonomy and nomenclature as well as the conservation of the species. If it is ignored and evil people and their corrupt mates in government pretend the species does not exist, as has been done quite a lot lately in herpetology in Australia, then the species may well become extinct while people in positions of power are busy forcibly ignoring its existence. Refer to the papers of Hoser (2019a, 2019b) and sources cited therein for more details.

ANILIOS CRYPTICSPECIES SP. NOV. LSIDurn:Isid:zoobank.org:act:AB33FFD1-D53C-4195-8493-18749058BF87

Holotype: A preserved male specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R111719 collected from 20 km east southeast of Wheelarra Hill, Pilbara District, Western Australia, Australia, Latitude -23.412778 S., Longitude 120.316667 E.

This facility allows access to its holdings.

Paratypes: 1/ A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R111718 collected from 20 km east southeast of Wheelarra Hill, Pilbara District, Western Australia, Australia, Latitude -23.412778 S., Longitude 120.316667 E., 2/ A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R111862 collected from 26 km southeast of Wheelarra Hill, Pilbara District, Western Australia, Australia, Latitude -23.535556 S., Longitude 120.326111 E.

Diagnosis: Until now, putative "*Ramphotyphlops* hamatus Storr, 1981" now placed in the genus Anilios Gray, 1845, with a type species of Anilios australis Gray, 1845 has been treated as a single species endemic to the Pilbara region and elevated areas to the south, extending to occupy much of the interior and coastal zone of the south-west part of Western Australia.

Phylogenies published by Marin *et al.* (2012, 2013) identified what they called seven species lineages within putative "*Ramphotyphlops hamatus* Storr, 1981".

With two pairs of lineages showing splits at between 1-2 MYA, they have each been treated herein as single species. This leads to five morphologically divergent and allopatric populations recognized herein as divergent species. As pairs, two each had species that diverged from one another over 2 MYA and these two pairs of species in turn diverged from one another about 3 MYA. One of these four species includes the nominate form of *A. hamatus*, with a type locality of Marandoo, Western Australia, Australia, Latitude -22.38 S., Longitude 118.06 E., with the other three forms formally named herein as new species. A fifth lineage is about 4.5 MYA divergent from the others, also until now unnamed and is herein formally

named as *Anilios nottobeignored sp. nov.*. The distributions of each of the five morphologically similar species are dictated by well-known landform biogeographical barriers that affect other reptile species in the same region, including the interplay of range areas where species live and major river basins that stop the spread to other areas of suitable habitat. Based on the molecular evidence, the clade of species originated in the central Pilbara and have expanded beyond this area in more recent geological times.

The nominate form of *A. hamatus* is herein confined to the Hamersley Ranges, of the Pilbara district in Western Australia, bounded by the Turee Creek east branch and Weeli Wolli Creek in the east, Fortescue River to the north, Ashburton River to the south and the coastal flats to the west.

A. nottobeignored sp. nov. is by far the most divergent of the five species both genetically and morphologically and it is astounding that no one has

bothered to formally describe the species before now. It is a range-restricted endemic, effectively confined to the Opthalmia Range, being bound by Turee Creek east branch and Weeli Wolli Creek in the west, the Fortescue River to the North and east, and the upper Ashburton River basin to the south. An overview of the relevant area gives a range of about 5,000 square km for the species, obviously not all of which is inhabitable to it, making this a very range restricted endemic of high importance.

A. crypticspecies sp. nov. is a taxon only presently known from the hills east of the Fortescue River and the town of Newman in Western Australia in an area of hilly country effectively bound by Wheelarra Hill Mine, Western Australia, Latitude -23.412778 S., Longitude 120.316667 E., in the west and Jiggalong Mission, Western Australia, Latitude -23.366667 S., Longitude 120.316667 E., although this taxon almost certainly occurs in a far wider area, to include hilly areas extending north to the De Gray River, with three recorded specimens in this area being referred to *A. crypticspecies sp. nov.*.

A. goodcatch sp. nov. is a taxon from the Onslow / Cape Range area on the Western Australian coast, extending in distribution in a line south-east to include a significant area of the southern interior of the west of Western Australia.

A. greatfind sp. nov. is another in a list of species of reptile that is apparently endemic to the Shark Bay region of Western Australia, only known from within a 100 km radius of the bay and an estimated distribution in terms of this species being no more than 15,000 square km, obviously not all of which is inhabitable to it, making it another a range-restricted endemic.

The five relevant species, being *A. nottobeignored sp. nov.*, *A. hamatus*, *A. crypticspecies sp. nov.*, *A. goodcatch sp. nov.* and *A. greatfind sp. nov.* are all separated from one another by the following combinations of characters:

A. nottobeignored sp. nov. is separated from all the other four species by having a dorsum that is purplish brown in colour and starting at the back of the neck each scale on the upper surfaces of dorsum and flanks has a bold smallish white spot at the centre, this spotting remaining prominent to the latter third of the body, where it becomes both faded and scattered (as in not on each scale).

The white spots just mentioned are not of any particular shape as one moves down the body, being generally irregular in shape.

Juveniles of the other species also have this spotting in various forms, but in all except *A. crypticspecies sp. nov.* and *A. greatfind sp. nov.* this obvious white spotting is not seen in adults.

The outer edge of the rostral scale bulges out slightly midway down the snout, curling in moderately at the jaw line from the dorsal view, before widening out in lateral or ventral view. The demarcation between dark upper flank and white under body is jagged, being caused by the interplay of different coloured scales (this demarcation is seen in all species). There is also some scattered darker scales infusing into the otherwise white lower flank, these being widely spaced and irregular. The reverse in terms of white infusions up is not seen in this species. Prefrontal and frontal are of similar size.

A. hamatus has a complete absence of bold white spotting in the centre of scales on the dorsum, instead being a more-or-less unicolor purplish brown snake on top. The rostral is U-shaped with outer edge of the rostral curving inwards slightly midway down the snout, flaring out slightly at the jawline from above, before widening out further in lateral or ventral view. The demarcation between dark upper flank and white under body is jagged, being caused by the interplay of different coloured scales. There are also closely spaced but irregular scattered darker scales infusing into the otherwise white lower flank and also white scales infusing the darker ones on higher rows. Prefrontal is noticeably larger than the frontal.

A. crypticspecies sp. nov. a dark purplish-brown snake. For the first third of the upper body and flanks there are white patches in the centre of each scale, each being in the shape of a tiny rectangle. The latter two thirds of the body lack any such white marks or spotting. It has a horseshoe shaped rostral when viewed from above. The dark of the dorsum is also expanded so that the light (white) of the belly is barely visible when the snake is viewed side on, being in contrast to all the other species, where the lower white is obviously visible due its higher positioning up the lower flank. This situation is further exaggerated by there being significantly more dark infusions downwards rather than light ones up.

Prefrontal is slightly larger than the frontal.

A. goodcatch sp. nov. is a lighter sandy brown on the dorsum with a weak purplish/pink tinge, also infusing the white underparts. the jagged colour change on the mid flank caused by the interplay of coloured scales is consistent along each side, except for about ten irregularly placed single scale light infusions up on the first two thirds of the body length and another ten irregularly placed single scale dark infusions down on the first two thirds of the body length. The posterior third of the body has numerous infusions up and down.

The rostral is square shaped with outer edges of the rostral being in straight lines up when viewed from above. The prefrontal is much larger than the frontal. *A. greatfind sp. nov.* is a dark pinkish grey above. Starting at the back of the neck each scale on the upper surfaces of dorsum and flanks has a bold white spot at the centre, this spotting remaining prominent to the end of the body and onto the tail. On the posterior third of the body, some scattered

scales do not have the white centres, but these are limited. Viewed from above the rostral is V-shaped and slightly shortened, the expansion being taken up by the enlarged prefrontal. The frontal is tiny.

The five preceding species, being *A. nottobeignored sp. nov.*, *A. hamatus*, *A. crypticspecies sp. nov.*, *A. goodcatch sp. nov.* and *A. greatfind sp. nov.* are separated from all other Australian Blind Snakes by the following combination of characters:

A moderately large (up to 42 cm total length), tail being 1.8-4.1 percent of total length (males much longer than females), moderately stout, blind-snake of variable colour on the dorsum dependent on both age and species (in addition to things like shedding cycles).

An obviously beaked snout, 22 midbody scale rows and a nasal cleft usually proceeding from the second labial.

Rostral (from above) is variable in shape but always much longer than wide, about two-thirds as wide as the head and extending back to well short of level of eyes where it always meets the prefrontal. Nasals are narrowly separated behind the rostral. Frontal may be larger or smaller than the prefrontal, but mostly slightly smaller.

Tip of snout has a weak to moderately strong, transverse cutting edge (depending on species). Nostrils inferior, slightly swollen, slightly to much nearer to the rostral than the preocular. Nasal cleft usually proceeds from the second labial to the nostril or a little forward past it but never crossing the obtuse ridge above the nostril.

22 midbody scale rows, 338-394 ventrals 338-394, 11-22 subcaudals (males have the higher counts) (modified and adapted from Storr, 1981).

Distinguishable from the morphologically similar *A. australis* and the closely related *A. adept sp. nov.* (previously treated as a north-west population of *A. australis*) by having a transverse cutting edge on the tip of the snout, nasal cleft not extending on to top of the head, widely separated nasals as opposed to narrowly separated and more than 338 ventrals (versus usually less than 340 in *A. australis* and *A. adept sp. nov.*).

Anilios nottobeignored sp. nov. is depicted in life online at:

https://www.flickr.com/photos/zimny_ anders/52444811993/

from the Newman area, Western Australia in a photo

by Anders Zimmy.

Anilios hamatus is depicted in life online at:

https://www.flickr.com/photos/

reptileshots/52789388465/

showing a specimen from the Karijini region, Western Australia in a photo by Brendan Schembri.

Anilios goodcatch sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/252572312

depicting a specimen from the North-west Cape, Western Australia photographed by Bryce van der Heide, and

https://www.inaturalist.org/observations/260850240 depicting another specimen from the North-west Cape, Western Australia.

Anilios greatfind sp. nov. is depicted in life online at: https://www.flickr.com/photos/

jaricornelis/50813037496/

depicting a specimen from Hamelin Pool, Western Australia, photographed by Jari Cornelis and https://www.flickr.com/photos/136643623@ N03/45772809072/

depicting a specimen from Hamelin Pool, Western Australia, photographed by Damian Lettoof and https://www.flickr.com/photos/201283849@ N06/53939907976/

depicting a specimen from Shark Bay, Western Australia.

Distribution: *A. crypticspecies sp. nov.* is a taxon only presently known from the hills east of the Fortescue River and the town of Newman in Western Australia in an area of hilly country effectively bound by Wheelarra Hill Mine, Western Australia, Latitude -23.412778 S., Longitude 120.316667 E., in the west and Jiggalong Mission, Western Australia, Latitude -23.366667 S., Longitude 120.316667 E., although this taxon almost certainly occurs in a far wider area, to include hilly areas extending north to the De Gray River, with three recorded specimens in this area being referred to *A. crypticspecies sp. nov.*

Etymology: *A. crypticspecies sp. nov.* has its name taken directly from the English words "cryptic species". This reflects the fact that it remained effectively hidden from science as a new species until year 2025 in spite of extensive herpetological fieldwork in the Pilbara region of western Australia by numerous paid herpetologists in the period between the early 1980's to the present date.

The species name is a noun in apposition.

ANILIOS GOODCATCH SP. NOV.

LSIDurn:Isid:zoobank.org:act:98C70FF1-EACA-45DF-ADF1-A072F5DB7D43

Holotype: A preserved adult male specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R110678 collected from North West Cape, Western Australia, Australia, Latitude -21.851389 S., Longitude 114.105833 E.

This government-owned facility allows access to its holdings.

Paratypes: Seven preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, being specimen numbers R110669 (adult female), R142177, R157986 (adult male), R157987, all from North West Cape, Western Australia, Australia, Latitude -21.851389 S., Longitude

114.105833 E. and specimen numbers R112181, R112182 and R108348 (adult female) all collected from the Onslow area of Western Australia, Australia, Latitude -21.740833 S., Longitude 115.113889 E. **Diagnosis:** Until now, putative *"Ramphotyphlops hamatus* Storr, 1981" now placed in the genus *Anilios* Gray, 1845, with a type species of *Anilios australis* Gray, 1845 has been treated as a single species endemic to the Pilbara region and elevated areas to the south, extending to occupy much of the interior and coastal zone of the south-west part of Western Australia.

Phylogenies published by Marin *et al.* (2012, 2013) identified what they called seven species lineages within putative "*Ramphotyphlops hamatus* Storr, 1981".

With two pairs of lineages showing splits at between 1-2 MYA, they have each been treated herein as single species. This leads to five morphologically divergent and allopatric populations recognized herein as divergent species. As pairs, two each had species that diverged from one another over 2 MYA and these two pairs of species in turn diverged from one another about 3 MYA. One of these four species includes the nominate form of *A. hamatus*, with a type locality of Marandoo, Western Australia, Australia, Latitude -22.38 S., Longitude 118.06 E., with the other three forms formally named herein as new species. A fifth lineage is about 4.5 MYA divergent from the others, also until now unnamed and is herein formally

others, also until now unnamed and is herein formally named as *Anilios nottobeignored sp. nov.*.

The distributions of each of the five morphologically similar species are dictated by well-known landform biogeographical barriers that affect other reptile species in the same region, including the interplay of range areas where species live and major river basins that stop the spread to other areas of suitable habitat. Based on the molecular evidence, the clade of species originated in the central Pilbara and have expanded beyond this area in more recent geological times.

The nominate form of *A. hamatus* is herein confined to the Hamersley Ranges, of the Pilbara district in Western Australia, bounded by the Turee Creek east branch and Weeli Wolli Creek in the east, Fortescue River to the north, Ashburton River to the south and the coastal flats to the west.

A. nottobeignored sp. nov. is by far the most divergent of the five species both genetically and morphologically and it is astounding that no one has bothered to formally describe the species before now. It is a range-restricted endemic, effectively confined to the Opthalmia Range, being bound by Turee Creek east branch and Weeli Wolli Creek in the west, the Fortescue River to the North and east, and the upper Ashburton River basin to the south. An overview of the relevant area gives a range of about 5,000 square km for the species, obviously not all of which is inhabitable to it, making this a very range restricted endemic of high importance.

A. crypticspecies sp. nov. is a taxon only presently known from the hills east of the Fortescue River and the town of Newman in Western Australia in an area of hilly country effectively bound by Wheelarra Hill Mine, Western Australia, Latitude -23.412778 S., Longitude 120.316667 E., in the west and Jiggalong Mission, Western Australia, Latitude -23.366667 S., Longitude 120.316667 E., although this taxon almost certainly occurs in a far wider area, to include hilly areas extending north to the De Gray River, with three recorded specimens in this area being referred to *A. crypticspecies sp. nov.*

A. goodcatch sp. nov. is a taxon from the Onslow / Cape Range area on the Western Australian coast, extending in distribution in a line south-east to include a significant area of the southern interior of the west of Western Australia.

A. greatfind sp. nov. is another in a list of species of reptile that is apparently endemic to the Shark Bay region of Western Australia, only known from within a 100 km radius of the bay and an estimated distribution in terms of this species being no more than 15,000 square km, obviously not all of which is inhabitable to it, making it another a range-restricted endemic.

The five relevant species, being *A. nottobeignored sp. nov.*, *A. hamatus*, *A. crypticspecies sp. nov.*, *A. goodcatch sp. nov.* and *A. greatfind sp. nov.* are all separated from one another by the following combinations of characters:

A. nottobeignored sp. nov. is separated from all the other four species by having a dorsum that is purplish brown in colour and starting at the back of the neck each scale on the upper surfaces of dorsum and flanks has a bold smallish white spot at the centre, this spotting remaining prominent to the latter third of the body, where it becomes both faded and scattered (as in not on each scale).

The white spots just mentioned are not of any particular shape as one moves down the body, being generally irregular in shape.

Juveniles of the other species also have this spotting in various forms, but in all except *A. crypticspecies sp. nov.* and *A. greatfind sp. nov.* this obvious white spotting is not seen in adults.

The outer edge of the rostral scale bulges out slightly midway down the snout, curling in moderately at the jaw line from the dorsal view, before widening out in lateral or ventral view. The demarcation between dark upper flank and white under body is jagged, being caused by the interplay of different coloured scales (this demarcation is seen in all species). There is also some scattered darker scales infusing into the otherwise white lower flank, these being widely spaced and irregular. The reverse in terms of white infusions up is not seen in this species. Prefrontal and frontal are of similar size.

A. hamatus has a complete absence of bold white spotting in the centre of scales on the dorsum, instead being a more-or-less unicolor purplish brown snake on top. The rostral is U-shaped with outer edge of the rostral curving inwards slightly midway down the snout, flaring out slightly at the jawline from above, before widening out further in lateral or ventral view. The demarcation between dark upper flank and white under body is jagged, being caused by the interplay of different coloured scales. There are also closely spaced but irregular scattered darker scales infusing into the otherwise white lower flank and also white scales infusing the darker ones on higher rows. Prefrontal is noticeably larger than the frontal.

A. crypticspecies sp. nov. a dark purplish-brown snake. For the first third of the upper body and flanks there are white patches in the centre of each scale, each being in the shape of a tiny rectangle. The latter two thirds of the body lack any such white marks or spotting. It has a horseshoe shaped rostral when viewed from above. The dark of the dorsum is also expanded so that the light (white) of the belly is barely visible when the snake is viewed side on, being in contrast to all the other species, where the lower white is obviously visible due its higher positioning up the lower flank. This situation is further exaggerated by there being significantly more dark infusions downwards rather than light ones up.

Prefrontal is slightly larger than the frontal.

A. goodcatch sp. nov. is a lighter sandy brown on the dorsum with a weak purplish/pink tinge, also infusing the white underparts. the jagged colour change on the mid flank caused by the interplay of coloured scales is consistent along each side, except for about ten irregularly placed single scale light infusions up on the first two thirds of the body length and another ten irregularly placed single scale dark infusions down on the first two thirds of the body length. The posterior third of the body has numerous infusions up and down.

The rostral is square shaped with outer edges of the rostral being in straight lines up when viewed from above. The prefrontal is much larger than the frontal.

A. greatfind sp. nov. is a dark pinkish grey above. Starting at the back of the neck each scale on the upper surfaces of dorsum and flanks has a bold white spot at the centre, this spotting remaining prominent to the end of the body and onto the tail.

On the posterior third of the body, some scattered scales do not have the white centres, but these are limited. Viewed from above the rostral is V-shaped and slightly shortened, the expansion being taken up by the enlarged prefrontal. The frontal is tiny.

The five preceding species, being *A. nottobeignored sp. nov.*, *A. hamatus*, *A. crypticspecies sp. nov.*, *A. goodcatch sp. nov.* and *A. greatfind sp. nov.* are separated from all other Australian Blind Snakes by

the following combination of characters:

A moderately large (up to 42 cm total length), tail being 1.8-4.1 percent of total length (males much longer than females), moderately stout, blind-snake of variable colour on the dorsum dependent on both age and species (in addition to things like shedding cycles).

An obviously beaked snout, 22 midbody scale rows and a nasal cleft usually proceeding from the second labial.

Rostral (from above) is variable in shape but always much longer than wide, about two-thirds as wide as the head and extending back to well short of level of eyes where it always meets the prefrontal. Nasals are narrowly separated behind the rostral. Frontal may be larger or smaller than the prefrontal, but mostly slightly smaller.

Tip of snout has a weak to moderately strong, transverse cutting edge (depending on species). Nostrils inferior, slightly swollen, slightly to much nearer to the rostral than the preocular. Nasal cleft usually proceeds from the second labial to the nostril or a little forward past it but never crossing the obtuse ridge above the nostril.

22 midbody scale rows, 338-394 ventrals 338-394, 11-22 subcaudals (males have the higher counts) (modified and adapted from Storr, 1981). Distinguishable from the morphologically similar *A. australis* and the closely related *A. adept sp. nov.* (previously treated as a north-west population of *A. australis*) by having a transverse cutting edge on the tip of the snout, nasal cleft not extending on to top of the head, widely separated nasals as opposed to narrowly separated and more than 338 ventrals (versus usually less than 340 in *A. australis* and *A. adept sp. nov.*).

Anilios nottobeignored sp. nov. is depicted in life online at:

https://www.flickr.com/photos/zimny_ anders/52444811993/

from the Newman area, Western Australia in a photo by Anders Zimmy.

Anilios hamatus is depicted in life online at: https://www.flickr.com/photos/

reptileshots/52789388465/

showing a specimen from the Karijini region, Western Australia in a photo by Brendan Schembri.

Anilios goodcatch sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/252572312 depicting a specimen from the North-west Cape, Western Australia photographed by Bryce van der Heide, and

https://www.inaturalist.org/observations/260850240 depicting another specimen from the North-west Cape, Western Australia.

Anilios greatfind sp. nov. is depicted in life online at: https://www.flickr.com/photos/ jaricornelis/50813037496/

depicting a specimen from Hamelin Pool, Western Australia, photographed by Jari Cornelis and https://www.flickr.com/photos/136643623@ N03/45772809072/

depicting a specimen from Hamelin Pool, Western Australia, photographed by Damian Lettoof and https://www.flickr.com/photos/201283849@ N06/53939907976/

depicting a specimen from Shark Bay, Western Australia.

Distribution: *A. goodcatch sp. nov.* is a taxon from the Onslow / Cape Range area on the Western Australian coast, extending in distribution in a line south-east to include a significant area of the southern interior of the west of Western Australia.

Etymology: *A. goodcatch sp. nov.* has its name taken directly from the English words "good catch". This reflects the fact that field herpetologists tend to only encounter Blind Snakes occasionally. That includes for this species. They are hard to actually go looking for to find. They are usually found by field herpetologists when looking for other more iconic and "exciting species" such as the Cape Range Death Adders Acanthophis donnellani (Hoser, 2002).

This explains why *A. goodcatch sp. nov.* have been found in relatively large numbers crossing the roads around Cape Range. This is a known spot for Cape Range Death Adders *Acanthophis donnellani* (Hoser, 2002).

As to find a different species of snake such as *A. goodcatch sp. nov.* is a good catch, the scientific nomen reflects this.

The species name is a noun in apposition.

ANILIOS GREATFIND SP. NOV.

LSIDurn:lsid:zoobank.org:act:DCA7CA6A-EDF4-4CBE-9412-C90E2092FDD5

Holotype: A preserved adult male specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R112743 collected from 6 km northeast of Carnarvon, Western Australia, Australia, Latitude -24.86 S., Longitude 113.668889 E.

This facility allows access to its holdings.

Paratypes: Three preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, being specimen numbers R137443 (male) collected from 2.5 km north of Peron Homestead, Person Heritage Precinct, Shark Bay, Western Australia, Australia, Latitude -25.817222 S., Longitude 113.547222 E., R112742 (juvenile) collected from 2 km west of Carnarvon, Western Australia, Australia, Latitude -24.873889 S., Longitude 113.636944 E., and R120970 collected from 2 km southwest of Meedo Homestead, Western Australia, Australia, Latitude -25.680556 S., Longitude 114.621667 E .

Diagnosis: Until now, putative "*Ramphotyphlops hamatus* Storr, 1981" now placed in the genus *Anilios* Gray, 1845, with a type species of *Anilios australis* Gray, 1845 has been treated as a single species endemic to the Pilbara region and elevated areas to the south, extending to occupy much of the interior and coastal zone of the south-west part of Western Australia.

Phylogenies published by Marin *et al.* (2012, 2013) identified what they called seven species lineages within putative "*Ramphotyphlops hamatus* Storr, 1981".

With two pairs of lineages showing splits at between 1-2 MYA, they have each been treated herein as single species. This leads to five morphologically divergent and allopatric populations recognized herein as divergent species. As pairs, two each had species that diverged from one another over 2 MYA and these two pairs of species in turn diverged from one another about 3 MYA. One of these four species includes the nominate form of *A. hamatus*, with a type locality of Marandoo, Western Australia, Australia, Latitude -22.38 S., Longitude 118.06 E., with the other three forms formally named herein as new species.

A fifth lineage is about 4.5 MYA divergent from the others, also until now unnamed and is herein formally named as *Anilios nottobeignored sp. nov.*.

The distributions of each of the five morphologically similar species are dictated by well-known landform biogeographical barriers that affect other reptile species in the same region, including the interplay of range areas where species live and major river basins that stop the spread to other areas of suitable habitat. Based on the molecular evidence, the clade of species originated in the central Pilbara and have expanded beyond this area in more recent geological times.

The nominate form of *A. hamatus* is herein confined to the Hamersley Ranges, of the Pilbara district in Western Australia, bounded by the Turee Creek east branch and Weeli Wolli Creek in the east, Fortescue River to the north, Ashburton River to the south and the coastal flats to the west.

A. nottobeignored sp. nov. is by far the most divergent of the five species both genetically and morphologically and it is astounding that no one has bothered to formally describe the species before now. It is a range-restricted endemic, effectively confined to the Opthalmia Range, being bound by Turee Creek east branch and Weeli Wolli Creek in the west, the Fortescue River to the North and east, and the upper Ashburton River basin to the south. An overview of the relevant area gives a range of about 5,000 square km for the species, obviously not all of which is inhabitable to it, making this a very range restricted endemic of high importance.

A. crypticspecies sp. nov. is a taxon only presently known from the hills east of the Fortescue River and

the town of Newman in Western Australia in an area of hilly country effectively bound by Wheelarra Hill Mine, Western Australia, Latitude -23.412778 S., Longitude 120.316667 E., in the west and Jiggalong Mission, Western Australia, Latitude -23.366667 S., Longitude 120.316667 E., although this taxon almost certainly occurs in a far wider area, to include hilly areas extending north to the De Gray River, with three recorded specimens in this area being referred to *A. crypticspecies sp. nov.*.

A. goodcatch sp. nov. is a taxon from the Onslow / Cape Range area on the Western Australian coast, extending in distribution in a line south-east to include a significant area of the southern interior of the west of Western Australia.

A. greatfind sp. nov. is another in a list of species of reptile that is apparently endemic to the Shark Bay region of Western Australia, only known from within a 100 km radius of the bay and an estimated distribution in terms of this species being no more than 15,000 square km, obviously not all of which is inhabitable to it, making it another a range-restricted endemic.

The five relevant species, being *A. nottobeignored sp. nov.*, *A. hamatus*, *A. crypticspecies sp. nov.*, *A. goodcatch sp. nov.* and *A. greatfind sp. nov.* are all separated from one another by the following combinations of characters:

A. nottobeignored sp. nov. is separated from all the other four species by having a dorsum that is purplish brown in colour and starting at the back of the neck each scale on the upper surfaces of dorsum and flanks has a bold smallish white spot at the centre, this spotting remaining prominent to the latter third of the body, where it becomes both faded and scattered (as in not on each scale).

The white spots just mentioned are not of any particular shape as one moves down the body, being generally irregular in shape.

Juveniles of the other species also have this spotting in various forms, but in all except *A. crypticspecies sp. nov.* and *A. greatfind sp. nov.* this obvious white spotting is not seen in adults.

The outer edge of the rostral scale bulges out slightly midway down the snout, curling in moderately at the jaw line from the dorsal view, before widening out in lateral or ventral view. The demarcation between dark upper flank and white under body is jagged, being caused by the interplay of different coloured scales (this demarcation is seen in all species). There is also some scattered darker scales infusing into the otherwise white lower flank, these being widely spaced and irregular. The reverse in terms of white infusions up is not seen in this species.

Prefrontal and frontal are of similar size.

A. hamatus has a complete absence of bold white spotting in the centre of scales on the dorsum, instead being a more-or-less unicolor purplish brown snake

on top. The rostral is U-shaped with outer edge of the rostral curving inwards slightly midway down the snout, flaring out slightly at the jawline from above, before widening out further in lateral or ventral view. The demarcation between dark upper flank and white under body is jagged, being caused by the interplay of different coloured scales. There are also closely spaced but irregular scattered darker scales infusing into the otherwise white lower flank and also white scales infusing the darker ones on higher rows. Prefrontal is noticeably larger than the frontal. A. crypticspecies sp. nov. a dark purplish-brown snake. For the first third of the upper body and flanks there are white patches in the centre of each scale, each being in the shape of a tiny rectangle. The latter two thirds of the body lack any such white marks or spotting. It has a horseshoe shaped rostral when viewed from above. The dark of the dorsum is also expanded so that the light (white) of the belly is barely visible when the snake is viewed side on, being in contrast to all the other species, where the lower white is obviously visible due its higher positioning up the lower flank. This situation is further exaggerated by there being significantly more dark infusions downwards rather than light ones up.

Prefrontal is slightly larger than the frontal. A. goodcatch sp. nov. is a lighter sandy brown on the dorsum with a weak purplish/pink tinge, also infusing the white underparts. the jagged colour change on the mid flank caused by the interplay of coloured scales is consistent along each side, except for about ten irregularly placed single scale light infusions up on the first two thirds of the body length and another ten irregularly placed single scale dark infusions down on the first two thirds of the body length. The posterior third of the body has numerous infusions up and down.

The rostral is square shaped with outer edges of the rostral being in straight lines up when viewed from above. The prefrontal is much larger than the frontal. *A. greatfind sp. nov.* is a dark pinkish grey above. Starting at the back of the neck each scale on the upper surfaces of dorsum and flanks has a bold white spot at the centre, this spotting remaining prominent to the end of the body and onto the tail.

On the posterior third of the body, some scattered scales do not have the white centres, but these are limited. Viewed from above the rostral is V-shaped and slightly shortened, the expansion being taken up by the enlarged prefrontal. The frontal is tiny.

The five preceding species, being *A. nottobeignored sp. nov.*, *A. hamatus*, *A. crypticspecies sp. nov.*, *A. goodcatch sp. nov.* and *A. greatfind sp. nov.* are separated from all other Australian Blind Snakes by the following combination of characters:

A moderately large (up to 42 cm total length), tail being 1.8-4.1 percent of total length (males much longer than females), moderately stout, blind-snake

of variable colour on the dorsum dependent on both age and species (in addition to things like shedding cycles).

An obviously beaked snout, 22 midbody scale rows and a nasal cleft usually proceeding from the second labial.

Rostral (from above) is variable in shape but always much longer than wide, about two-thirds as wide as the head and extending back to well short of level of eyes where it always meets the prefrontal. Nasals are narrowly separated behind the rostral. Frontal may be larger or smaller than the prefrontal, but mostly slightly smaller.

Tip of snout has a weak to moderately strong, transverse cutting edge (depending on species). Nostrils inferior, slightly swollen, slightly to much nearer to the rostral than the preocular. Nasal cleft usually proceeds from the second labial to the nostril or a little forward past it but never crossing the obtuse ridge above the nostril.

22 midbody scale rows, 338-394 ventrals 338-394, 11-22 subcaudals (males have the higher counts) (modified and adapted from Storr, 1981).

Distinguishable from the morphologically similar *A*. *australis* and the closely related *A*. *adept sp. nov*. (previously treated as a north-west population of *A*. *australis*) by having a transverse cutting edge on the tip of the snout, nasal cleft not extending on to top of the head, widely separated nasals as opposed to narrowly separated and more than 338 ventrals

(versus usually less than 340 in *A. australis* and *A. adept sp. nov.*).

Anilios nottobeignored sp. nov. is depicted in life online at:

https://www.flickr.com/photos/zimny_

anders/52444811993/

from the Newman area, Western Australia in a photo by Anders Zimmy.

Anilios hamatus is depicted in life online at:

https://www.flickr.com/photos/

reptileshots/52789388465/

- showing a specimen from the Karijini region, Western Australia in a photo by Brendan Schembri.
- Anilios goodcatch sp. nov. is depicted in life online at:
- https://www.inaturalist.org/observations/252572312
- depicting a specimen from the North-west Cape,
- Western Australia photographed by Bryce van der Heide, and
- https://www.inaturalist.org/observations/260850240 depicting another specimen from the North-west
- Cape, Western Australia.
- Anilios greatfind sp. nov. is depicted in life online at: https://www.flickr.com/photos/
- jaricornelis/50813037496/
- depicting a specimen from Hamelin Pool, Western
- Australia, photographed by Jari Cornelis and
- https://www.flickr.com/photos/136643623@

N03/45772809072/

depicting a specimen from Hamelin Pool, Western Australia, photographed by Damian Lettoof and https://www.flickr.com/photos/201283849@ N06/53939907976/

depicting a specimen from Shark Bay, Western Australia.

Distribution: *A. greatfind sp. nov.* is another in a list of species of reptile that is apparently endemic to the Shark Bay region of Western Australia, only known from within a 100 km radius of the bay and an estimated distribution in terms of this species being no more than 15,000 square km, obviously not all of which is inhabitable to it, making it another a range-restricted endemic.

It should immediately be treated as a vulnerable species of conservation significance.

Etymology: *A. greatfind sp. nov.* has its name taken directly from the English words "great find". This reflects the fact that field herpetologists tend to only encounter Blind Snakes incidentally and occasionally, thereby making them a "great find". That includes for this species.

The species name is a noun in apposition.

ANILIOS BULLIARDI SP. NOV.

LSIDurn:lsid:zoobank.org:act:607C7051-9439-4F4C-B917-62F70A8935C7

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R67334 collected from Armadale, Western Australia, Australia, Latitude -32.166667 S., Longitude 116.016667 E.

This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R31992 collected from Helena valley Western Australia, Australia, Latitude -31.45 S., Longitude 116.116667 E.

Diagnosis: The geographic distribution of putative *Anilios waitii* Boulenger, 1895 and morphological divergences between populations flags the presence of more than one species, as indicated in the phylogenies of Marin *et al.* (2012, 2013).

The type form of *A. waitii* is from north-west Australia, a form which has a distribution extending from the Pilbara region south through the elevated areas punctuated by the Canarvon and Robinson Ranges, generally north of Lake Barlee and Lake Moore. *A. bulliardi sp. nov.* occurs from about Tallering Peak, Latitude -28.1 S. Longitude 115.633333 E. in the north-west, south along the coast of Western Australia to Cranbrook, Latitude -34.3 S., Longitude 117.55 E. in the south, generally west of Lake Moore in the north and not far east of it in the south, the species generally being bound in the south-west by the zone of lowlands and salt lakes between the south-west

and more elevated areas to the north and east of the State of Western Australia.

This low zone is the biogeographic barrier separating the two species.

Anilios mirlintjarra sp. nov. is the geographically isolated population of putative A. waitii from the Warburton Ranges in the far east of Western Australia, west southwest of the Northern Territory and South Australian border with Western Australia. It is separated from more western populations by the Great Victoria Desert to the south and south-west and other low-lying regions to the west and northwest including the Gibson Desert.

A. bulliardi sp. nov. is readily separated from the nominate form of *A. waitii* by the fact that adults are a strong yellow brown as adults, versus pinkish brown in *A. waitii*. The anterior of the snout is strongly pinkish white in adult *A. bulliardi sp. nov.* versus strongly pink in type *A. waitii*.

A. mirlirrtjarra sp. nov. is similar in most respects to A. waitii but separated from that species by a distinctive reddish tinge to the colour of adults, versus pink in A. waitii. Unlike both A. waitii and A. bulliardi sp. nov. that have a slight darkening or change of colour on the upper surface of the neck, for a short distance behind the eyes (several scales) and slightly more than the distance from eye to snout, this does not seem to be the case in Anilios mirlirrtjarra sp. nov. A. waitii, A. bulliardi sp. nov. and A. mirlirrtjarra sp. nov. are as a trio, separated from all other Australian Blind Snakes by the following combination of characters:

Snout is strongly beaked and tipped with a dark coloured transverse cutting edge; nasal cleft usually proceeding from the second labial. Nostrils inferior, swollen, much nearer to rostral than preocular. Rostral from above is elliptic, much longer than wide, being about three-quarters as wide as the head and usually extending back to about the level of the eyes, or most commonly just before them. 20 midbody rows. 535-667 ventrals and 13-26 subcaudals. Dorsal and upper lateral surfaces moderately dark in colour merging on the far lower flanks with the whitish venter.

These three species are separated from the morphologically similar *A. bituberculatus* (Peters, 1863) species complex by having more numerous ventrals (more than 500 versus fewer than 500) and a snout that is not strongly trilobed.

A. bulliardi sp. nov. sp. nov. is depicted in life in Storr, Smith and Johnstone (2002) on page 103 at bottom right from Dongara, Western Australia, photographed by Ron E. Johnstone and in Cogger (2014) on page 813 bottom left, from Maddington (Perth), Western Australia, photographed by Brad Maryan.

A. waitii is depicted in life online at: https://www.flickr.com/photos/brian_ busho/49353887786/ from Menzies, Western Australia, photographed by Brian Bush.

The molecular evidence of Marin *et al.* (2012, 2013) and the biogeographical evidence, suggests that the three relevant species diverged from one another over 2 MYA.

Distribution: *A. bulliardi sp. nov. sp. nov.* is a species with a centre of distribution along and near the Darling Range in southwest Australia, bound by the Indian Ocean on the west, salt lakes and plains to the east, flat and mainly arid zones to the north and a cold climate region at the southern extremity of the range.

Etymology: *A. bulliardi sp. nov.* is named in honour of Kaj-Erik Bulliard of Esperance, Western Australia, formerly of Sydney, New South Wales (NSW), Australia in recognition of his contributions to herpetology in Australia.

He was forced to leave New South Wales (NSW) as a fugitive of the NSW National Parks and Wildlife Service (NPWS).

Refer also to the etymology for the species *Harrisoniascincus wildlifedepartmentscumorum* Hoser, 2025 in Hoser (2025c) on page 31, and Hoser (1989, 1991, 1993 and 1996).

ANILIOS MIRLIRRTJARRA SP. NOV.

LSIDurn:lsid:zoobank.org:act:608EFB9F-5D8A-4B23-B9F7-B1BD93ED6C6A

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R31358 collected from the Warburton Range Mission, Western Australia, Australia, Latitude -26.133333 S., Longitude 126.583333 E.

This government-owned facility allows access to its holdings.

Paratypes: Six preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen numbers R14659, R17780, R22027, R22095, R31359 and R136180 all from the Warburton Range Mission, Western Australia, Australia, Latitude -26.133333 S., Longitude 126.583333 E. or the adjacent Warburton Range. **Diagnosis:** The geographic distribution of putative *Anilios waitii* Boulenger, 1895 and morphological divergences between populations flags the presence of more than one species, as indicated in the

phylogenies of Marin *et al.* (2012, 2013). The type form of *A. waitii* is from north-west Australia, a form which has a distribution extending from the Pilbara region south through the elevated areas punctuated by the Canarvon and Robinson Ranges, generally north of Lake Barlee and Lake Moore. *A. bulliardi sp. nov.* occurs from about Tallering Peak, Latitude -28.1 S. Longitude 115.633333 E. in the north-west, south along the coast of Western Australia to Cranbrook, Latitude -34.3 S., Longitude 117.55 E. in the south, generally west of Lake Moore in the north and not far east of it in the south, the species

generally being bound in the south-west by the zone of lowlands and salt lakes between the south-west and more elevated areas to the north and east of the State of Western Australia.

This low zone is the biogeographic barrier separating the two species.

Anilios mirlirrtjarra sp. nov. is the geographically isolated population of putative *A. waitii* from the Warburton Ranges in the far east of Western Australia, west southwest of the Northern Territory and South Australian border with Western Australia.

It is separated from more western populations by the Great Victoria Desert to the south and south-west and other low-lying regions to the west and northwest including the Gibson Desert.

A. bulliardi sp. nov. is readily separated from the nominate form of *A. waitii* by the fact that adults are a strong yellow brown as adults, versus pinkish brown in *A. waitii*. The anterior of the snout is strongly pinkish white in adult *A. bulliardi sp. nov.* versus strongly pink in type *A. waitii*.

A. mirlintjarra sp. nov. is similar in most respects to A. waitii but separated from that species by a distinctive reddish tinge to the colour of adults, versus pink in A. waitii. Unlike both A. waitii and A. bulliardi sp. nov. that have a slight darkening or change of colour on the upper surface of the neck, for a short distance behind the eyes (several scales) and slightly more than the distance from eye to snout, this does not seem to be the case in Anilios mirlirrtjarra sp. nov.

A. waitii, A. bulliardi sp. nov. and *A. mirlirrtjarra sp. nov.* are as a trio, separated from all other Australian Blind Snakes by the following combination of characters:

Snout is strongly beaked and tipped with a dark coloured transverse cutting edge; nasal cleft usually proceeding from the second labial. Nostrils inferior, swollen, much nearer to rostral than preocular. Rostral from above is elliptic, much longer than wide, being about three-quarters as wide as the head and usually extending back to about the level of the eyes, or most commonly just before them. 20 midbody rows. 535-667 ventrals and 13-26 subcaudals. Dorsal and upper lateral surfaces moderately dark in

colour merging on the far lower flanks with the whitish venter.

These three species are separated from the morphologically similar *A. bituberculatus* (Peters, 1863) species complex by having more numerous ventrals (more than 500 versus fewer than 500) and a snout that is not strongly trilobed.

A. bulliardi sp. nov. sp. nov. is depicted in life in Storr, Smith and Johnstone (2002) on page 103 at bottom right from Dongara, Western Australia, photographed by Ron E. Johnstone and in Cogger (2014) on page 813 bottom left, from Maddington (Perth), Western Australia, photographed by Brad Maryan. *A. waitii* is depicted in life online at: https://www.flickr.com/photos/brian_ busho/49353887786/

from Menzies, Western Australia, photographed by Brian Bush.

The molecular evidence of Marin *et al.* (2012, 2013) and the biogeographical evidence, suggests that the three relevant species diverged from one another over 2 MYA.

Distribution: *A. mirlirrtjarra sp. nov.* is the geographically isolated population of putative *A. waitii* from the Warburton Ranges in the far east of Western Australia, west southwest of the Northern Territory and South Australian border with Western Australia. It is separated from more western populations by the Great Victoria Desert to the south and south-west and other low-lying regions to the west and northwest including the Gibson Desert.

Etymology: *A. mirlirrtjarra sp. nov.* is named after the Ngaanyatjarra (Aboriginal) name for the Warburton Range. The spelling of this name should not be changed and is deliberate.

Mirlirrtjarra is named after the range of hills (Warburton Ranges) to the north of the community which in turn was named after one of the early European explorers who travelled this region in search of good pastoral land. The other name for the community is Mirlirrtjarra which is the name of a site nearby. Warburton is the largest of the Ngaanyatjarra Communities and is considered the metropolis of the Lands.

Following the above ground testing of nuclear weapons by the British Government at Maralinga to the immediate east in adjacent South Australia, the local Ngaanyatjarra community had to endure clouds of radioactive dust raining on the community for many years and ongoing.

As a result, radiation caused illnesses such as stillborn young, cancers and other fatally debilitating diseases continue to decimate the surviving local natives.

ANILIOS JUDYFERGUSONAE SP. NOV. LSIDurn:Isid:zoobank.org:act:16DC47DA-ED79-4554-BD07-75C85E99D935

Holotype: A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, specimen number R34039 collected from Tieyon Station, South Australia, Australia, Latitude -26.217 S., Longitude 133.85 E. This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, specimen number R38957 collected from the Stuart Highway, south of Kulgera, Northern Territory, Australia, Latitude -25.95541 S., Longitude 133.2299 E.

Diagnosis: Until now, Anilios judyfergusonae sp.

nov. has been treated as a southern population of *A. centralis* (Storr, 1984), with a type locality of Alice Springs. Northern Territory, Australia, Latitude -23.42S., Longitude 152.0 E.

However, the phylogenies of Marin *et al.* (2012, 2013) indicated the presence of two species and a divergence of over 2 MYA between the two populations.

Because the two populations are morphologically divergent, allopatric and evolving separately, the unnamed southern population is herein formally named as *Anilios judyfergusonae sp. nov*.

A. centralis is effectively confined to the Central MacDonnell Ranges district of central Australia near Alice Springs in the Northern Territory.

A. judyfergusonae sp. nov. is found in the elevated and hilly region around the western half of the Northern Territory and South Australian border in association with the Musgrave Ranges and quite likely also the Tomkinson Ranges.

The two populations are separated from one another by the Lake Amadeus basin and associated areas of salt plains, mud flats and sand dunes, forming an impassable barrier for the relevant populations.

A. judyfergusonae sp. nov. is readily separated from A. centralis by the fact that it has a yellowish coloured dorsum with slight pinkish tinge, versus brown with a purplish tinge on nominate A. centralis. A. judyfergusonae sp. nov. also has well-defined light etchings of the scales on the back of the head and adjacent neck, versus not so on type A. centralis.

The two species are readily separated from all other species of Australian Blind Snakes by the following unique combination of characters:

A moderately slender Blind Snake rarely exceeding 20 cm total length, with 20 midbody scale rows, 405-482 ventrals and 12-20 subcaudals.

Rostral from above is elliptic. longer than wide and extending back nearly to the level of the eyes.

Nasals narrowly separated behind rostral. Snout is relatively short and tipped with a strong, dark transverse cutting edge which extends back as a ridge on to nasal scale just above nostril. Nostrils are inferior, much nearer to the rostral than the preocular. Nasal cleft proceeds from second labial to the nostril or a little beyond but never crossing nasal ridge or reaching the rostral.

Upper surface colouration could be described as purplish brown (for *A. centralis*) or light sandy brown to yellowish (for *A. judyfergusonae sp. nov.*), merging with pale lower surface fairly abruptly slightly below the midline of the flank.

A. judyfergusonae sp. nov. in life is depicted online at: https://www.flickr.com/photos/ reptileshots/51312722178/

being a specimen from Kulgera, in the far south of the Northern Territory, Australia, photographed by Brendan Schembri. *A. centralis.* is depicted in life in Wilson and Swan (2021) on page 529 at centre left, being of a specimen from Alice Springs in the Northern Territory in a photo by Greg Fyfe and online at https://www.flickr.com/photos/

mattsummerville/49018377687

specimen from Alice Springs, Northern Territory, Australia, photographed by Matt Summerville, and https://www.flickr.com/photos/156667445@ N07/44547776555/

specimen from Alice Springs, Northern Territory, Australia, photographed by Otto Bylén Claesson. **Distribution:** *A. judyfergusonae sp. nov.* is found in the elevated and hilly region around the western half of the Northern Territory and South Australian border in association with the Musgrave Ranges and quite likely also the Tomkinson Ranges.

A. centralis is effectively confined to the Central MacDonnell Ranges district of central Australia near Alice Springs in the Northern Territory.

The two populations are separated from one another by the Lake Amadeus basin and associated areas of salt plains, mud flats and sand dunes, forming an impassable barrier for the relevant populations.

This biogeographical barrier has separated other Centralian species pairs, some of which have only been relatively recently described, including for example, those listed in Hoser (2025a).

Two species sharing distributions with *A. judyfergusonae sp. nov.* are *Diplodactylus* (*Yankunytjatjaragecko*) *ooh* Hoser, 2023 and *Liopholis faaaaark* Hoser, 2024, both being split from earlier named Centralian taxa (Hoser (2025a).

Etymology: *A. judyfergusonae sp. nov.* is named in honor of Judy Feguson of Taggerty, Victoria, Australia, wife of Peter Whybrow, who are a pair of herpetologists that have made many major contributions to herpetology in Australia for over 30 years.

SUEWITTTYPHLOPS CROTTYI SP. NOV. LSIDurn:lsid:zoobank.org:act:CC7F124F-78A0-4935-8B82-8BD9A29F97F7

Holotype: A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, specimen number R19109 collected from Raragala Island (North), Wessel Islands, Northern Territory, Australia, Latitude -11.577 S., Longitude 136.35 E.

This government-owned facility allows access to its holdings.

Diagnosis: Until now, each of *Suewitttyphlops crottyi sp. nov.*, *S. oxyi sp. nov.* and *S. romani sp. nov.* have been treated as divergent north and north-west Australian populations of *S. sloppi* (Hoser, 2013) (with a type locality of Wyndham East Kimberley, Western Australia, Australia, Latitude -15.65 S., Longitude 128.70 E.).

S. sloppi is in turn closely related to *S. ligatus* (Peters, 1879) of the north-east quarter of New South Wales and most of the (in any way) elevated regions of Queensland, east of the Murray Darling, Cooper's Creek and Cape Fold drainages, north to the western slopes of the Great Divide south of Cooktown. Related to *S. ligatus* is *S. okara sp. nov.* from Cape York Peninsula, found generally north of Coen in

Queensland and similar in most respects to that species (*S. ligatus*).

S. crottyi sp. nov. is known only from the type locality in the Wessell Islands and may be endemic to this area due to unsuitable habitat on the immediately adjacent Australian mainland.

S. oxyi sp. nov. is a taxon from the southern Gulf of Carpentaria region in the east Northern Territory. *S. romani sp. nov.* is a Selwyn Ranges endemic from north-west Queensland, the distribution including outlier ranges to the north and south of the main range.

As a group all four are separated from *S. ligatus* (Peters, 1879) and *S. okara sp. nov.*, by their noticeably more stout and robust body and lower ventral count, 296-355 in these four species, versus over 355 in *S. ligatus* and *S. okara sp. nov.*. They are further separated from *S. ligatus* in that the rostral is intersected on the sides (partially, usually, or completely) by adjoining scales just before it connects the prefrontal shield, versus not so in *S. ligatus* and *S. okara sp. nov.*.

Further diagnostic features of the six preceding species, separating them from all other Australian blindsnake species, includes the fact that they are perhaps Australia's most stout and robust Blind Snake, attaining 50 cm as adults and with a length that is 25-32 times that of the diameter. The snout is rounded from above and in profile. There are 24 mid-body scale rows and the nasal cleft, visible from above, extends from the first labial to well on top of the head.

Rostral is slighter wider below than above and about twice as long as wide, and one third or less as wide as the head. Nasal cleft arises from the first labial, curving upwards and back from the nostril and terminates near the top of the nasal after curving backwards.

Preocular present, slightly narrower than the nasal or the ocular, in contact with the second and third labials; eyes as large black spots are readily distinguishable; prefrontal, supraoculars and parietals are noticeably enlarged; four upper labials.

Dorsally the colouration is dark grayish, brown, purplish brown or even a dark pinkish colour and ventrally a whitish cream to yellow or sometimes a dull pink, with the junction between the colours sharp and straight edged.

There are 11-17 subcaudals and the tail is 2.7-3.9 percent of the total length.

S. crottyi sp. nov., S. oxyi sp. nov. and S. romani sp. nov. are separated from S. sloppi and one another by the following suites of characters:

S. crottyi sp. nov. has a moderate lightening of the anterior of the snout, versus strongly lightened and whitish in colour in *S. sloppi*, *S. oxyi sp. nov.* and *S. romani sp. nov.*

S. sloppi, and *S. crottyi sp. nov*. are both separated from both *S. oxyi sp. nov*. and *S. romani sp. nov*. by having strong thick yellow or white lines etching the scales at the anterior part of the dorsum of the head, versus weakly so in *S. oxyi sp. nov*. and *S. romani sp. nov*.

Both *S. crottyi sp. nov.* and *S. ligatus* are separated from the other three species *S. sloppi, S. oxyi sp. nov.* and *S. romani sp. nov.* by the fact that the prefrontal shield is slightly larger than the frontal shield, versus much larger as in double the size in *S. sloppi, S. oxyi sp. nov.* and *S. romani sp. nov.*.

S. romani sp. nov. is separated from the other preceding species by the fact that the rostral barely meets the frontal or is otherwise narrowly separated from it and adults have a slightly yellowish brown hue to the dorsal coloration.

Molecular evidence cited by Greer (2025), being a simplified phylogeny from Marin *et al.* (2012, 2013) shows that the species, *S. crottyi sp. nov.* diverged from its nearest common ancestor *S. sloppi* in the middle Pliocene Epoch, about 4 MYA, being significant species-level divergence.

The same evidence showed that *S. oxyi sp. nov.* diverged from *S. sloppi* as nearest relatives about 2 MYA.

There is no molecular evidence for *S. romani sp. nov.* found in the Selwyn Ranges district, including outliers in north-west Queensland, but it occurs in a well-known region of endemicity and separated by known biogeographical barriers on all sides. It is also morphologically divergent.

The putative taxon "*Typhlops curtus* Ogilby, 1892" with a type locality of Walsh River, Gulf of Carpentaria is treated as a synonym of *S. ligatus* by being in the same unbroken range of distribution as the type form of *S. ligatus.*

However, geographically disjunct populations of putative *S. ligatus* from further north on Cape York, from Coen, Queensland and north, represents a different species being *S. okara sp. nov*..

S. okara sp. nov. is separated from *S. ligatus* by being pinkish brown on the dorsum rather than brownish or sometimes purplish brown as well as having a rostral that is noticeably narrower at the bottom rather than being of similar width from top to bottom.

Distribution: *S. crottyi sp. nov.* is known only from the Wessel Islands, Northern Territory, Australia, Latitude -11.577 S., Longitude 136.35 E. This species may be a range-restricted endemic and therefore should be treated as vulnerable to extinction, unless

and until contrary information is obtained.

Etymology: Named in honor of a Great Dane, Rottweiller cross dog myself and my family owned from 1989 for thirteen years named "*Crotalus*" AKA "Crotty" in recognition for his services protecting our research facility from thieves during the relevant time frame. It is fitting that animals that make up such an important part of the human world, should be a part of our heritage in terms of the nomenclature for our biodiversity.

SUEWITTTYPHLOPS OXYI SP. NOV. LSIDurn:Isid:zoobank.org:act:86E51EA8-5909-4B9A-B67D-FBD55C33E1FA

Holotype: A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, specimen number R35156 collected from the Tablelands Highway, Barkly Tableland, Northern Territory, Australia, Latitude -17.705 S., Longitude 135.68717 E.

This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, specimen number R21830 collected from the Mcarthur River, Northern Territory, Australia, Latitude -15.467 S., Longitude 136.083 E. **Diagnosis:** Until now, each of *Suewitttyphlops crottyi sp. nov.*, *S. oxyi sp. nov.* and *S. romani sp. nov.* have been treated as divergent north and north-west Australian populations of *S. sloppi* (Hoser, 2013) (with a type locality of Wyndham East Kimberley, Western Australia, Australia, Latitude -15.65 S., Longitude 128.70 E.).

S. sloppi is in turn closely related to *S. ligatus* (Peters, 1879) of the north-east quarter of New South Wales and most of the (in any way) elevated regions of Queensland, east of the Murray Darling, Cooper's Creek and Cape Fold drainages, north to the western slopes of the Great Divide south of Cooktown.

Related to *S. ligatus* is *S. okara sp. nov*. from Cape York Peninsula, found generally north of Coen in Queensland and similar in most respects to that species.

S. crottyi sp. nov. is known only from the type locality in the Wessell Islands and may be endemic to this area due to unsuitable habitat on the immediately adjacent Australian mainland.

S. oxyi sp. nov. is a taxon from the southern Gulf of Carpentaria region in the east Northern Territory.

S. romani sp. nov. is a Selwyn Ranges endemic from north-west Queensland, the distribution including outlier ranges to the north and south of the main range.

As a group all four are separated from *S. ligatus* (Peters, 1879) and *S. okara sp. nov.*, by their noticeably more stout and robust body and lower ventral count, 296-355 in these four species, versus over 355 in *S. ligatus* and *S. okara sp. nov.*. They are

further separated from *S. ligatus* in that the rostral is intersected on the sides (partially, usually, or completely) by adjoining scales just before it connects the prefrontal shield, versus not so in *S. ligatus* and *S. okara sp. nov.*.

Further diagnostic features of the six preceding species, separating them from all other Australian blindsnake species, includes the fact that they are perhaps Australia's most stout and robust Blind Snake, attaining 50 cm as adults and with a length that is 25-32 times that of the diameter. The snout is rounded from above and in profile. There are 24 mid-body scale rows and the nasal cleft, visible from above, extends from the first labial to well on top of the head.

Rostral is slighter wider below than above and about twice as long as wide, and one third or less as wide as the head. Nasal cleft arises from the first labial, curving upwards and back from the nostril and terminates near the top of the nasal after curving backwards.

Preocular present, slightly narrower than the nasal or the ocular, in contact with the second and third labials; eyes as large black spots are readily distinguishable; prefrontal, supraoculars and parietals are noticeably enlarged; four upper labials.

Dorsally the colouration is dark grayish, brown, purplish brown or even a dark pinkish colour and ventrally a whitish cream to yellow or sometimes a dull pink, with the junction between the colours sharp and straight edged.

There are 11-17 subcaudals and the tail is 2.7-3.9 percent of the total length.

S. crottyi sp. nov., S. oxyi sp. nov. and S. romani sp. nov. are separated from S. sloppi and one another by the following suites of characters:

S. crottyi sp. nov. has a moderate lightening of the anterior of the snout, versus strongly lightened and whitish in colour in *S. sloppi*, *S. oxyi sp. nov.* and *S. romani sp. nov.*

S. sloppi, and *S. crottyi sp. nov.* are both separated from both *S. oxyi sp. nov.* and *S. romani sp. nov.* by having strong thick yellow or white lines etching the scales at the anterior part of the dorsum of the head, versus weakly so in *S. oxyi sp. nov.* and *S. romani sp. nov.*.

Both *S. crottyi sp. nov.* and *S. ligatus* are separated from the other three species *S. sloppi*, *S. oxyi sp. nov.* and *S. romani sp. nov.* by the fact that the prefrontal shield is slightly larger than the frontal shield, versus much larger as in double the size in *S. sloppi*, *S. oxyi sp. nov.* and *S. romani sp. nov.*.

S. romani sp. nov. is separated from the other preceding species by the fact that the rostral barely meets the frontal or is otherwise narrowly separated from it and adults have a slightly yellowish brown hue to the dorsal coloration.

Molecular evidence cited by Greer (2025), being a

simplified phylogeny from Marin *et al.* (2012, 2013) shows that the species, *S. crottyi sp. nov.* diverged from its nearest common ancestor *S. sloppi* in the middle Pliocene Epoch, about 4 MYA, being significant species-level divergence.

The same evidence showed that *S. oxyi sp. nov.* diverged from *S. sloppi* as nearest relatives about 2 MYA.

There is no molecular evidence for *S. romani sp. nov.* found in the Selwyn Ranges district, including outliers in north-west Queensland, but it occurs in a well-known region of endemicity and separated by known biogeographical barriers on all sides. It is also morphologically divergent.

The putative taxon "*Typhlops curtus* Ogilby, 1892" with a type locality of Walsh River, Gulf of Carpentaria is treated as a synonym of *S. ligatus* by being in the same unbroken range of distribution as the type form of *S. ligatus*.

However, geographically disjunct populations of putative *S. ligatus* from further north on Cape York, from Coen, Queensland and north, represents a different species being *S. okara sp. nov.*.

S. okara sp. nov. is separated from *S. ligatus* by being pinkish brown on the dorsum rather than brownish or sometimes purplish brown as well as having a rostral that is noticeably narrower at the bottom rather than being of similar width from top to bottom.

Distribution: *S. oxyi sp. nov.* is known only from the southern Gulf of Carpentaria region in the east Northern Territory.

This species may be a range-restricted endemic and therefore should be treated as vulnerable to extinction, unless and until contrary information is obtained.

Etymology: Named in honor of a Great Dane dog that our family owned from year 2002 to 2010 named "*Oxyuranus*" AKA "*Oxy*" in recognition for his services protecting our research facility from thieves during the relevant time frame. It is fitting that animals that make up such an important part of the human world, should be a part of our heritage in terms of the nomenclature for our biodiversity.

SUEWITTTYPHLOPS ROMANI SP. NOV. LSIDurn:lsid:zoobank.org:act:AF793179-BD53-4A75-B28D-5B24D2525B2B

Holotype: A preserved adult female specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J80830 collected from Fort Constantine, Queensland, Australia, Latitude -20.483889 S., Longitude 140.608889 S. (about 24 km north of Cloncurry, Queensland).

This government-owned facility allows access to its holdings.

Paratypes: 1/ A preserved adult female specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J62775 collected from 300 metres north-east of the Cannington Project Camp, Northwest Queensland, Australia, Latitude -21.9 S., Longitude 140.916667 E., 2/ A preserved immature female specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J39034 collected 9.9 km east of Mount Isa on the Barkly Highway, Northwest Queensland, Australia, Latitude -20.7 S., Longitude 139.566667 E.

Diagnosis: Until now, each of *Suewitttyphlops crottyi sp. nov.*, *S. oxyi sp. nov.* and *S. romani sp. nov.* have been treated as divergent north and north-west Australian populations of *S. sloppi* (Hoser, 2013) (with a type locality of Wyndham East Kimberley, Western Australia, Australia, Latitude -15.65 S., Longitude 128.70 E.).

S. sloppi is in turn closely related to *S. ligatus* (Peters, 1879) of the north-east quarter of New South Wales and most of the (in any way) elevated regions of Queensland, east of the Murray Darling, Cooper's Creek and Cape Fold drainages, north to the western slopes of the Great Divide south of Cooktown.

Related to *S. ligatus* is *S. okara sp. nov.* from Cape York Peninsula, found generally north of Coen in Queensland and similar in most respects to that species.

S. crottyi sp. nov. is known only from the type locality in the Wessell Islands and may be endemic to this area due to unsuitable habitat on the immediately adjacent Australian mainland.

S. oxyi sp. nov. is a taxon from the southern Gulf of Carpentaria region in the east Northern Territory. *S. romani sp. nov.* is a Selwyn Ranges endemic from north-west Queensland, the distribution including outlier ranges to the north and south of the main range.

As a group all four are separated from *S. ligatus* (Peters, 1879) and *S. okara sp. nov.*, by their noticeably more stout and robust body and lower ventral count, 296-355 in these four species, versus over 355 in *S. ligatus* and *S. okara sp. nov.*. They are further separated from *S. ligatus* in that the rostral is intersected on the sides (partially, usually, or completely) by adjoining scales just before it connects the prefrontal shield, versus not so in *S. ligatus* and *S. okara sp. nov.*.

Further diagnostic features of the six preceding species, separating them from all other Australian blindsnake species, includes the fact that they are perhaps Australia's most stout and robust Blind Snake, attaining 50 cm as adults and with a length that is 25-32 times that of the diameter. The snout is rounded from above and in profile. There are 24 mid-body scale rows and the nasal cleft, visible from above, extends from the first labial to well on top of the head.

Rostral is slighter wider below than above and about twice as long as wide, and one third or less as wide as the head. Nasal cleft arises from the first labial, curving upwards and back from the nostril and terminates near the top of the nasal after curving backwards.

Preocular present, slightly narrower than the nasal or the ocular, in contact with the second and third labials; eyes as large black spots are readily distinguishable; prefrontal, supraoculars and parietals are noticeably enlarged; four upper labials.

Dorsally the colouration is dark grayish, brown, purplish brown or even a dark pinkish colour and ventrally a whitish cream to yellow or sometimes a dull pink, with the junction between the colours sharp and straight edged.

There are 11-17 subcaudals and the tail is 2.7-3.9 percent of the total length.

S. crottyi sp. nov., *S. oxyi sp. nov.* and *S. romani sp. nov.* are separated from *S. sloppi* and one another by the following suites of characters:

S. crottyi sp. nov. has a moderate lightening of the anterior of the snout, versus strongly lightened and whitish in colour in *S. sloppi, S. oxyi sp. nov.* and *S. romani sp. nov.*

S. sloppi, and *S. crottyi sp. nov.* are both separated from both *S. oxyi sp. nov.* and *S. romani sp. nov.* by having strong thick yellow or white lines etching the scales at the anterior part of the dorsum of the head, versus weakly so in *S. oxyi sp. nov.* and *S. romani sp. nov.*.

Both *S. crottyi sp. nov.* and *S. ligatus* are separated from the other three species *S. sloppi, S. oxyi sp. nov.* and *S. romani sp. nov.* by the fact that the prefrontal shield is slightly larger than the frontal shield, versus much larger as in double the size in *S. sloppi, S. oxyi sp. nov.* and *S. romani sp. nov.*.

S. romani sp. nov. is separated from the other preceding species by the fact that the rostral barely meets the frontal or is otherwise narrowly separated from it and adults have a slightly yellowish brown hue to the dorsal coloration.

Molecular evidence cited by Greer (2025), being a simplified phylogeny from Marin *et al.* (2012, 2013) shows that the species, *S. crottyi sp. nov.* diverged from its nearest common ancestor *S. sloppi* in the middle Pliocene Epoch, about 4 MYA, being significant species-level divergence.

The same evidence showed that *S. oxyi sp. nov.* diverged from *S. sloppi* as nearest relatives about 2 MYA.

There is no molecular evidence for *S. romani sp. nov.* found in the Selwyn Ranges district, including outliers in north-west Queensland, but it occurs in a well-known region of endemicity and separated by known biogeographical barriers on all sides. It is also morphologically divergent.

The putative taxon "*Typhlops curtus* Ogilby, 1892" with a type locality of Walsh River, Gulf of Carpentaria is treated as a synonym of *S. ligatus* by being in the same unbroken range of distribution as the type form of *S. ligatus*.

However, geographically disjunct populations of putative *S. ligatus* from further north on Cape York, from Coen, Queensland and north, represents a different species being *S. okara sp. nov.*.

S. okara sp. nov. is separated from *S. ligatus* by being pinkish brown on the dorsum rather than brownish or sometimes purplish brown as well as having a rostral that is noticeably narrower at the bottom rather than being of similar width from top to bottom.

Distribution: *S. romani sp. nov.* is known only from the Selwyn Ranges, northwest Queensland and outliers.

The region is quite substantial in land area and geographically isolated, with little if any intensive human activities other than extractive mining. Therefore, the species is probably not at any extinction risk.

Etymology: Named in honor of a Great Dane dog that our family owned from year 2023 to present named "Roman" being named after Roman Hulimka of 492 Park Road in Park Orchards, Victoria, Australia, who also provided services to herpetology over 2 decades.

The dog has actively protected our research facility from thieves during the relevant time frame. It is fitting that animals that make up such an important part of the human world, should be a part of our heritage in terms of the nomenclature for our biodiversity.

SUEWITTTYPHLOPS OKARA SP. NOV. LSIDurn:lsid:zoobank.org:act:DE4D14F2-4A0D-45AA-8066-9C32E0F43C71

Holotype: A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J92808 collected from just north-west of Coen in north-east Queensland, Australia, Latitude -13.651389 S., Longitude 142.796389 E.

This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J93151 collected from the Ducie River area, Latitude -12.045833 S., Longitude 142.064722 E.

Diagnosis: Until now, each of *Suewitttyphlops crottyi sp. nov.*, *S. oxyi sp. nov.* and *S. romani sp. nov.* have been treated as divergent north and north-west Australian populations of *S. sloppi* (Hoser, 2013) (with a type locality of Wyndham East Kimberley, Western Australia, Australia, Latitude -15.65 S., Longitude 128.70 E.).

S. sloppi is in turn closely related to *S. ligatus* (Peters, 1879) of the north-east quarter of New South Wales and most of the (in any way) elevated regions of Queensland, east of the Murray Darling, Cooper's Creek and Cape Fold drainages, north to the western slopes of the Great Divide south of Cooktown. Related to *S. ligatus* is *S. okara sp. nov.* from Cape York Peninsula, found generally north of Coen in

Queensland and similar in most respects to that species.

The putative taxon "*Typhlops curtus* Ogilby, 1892" with a type locality of Walsh River, Gulf of Carpentaria is treated as a synonym of *S. ligatus* by being in the same unbroken range of distribution as the type form of *S. ligatus*.

The geographically disjunct population of putative *S. ligatus* from further north on Cape York, from Coen, Queensland in the south and then found further north, separated by a distinct gap in the distribution of putative *S. ligatus* represents a different species, this being now known as *S. okara sp. nov.*.

S. okara sp. nov. is separated from *S. ligatus* by being pinkish brown on the dorsum rather than brownish or sometimes purplish brown as well as having a rostral that is noticeably narrower at the bottom rather than being of similar width from top to bottom.

S. crottyi sp. nov. is known only from the type locality in the Wessell Islands and may be endemic to this area due to unsuitable habitat on the immediately adjacent Australian mainland.

S. oxyi sp. nov. is a taxon from the southern Gulf of Carpentaria region in the east Northern Territory. *S. romani sp. nov.* is a Selwyn Ranges endemic from north-west Queensland, the distribution including outlier ranges to the north and south of the main range.

As a group all four are separated from *S. ligatus* (Peters, 1879) and *S. okara sp. nov.*, by their noticeably more stout and robust body and lower ventral count, 296-355 in these four species, versus over 355 in *S. ligatus* and *S. okara sp. nov.*. They are further separated from *S. ligatus* in that the rostral is intersected on the sides (partially, usually, or completely) by adjoining scales just before it connects the prefrontal shield, versus not so in *S. ligatus* and *S. okara sp. nov.*.

Further diagnostic features of the six preceding species, separating them from all other Australian Blind Snake species, includes the fact that they are perhaps Australia's most stout and robust Blind Snake, attaining 50 cm as adults and with a length that is 25-32 times that of the diameter. The snout is rounded from above and in profile. There are 24 mid-body scale rows and the nasal cleft, visible from above, extends from the first labial to well on top of the head.

Rostral is slighter wider below than above and about twice as long as wide, and one third or less as wide as the head. Nasal cleft arises from the first labial, curving upwards and back from the nostril and terminates near the top of the nasal after curving backwards.

Preocular present, slightly narrower than the nasal or the ocular, in contact with the second and third labials; eyes as large black spots are readily distinguishable; prefrontal, supraoculars and parietals are noticeably enlarged; four upper labials.

Dorsally the colouration is dark grayish, brown, purplish brown or even a dark pinkish colour and ventrally a whitish cream to yellow or sometimes a dull pink, with the junction between the colours sharp and straight edged.

There are 11-17 subcaudals and the tail is 2.7-3.9 percent of the total length.

S. crottyi sp. nov., S. oxyi sp. nov. and S. romani sp. nov. are separated from S. sloppi and one another by the following suites of characters:

S. crottyi sp. nov. has a moderate lightening of the anterior of the snout, versus strongly lightened and whitish in colour in *S. sloppi*, *S. oxyi sp. nov.* and *S. romani sp. nov.*

S. sloppi, and *S. crottyi sp. nov*. are both separated from both *S. oxyi sp. nov*. and *S. romani sp. nov*. by having strong thick yellow or white lines etching the scales at the anterior part of the dorsum of the head, versus weakly so in *S. oxyi sp. nov*. and *S. romani sp. nov*.

Both *S. crottyi sp. nov.* and *S. ligatus* are separated from the other three species *S. sloppi, S. oxyi sp. nov.* and *S. romani sp. nov.* by the fact that the prefrontal shield is slightly larger than the frontal shield, versus much larger as in double the size in *S. sloppi, S. oxyi sp. nov.* and *S. romani sp. nov.*.

S. romani sp. nov. is separated from the other preceding species by the fact that the rostral barely meets the frontal or is otherwise narrowly separated from it and adults have a slightly yellowish brown hue to the dorsal coloration.

Molecular evidence cited by Greer (2025), being a simplified phylogeny from Marin *et al.* (2012, 2013) shows that the species, *S. crottyi sp. nov.* diverged from its nearest common ancestor *S. sloppi* in the middle Pliocene Epoch, about 4 MYA, being significant species-level divergence.

The same evidence showed that *S. oxyi sp. nov.* diverged from *S. sloppi* as nearest relatives about 2 MYA.

There is no molecular evidence for *S. romani sp. nov.* found in the Selwyn Ranges district, including outliers in north-west Queensland, but it occurs in a well-known region of endemicity and separated by known biogeographical barriers on all sides. It is also morphologically divergent.

Likewise for *S. okara sp. nov.* in that there is no molecular data on the taxon.

Distribution: *S. okara sp. nov.* is currently only known from a small number of specimens and appears to be confined to elevated regions generally north of Coen, Queensland on Cape York, Australia. The name *S. okara sp. nov.* is taken from the name of the local (to north Cape York) Aboriginal tribe that inhabited the area before the British invasion and genocide of the people of the 1800's.

The formation of the scientific name as "okara" rather than "okaraorum" as would normally be the case is deliberate and done with a view to keeping the scientific name both simpler and also more relatable to the Okara people themselves, not otherwise familiar with either Latin or the rules of scientific nomenclature.

Therefore, the spelling of the name should only be changed if absolutely mandatory.

SUEWITTTYPHLOPS OVERLOOKEDIT SP. NOV. LSIDurn:Isid:zoobank.org:act:E6A61D15-36CB-4116-AE2A-D9AEB11CDEF1

Holotype: A preserved adult female specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R140003 collected from Millstream, Western Australia, Australia, Latitude -21.6 S., Longitude 117.1 E.

This government-owned facility allows access to its holdings.

Paratypes: 1/ A preserved adult female specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R102111 collected as a roadkill in mid-April 1991 at Pannawonica, Western Australia, Australia, Latitude -21.395 W., Longitude 116.20 E., 2/ A preserved specimen at the Western Australian Museum, Perth, Western Australia, Australia, specimen number R170702 collected from near Duck Creek, Pilbara District, Western Australia, Australia, Latitude -22.0 S., Longitude 116.5 E.

Diagnosis: Until now, each of *Suewitttyphlops overlookedit sp. nov.* and *Suewitttyphlops outofsight sp. nov.* have been treated as populations of the putative Pilbara taxon, *Suewitttyphlops ganei* (Aplin, 1998), with a type locality of Cathedral Gorge, 30 km west of Newman, Western Australia, Australia, Latitude -23.17305 S., Longitude 119.28 E.

The three species are range restricted endemics effectively confined to upland areas and separated by major drainage systems which are known biogeographic barriers affecting other Pilbara reptile species.

S. ganei is herein confined to the Opthalmia Range in the East Pilbara, in a region bound by Turri Creek East Branch and Weeli Wolli Creek in the west, separating this taxon from the Hamersley Ranges taxon *S. overlookedit sp. nov. S. ganei* is further constrained by the major biogeographical barrier of the Fortescue River, including Jiggalong Creek to the north and the Ashburton River system to the south. The same above-mentioned river systems and the Pilbara coast to the west effectively confine *S. overlookedit sp. nov.* to the Hamersley Ranges district.

To the north of the Fortescue River barrier in the Chichester Range, the morphologically divergent *S. outofsight sp. nov.* occurs.

The molecular results of Marin et al. (2012, 2013) as

cited by Greer (2025) found that the three relevant populations of putative *S. ganei* all diverged from one another about 2 MYA and were in effect separate species.

Each species appears to be confined to mainly wetter habitats in hilly areas in an otherwise very hot and dry Pilbara district.

The three morphologically similar species are separated from one another by the following character combinations.

S. ganei has a frontal shield that is essentially straight sided from top to bottom except for an enlarged round-shaped bulge at the upper edge where it meets and intersects the first and second labials on each side and the prefrontal posterior to it. The nasal is more "U-shaped" than triangular, the lower edge of the "U-shape being the upper edge of the scale. The scales of the head and dorsum are a medium brownish in colour and the etching between the scales on the upper parts of the head is a light creamish colour with a very slight reddish tinge. S. overlookedit sp. nov. has a frontal shield that is essentially ovoid or horseshoe shaped, as opposed to straight sided. The bulge at the top is gradual in form and not ball-on-stick-style as seen in S. ganei. The nasals are obviously triangular with a well pointed upper edge formed from a narrow apex, rather than being from a U-shaped peak as seen in S. ganei. The scales of the head and dorsum are a medium purplish brownish in colour and the etching between the scales on the upper parts of the head is white, and sometimes with a very slight pink tinge.

S. outofsight sp. nov. has a frontal shield that is straight sided top to bottom, or at most only slightly wider near the top. It is not with a noticeable circular area at the top as seen in S. ganei or in the form of a horseshoe as seen in S. overlookedit sp. nov.. The nasals are obviously triangular with a well pointed upper edge formed from a medium to wide apex, rather than being from a narrow obviously constricted apex as seen in S. overlookedit sp. nov. or with a U-shaped peak as seen in S. ganei. The dorsum of this species is chocolate brown in colour. Etching between the scales on the head is beige in colour. The three species S. ganei, S. overlookedit sp. nov. and S. outofsight sp. nov. are readily separated from all other Australian Blind Snakes by the following suite of characters:

An elongate, moderately stout Australian Blind Snake with 24 midbody scale rows, a foreshortened head with snout bluntly rounded in lateral profile and from above, moderately high number of vertebral scales (430-448) and nasal cleft vertically dividing the nasal scale, originating

from the second labial scale and terminating at the top of the rostral scale on the dorsal surface of the head.

Vertebral scales number 430-448 for females, 432 for

the only male counted. Subcaudal scales (excluding the conical spine) of females 12-13, of male known is 19.

Circumferential scale rows 24 along entire length of body.

Head bluntly rounded in profile and from above, preocular region extremely foreshortened. Eyes conspicuous, positioned deep to the anterodorsal portion of the ocular scale.

Nasals large, forming a major part of the anterior surface of the head; broadly separated behind the rostral by the prefrontal. Nasal cleft originates from the anterior end of the second supralabial, curves around the front of the nostril then extends vertically onto the upper surface of the head, finally swinging posteromedially to contact posterolateral margin of rostral. Nasal scale thus completely divided into subequal anterior and posterior moeities. Preocular smaller than the nasal, subequal to ocular, narrowly separated from prefrontal by intervening supraocular.

Anterior suture of preocular intersects upper border of second upper labial well behind nasal

cleft. Lower border of preocular overlaps upper labials 2-3. Ocular subequal to preocular.

Ventral portion wedged between upper labials 3 and 4. Upper labials increase in size posteriorly;

Upper labial 4 projects behind posterior margin of the ocular. Prefrontal large, equal to three body scales; deeply wedged between nasal and supraocular but fails to contact the preocular. Supraocular subequal to the prefrontal. Frontal is so small is to not be readily distinguishable from other scales of the vertebral series. Parietal wide but straplike, equal in width to

three body scales. The three preceding species are most similar to putative S. ligatus (Peters, 1879), herein treated as a composite of S. ligatus (confined to Queensland and New South Wales, east of the Carpentaria Fold) and south of Cooktown, Queensland, along with the closely related S. okara sp. nov. from Cape York Peninsula, found generally north of Coen in Queensland and similar in most respects to that species, as well as S. sloppi (Hoser, 2013) (with a type locality of Wyndham East Kimberley, Western Australia, Australia, Latitude -15.65 S., Longitude 128.70 E.), S. crottyi sp. nov. from the Wessell Islands, Northern Territory, S. oxyi sp. nov. from the southern Gulf of Carpentaria Region west of the Carpentaria Fold in the Northern Territory and S. romani sp. nov. from the Selwyn Ranges, north-west Queensland, including outliers.

The three preceding species are separated from the latter six by being less elongate (as in more stout), with fewer vertebral scales (296-355 in females), a less extremely foreshortened

head, a broader rostral scale, and a nasal cleft which originates at the first labial scale and

terminates well short of the rostral scale.

S. ganei of the type form is depicted in life in Aplin (1998) on page 8 at top and it is also depicted in life in Storr, Smith and Johnstone (2002) on page 102 at top left, being from 30 km west of Newman, Western Australia and is also depicted online at:

https://biocache.alS.org.au/occurrences/ac16745df4e7-46fc-a68d-eae19239a83b

S. overlookedit sp. nov. is depicted in life online at: https://www.flickr.com/photos/ euprepiosaur/7218816240/

being a specimen from Pannawonica, Western Australia.

S. outofsight sp. nov. from the Chichester range is depicted in life in Cogger (2014) on page 101 at bottom right.

Distribution: *S. overlookedit sp. nov.* is a Hamersley Ranges endemic of the Pilbara region in northwest Western Australia. This is a region of about 100 km diameter or about 10,000 square km, although obviously this taxon does not and cannot live in much of this area due its specific habitat and microhabitat needs. Of the three species, *S. ganei*, *S. overlookedit sp. nov.* and *S. outofsight sp. nov.* it is *S. overlookedit sp. nov.* that has the largest known range. The other two species each probably occupies a range of about 2,500 square kilometers. Because of the small number of specimens of each species collected to date by herpetologists in the Pilbara region, an area extensively collected over the past 4 decades, all three species should be treated as vulnerable.

Etymology: The species name *S. overlookedit sp. nov.* is a direct reflection of the fact that countless government officials and herpetologists in Australia have quite shamefully overlooked this taxon as a valid species in need of cataloguing and preserving. Refer to the relevant comments of Hoser (2019a, 2019b) in particular.

The species name is a noun in apposition.

SUEWITTTYPHLOPS OUTOFSIGHT SP. NOV. LSIDurn:lsid:zoobank.org:act:48FA23E9-716E-4A26-BDFC-4D7D0E23DE50

Holotype: A preserved subadult male specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R156328 collected from the Chichester Range, Pilbara district, Western Australia, Australia, Latitude -22.2 S., Longitude 119.0 E.

This government-owned facility allows access to its holdings.

Paratypes: Three preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen numbers R151749, R165000 and R165034 (Skeleton) all collected from the Chichester Range, Pilbara district, Western Australia, Australia, Latitude -22.2 S., Longitude 119.0 E.

Diagnosis: Until now, each of *Suewitttyphlops* overlookedit sp. nov. and *Suewitttyphlops* outofsight sp. nov. have been treated as populations of the putative Pilbara taxon, *Suewitttyphlops ganei* (Aplin, 1998), with a type locality of Cathedral Gorge, 30 km west of Newman, Western Australia, Australia, Latitude -2317305 S., Longitude 119.28 E.

The three species are range restricted endemics effectively confined to upland areas and separated by major drainage systems which are known biogeographic barriers affecting other Pilbara reptile species.

S. ganei is herein confined to the Opthalmia Range in the East Pilbara, in a region bound by Turri Creek East Branch and Weeli Wolli Creek in the west, separating this taxon from the Hamersley Ranges taxon *S. overlookedit sp. nov. S. ganei* is further constrained by the major biogeographical barrier of the Fortescue River, including Jiggalong Creek to the north and the Ashburton River system to the south. The same above-mentioned river systems and

the Pilbara coast to the west effectively confine *S. overlookedit sp. nov.* to the Hamersley Ranges district.

To the north of the Fortescue River barrier in the Chichester Range, the morphologically divergent *S. outofsight sp. nov.* occurs.

The molecular results of Marin *et al.* (2012, 2013) as cited by Greer (2025) found that the three relevant populations of putative *S. ganei* all diverged from one another about 2 MYA and were in effect separate species.

Each species appears to be confined to mainly wetter habitats in hilly areas in an otherwise very hot and dry Pilbara district.

The three morphologically similar species are separated from one another by the following character combinations.

S. ganei has a frontal shield that is essentially straight sided from top to bottom except for an enlarged round-shaped bulge at the upper edge where it meets and intersects the nasal and preocular on each side and the prefrontal posterior to it. The nasals are more "U-shaped" than triangular, the lower edge of the "U-shape being the upper edge of the scale. The scales of the head and dorsum are a medium brownish in colour and the etching between the scales on the upper parts of the head is a light creamish colour with a very slight reddish tinge.

S. overlookedit sp. nov. has a frontal shield that is essentially ovoid or horseshoe shaped, as opposed to straight sided. The bulge at the top is gradual in form and not ball-on-stick-style as seen in *S. ganei.* The nasals are obviously triangular with a well pointed upper edge formed from a narrow apex, rather than being from a U-shaped peak as seen in *S. ganei.* The scales of the head and dorsum are a medium purplish brownish in colour and the etching between the

scales on the upper parts of the head is white, and sometimes with a very slight pink tinge. *S. outofsight sp. nov.* has a frontal shield that is straight sided top to bottom, or at most only slightly wider near the top. It is not with a noticeable circular area at the top as seen in *S. ganei* or in the form of a horseshoe as seen in *S. overlookedit sp. nov.* The nasals are obviously triangular with a well pointed upper edge formed from a medium to wide apex, rather than being from a narrow obviously constricted apex as seen in *S. overlookedit sp. nov.* or with a U-shaped peak as seen in *S. ganei.* The dorsum of this species is chocolate brown in colour. Etching

between the scales on the head is beige in colour. The three species *S. ganei*, *S. overlookedit sp. nov.* and *S. outofsight sp. nov.* are readily separated from all other Australian Blind Snakes by the following suite of characters:

An elongate, moderately stout Australian Blind Snake with 24 midbody scale rows, a foreshortened head with snout bluntly rounded in lateral profile and from above, moderately high number of vertebral scales (430-448) and nasal cleft vertically dividing the nasal scale, originating

from the second labial scale and terminating at the top of the rostral scale on the dorsal surface of the head.

Vertebral scales number 430-448 for females, 432 for the only male counted. Subcaudal scales (excluding the conical spine) of females 12-13, of male known is 19.

Circumferential scale rows 24 along entire length of body.

Head bluntly rounded in profile and from above, preocular region extremely foreshortened. Eyes conspicuous, positioned deep to the anterodorsal portion of the ocular scale.

Nasals large, forming a major part of the anterior surface of the head; broadly separated behind the rostral by the prefrontal. Nasal cleft originates from the anterior end of the second supralabial, curves around the front of the nostril then extends vertically onto the upper surface of the head, finally swinging posteromedially to contact posterolateral margin of rostral. Nasal scale thus completely divided into subequal anterior and posterior moeities. Preocular smaller than the nasal, subequal to ocular, narrowly separated from prefrontal by intervening supraocular.

Anterior suture of preocular intersects upper border of second upper labial well behind nasal

cleft. Lower border of preocular overlaps upper labials 2-3. Ocular subequal to preocular.

Ventral portion wedged between upper labials 3 and 4. Upper labials increase in size posteriorly;

Upper labial 4 projects behind posterior margin of the ocular. Prefrontal large, equal to three body scales; deeply wedged between nasal and supraocular but

fails to contact the preocular. Supraocular subequal to the prefrontal. Frontal is so small is to not be readily distinguishable from other scales of the vertebral series. Parietal wide but straplike, equal in width to three body scales.

The three preceding species are most similar to putative S. ligatus (Peters, 1879), herein treated as a composite of S. ligatus (confined to Queensland and New South Wales, east of the Carpentaria Fold) and south of Cooktown, Queensland, along with the closely related S. okara sp. nov. from Cape York Peninsula, found generally north of Coen in Queensland and similar in most respects to that species, as well as S. sloppi (Hoser, 2013) (with a type locality of Wyndham East Kimberley, Western Australia, Australia, Latitude -15.65 S., Longitude 128.70 E.), S. crottyi sp. nov. from the Wessell Islands, Northern Territory, S. oxyi sp. nov. from the southern Gulf of Carpentaria Region west of the Carpentaria Fold in the Northern Territory and S. romani sp. nov. from the Selwyn Ranges, north-west Queensland, including outliers.

The three preceding species are separated from the latter six by being less elongate (as in more stout), with fewer vertebral scales (296-355 in females), a less extremely foreshortened

head, a broader rostral scale, and a nasal cleft which originates at the first labial scale and

terminates well short of the rostral scale.

S. ganei of the type form is depicted in life in Aplin (1998) on page 8 at top and it is also depicted in life in Storr, Smith and Johnstone (2002) on page 102 at top left, being from 30 km west of Newman, Western Australia and is also depicted online at: https://biocache.alS.org.au/occurrences/ac16745d-

f4e7-46fc-a68d-eae19239a83b

S. overlookedit sp. nov. is depicted in life online at: https://www.flickr.com/photos/ euprepiosaur/7218816240/

euprepiosaul/7218618240/

being a specimen from Pannawonica, Western Australia.

S. outofsight sp. nov. from the Chichester range is depicted in life in Cogger (2014) on page 101 at bottom right.

Distribution: To the north of the Fortescue River barrier in the Chichester Range, the morphologically divergent *S. outofsight sp. nov.* occurs.

S. overlookedit sp. nov. is a Hamersley Ranges endemic of the Pilbara region in northwest Western Australia. This is a region of about 100 km diameter or about 10,000 square km, although obviously this taxon does not and cannot live in much of this area due its specific habitat and microhabitat needs.

Of the three species, *S. ganei*, *S. overlookedit sp. nov.* and *S. outofsight sp. nov.* it is *S. overlookedit sp. nov.* that has the largest known range. The other two species each probably occupies a range of about 2,500 square kilometers. Because of the small number of specimens of each species collected to date by herpetologists in the Pilbara region, an area extensively collected over the past 4 decades, all three species should be treated as vulnerable.

Etymology: The species name *S. outofsight sp. nov.* is a direct reflection of the fact that countless government officials and herpetologists in Australia have quite shamefully overlooked this taxon as a valid species in need of cataloguing and preserving and kept it "out of sight" of the public at large while they potentially "managed the species to extinction". Refer to the relevant comments of Hoser (2019a, 2019b) in particular.

SUEWITTTYPHLOPS MILEII SP. NOV. LSIDurn:Isid:zoobank.org:act:D8602701-39A7-4B14-8E38-73B476E557C1

Holotype: A preserved male specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R133192 collected from Koolan Island, Buccaneer Archipelago, West Kimberley District, Western Australia, Australia, Latitude -16.127222 S., Longitude 123.741389 E. This government-owned facility allows access to its holdings.

Paratypes: Six preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen numbers R133193 (adult female), R158014 (adult female), R158055 (male), R165559 (female), R145043 (adult) and R91044 all from Koolan Island, Buccaneer Archipelago, West Kimberley District, Western Australia, Australia, Latitude -16.127222 S., Longitude 123.741389 E.

Diagnosis: Marin *et al.* (2012, 2013) provided a molecular basis to separate putative *Suewitttyphlops kimberleyensis* (Storr, 1981) into at least four separate species in addition to the closely related south-west Kimberley species *S. troglodytes* (Storr, 1981).

The type locality for *S. kimberleyensis* is Bigge Island, Western Australia, Latitude 14.32 S., Longitude 125.08 E. and this taxon is herein confined to nearby islands in the Bonaparte Archipelago, extending at least as far south as Coronation Island, Western Australia, Latitude -14.983333 S., Longitude 124.916667 E. as well as the immediately adjacent mainland of the West Kimberley District of Western Australia.

Suewittyphlops mileii sp. nov. is only known from Koolan Island, other islands in the immediately adjacent Buccaneer Archipelago and the immediately adjacent mainland of the West Kimberley District of Western Australia.

Suewitttyphlops paulwoolfi sp. nov. is a taxon from the north-east Kimberley District of Western Australia, known from an area generally east of Wuudagu, about 20 km west of Kalumburu, in the north Kimberley District, to the Northern Territory border in the east, being an inhabitant of woodlands associated with sandstone rock outcroppings.

Suewitttyphlops euanedwardsi sp. nov. inhabits the rockier parts of the western half of the top end of the Northern Territory from the Victoria River district in the south-west to the west Arnhem Land escarpment in the north-east.

S. kimberleyensis (Storr, 1981), *S. mileii sp. nov.*, *S. paulwoolfi sp. nov.* and *S. euanedwardsi sp. nov.* are separated from one another by the following character differences:

S. kimberleyensis is a dark pinkish-brown coloured snake on top, being this colour at the anterior end, becoming cholate brown at the posterior end. It has a has a moderately wide U-shaped rostral that flares out slightly at the last third of the lower edge, entering the prefrontal but not flattening the anterior edge. The large scale around the eye spot is not divided. There is thin and semi distinct white etching of scales on the anterior of the snout. The tip of the snout is whitish. S. mileii sp. nov. is a dark pinkish-brown coloured snake on top, being this colour at the anterior end, becoming cholate brown at the posterior end. It has a rostral that barely touches the anterior of the prefrontal with the lateral parts of the prefrontal scale being ending in a narrow sharp point, versus a wide blunter point in S. kimberleyensis. The large scale around the eye spot is effectively divided into two, the division being along the posterior edge of the eye spot. There is thin and semi distinct white etching of scales on the anterior of the snout. The tip of the snout is whitish.

S. paulwoolfi sp. nov. is a pinkish coloured snake, with a slight brownish tinge at the posterior end. The rostral is straight sided up the snout from top to bottom. The middle of the front edge of the prefrontal is flat in line, rather than forward angled in both *S. kimberleyensis* and *S. paulwoolfi sp. nov.*. The prefrontal is also wider than the rostral, versus not so in *S. kimberleyensis* and *S. paulwoolfi sp. nov.*. The scale around the eye spot is reduced in size and teardrop shaped, the front and back edge effectively confining the eye spot. There is strong and thick white etching of scales on the anterior of the snout.

S. euanedwardsi sp. nov. is a snake that has a yellowish-brown dorsum all over and no change in colour intensity at the posterior end. The top of the head is noticeably lighter than the rest of the body, being light yellowish brown rather than medium yellowish brown in colour. There is a very slight further lightening of colour at the anterior part of the snout, but not in the form of whitening as such. The rostral is relatively shorter in this species than seen in the three preceding species, with the anterior edge of the prefrontal moving forward and accommodating the void. There is no white etching of scales on the anterior of the snout.

The four preceding species *S. kimberleyensis*, *S. mileii sp. nov.*, *S. paulwoolfi sp. nov.* and *S.*

euanedwardsi sp. nov. are separated from the closely related and morphologically similar west Kimberley taxon *S. troglodytes* (Storr, 1981) of the south-west Kimberley district by having a nasal cleft extending upwards and slightly backwards to about midway between nostril and top of the nasal scale; nostril a little nearer to the rostral than the preocular and ventrals fewer than 550, versus the nasal cleft extending upwards and forwards from nostril to rostral; nostril much nearer to the rostral than the preocular and ventrals more than 600.

As a cohort, the five preceding species are readily separated from all other Australian Blind Snakes by the following combination of characters: snout is rounded in profile; rostral (from above) is much longer than wide; nostrils are lateral; 22 Midbody scale rows and over 400 ventrals.

S. mileii sp. nov. is depicted in life on the website controlled by Peter Uetz and the Adam Britton gang of people who engage in anal sex with people's pet dogs, child rapists, drug dealers and wildlife smugglers at:

https://reptile-database.reptarium.cz/species?genus= Anilios&species=kimberleyensis

with the specimen from Koolan Island, Western Australia, being photographed by Brad Maryan.

S. paulwoolfi sp. nov. is depicted in life online at: https://www.flickr.com/photos/194274402@ N06/51649985624/

being a specimen from Mornington Station, Western Australia, photographed by Melissa Bruton.

S. euanedwardsi sp. nov. is depicted in life in Cogger (2014) on page 803 at bottom right, being from Litchfield National Park in the Northern Territory, photographed by Paul Horner.

The phylogenies of Marin *et al.* (2012, 2013) showed that each of *S. kimberleyensis* (Storr, 1981), *S. mileii sp. nov.*, *S. paulwoolfi sp. nov.* and *S. euanedwardsi sp. nov.* and the morphologically similar *S. troglodytes* (Storr, 1981) diverged from one another in the Pliocene epoch which means each diverged from nearest relatives more than 2.6 MYA, supporting the species level recognition of each taxon.

Distribution: *S. mileii sp. nov.* is only known from Koolan Island, other islands in the immediately adjacent Buccaneer Archipelago and the immediately adjacent mainland of the west Kimberley, WA.

Etymology: *S. mileii sp. nov.* is named in honour of Javier Gerardo Milei who is an Argentine libertarian politician and economist. He has served as President of Argentina since 2023 (continuing to do so in mid 2025). His political mantra of dismantling the corrupt and parasitic public service bureaucracy, combined with zero tolerance for police, judicial and political corruption have reversed a century long decline in Argentina's economic, social and environmental fortunes and propelled the country to be one of the most dynamic modern economies in South America

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within his first year of government.

His successful model of minimalist government intrusions into the lives of law-abiding citizens, combined with no tolerance for corruption and dishonesty in government is one that should be adopted in other countries including the endemically corrupt fascist state of Australia.

There would be significant benefits to wildlife conservation in Australia with the government model of Javier Gerardo Milei.

SUEWITTTYPHLOPS PAULWOOLFI SP. NOV. LSIDurn:lsid:zoobank.org:act:CC91FE73-F2E0-4453-8724-0F957283EC61

Holotype: A preserved adult female specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R125981 collected from Wyndham, East Kimberley District, Western Australia, Australia, Latitude -15.466667 S., Longitude 128.1 E.

This government-owned facility allows access to its holdings.

Paratypes: 1/ A preserved adult male specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number 98 km southwest of Kununurra, 7-9 km east of the Great Northern Highway, East Kimberley District, Western Australia, Australia, Latitude -16.586111 S., Longitude 128.275278 E., 2/ A preserved specimen at the Australian National Wildlife Collection (controlled by the Commonwealth Scientific and Industrial Research Organisation AKA CSIRO), Canberra, Australian Capital Territory, Australia, specimen number R12424 collected from McPhee Creek, East Kimberley District, Western Australia, Australia,

Latitude -16.2661 S., Longitude 128.3024 E. **Diagnosis:** Marin *et al.* (2012, 2013) provided a molecular basis to separate putative *Suewitttyphlops kimberleyensis* (Storr, 1981) into at least four separate species in addition to the closely related south-west Kimberley species *S. troglodytes* (Storr, 1981).

The type locality for *S. kimberleyensis* is Bigge Island, Western Australia, Latitude 14.32 S., Longitude 125.08 E. and this taxon is herein confined to nearby islands in the Bonaparte Archipelago, extending at least as far south as Coronation Island, Western Australia, Latitude -14.983333 S., Longitude 124.916667 E. as well as the immediately adjacent mainland of the West Kimberley District of Western Australia.

Suewitttyphlops mileii sp. nov. is only known from Koolan Island, other islands in the immediately adjacent Buccaneer Archipelago and the immediately adjacent mainland of the West Kimberley District of Western Australia.

Suewitttyphlops paulwoolfi sp. nov. is a taxon from the north-east Kimberley district of Western Australia, known from an area generally east of Wuudagu, about 20 km west of Kalumburu, in the north Kimberley District, to the Northern Territory border in the east, being an inhabitant of woodlands associated with sandstone rock outcroppings.

Suewitttyphlops euanedwardsi sp. nov. inhabits the rockier parts of the western half of the top end of the Northern Territory from the Victoria River district in the south-west to the west Arnhem Land escarpment in the north-east.

S. kimberleyensis (Storr, 1981), *S. mileii sp. nov.*, *S. paulwoolfi sp. nov.* and *S. euanedwardsi sp. nov.* are separated from one another by the following character differences:

S. kimberleyensis is a dark pinkish-brown coloured snake on top, being this colour at the anterior end, becoming cholate brown at the posterior end. It has a has a moderately wide U-shaped rostral that flares out slightly at the last third of the lower edge, entering the prefrontal but not flattening the anterior edge. The large scale around the eye spot is not divided. There is thin and semi distinct white etching of scales on the anterior of the snout. The tip of the snout is whitish. S. mileii sp. nov. is a dark pinkish-brown coloured snake on top, being this colour at the anterior end, becoming cholate brown at the posterior end. It has a rostral that barely touches the anterior of the prefrontal with the lateral parts of the prefrontal scale being ending in a narrow sharp point, versus a wide blunter point in S. kimberleyensis. The large scale around the eye spot is effectively divided into two, the division being along the posterior edge of the eye spot. There is thin and semi distinct white etching of scales on the anterior of the snout. The tip of the snout is whitish.

S. paulwoolfi sp. nov. is a pinkish coloured snake, with a slight brownish tinge at the posterior end. The rostral is straight sided up the snout from top to bottom. The middle of the front edge of the prefrontal is flat in line, rather than forward angled in both *S. kimberleyensis* and *S. paulwoolfi sp. nov.*. The prefrontal is also wider than the rostral, versus not so in *S. kimberleyensis* and *S. paulwoolfi sp. nov.*. The scale around the eye spot is reduced in size and teardrop shaped, the front and back edge effectively confining the eye spot. There is strong and thick white etching of scales on the anterior of the snout.

S. euanedwardsi sp. nov. is a snake that has a yellowish-brown dorsum all over and no change in colour intensity at the posterior end. The top of the head is noticeably lighter than the rest of the body, being light yellowish brown rather than medium yellowish brown in colour. There is a very slight further lightening of colour at the anterior part of the snout, but not in the form of whitening as such. The rostral is relatively shorter in this species than seen in the three preceding species, with the anterior edge of the prefrontal moving forward and accommodating the void. There is no white etching of scales on the

anterior of the snout.

The four preceding species *S. kimberleyensis*, *S. mileii sp. nov.*, *S. paulwoolfi sp. nov.* and *S. euanedwardsi sp. nov.* are separated from the closely related and morphologically similar west Kimberley taxon *S. troglodytes* (Storr, 1981) of the south-west Kimberley district by having a nasal cleft extending upwards and slightly backwards to about midway between nostril and top of the nasal scale; nostril a little nearer to the rostral than the preocular and ventrals fewer than 550, versus the nasal cleft extending upwards and forwards from nostril to rostral; nostril much nearer to the rostral than the preocular and ventrals more than 600.

As a cohort, the five preceding species are readily separated from all other Australian Blind Snakes by the following combination of characters: snout is rounded in profile; rostral (from above) is much longer than wide; nostrils are lateral; 22 Midbody scale rows and over 400 ventrals.

S. mileii sp. nov. is depicted in life on the website controlled by Peter Uetz and the Adam Britton gang of people who engage in anal sex with people's pet dogs, child rapists, drug dealers and wildlife smugglers at:

https://reptile-database.reptarium.cz/species?genus= Anilios&species=kimberleyensis

with the specimen from Koolan Island, Western Australia, being photographed by Brad Maryan.

S. paulwoolfi sp. nov. is depicted in life online at: https://www.flickr.com/photos/194274402@ N06/51649985624/

being a specimen from Mornington Station, Western Australia, photographed by Melissa Bruton.

S. euanedwardsi sp. nov. is depicted in life in Cogger (2014) on page 803 at bottom right, being from Litchfield National Park in the Northern Territory, photographed by Paul Horner.

The phylogenies of Marin *et al.* (2012, 2013) showed that each of *S. kimberleyensis* (Storr, 1981), *S. mileii sp. nov.*, *S. paulwoolfi sp. nov.* and *S. euanedwardsi sp. nov.* and the morphologically similar *S. troglodytes* (Storr, 1981) diverged from one another in the Pliocene epoch which means each diverged from nearest relatives more than 2.6 million years ago, supporting the species level recognition of each taxon.

Distribution: Suewitttyphlops paulwoolfi sp. nov. is a taxon from the north-east Kimberley district of Western Australia, known from an area generally east of Wuudagu, about 20 km west of Kalumburu, in the north Kimberley District, to the Northern Territory border in the east, being an inhabitant of woodlands associated with sandstone rock outcroppings.

Etymology: *S. paulwoolfi sp. nov.* is named in honour of Paul Woolf of Walloon, Queensland, Australia. For more details see the etymology for *Woolftyphlops* Hoser, 2012 in Hoser (2012d) at pages 19-20.

SUEWITTTYPHLOPS EUANEDWARDSI SP. NOV. LSIDurn:lsid:zoobank.org:act:1D2BF8E8-0005-49E7-BDA6-A71334C0C9EE

Holotype: A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, specimen number R21996 collected at Litchfield National Park, Northern Territory, Australia, Latitude -13.202 S., Longitude 130.708 E.

This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, specimen number R22224 collected at Litchfield National Park, Northern Territory, Australia, Latitude-13.7 S., Longitude 131.8. **Diagnosis:** Marin *et al.* (2012, 2013) provided a molecular basis to separate putative *Suewitttyphlops kimberleyensis* (Storr, 1981) into at least four separate species in addition to the closely related south-west Kimberley species *S. troglodytes* (Storr, 1981).

The type locality for *S. kimberleyensis* is Bigge Island, Western Australia, Latitude 14.32 S., Longitude 125.08 E. and this taxon is herein confined to nearby islands in the Bonaparte Archipelago, extending at least as far south as Coronation Island, Western Australia, Latitude -14.983333 S., Longitude 124.916667 E. as well as the immediately adjacent mainland of the West Kimberley District of Western Australia.

Suewitttyphlops mileii sp. nov. is only known from Koolan Island, other islands in the immediately adjacent Buccaneer Archipelago and the immediately adjacent mainland of the West Kimberley District of Western Australia.

Suewitttyphlops paulwoolfi sp. nov. is a taxon from the north-east Kimberley District of Western Australia, known from an area generally east of Wuudagu, about 20 km west of Kalumburu, in the north Kimberley District, to the Northern Territory border in the east, being an inhabitant of woodlands associated with sandstone rock outcroppings.

Suewittyphlops euanedwardsi sp. nov. inhabits the rockier parts of the western half of the top end of the Northern Territory from the Victoria River district in the south-west to the west Arnhem Land escarpment in the north-east.

S. kimberleyensis (Storr, 1981), *S. mileii sp. nov.*, *S. paulwoolfi sp. nov.* and *S. euanedwardsi sp. nov.* are separated from one another by the following character differences:

S. kimberleyensis is a dark pinkish-brown coloured snake on top, being this colour at the anterior end, becoming cholate brown at the posterior end. It has a has a moderately wide U-shaped rostral that flares out slightly at the last third of the lower edge, entering the prefrontal but not flattening the anterior edge. The

large scale around the eye spot is not divided. There is thin and semi distinct white etching of scales on the anterior of the snout. The tip of the snout is whitish. *S. mileii sp. nov.* is a dark pinkish-brown coloured snake on top, being this colour at the anterior end, becoming cholate brown at the posterior end. It has a rostral that barely touches the anterior of the prefrontal with the lateral parts of the prefrontal scale being ending in a narrow sharp point, versus a wide blunter point in *S. kimberleyensis.* The large scale around the eye spot is effectively divided into two, the division being along the posterior edge of the eye spot. There is thin and semi distinct white etching of scales on the anterior of the snout. The tip of the snout is whitish.

S. paulwoolfi sp. nov. is a pinkish coloured snake, with a slight brownish tinge at the posterior end. The rostral is straight sided up the snout from top to bottom. The middle of the front edge of the prefrontal is flat in line, rather than forward angled in both *S. kimberleyensis* and *S. paulwoolfi sp. nov.*. The prefrontal is also wider than the rostral, versus not so in *S. kimberleyensis* and *S. paulwoolfi sp. nov.*. The scale around the eye spot is reduced in size and teardrop shaped, the front and back edge effectively confining the eye spot. There is strong and thick white etching of scales on the anterior of the snout.

S. euanedwardsi sp. nov. is a snake that has a yellowish-brown dorsum all over and no change in colour intensity at the posterior end. The top of the

head is noticeably lighter than the rest of the body, being light yellowish brown rather than medium yellowish brown in colour. There is a very slight further lightening of colour at the anterior part of the snout, but not in the form of whitening as such. The rostral is relatively shorter in this species than seen in the three preceding species, with the anterior edge of the prefrontal moving forward and accommodating the void. There is no white etching of scales on the anterior of the snout.

The four preceding species *S. kimberleyensis*, *S. mileii sp. nov.*, *S. paulwoolfi sp. nov.* and *S. euanedwardsi sp. nov.* are separated from the closely related and morphologically similar west Kimberley taxon *S. troglodytes* (Storr, 1981) of the south-west Kimberley district by having a nasal cleft extending upwards and slightly backwards to about midway between nostril and top of the nasal scale; nostril a little nearer to the rostral than the preocular and ventrals fewer than 550, versus the nasal cleft extending upwards and forwards from nostril to rostral; nostril much nearer to the rostral than the preocular and ventrals more than 600.

As a cohort, the five preceding species are readily separated from all other Australian Blind Snakes by the following combination of characters: snout is rounded in profile; rostral (from above) is much longer than wide; nostrils are lateral; 22 Midbody scale rows and over 400 ventrals. *S. mileii sp. nov.* is depicted in life on the website controlled by Peter Uetz and the Adam Britton gang of people who engage in anal sex with people's pet dogs, child rapists, drug dealers and wildlife smugglers at:

https://reptile-database.reptarium.cz/species?genus= Anilios&species=kimberleyensis

with the specimen from Koolan Island, Western Australia, being photographed by Brad Maryan. *S. paulwoolfi sp. nov.* is depicted in life online at: https://www.flickr.com/photos/194274402@ N06/51649985624/

being a specimen from Mornington Station, Western Australia, photographed by Melissa Bruton.

S. euanedwardsi sp. nov. is depicted in life in Cogger (2014) on page 803 at bottom right, being from Litchfield National Park in the Northern Territory, photographed by Paul Horner.

The phylogenies of Marin *et al.* (2012, 2013) showed that each of *S. kimberleyensis* (Storr, 1981), *S. mileii sp. nov.*, *S. paulwoolfi sp. nov.* and *S. euanedwardsi sp. nov.* and the morphologically similar *S. troglodytes* (Storr, 1981) diverged from one another in the Pliocene epoch which means each diverged from nearest relatives more than 2.6 million years ago, supporting the species level recognition of each taxon.

Distribution: Suewitttyphlops euanedwardsi sp. nov. inhabits the rockier parts of the western half of the top end of the Northern Territory from the Victoria River District in the south-west to the west Arnhem Land escarpment in the north-east.

Etymology: *S. euanedwardsi sp. nov.* is named in honour of Euan Edwards of Upper Coomera on the Gold Coast, Queensland, Australia. For more details see the etymology for *Edwardstyphlops* Hoser, 2012 in Hoser (2012d) at page 19.

ACKYTYPHLOPS GEDYEI SP. NOV. LSIDurn:lsid:zoobank.org:act:D66EC2BB-4E04-4E24-B14F-3D2EABA3DBAA

Holotype: A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J72742 collected from near Wandana Waters, northeast Queensland, Australia, Latitude -17.55 S., Longitude 145.616667 E.

This government-owned facility allows access to its holdings.

Paratypes: 1/ A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J76031 collected from near Ravenshoe, northeast Queensland, Australia, Latitude -17.6 S., Longitude 145.483333 E., 2/ A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J80559 collected from the Tully Falls Forest Reserve, northeast Queensland, Australia, Latitude -17.610556 S., Longitude 145.558889 E. **Diagnosis:** Ackytyphlops gedyei sp. nov. is a taxon found in the southern wet tropics, of Queensland, Australia being a region generally south and southwest of Cairns in north-east Queensland. It is morphologically and genetically divergent to the specimens from further north on Cape York that are assigned to one or other of either A. robertsi (Couper, Covacevich and Wilson, 1998) of the northern west tropics region, generally bounded by Cooktown in the North and Port Douglas in the south, or further north, where specimens are assigned to A. torresianus (Boulenger, 1889).

Ackytyphlops gedyei sp. nov. is separated from all other species in the A. polygrammicus (Schlegel, 1839) complex of north-east Australia and the New Guinea/Wallacea region which is where they occur, by the following unique suite of characters: dark brown dorsum with underlying semi-distinct black patches usually being made up of part or whole of a scale, an elongate more-or-less rectangular rostral that indents (inwards) slightly on either side midway up the sides, or is otherwise essentially straight lined (unique to this species within the group); yellow patches and yellow etching on and between the scales at the anterior part of the top of the head, yellow venter and a reasonably well-defined demarcation between dorsal and ventral colouration, versus extremely well-defined in A. robertsi and poorly defined in A. torresianus being the only other two species in the group from Australia. As a group, A. gedyei sp. nov. and the other species in the A. polygrammicus group of species are separated from all other Australasian Blind Snakes by the unique combination of the following characters: Brownish above, yellowish below. Rostral, mouth and tail tip usually yellowish or with yellow pigment spots. The snout is rounded from above and in profile. Nasal cleft joins the second supralabial or the suture between the first and second labials, projecting forward and upward to partially divide the nasal, which is visible from above. Rostral is large and obvious, being much longer than wide. 22 midbody scale rows, 520-580 ventrals. Length is 35-60 times the diameter; average length is 25 cm and maximum is about 40 cm (modified from Cogger 2014 and Couper, Covacevich and Wilson, 1998).

Ackytyphlops gedyei sp. nov. is depicted in life in Cogger (2014) on page 809 bottom left and online at: https://www.flickr.com/photos/

shaneblackfnq/16984398101/

being from Lake Eacham, Queensland and photographed by Shane Black, and https://www.flickr.com/photos/ euprepiosaur/5205828774/

being from Paluma Range and photographed by Stephen Zozaya.

The phylogenies of Marin *et al.* (2012, 2013) showed that the species *A. gedyei sp. nov.* diverged from nearest relatives further north in Qld over 2 MYA.

Distribution: *Ackytyphlops gedyei sp. nov.* is a taxon found in the southern wet tropics, of Queensland, Australia being a region generally south and southwest of Cairns in north-east Queensland.

Etymology: *A. gedyei sp. nov.* is named in honour of Andrew Gedye of Innisfail of far north Queensland, Australia. He is a well-known breeder of rare and potentially threatened species of snakes and is thanked for his services to herpetology spanning some decades.

PATTERSONTYPHLOPS KAMILAROI SP. NOV. LSIDurn:Isid:zoobank.org:act:CC2C7CCA-7C54-4D3D-9E57-7412B6C3675B

Holotype: A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.154152 collected from Poison Gate Road on road to Poison Gate from the Gwydir Highway, New South Wales, Australia, Latitude -29.52971 S., Longitude 149.26749 E.

This government-owned facility allows access to its holdings.

Paratypes: 1/ A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.19388 collected from Collarenabri, New South Wales, Australia, Latitude -29.55 S., Longitude 148.583 E., 2/ A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.12761 collected from Walgett, New South Wales, Australia, Latitude -30.016 S., Longitude 148.116 E.

Diagnosis: Until now *Pattersontyphlops kamilaroi sp. nov.* has been treated as a south-west population of *Pattersontyphlops wiedii* (Peters, 1867) with a type locality of Brisbane, Queensland.

A. wiedii is herein confined to the general region north of the border ranges in south-east Queensland extending south along the NSW north coast, east of the ranges. Its range extends north on the margins of the Great Dividing range to the Tropic of Capricorn. A. kamilaroi sp. nov. is the taxon found in drier parts of north-east New South Wales, extending west to the Darling River basin.

A. kamilaroi sp. nov. is separated from A. wiedii by having a weakly and evenly ovoid-shaped rostral, with a sizeable contact point to the lower snout, versus one that is wide and bulbous at the top and with narrow contact point below at the lower snout. A. kamilaroi sp. nov. has a narrow prefrontal shield, versus wide in A. wiedii.

In *A. kamilaroi sp. nov*. the black eye spot is at the posterior part of the scale overlaying it, versus in the central part in *A. wiedii*.

The two species, *A. kamilaroi sp. nov.* and *A. wiedii* are readily separated from all other Australian Blind Snakes by the following suite of characters: Snout is rounded in profile from above and the leading edge of the rostral is curved and lacks a downturned transverse keel. Nasal cleft is visible from above and

usually joins the second supralabial. Nasal scale is not completely divided. 20 midbody scale rows. Body without longitudinal stripes of any kind, venter is obviously lighter than the dorsum.

The most similar related species is *A. fossor* Shea, 2015 which is differentiated by having a round-shaped rostral versus either ovoid or bulbous in shape and the nasal cleft is not visible from above.

A. wiedii is depicted in life online at:

https://www.flickr.com/photos/

ryanfrancis/19316423316/

and

https://www.inaturalist.org/observations/145071341 and

https://www.inaturalist.org/observations/142435850 *A. kamilaroi sp. nov*. is depicted in life online at: https://www.inaturalist.org/observations/91525797 and

https://www.inaturalist.org/observations/145447499 and

https://www.inaturalist.org/observations/58147773 The phylogenies published by Marin *et al.* (2012, 2013) indicated the divergence between populations of *A. wiedii* and *A. kamilaroi sp. nov.* to be in excess of 2.6 MYA during the late Pliocene epoch.

Distribution: *A. kamilaroi sp. nov.* is found in drier parts of north-east New South Wales, nearby far south Queensland and extending west to the Darling River basin.

Etymology: *A. kamilaroi sp. nov.* is named after the Kamilaroi people being the original inhabitants of the region this species occurs in. They lived here prior to the British invasion and genocide of the 1800's. Most of the area was cleared and turned into intensive agriculture. The few natives that survived had to move further west into arid and agriculturally useless land to try to eke out an existence.

Unable to do so, they moved to the edges of "white" towns where they lived under sheets of tin and scavenged rubbish in order to survive.

KERRTYPHLOPS CORRUPTPOLICEORUM SP. NOV.

LSIDurn:lsid:zoobank.org:act:B46E5334-8C97-42E9-8177-B9275FBB3C46

Holotype: A preserved specimen at the Australian National Wildlife Collection (controlled by the Commonwealth Scientific and Industrial Research Organisation AKA CSIRO), Canberra, Australian Capital Territory, Australia, specimen number R06668 collected from the Sloane Reserve, Savernake Hall, 28.5 km north of Mulwala, New South Wales, Australia, Latitude -35.738 S., Longitude 146.0483 E. This government-owned facility allows access to its holdings.

Paratypes: Two preserved specimens at the National Museum of Victoria, Melbourne, Victoria, Australia, specimen numbers D68358 collected from near

Katamatite, Victoria, Latitude -36.0833 S., Longitude 145.7 E., D16295 collected from Shepparton, Victoria (AKA "Ice town"), Australia, Latitude -36.38 S., Longitude 145.4 E.

Diagnosis: For decades, since moving from Sydney, New South Wales, Australia, to Melbourne, Victoria, Australia, while in the field catching reptiles in almost all parts of both states, I have noticed subtle but consistent morphological divergence between specimens of putative *"Ramphotyphlops proximus* Waite, 1893" from different places.

The species is now placed in the genus *Kerrtyphlops* Hoser, 2013.

The molecular results of Marin *et al.* (2012, 2013) found that the main west and central Victorian population, also entering far southern New South Wales, diverged from the New South Wales and Queensland population by roughly 2 million years. Therefore, the unnamed Victorian form is herein formally named as a new species *Kerrtyphlops corruptpoliceorum sp. nov.*.

K. corruptpoliceorum sp. nov. is readily separated from the nominate form of *K. proximus* (Waite, 1893) by having a rostral that when viewed from above is relatively narrow and squarish at the lower half before topping out in a wide oval shape in the upper half, versus one that is only slightly narrower on the lower part. *K. corruptpoliceorum sp. nov.* is further separated from *K. proximus* by usually having a prominent anal spot, versus either absent or indistinct in *K. proximus.*

The two preceding species, being the entirety of the genus *Kerrtyphlops* Hoser, 2013 are separated from all other Australian Blind Snakes by the following suite of characters: Rich dark brown above, fading to creamish-white below, sometimes with a small dark patch on either side of the vent. The snout is very bluntly tri-lobed from above, angular in profile. The nasal cleft is visible from above, joining the first labial below. Rostral is either wholly ovoid from above or alternatively bulbously oval on top and straight edged below, slightly longer than broad. 20 mid body scale rows, body diameter is 20-40 times its length, with an average adult length of 50 cm, but known to attain nearly 75 cm on some occasions.

K. corruptpoliceorum sp. nov. is depicted in life online at:

https://images.ala.org.au/image/

viewer?imageId=d8777ca9-3da2-4c8a-83bd-1937d596b1e5

K. proximus is depicted in life online at:

https://www.flickr.com/photos/

reptileshots/53344136584/

from the Liverpool Plains in New South Wales, photographed by Brendan Schembri.

Distribution: *K. corruptpoliceorum sp. nov.* is a taxon that occurs in drier areas west and north of the Great Divide in northern Victoria, excluding the driest parts

of the north-west and the far west in general, crossing the New South Wales border and entering the southwestern slopes and adjoining plains in southern New South Wales.

K. proximus as recognized herein occupies the rest of the range of the subgenus, being found generally from Canberra in the Australian Capital Territory, along the ranges, western slopes and coastal plains of New South Wales to south-east Queensland, south of the tropic of Capricorn. Specimens from north of the Border Ranges in south-east Queensland have different head scalation to those further south and may also be of a different species. However, the molecular results of Marin *et al.* (2012, 2013) that sequenced these animals in addition to those from New South Wales and Victoria did not indicate this.

Etymology: *K. corruptpoliceorum sp. nov.* a collective noun in apposition, is named in recognition of the corrupt Victoria Police Department. Supposedly a lawenforcement department, the State Police in Victoria do anything but enforce the law. Instead, they run crime and corruption at all levels, times and places and are in effect a terrorist organisation.

The State Police here in Victoria, bash, rob and thieve from people on a daily basis. They fabricate criminal charges against those who get in their way and worse still, instead of prosecuting hard-core criminals, they actively protect them.

They instead prosecute those who seek to end the crime.

This is not just so-called legal indiscretions, but rather things that any moral person would see as wrong. Crimes like kidnapping people's pet dogs, anally raping them and posting videos of the same online are fair game in Victoria and green-lighted by the police here.

Members of the Wolfgang Wüster / Adam Britton gang in Victoria do not get charged for the most serious crimes, including things that would automatically have them jailed elsewhere.

Court suppression orders are used to green-light criminals to continue their crimes and without ever being publicly exposed, which is why I am not publishing any new names of perpetrators or details of their crimes in this etymology.

Those who may even inadvertently expose the perpetrators are instead jailed for breaching the suppression orders.

The relevant species *K. corruptpoliceorum sp. nov.* has a paratype from Shepparton in northern Victoria. This provincial town also known as "Ice city" and for good reason.

It is an epicenter of a Victoria Police protected illegal methamphetamine trade.

Ice (crystal meth), is an illegal methamphetamine, a member of the amphetamine family of drugs. It is very addictive and is linked to chronic physical and mental health problems. Countless lives are destroyed by its use and the corrupt police use ice addicts to do their dirty work, such as bashing people, aggravated burglaries, being "stooge witnesses" in court proceedings against innocent people and the like.

Publicly and in the State controlled media in Australia, the Victoria Police are always claiming to be good in all ways. When not bashing their own wives and demanding recognition for their allegedly dangerous job (most police are in fact killed by other police), they are busy nominating themselves for government issued awards, building obscene statues in public places and seeking other ways to immortalize themselves with a false narrative.

As a sop to their wish to immortalize themselves it is appropriate that a species of blind snake be named in recognition of the corrupt Victorian Police department and its individual officers, pretty much all of whom, down to the very last officer, is 100 percent corrupt.

I note also that this species has a distribution extending into New South Wales and for the record, the police force in that state is no better!

For further details about the activities of the Victorian Police refer to Hoser (1999-b) and for further details on the New South Wales Police, refer to Hoser (1999b).

See also the etymology for the skink lizard *Harrisoniascincus nswpolicearecrooks* Hoser, 2025 in Hoser (2025c).

ROBINWITTTYPHLOPS DATSTINK SP. NOV. LSIDurn:Isid:zoobank.org:act:9F74E787-836B-43FD-BE3A-74CD2C14F61F

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R146958 collected from Kalumburu, Western Australia, Australia, Latitude -14.3 S., Longitude 126.633333 E..

This government-owned facility allows access to its holdings.

Paratypes: Three preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen numbers R131661, R146375 and R180002 all collected from within 25 km of Kalumburu, Western Australia, Australia, Latitude -14.3 S., Longitude 126.633333 E.

Diagnosis: Until now most publishing authors have treated each of *Robinwitttyphlops datstink sp. nov., R. fukdat sp. nov., R. stinkey sp. nov.* and *R. anothersp sp. nov.* as putative *Robinwitttyphlops unguirostris* (Peters, 1867), until now placed in various genera including originally as "*Typhlops* (*Onychocephalus*) *unguirostris* Peters, 1867" and more recently in the genus *Anilios* Gray, 1845.

The two related species, *Robinwitttyphlops jackyhoserae* (Hoser, 2013) and *R. yirrikalae* (Kinghorn, 1942) have often been treated as putative *R. unguirostris* and are all closely related to it. The seven relevant and most closely related species

are as follows:

R. unguirostris including the synonym name *"Typhlops curvirostris* Peters, 1879" is herein confined to coastal and near coastal Queensland, south of Cairns and mainly east of the spine of the Great Dividing Range to the Fitzroy River basin in southcentral east Queensland.

R. anothersp sp. nov. is found on most of Cape York and the eastern Gulf of Carpentaria in north Queensland.

R. jackyhoserae is a taxon from the south-west Kimberley district, of Western Australia generally southwest of the type locality of the Gibb River Homestead, Western Australia, Latitude -16.42 S., Longitude. 126.44 E.

R. yirrikalae is found in the region of East Arnhem Land in the Northern Territory.

R. datstink sp. nov. is endemic to the north Kimberley district of Western Australia, from the type locality, Kalumburu, Western Australia, Australia and including the hilly region southeast, to include the Mitchell River area.

R. fukdat sp. nov. occurs in a broad region across the Northern Territory, extending from the south-west Gulf of Carpentaria to the Ord River drainage in north-east Western Australia not including the top end or the arid regions to the south.

R. stinkey sp. nov. is confined to the western half of the top end of the Northern Territory, bound by the Daly River in the south and the west Arnhem Land escarpment area in the east.

The seven species are separated from one another as follows:

Nominate *R. unguirostris* is defined as being a pinkish to pinkish brown snake on top, with the yellow-white whitening of the snout being bold to behind the eyes on the top of the head. In *R. unguirostris* the anterior part of the eye spot eye sits back from the line of the head shield, meaning it sits completely within the boundaries of the shield.

In *R. unguirostris* each dorsal scale does not have a whitish edge producing a netted or sometimes spotted appearance on the upper surfaces or if so, it is extremely faint and barely noticeable. Viewed from below, the mouth is in the form of a C-shape or overwide U-shape.

R. anothersp sp. nov. is similar in most respects to *R. unguirostris* but separated from that species by being a distinctive chocolate brown above and with yellow below for the entire length of the venter, as opposed to just anteriorly in *R. unguirostris*

Viewed from below, the mouth is in the form of a U-shape or rather than as a C-shape or over-wide U-shape as seen in *R. unguirostris*.

R. yirrikalae is readily separated from all the preceding six species by having the unique combination of a head that is rounded from above and in profile and a rostral that does not have a

sharp transverse keel, versus a head that is bluntly trilobed from above and with a rostral that has a sharp transverse keel, so that the head is angular in profile as seen in all the other species.

The species is pinkish in dorsal colour and snout is lighter than the body, but still pinkish rather than white or strongly yellow.

In *R. jackyhoserae* the dorsum is a purplish brown color, consistent all over, except for the snout which is whitish, the whitish colour stopping at or before the level of the eyes on the top of the head. Undersides have a very slight yellowish tinge anteriorly but are otherwise white.

Each scale of the dorsum has a whitish edge producing a netted or spotted appearance on the upper surfaces. This is especially the case on the anterior part of the dorsum.

In *R. jackyhoserae* the line of the eye shield touches the anterior edge of the eye. By contrast in *R. unguirostris* of Queensland, the anterior part of the eye spot eye sits back from the line of the eye shield, meaning it sits completely within the boundaries of the shield.

R. datstink sp. nov. is similar in most respects to R. jackyhoserae including in terms of overall colouration. However, it is separated from that species by the fact while the scales of the dorsum have a lighter edge, this is in the form of a dull lighter edge, rather than like well-defined spots. There is also an absence of defined white spots at the anterior part of the dorsum as seen in R. jackyhoserae. The venter is pinkish white rather than white as seen in R. jackyhoserae. R. fukdat sp. nov. is separated from the other species by the combination of a more strongly purplish or pink rinse in the color of adults, including aged specimens which as a rule are brown in all relevant species. Perhaps most noticeable is the particularly wellformed hooked beak, which is more pronounced in this *R. fukdat sp. nov*. than in any of the other species besides R. stinkey sp. nov. which is similarly overhooked.

Notably, while the head is bluntly trilobed from above in *R. fukdat sp. nov.*, it is so slight in this taxon, it almost appears as a more rounded head from above, but obviously not smoothly rounded.

R. stinkey sp. nov. is the taxon among the group with a snout that is more angular and pointed at the front when viewed from above. The scales of the dorsum have a strong purplish brown colour and with minimal markings save for a dark etching of each dorsal scale, thereby accentuating the scaly appearance of the snake. The white of the snout has a slight yellowish tinge and extends well past the eyes on the top of the head. Venter is whitish, including at the anterior end and the light of the belly extends some way up the lower flank and more so than seen in the other species.

The seven preceding Blind Snakes are separated

from all other Australian Blind Snakes by the following unique combination of characters:

A moderately slender Blind Snake attaining up to 50 cm long, with a snout hooked in profile, 24 midbody scale rows, 387-474 ventrals,11-16 subcaudals, the tail is 1.2-2.7 percent of the total length and nasal cleft proceeding from the first labial.

The rostral from above is elliptic, longer than wide and about two thirds as wide as the head. The cutting edge at the tip of the snout usually extends back through the nasal scale as a ridge. Nostril is inferior, much nearer to rostral than to preocular. Nasal cleft proceeds from the first upper labial, curves upwards and forwards from nostril to or towards rostral.

The dorsal surface is a dark olive brown to purple brown in adults, which is well demarcated from the whitish, yellowish, whitish-yellowish, or sometimes pinkish white venter.

Images of the type form of *R. unguirostris* in life are online at:

https://www.flickr.com/photos/114192916@ N07/46139711721/

specimen from Charters Towers, Queensland, photographed by Justin Wright, and

https://www.flickr.com/photos/hamidtun/47580744922/

specimen from Townsville, Queensland,

photographed by Halvard Aas Midtun, and https://www.flickr.com/photos/144043627@ N08/37034630624/

specimen from Townsville, Queensland, photographed by Lorenzo Bertola, and

https://www.flickr.com/photos/144043627@ N08/23891024988/i

specimen from Townsville, Queensland photographed by Lorenzo Bertola, and

https://www.flickr.com/photos/

shaneblackfnq/38947624365/

specimen from Ravenshoe, Queensland,

photographed by Shane Black https://www.flickr.com/photos/194580465@

N02/53590781584/

specimen from Townsville, Queensland photographed by Alec Karcz.

Images of *R. anothersp sp. nov.* in life are online at: https://www.flickr.com/photos/

euprepiosaur/8207417809/

specimen from Weipa, Queensland, photographed by Stephen Zozoya, and

https://www.flickr.com/photos/

euprepiosaur/8208507338/

specimen from Weipa, Queensland, photographed by Stephen Zozoya, and

https://www.flickr.com/photos/

shaneblackfnq/51813559288/

specimen from Palmer River, north wet tropics, Queensland, photographed by Shane Black. Images of *R. stinkey sp. nov.* in life are online at: https://www.inaturalist.org/observations/204555864 specimen from Robin Falls, Adelaide River, Northern Territory, photographed by "rubynats" and https://www.flickr.com/photos/ntwildlife/33980327822/ specimen from Marakai, Northern Territory, photographed by Stuart Butler.

Images of *R. jackyhoserae* in life are online at: https://www.flickr.com/photos/194274402@ N06/51649989329/

specimen from Mornington, Kimberley district, Western Australia, photographed by Melissa Bruton, and

https://www.inaturalist.org/observations/219262469 specimen from Mornington Sanctuary, Wunaamin Miliwundi Ranges, Kimberley district, Western Australia, photographed by "handwerlen".

An image of *R. datstink sp. nov.* in life is online at: https://www.flickr.com/photos/114192916@ N07/53051657960/

photographed in the North Kimberley, photographed by Justin Wright.

Images of *R. fukdat sp. nov.* in life are depicted in Storr, Smith and Johnstone (2002) on page 103 bottom right, specimen from Lake Argyle, Western Australia, Cogger (2014) on page 812 at top right, specimen from Kununurra, Western Australia, and Wilson and Swan (2021) on page 541, middle right specimen from Kununurra, Western Australia.

An image of the holotype of *R. yirrakale* is depicted in Wilson and Swan (2021) on page 543 centre right, photographed by serial taxonomic vandal Glenn Shea.

The phylogeny of Marin *et al.* (2012 and 2013) confirmed that all the preceding seven species, being *R. unguirostris*, *R. jackyhoserae*, *R. yirrakale*, *R. datstink sp. nov.*, *R. fukdat sp. nov.*, *R. stinkey sp. nov.*, *R. anothersp sp. nov.* separated in the Pliocene, as in more than 2.6 MYA, in effect confirming that all are divergent species. Based on the phylogeny of Marin *et al.* (2012 and 2023) the most divergent of these, *R. jackyhoserae* diverged about 8 MYA from nearest relative.

Distribution: *R. datstink sp. nov.* is endemic to the north Kimberley district of Western Australia, from the type locality, Kalumburu, Western Australia, Australia, Latitude -14.3 S., Longitude 126.633333 E. and including the hilly region southeast, to include the Mitchell River area.

Etymology: *R. datstink sp. nov.* is named in reflection of the fact that when picked up, it defecates and it is quite smelly. When collecting specimens on the roads of the Kimberley district with fellow herpetologist Charles Acheson in 1983, a specimen defecated on him and he exclaimed "dat stink!" and hence the etymology.

The species name is a noun in apposition.

ROBINWITTTYPHLOPS FUKDAT SP. NOV. LSIDurn:lsid:zoobank.org:act:E0B0C721-4DA3-4BC2-91DD-85549DBF58E5

Holotype: A preserved female specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R115861 collected from Lake Argyle, Western Australia, Australia, Latitude -128.8 S., Longitude -16.3 E. This government-owned facility allows access to its holdings.

Paratype: A preserved male specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R151036 collected from Kununurra, Western Australia, Australia, Latitude -128.8 S., Longitude -15.833333 E.

Diagnosis: Until now most publishing authors have treated each of *Robinwitttyphlops datstink sp. nov.*, *R. fukdat sp. nov.*, *R. stinkey sp. nov.* and *R. anothersp sp. nov.* as putative *Robinwitttyphlops unguirostris* (Peters, 1867), until now placed in various genera including originally as "*Typhlops (Onychocephalus) unguirostris* Peters, 1867" and more recently in the genus *Anilios* Gray, 1845.

The two related species, *Robinwitttyphlops jackyhoserae* (Hoser, 2013) and *R. yirrikalae* (Kinghorn, 1942) have often been treated as putative *R. unguirostris* and are all closely related to it. The seven relevant and most closely related species are as follows:

R. unguirostris including the synonym name *"Typhlops curvirostris* Peters, 1879" is herein confined to coastal and near coastal Queensland, south of Cairns and mainly east of the spine of the Great Dividing Range to the Fitzroy River basin in southcentral east Queensland.

R. anothersp sp. nov. is found on most of Cape York and the eastern Gulf of Carpentaria in north Queensland.

R. jackyhoserae is a taxon from the south-west Kimberley district, of Western Australia generally southwest of the type locality of the Gibb River Homestead, Western Australia, Latitude -16.42 S., Longitude. 126.44 E.

R. yirrikalae is found in the region of East Arnhem Land in the Northern Territory.

R. datstink sp. nov. is endemic to the north Kimberley district of Western Australia, from the type locality, Kalumburu, Western Australia, Australia, Latitude -14.3 S., Longitude 126.633333 E. and including the hilly region southeast, to include the Mitchell River area.

R. fukdat sp. nov. occurs in a broad region across the Northern Territory, extending from the south-west Gulf of Carpentaria to the Ord River drainage in north-east Western Australia not including the top end or the arid regions to the south.

R. stinkey sp. nov. is confined to the western half of

the top end of the Northern Territory, bound by the Daly River in the south and the west Arnhem Land escarpment area in the east.

The seven species are separated from one another as follows:

Nominate *R. unguirostris* is defined as being a pinkish to pinkish brown snake on top, with the yellow-white whitening of the snout being bold to behind the eyes on the top of the head. In *R. unguirostris* the anterior part of the eye spot eye sits back from the line of the eye shield, meaning it sits completely within the boundaries of the shield.

In *R. unguirostris* each dorsal scale does not have a whitish edge producing a netted or sometimes spotted appearance on the upper surfaces or if so, it is extremely faint and barely noticeable. Viewed from below, the mouth is in the form of a C-shape or overwide U-shape.

R. anothersp sp. nov. is similar in most respects to *R. unguirostris* but separated from that species by being a distinctive chocolate brown above and with yellow below for the entire length of the venter, as opposed to just anteriorly in *R. unguirostris*

Viewed from below, the mouth is in the form of a U-shape or rather than as a C-shape or over-wide U-shape as seen in *R. unguirostris*.

R. yirrikalae is readily separated from all the preceding six species by having the unique combination of a head that is rounded from above and in profile and a rostral that does not have a sharp transverse keel, versus a head that is bluntly trilobed from above and with a rostral that has a sharp transverse keel, so that the head is angular in profile as seen in all the other species.

The species is pinkish in dorsal colour and snout is lighter than the body, but still pinkish rather than white or strongly yellow.

In *R. jackyhoserae* the dorsum is a purplish brown color, consistent all over, except for the snout which is whitish, the whitish colour stopping at or before the level of the eyes on the top of the head. Undersides have a very slight yellowish tinge anteriorly but are otherwise white.

Each scale of the dorsum has a whitish edge producing a netted or spotted appearance on the upper surfaces. This is especially the case on the anterior part of the dorsum.

In *R. jackyhoserae* the line of the eye shield touches the anterior edge of the eye. By contrast in *R. unguirostris* of Queensland, the anterior part of the eye spot eye sits back from the line of the eye shield, meaning it sits completely within the boundaries of the shield.

R. datstink sp. nov. is similar in most respects to *R. jackyhoserae* including in terms of overall colouration. However, it is separated from that species by the fact while the scales of the dorsum have a lighter edge, this is in the form of a dull lighter edge, rather than

like well-defined spots. There is also an absence of defined white spots at the anterior part of the dorsum as seen in *R. jackyhoserae*. The venter is pinkish white rather than white as seen in *R. jackyhoserae*. *R. fukdat sp. nov.* is separated from the other species by the combination of a more strongly purplish or pink rinse in the color of adults, including aged specimens which as a rule are brown in all relevant species. Perhaps most noticeable is the particularly well-formed hooked beak, which is more pronounced in this *R. fukdat sp. nov.* than in any of the other species besides *R. stinkey sp. nov.* which is similarly overhooked.

Notably, while the head is bluntly trilobed from above in *R. fukdat sp. nov.*, it is so slight in this taxon, it almost appears as a more rounded head from above, but obviously not smoothly rounded.

R. stinkey sp. nov. is the taxon among the group with a snout that is more angular and pointed at the front when viewed from above. The scales of the dorsum have a strong purplish brown colour and with minimal markings save for a dark etching of each dorsal scale, thereby accentuating the scaly appearance of the snake. The white of the snout has a slight yellowish tinge and extends well past the eyes on the top of the head. Venter is whitish, including at the anterior end and the light of the belly extends some way up the lower flank and more so than seen in the other species.

The seven preceding Blind Snakes are separated from all other Australian Blind Snakes by the following unique combination of characters:

A moderately slender Blind Snake attaining up to 50 cm long, with a snout hooked in profile, 24 midbody scale rows, 387-474 ventrals,11-16 subcaudals, the tail is 1.2-2.7 percent of the total length and nasal cleft proceeding from the first labial.

The rostral from above is elliptic, longer than wide and about two thirds as wide as the head. The cutting edge at the tip of the snout usually extends back through the nasal scale as a ridge. Nostril is inferior, much nearer to rostral than to preocular. Nasal cleft proceeds from the first upper labial, curves upwards and forwards from nostril to or towards rostral.

The dorsal surface is a dark olive brown to purple brown in adults, which is well demarcated from the whitish, yellowish, whitish-yellowish, or sometimes pinkish white venter.

Images of the type form of *R. unguirostris* in life are online at:

https://www.flickr.com/photos/114192916@ N07/46139711721/

specimen from Charters Towers, Queensland, photographed by Justin Wright, and

https://www.flickr.com/photos/hamidtun/47580744922/ specimen from Townsville, Queensland, photographed by Halvard Aas Midtun, and https://www.flickr.com/photos/144043627@

N08/37034630624/

specimen from Townsville, Queensland, photographed by Lorenzo Bertola, and https://www.flickr.com/photos/144043627@ N08/23891024988/i specimen from Townsville, Queensland photographed by Lorenzo Bertola, and https://www.flickr.com/photos/ shaneblackfng/38947624365/ specimen from Ravenshoe, Queensland, photographed by Shane Black https://www.flickr.com/photos/194580465@ N02/53590781584/ specimen from Townsville, Queensland photographed by Alec Karcz. Images of *R. anothersp sp. nov.* in life are online at: https://www.flickr.com/photos/ euprepiosaur/8207417809/ specimen from Weipa, Queensland, photographed by Stephen Zozoya, and https://www.flickr.com/photos/ euprepiosaur/8208507338/ specimen from Weipa, Queensland, photographed by Stephen Zozoya, and https://www.flickr.com/photos/ shaneblackfnq/51813559288/ specimen from Palmer River, north wet tropics, Queensland, photographed by Shane Black. Images of R. stinkey sp. nov. in life are online at: https://www.inaturalist.org/observations/204555864 specimen from Robin Falls, Adelaide River, Northern Territory, photographed by "rubynats" and https://www.flickr.com/photos/ntwildlife/33980327822/ specimen from Marakai, Northern Territory, photographed by Stuart Butler. Images of R. jackyhoserae in life are online at: https://www.flickr.com/photos/194274402@ N06/51649989329/ specimen from Mornington, Kimberley district, Western Australia, photographed by Melissa Bruton, and https://www.inaturalist.org/observations/219262469 specimen from Mornington Sanctuary, Wunaamin Miliwundi Ranges, Kimberley district, Western Australia, photographed by "handwerlen". An image of *R. datstink sp. nov.* in life is online at: https://www.flickr.com/photos/114192916@

N07/53051657960/

photographed in the North Kimberley, photographed by Justin Wright.

Images of *R. fukdat sp. nov.* in life are depicted in Storr, Smith and Johnstone (2002) on page 103 bottom right, specimen from Lake Argyle, Western Australia, Cogger (2014) on page 812 at top right, specimen from Kununurra, Western Australia, and Wilson and Swan (2021) on page 541, middle right

specimen from Kununurra, Western Australia. An image of the holotype of *R. yirrakale* is depicted in Wilson and Swan (2021) on page 543 centre right, photographed by serial taxonomic vandal Glenn Shea.

The phylogeny of Marin *et al.* (2012, 2013) confirmed that all the preceding seven species, being *R. unguirostris*, *R. jackyhoserae*, *R. yirrakale*, *R. datstink sp. nov.*, *R. fukdat sp. nov.*, *R. stinkey sp. nov.*, *R. anothersp sp. nov.* separated in the Pliocene, as in more than 2.6 MYA, in effect confirming that all are divergent species. Based on the phylogeny of Marin *et al.* (2012, 2013) the most divergent of these, *R. jackyhoserae* diverged about 8 MYA from nearest relative.

Distribution: *R. fukdat sp. nov.* occurs in a broad region across the Northern Territory, extending from the south-west Gulf of Carpentaria to the Ord River drainage in north-east Western Australia not including the top end or the arid regions to the south.

Etymology: *R. fukdat sp. nov.* is named in reflection of the fact that when picked up, it defecates and it is quite smelly. When collecting specimens on the Lake Argyle road on a stinking hot moonless night with fellow herpetologist Charles Acheson in 1983, a specimen defecated on him as he grabbed it crossing the bitumen road. He exclaimed "fuk dat" and hence the etymology. The species name is a noun in apposition.

ROBINWITTTYPHLOPS STINKEY SP. NOV. LSIDurn:Isid:zoobank.org:act:525F6D50-1995-4358-826E-B4CD44F6B739

Holotype: A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, specimen number R21669 collected from Dundee Beach, Fog Bay, Northern Territory, Australia, Latitude -12.75 S., Longitude 130.367 E.

This government-owned facility allows access to its specimens.

Paratypes: Three preserved specimens at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, being 1/ Specimen number R27369 collected at Jim Jim Road near the Airstrip, at Mount Bundy, Northern Territory, Australia, Latitude -12.867 S., Longitude 131.0 E., 2/ Specimen number R27690 collected from Dorat Road, south of the Adelaide River township, Adelaide River Region, Northern Territory, Australia, Latitude -13.482 S., Longitude 131.134 E., 3/ Specimen number R38914 collected from the Arnhem Highway, near the entrance to Bird Billabong, Mount Bundy, Northern Territory, Australia, Latitude -13.62448 E.

Diagnosis: Until now most publishing authors have treated each of *Robinwitttyphlops datstink sp. nov., R. fukdat sp. nov., R. stinkey sp. nov.* and *R. anothersp sp. nov.* as putative *Robinwitttyphlops unguirostris*

(Peters, 1867), until now placed in various genera including originally as "*Typhlops* (*Onychocephalus*) *unguirostris* Peters, 1867" and more recently in the genus *Anilios* Gray, 1845.

The two related species, *Robinwitttyphlops jackyhoserae* (Hoser, 2013) and *R. yirrikalae* (Kinghorn, 1942) have often been treated as putative *R. unguirostris* and are all closely related to it. The seven relevant and most closely related species are as follows:

R. unguirostris including the synonym name *"Typhlops curvirostris* Peters, 1879" is herein confined to coastal and near coastal Queensland, south of Cairns and mainly east of the spine of the Great Dividing Range to the Fitzroy River basin in southcentral east Queensland.

R. anothersp sp. nov. is found on most of Cape York and the eastern Gulf of Carpentaria in north Queensland.

R. jackyhoserae is a taxon from the south-west Kimberley district, of Western Australia generally southwest of the type locality of the Gibb River Homestead, Western Australia, Latitude -16.42 S., Longitude. 126.44 E.

R. yirrikalae is found in the region of East Arnhem Land in the Northern Territory.

R. datstink sp. nov. is endemic to the north Kimberley district of Western Australia, from the type locality and including the hilly region southeast, to include the Mitchell River area.

R. fukdat sp. nov. occurs in a broad region across the Northern Territory, extending from the south-west Gulf of Carpentaria to the Ord River drainage in north-east Western Australia not including the top end or the arid regions to the south.

R. stinkey sp. nov. is confined to the western half of the top end of the Northern Territory, bound by the Daly River in the south and the west Arnhem Land escarpment area in the east.

The seven species are separated from one another as follows:

Nominate *R. unguirostris* is defined as being a pinkish to pinkish brown snake on top, with the yellow-white whitening of the snout being bold to behind the eyes on the top of the head. In *R. unguirostris* the anterior part of the eye spot eye sits back from the line of the eye shield, meaning it sits completely within the boundaries of the shield.

In *R. unguirostris* each dorsal scale does not have a whitish edge producing a netted or sometimes spotted appearance on the upper surfaces or if so, it is extremely faint and barely noticeable. Viewed from below, the mouth is in the form of a C-shape or overwide U-shape.

R. anothersp sp. nov. is similar in most respects to *R. unguirostris* but separated from that species by being a distinctive chocolate brown above and with yellow below for the entire length of the venter, as opposed

to just anteriorly in R. unguirostris

Viewed from below, the mouth is in the form of a U-shape or rather than as a C-shape or over-wide U-shape as seen in *R. unguirostris*.

R. yirrikalae is readily separated from all the preceding six species by having the unique combination of a head that is rounded from above and in profile and a rostral that does not have a sharp transverse keel, versus a head that is bluntly trilobed from above and with a rostral that has a sharp transverse keel, so that the head is angular in profile as seen in all the other species.

The species is pinkish in dorsal colour and snout is lighter than the body, but still pinkish rather than white or strongly yellow.

In *R. jackyhoserae* the dorsum is a purplish brown color, consistent all over, except for the snout which is whitish, the whitish colour stopping at or before the level of the eyes on the top of the head. Undersides have a very slight yellowish tinge anteriorly but are otherwise white.

Each scale of the dorsum has a whitish edge producing a netted or spotted appearance on the upper surfaces. This is especially the case on the anterior part of the dorsum.

In *R. jackyhoserae* the line of the eye shield touches the anterior edge of the eye. By contrast in *R. unguirostris* of Queensland, the anterior part of the eye spot eye sits back from the line of the eye shield, meaning it sits completely within the boundaries of the shield.

R. datstink sp. nov. is similar in most respects to R. jackyhoserae including in terms of overall colouration. However, it is separated from that species by the fact while the scales of the dorsum have a lighter edge, this is in the form of a dull lighter edge, rather than like well-defined spots. There is also an absence of defined white spots at the anterior part of the dorsum as seen in *R. jackyhoserae*. The venter is pinkish white rather than white as seen in *R. jackyhoserae*. *R. fukdat sp. nov.* is separated from the other species by the combination of a more strongly purplish or pink rinse in the color of adults, including aged specimens which as a rule are brown in all relevant species. Perhaps most noticeable is the particularly wellformed hooked beak, which is more pronounced in this R. fukdat sp. nov. than in any of the other species besides R. stinkey sp. nov. which is similarly overhooked.

Notably, while the head is bluntly trilobed from above in *R. fukdat sp. nov.*, it is so slight in this taxon, it almost appears as a more rounded head from above, but obviously not smoothly rounded.

R. stinkey sp. nov. is the taxon among the group with a snout that is more angular and pointed at the front when viewed from above. The scales of the dorsum have a strong purplish brown colour and with minimal markings save for a dark etching of each dorsal scale,

thereby accentuating the scaly appearance of the snake. The white of the snout has a slight yellowish tinge and extends well past the eyes on the top of the head. Venter is whitish, including at the anterior end and the light of the belly extends some way up the lower flank and more so than seen in the other species.

The seven preceding Blind Snakes are separated from all other Australian Blind Snakes by the following unique combination of characters:

A moderately slender Blind Snake attaining up to 50 cm long, with a snout hooked in profile, 24 midbody scale rows, 387-474 ventrals,11-16 subcaudals, the tail is 1.2-2.7 percent of the total length and nasal cleft proceeding from the first labial.

The rostral from above is elliptic, longer than wide and about two thirds as wide as the head. The cutting edge at the tip of the snout usually extends back through the nasal scale as a ridge. Nostril is inferior, much nearer to rostral than to preocular. Nasal cleft proceeds from the first upper labial, curves upwards and forwards from nostril to or towards rostral.

The dorsal surface is a dark olive brown to purple brown in adults, which is well demarcated from the whitish, yellowish, whitish-yellowish, or sometimes pinkish white venter.

Images of the type form of *R. unguirostris* in life are online at:

https://www.flickr.com/photos/114192916@ N07/46139711721/

specimen from Charters Towers, Queensland, photographed by Justin Wright, and https://www.flickr.com/photos/hamidtun/47580744922, specimen from Townsville, Queensland, photographed by Halvard Aas Midtun, and

https://www.flickr.com/photos/144043627@ N08/37034630624/

specimen from Townsville, Queensland, photographed by Lorenzo Bertola, and https://www.flickr.com/photos/144043627@ N08/23891024988/i

specimen from Townsville, Queensland photographed by Lorenzo Bertola, and

https://www.flickr.com/photos/ shaneblackfng/38947624365/

specimen from Ravenshoe, Queensland, photographed by Shane Black

https://www.flickr.com/photos/194580465@ N02/53590781584/

specimen from Townsville, Queensland photographed by Alec Karcz.

Images of *R. anothersp sp. nov.* in life are online at: https://www.flickr.com/photos/ euprepiosaur/8207417809/

specimen from Weipa, Queensland, photographed by Stephen Zozoya, and

https://www.flickr.com/photos/

euprepiosaur/8208507338/

specimen from Weipa, Queensland, photographed by Stephen Zozoya, and

https://www.flickr.com/photos/

shaneblackfnq/51813559288/

specimen from Palmer River, north wet tropics,

Queensland, photographed by Shane Black.

Images of *R. stinkey sp. nov.* in life are online at:

https://www.inaturalist.org/observations/204555864

specimen from Robin Falls, Adelaide River, Northern

Territory, photographed by "rubynats" and

https://www.flickr.com/photos/ntwildlife/33980327822/ specimen from Marakai, Northern Territory,

photographed by Stuart Butler.

Images of *R. jackyhoserae* in life are online at: https://www.flickr.com/photos/194274402@ N06/51649989329/

specimen from Mornington, Kimberley district, Western Australia, photographed by Melissa Bruton, and

https://www.inaturalist.org/observations/219262469 specimen from Mornington Sanctuary, Wunaamin Miliwundi Ranges, Kimberley district, Western Australia, photographed by "handwerlen".

An image of *R. datstink sp. nov.* in life is online at: https://www.flickr.com/photos/114192916@ N07/53051657960/

photographed in the North Kimberley, photographed by Justin Wright.

Images of *R. fukdat sp. nov.* in life are depicted in Storr, Smith and Johnstone (2002) on page 103 bottom right, specimen from Lake Argyle, Western Australia, Cogger (2014) on page 812 at top right, specimen from Kununurra, Western Australia, and Wilson and Swan (2021) on page 541, middle right specimen from Kununurra, Western Australia.

An image of the holotype of *R. yirrakale* is depicted in Wilson and Swan (2021) on page 543 centre right, photographed by serial taxonomic vandal Glenn Shea.

The phylogeny of Marin *et al.* (2012, 2013) confirmed that all the preceding seven species, being *R. unguirostris*, *R. jackyhoserae*, *R. yirrakale*, *R. datstink sp. nov.*, *R. fukdat sp. nov.*, *R. stinkey sp. nov.*, *R. anothersp sp. nov.* separated in the Pliocene, as in more than 2.6 MYA, in effect confirming that all are divergent species. Based on the phylogeny of Marin *et al.* (2012, 3013) the most divergent of these, *R. jackyhoserae* diverged about 8 MYA from nearest relative.

Distribution: *R. stinkey sp. nov.* is confined to the western half of the top end of the Northern Territory, bound by the Daly River in the south west and the west Arnhem Land escarpment area in the north east. **Etymology:** *R. stinkey sp. nov.* is named in reflection of the fact that when picked up, it defecates and it is quite smelly. When filming specimens in the early

days of March 2012 near the town of Batchelor in the Northern Territory, I gave an adult specimen to a Kungarakan (native aboriginal) child to hold. He said "it stinkey" and hence the etymology. The species name is a noun in apposition.

ROBINWITTTYPHLOPS ANOTHERSP SP. NOV. LSIDurn:Isid:zoobank.org:act:A507D576-381F-4212-8476-E65FA6BE1757

Holotype: A preserved specimen at the Australian Museum Herpetology Collection, Sydney, New South Wales, Australia, specimen number R.105154 collected from Weipa, Queensland, Australia, Latitude -12.633 S., Longitude 141.883 E.

This government-owned facility allows access to its holdings.

Paratypes: 1/ A preserved specimen at the Australian Museum Herpetology Collection, Sydney, New South Wales, Australia, specimen number R.82576 collected from Weipa, Queensland, Australia, Latitude -12.633 S., Longitude 141.883 E. and 2/ Two preserved specimens at the Queensland Museum Herpetology Collection, Brisbane, Queensland, Australia, specimen numbers J67276 and J67277 both collected from Weipa, Queensland, Australia, Latitude -12.633 S., Longitude 141.883 E.

Diagnosis: Until now most publishing authors have treated each of *Robinwitttyphlops datstink sp. nov., R. fukdat sp. nov., R. stinkey sp. nov.* and *R. anothersp sp. nov.* as putative *Robinwitttyphlops unguirostris* (Peters, 1867), until now placed in various genera including originally as *"Typhlops (Onychocephalus) unguirostris* Peters, 1867" and more recently in the genus *Anilios* Gray, 1845.

The two related species, *Robinwitttyphlops jackyhoserae* (Hoser, 2013) and *R. yirrikalae* (Kinghorn, 1942) have often been treated as putative *R. unguirostris* and are all closely related to it. The seven relevant and most closely related species

The seven relevant and most closely related species are as follows:

R. unguirostris including the synonym name "*Typhlops curvirostris* Peters, 1879" is herein confined to coastal and near coastal Queensland, south of Cairns and mainly east of the spine of the Great Dividing Range to the Fitzroy River basin in southcentral east Queensland.

R. anothersp sp. nov. is found on most of Cape York and the eastern Gulf of Carpentaria in north Queensland.

R. jackyhoserae is a taxon from the south-west Kimberley district, of Western Australia generally southwest of the type locality of the Gibb River Homestead, Western Australia, Latitude -16.42 S., Longitude. 126.44 E.

R. yirrikalae is found in the region of East Arnhem Land in the Northern Territory.

R. datstink sp. nov. is endemic to the north Kimberley district of Western Australia, from the type locality

and including the hilly region southeast, to include the Mitchell River area.

R. fukdat sp. nov. occurs in a broad region across the Northern Territory, extending from the south-west Gulf of Carpentaria to the Ord River drainage in north-east Western Australia not including the top end or the arid regions to the south.

R. stinkey sp. nov. is confined to the western half of the top end of the Northern Territory, bound by the Daly River in the south and the west Arnhem Land escarpment area in the east.

The seven species are separated from one another as follows:

Nominate *R. unguirostris* is defined as being a pinkish to pinkish brown snake on top, with the yellow-white whitening of the snout being bold to behind the eyes on the top of the head. In *R. unguirostris* the anterior part of the eye spot eye sits back from the line of the eye shield, meaning it sits completely within the boundaries of the eye shield.

In *R. unguirostris* each dorsal scale does not have a whitish edge producing a netted or sometimes spotted appearance on the upper surfaces or if so, it is extremely faint and barely noticeable. Viewed from below, the mouth is in the form of a C-shape or overwide U-shape.

R. anothersp sp. nov. is similar in most respects to *R. unguirostris* but separated from that species by being a distinctive chocolate brown above and with yellow below for the entire length of the venter, as opposed to just anteriorly in *R. unguirostris*

Viewed from below, the mouth is in the form of a U-shape or rather than as a C-shape or over-wide U-shape as seen in *R. unguirostris*.

R. yirrikalae is readily separated from all the preceding six species by having the unique combination of a head that is rounded from above and in profile and a rostral that does not have a sharp transverse keel, versus a head that is bluntly trilobed from above and with a rostral that has a sharp transverse keel, so that the head is angular in profile as seen in all the other species.

The species is pinkish in dorsal colour and snout is lighter than the body, but still pinkish rather than white or strongly yellow.

In *R. jackyhoserae* the dorsum is a purplish brown color, consistent all over, except for the snout which is whitish, the whitish colour stopping at or before the level of the eyes on the top of the head. Undersides have a very slight yellowish tinge anteriorly but are otherwise white.

Each scale of the dorsum has a whitish edge producing a netted or spotted appearance on the upper surfaces. This is especially the case on the anterior part of the dorsum.

In *R. jackyhoserae* the line of the eye shield touches the anterior edge of the eye. By contrast in *R. unguirostris* of Queensland, the anterior part of the

eye spot eye sits back from the line of the eye shield, meaning it sits completely within the boundaries of the shield.

R. datstink sp. nov. is similar in most respects to R. jackyhoserae including in terms of overall colouration. However, it is separated from that species by the fact while the scales of the dorsum have a lighter edge, this is in the form of a dull lighter edge, rather than like well-defined spots. There is also an absence of defined white spots at the anterior part of the dorsum as seen in R. jackyhoserae. The venter is pinkish white rather than white as seen in R. jackyhoserae. *R. fukdat sp. nov.* is separated from the other species by the combination of a more strongly purplish or pink rinse in the color of adults, including aged specimens which as a rule are brown in all relevant species. Perhaps most noticeable is the particularly wellformed hooked beak, which is more pronounced in this *R. fukdat sp. nov*. than in any of the other species besides R. stinkey sp. nov. which is similarly overhooked.

Notably, while the head is bluntly trilobed from above in *R. fukdat sp. nov.*, it is so slight in this taxon, it almost appears as a more rounded head from above, but obviously not smoothly rounded.

R. stinkey sp. nov. is the taxon among the group with a snout that is more angular and pointed at the front when viewed from above. The scales of the dorsum have a strong purplish brown colour and with minimal markings save for a dark etching of each dorsal scale, thereby accentuating the scaly appearance of the snake. The white of the snout has a slight yellowish tinge and extends well past the eyes on the top of the head. Venter is whitish, including at the anterior end and the light of the belly extends some way up the lower flank and more so than seen in the other species.

The seven preceding Blind Snakes are separated from all other Australian Blind Snakes by the following unique combination of characters:

A moderately slender Blind Snake attaining up to 50 cm long, with a snout hooked in profile, 24 midbody scale rows, 387-474 ventrals,11-16 subcaudals, the tail is 1.2-2.7 percent of the total length and nasal cleft proceeding from the first labial.

The rostral from above is elliptic, longer than wide and about two thirds as wide as the head. The cutting edge at the tip of the snout usually extends back through the nasal scale as a ridge. Nostril is inferior, much nearer to rostral than to preocular. Nasal cleft proceeds from the first upper labial, curves upwards and forwards from nostril to or towards rostral.

The dorsal surface is a dark olive brown to purple brown in adults, which is well demarcated from the whitish, yellowish, whitish-yellowish, or sometimes pinkish white venter.

Images of the type form of *R. unguirostris* in life are online at:

https://www.flickr.com/photos/114192916@ N07/46139711721/ specimen from Charters Towers, Queensland, photographed by Justin Wright, and https://www.flickr.com/photos/hamidtun/47580744922/ specimen from Townsville, Queensland, photographed by Halvard Aas Midtun, and https://www.flickr.com/photos/144043627@ N08/37034630624/ specimen from Townsville, Queensland, photographed by Lorenzo Bertola, and https://www.flickr.com/photos/144043627@ N08/23891024988/i specimen from Townsville, Queensland photographed by Lorenzo Bertola, and https://www.flickr.com/photos/ shaneblackfng/38947624365/ specimen from Ravenshoe, Queensland, photographed by Shane Black https://www.flickr.com/photos/194580465@ N02/53590781584/ specimen from Townsville, Queensland photographed by Alec Karcz. Images of *R. anothersp sp. nov.* in life are online at: https://www.flickr.com/photos/ euprepiosaur/8207417809/ specimen from Weipa, Queensland, photographed by Stephen Zozoya, and https://www.flickr.com/photos/ euprepiosaur/8208507338/ specimen from Weipa, Queensland, photographed by Stephen Zozoya, and https://www.flickr.com/photos/ shaneblackfnq/51813559288/ specimen from Palmer River, north wet tropics, Queensland, photographed by Shane Black. Images of R. stinkey sp. nov. in life are online at: https://www.inaturalist.org/observations/204555864 specimen from Robin Falls, Adelaide River, Northern Territory, photographed by "rubynats" and https://www.flickr.com/photos/ntwildlife/33980327822/ specimen from Marakai, Northern Territory, photographed by Stuart Butler. Images of *R. jackyhoserae* in life are online at: https://www.flickr.com/photos/194274402@ N06/51649989329/ specimen from Mornington, Kimberley district, Western Australia, photographed by Melissa Bruton, and https://www.inaturalist.org/observations/219262469 specimen from Mornington Sanctuary, Wunaamin Miliwundi Ranges, Kimberley district, Western Australia, photographed by "handwerlen". An image of *R. datstink sp. nov.* in life is online at: https://www.flickr.com/photos/114192916@

N07/53051657960/

photographed in the North Kimberley, photographed by Justin Wright.

Images of *R. fukdat sp. nov.* in life are depicted in Storr, Smith and Johnstone (2002) on page 103 bottom right, specimen from Lake Argyle, Western Australia, Cogger (2014) on page 812 at top right, specimen from Kununurra, Western Australia, and Wilson and Swan (2021) on page 541, middle right specimen from Kununurra, Western Australia.

An image of the holotype of *R. yirrakale* is depicted in Wilson and Swan (2021) on page 543 centre right, photographed by serial taxonomic vandal Glenn Shea.

The phylogeny of Marin *et al.* (2012, 2013) confirmed that all the preceding seven species, being *R. unguirostris*, *R. jackyhoserae*, *R. yirrakale*, *R. datstink sp. nov.*, *R. fukdat sp. nov.*, *R. stinkey sp. nov.*, *R. anothersp sp. nov.* separated in the Pliocene, as in more than 2.6 MYA, in effect confirming that all are divergent species. Based on the phylogeny of Marin *et al.* (2012, 3013) the most divergent of these, *R. jackyhoserae* diverged about 8 MYA from nearest relative.

Distribution: *R. anothersp sp. nov.* is found on most of Cape York and the eastern Gulf of Carpentaria in north Queensland.

Etymology: *R. anothersp sp. nov.* is named in reflection of the fact it is another species in a complex of species that until the publication of this paper had not been formally named.

The species name is a noun in apposition, with the suffix "sp" being an obvious abbreviation of the word "species".

LIBERTADICTUS ICK SP. NOV. LSIDurn:Isid:zoobank.org:act:9D4C4446-4623-491D-97B3-3219ED710894

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R146985 collected at Broad Arrow, Western Australia, Australia, Latitude -30.45 S., Longitude 121.333333 E.

This government-owned facility allows access to its holdings.

Paratypes: Four preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen numbers R144974, R144975 and R144976 collected at Black Flag, Western Australia, Australia, Latitude -30.566667 S., Longitude 121.25 E., and specimen number R5317 collected at Broad Arrow, Western Australia, Australia, Latitude -30.45 S., Longitude 121.333333 E. **Diagnosis:** Until now, putative *Libertadictus bituberculatus* (Peters, 1863), type locality of the Adelaide Plain, near Gawler in South Australia, being the type species of the genus *Libertadictus* Wells and Wellington, 1984, has been treated as a wideranging taxon found in drier parts of the southern

half of Australia, effectively excluding the east and west coasts of Australia, the tropical desert areas as well as the hotter west Australian deserts and cooler, wetter parts of southern Australia, in particular the colder south-east.

However, various phylogenies, including Marin *et al.* (2012, 2013) have confirmed the presence of multiple species with Pliocene divergence from one another. This paper formally names four species identified by Marin *et al.* (2012, 2013) and two others apparently allopatric and separated with biogeographical barriers of similar antiquity that have caused speciation in numerous other Australian reptiles.

The relevant species in the complex are as follows: *L. bituberculatus* is herein confined to the southern region of South Australia, generally near the coast, bound by the Nullarbor Plain in the west and Flinders Ranges / Adelaide Hills in the east.

L. ick sp. nov. is found throughout much of the southern interior of Western Australia, generally west of the Nullarbor Plain in the east and away from the coastal plain and ranges in the south-west.

L. wellsandwellingtonorum sp. nov. is the distinctive form restricted to the Macdonnell Ranges district of central Australia, Northern Territory, generally around the township of Alice Springs.

Separated to the north and south by a mosaic of black soil plains and moving red sand dunes, is a rangerestricted population from the northwestern ranges area of South Australia, herein formally named as *L. snakebustersorum sp. nov.*.

L. britishbombedhere sp. nov. occurs in the area of the Stuart Range, west of Lake Eyre in South Australia.

L. fasciststateorum sp. nov. occurs in the area of the deserts of far north-west Victoria, immediately adjacent New South Wales and also South Australia, extending west to the Flinders Ranges and Adelaide Hills barrier, extending north into north-east South Australia and into far south-west Queensland.

L. dishonestpoliceorum sp. nov. is found in New South Wales, west of the Great Dividing Range, generally east of the main Darling River basin, extending from far north-east Victoria north to southern Queensland.

The seven preceding species are separated from one another as follows:

L. bituberculatus is brownish as an adult, with a pinkish or purplish tinge, moderately trilobed and with the eye spot set well back from the front line of the ocular scale, being either central or slightly to the rear of the centre of the scale. The snout is barely lighter than the rest of the dorsum of the snake.

L. ick sp. nov. is similar in most respects to *L. bituberculatus* but with the eye spot being set well back on the ocular scale, being pretty much dead centre. Colour is strongly whitish on the head anterior to the eyes, barely extending to the eyes and

including the relevant supralabial scales.

L. wellswellingtonorum sp. nov. is a distinctive chocolate brown coloured snake as an adult, extremely strongly trilobed, with exaggerated nasal scales. The eye spot is slightly anterior to the centre of the ocular scale. Snout anterior to the eyes is a faded light dull brownish colour.

L. snakebustersorum sp. nov. is similar in most respects to *L. wellswellingtonorum sp. nov.* but instead has a strong yellowish hue in dorsal colouration in adults. The anterior snout is dull whitish above, quite obviously extending back past the eyes.

L. britishbombedhere sp. nov. is a pinkish brown snake on top with an obviously yellow coloured head. The snout is relatively strongly trilobed, being not as strongly trilobed as *L. wellswellingtonorum sp. nov.* and *L. snakebustersorum sp. nov.*, but obviously more strongly trilobed than the other species. The eye spot is slightly anterior to the centre of the ocular scale. *L. fasciststateorum sp. nov.* is a pinkish brown snake

dorsally as an adult. The anterior snout has a slight dull yellowing only. Snout is only moderately trilobed. Eye spot varies a lot in different populations of this taxon, but is mostly anterior in the ocular scale, sometimes entering the preocular.

L. dishonestpoliceorum sp. nov. is similar in most respects to L. fasciststateorum sp. nov. but is separated from that taxon by having a distinctively yellow anterior snout, a relatively larger eye spot and a more weakly trilobed snout when viewed from above, often appearing smooth in profile. Eye spot is usually slightly posterior in the ocular scale. The seven preceding species are readily separated from Libertadictus margaretae (Storr, 1981), the only other species in the genus by the fact that it has 18 midbody rows, versus 20 in all the other species. The genus Libertadictus as defined here is confined to species of Blind Snakes with the following suite of characters: A moderately dark, small, slender long-snouted Blind Snake up to 35 cm long with 20 or rarely 18, mid body scale rows and a nasal cleft proceeding from the second labial; snout strongly or moderately strongly trilobed as seen from above and slightly angular in profile. Tail is 1.5-3.3 percent of the total length, 414-485 ventrals, 11-18 subcaudals. From above the rostral is very much longer than wide and almost two thirds as wide as the head. The nostril is inferior, markedly swollen, much nearer to the rostral than the preocular. The nasal cleft extends obliquely upwards and forwards from the nostril to about midway between the nostril and the rostral. The upper surface is pinkish grey, bluish purple or a dark purplish brown, gradually merging with the whitish lower surface.

L. bituberculatus of the type form is depicted in life online at:

https://www.flickr.com/photos/128497936@ N03/50931993187/

specimen from Yorke Peninsula, South Australia, photographed by Shawn Scott, and

https://www.inaturalist.org/observations/144693954 from near Gawler, South Australia, photographed by "Ballzak", and

https://www.inaturalist.org/observations/217636871 from near Gawler, South Australia, photographed by "BTWrenhill", and

https://www.inaturalist.org/observations/84275779 from near Locheal, South Australia, photographed by "Nicko Nichols".

L. ick sp. nov. is depicted in life in Storr, Smith and Johnstone (2002) on page 101 in image number 3, specimen from Junana Rock, Western Australia, photographed by Ron E. Johnstone and online at:

https://www.flickr.com/photos/brian

busho/49353869641/

from Coolgardie, Western Australia, photographed by Brian Bush, and

https://www.flickr.com/photos/brian_

busho/49353863401/

from Coolgardie, Western Australia, photographed by Brian Bush.

L. wellsandwellingtonorum sp. nov. is depicted in life online at:

https://www.flickr.com/photos/171250498@ N08/52518375650/

specimen from the West MacDonnell Ranges, Northern Territory, Australia, photographed by Wes Read, and

https://www.flickr.com/photos/

- euprepiosaur/52568597394/
- specimen from the West MacDonnell Ranges,
- Northern Territory, Australia, photographed by
- Stephen Zozaya.

L. britishbombedhere sp. nov. is depicted in life online at:

https://www.inaturalist.org/observations/105130809

from near Roxby Downs, South Australia,

photographed by "JBilby" and

https://www.inaturalist.org/observations/151202028

from Olympic Dam, South Australia, photographed by taxonomic vandal Jules Farquhar.

L. fasciststateorum sp. nov. is depicted in life online at:

https://www.flickr.com/photos/88708273@ N03/10681269095/

from Murrayville, Victoria, photographed by Matt Clancy, and

https://www.flickr.com/photos/

julesfarquhar/54211644849/

- from Little Desert, Victoria, photographed by
- taxonomic vandal Jules Farquhar, and
- https://www.flickr.com/photos/
- moloch05/45814384515/
- from Ngarkat, southeast South Australia,
- photographed by David (Moloch05).

L. dishonestpoliceorum sp. nov. is depicted in life online at:

https://www.inaturalist.org/observations/251886021 with specimen from Pretty Pine, New South Wales, and photographed by Jim Churches, and

https://www.inaturalist.org/observations/265532535 from Terrick Terrick, Victoria, photographed by "max_ sonn".

In terms of calibrated divergences, the phylogeny of Marin *et al.* (2012, 2013) showed Pliocene divergences (as in over 2.5 MYA) for three of the newly named species and the nominate form of *L. bituberculatus.* The other species, being *L. ick sp. nov.*, *L. wellsandwellingtonorum sp. nov.* and *L. snakebustersorum sp. nov.* are isolated from each other and the other four species and separated by biogeographical barriers of known antiquity. Other reptile species similarly isolated, which have had molecular samples taken and cross-matched also had Pliocene divergences.

Distribution: *L. ick sp. nov.* is found throughout much of the southern interior of Western Australia, generally west of the Nullarbor Plain in the east and away from the coastal plain and ranges in the south-west.

Etymology: It was in 1981, when hitch-hiking across the southern part of Australia and after crossing the Nullarbor we stopped at a rest area. I lifted tin and found a specimen of this species. When I passed it to my driver, he yelled "ick" and moved away. Hence the etymology.

LIBERTADICTUS WELLSANDWELLINGTONORUM SP. NOV.

LSIDurn:lsid:zoobank.org:act:7E067660-441C-4E7A-8415-471DE3827C82

Holotype: A preserved specimen at the Museum and Art Gallery of the Northern Territory, Reptile Collection, Darwin, Northern Territory, Australia, specimen number R12400 collected from Temple Bar Gap, Roe Creek, (just west of Alice Springs), Northern Territory, Australia, Latitude

Latitude -23.75 S., Longitude 133.75 E.

This government-owned facility allows access to its holdings.

Paratypes: Two preserved specimens at the Museum and Art Gallery of the Northern Territory, Reptile Collection, Darwin, Northern Territory, Australia, specimen numbers R17276 and R34109 both collected from Alice Springs, Central Australia, Northern Territory, Australia, Latitude -23.733 S., Longitude 133.883 E.

Diagnosis: Until now, putative *Libertadictus bituberculatus* (Peters, 1863), type locality of the Adelaide Plain, near Gawler in South Australia, being the type species of the genus *Libertadictus* Wells and Wellington, 1984, has been treated as a wideranging taxon found in drier parts of the southern half of Australia, effectively excluding the east and west coasts of Australia, the tropical desert areas as well as the hotter west Australian deserts and cooler, wetter parts of southern Australia, in particular the colder south-east.

However, various phylogenies, including Marin et al. (2012, 2013) have confirmed the presence of multiple species with Pliocene divergence from one another. This paper formally names four species identified by Marin et al. (2012, 2013) and two others apparently allopatric and separated with biogeographical barriers of similar antiquity that have caused speciation in numerous other Australian reptiles.

The relevant species in the complex are as follows:

L. bituberculatus is herein confined to the southern region of South Australia, generally near the coast, bound by the Nullarbor Plain in the west and Flinders Ranges / Adelaide Hills in the east.

L. ick sp. nov. is found throughout much of the southern interior of Western Australia, generally west of the Nullarbor Plain in the east and away from the coastal plain and ranges in the south-west.

L. wellsandwellingtonorum sp. nov. is the distinctive form restricted to the Macdonnell Ranges district of central Australia, Northern Territory, generally around the township of Alice Springs.

Separated to the north and south by a mosaic of black soil plains and moving red sand dunes, is a rangerestricted population from the northwestern ranges area of South Australia, herein formally named as L. snakebustersorum sp. nov..

L. britishbombedhere sp. nov. occurs in the area of the Stuart Range, west of Lake Eyre in South Australia.

L. fasciststateorum sp. nov. occurs in the area of the deserts of far north-west Victoria, immediately adjacent New South Wales and also South Australia, extending west to the Flinders Ranges and Adelaide Hills barrier, extending north into north-east South Australia and into far south-west Queensland.

L. dishonestpoliceorum sp. nov. is found in New South Wales, west of the Great Dividing Range, generally east of the main Darling River basin, extending from far north-east Victoria north to southern Queensland.

The seven preceding species are separated from one another as follows:

L. bituberculatus is brownish as an adult, with a pinkish or purplish tinge, moderately trilobed and with the eye spot set well back from the front line of the ocular scale, being either central or slightly to the rear of the centre of the scale. The snout is barely lighter than the rest of the dorsum of the snake.

L. ick sp. nov. is similar in most respects to L. bituberculatus but with the eye spot being set well back on the ocular scale, being pretty much dead centre. Colour is strongly whitish on the head anterior to the eyes, barely extending to the eyes and including the relevant anterior scales.

L. wellswellingtonorum sp. nov. is a distinctive chocolate brown coloured snake as an adult, extremely strongly trilobed, with exaggerated nasal scales. The eye spot is slightly anterior to the centre of the ocular scale. Snout anterior to the eyes is a faded light dull brownish colour.

L. snakebustersorum sp. nov. is similar in most respects to L. wellswellingtonorum sp. nov. but instead has a strong yellowish hue in dorsal colouration in adults. The anterior snout is dull whitish above, quite obviously extending back past the eyes. L. britishbombedhere sp. nov. is a pinkish brown snake on top with an obviously vellow coloured head. The snout is relatively strongly trilobed, being not as strongly trilobed as *L. wellswellingtonorum sp. nov*. and *L. snakebustersorum sp. nov.*, but obviously more strongly trilobed than the other species. The eye spot is slightly anterior to the centre of the ocular scale. L. fasciststateorum sp. nov. is a pinkish brown snake dorsally as an adult. The anterior snout has a slight dull yellowing only. Snout is only moderately trilobed. Eye spot varies a lot in different populations of this taxon, but is mostly anterior in the ocular scale, sometimes entering the preceding preocular. L. dishonestpoliceorum sp. nov. is similar in most respects to L. fasciststateorum sp. nov. but is separated from that taxon by having a distinctively vellow anterior snout, a relatively larger eye spot and a more weakly trilobed snout when viewed from above, often appearing smooth in profile. Eye spot is usually slightly posterior in the ocular scale. The seven preceding species are readily separated from Libertadictus margaretae (Storr, 1981), the only other species in the genus by the fact that it has 18 midbody rows, versus 20 in all the other species. The genus Libertadictus as defined here is confined to species of Blind Snakes with the following suite of characters: A moderately dark, small, slender long-snouted Blind Snake up to 35 cm long with 20 or rarely 18, mid body scale rows and a nasal cleft proceeding from the second labial; snout strongly or moderately strongly trilobed as seen from above and slightly angular in profile. Tail is 1.5-3.3 percent of the total length, 414-485 ventrals, 11-18 subcaudals. From above the rostral is very much longer than wide and almost two thirds as wide as the head. The nostril is inferior, markedly swollen, much nearer to the rostral than the preocular. The nasal cleft extends obliquely upwards and forwards from the nostril to about midway between the nostril and the rostral. The upper surface is pinkish grey, bluish purple or a dark purplish brown, gradually merging with the whitish lower surface.

L. bituberculatus of the type form is depicted in life online at:

https://www.flickr.com/photos/128497936@ N03/50931993187/

specimen from Yorke Peninsula, South Australia,

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photographed by Shawn Scott, and

https://www.inaturalist.org/observations/144693954 from near Gawler, South Australia, photographed by "Ballzak", and

https://www.inaturalist.org/observations/217636871 from near Gawler, South Australia, photographed by "BTWrenhill", and

https://www.inaturalist.org/observations/84275779 from near Locheal, South Australia, photographed by "Nicko Nichols".

L. ick sp. nov. is depicted in life in Storr, Smith and Johnstone (2002) on page 101 in image number 3, specimen from Junana Rock, Western Australia, photographed by Ron E. Johnstone and online at: https://www.flickr.com/photos/brian_

busho/49353869641/

from Coolgardie, Western Australia, photographed by Brian Bush, and

https://www.flickr.com/photos/brian_ busho/49353863401/

from Coolgardie, Western Australia, photographed by Brian Bush.

L. wellsandwellingtonorum sp. nov. is depicted in life online at:

https://www.flickr.com/photos/171250498@ N08/52518375650/

specimen from the West MacDonnell Ranges, Northern Territory, Australia, photographed by Wes Read, and

https://www.flickr.com/photos/

euprepiosaur/52568597394/

specimen from the West MacDonnell Ranges,

Northern Territory, Australia, photographed by Stephen Zozaya.

- *L. britishbombedhere sp. nov.* is depicted in life online at:
- https://www.inaturalist.org/observations/105130809
- from near Roxby Downs, South Australia,
- photographed by "JBilby" and

https://www.inaturalist.org/observations/151202028 from Olympic Dam, South Australia, photographed by

taxonomic vandal Jules Farquhar.

L. fasciststateorum sp. nov. is depicted in life online at:

https://www.flickr.com/photos/88708273@ N03/10681269095/

from Murrayville, Victoria, photographed by Matt Clancy, and

https://www.flickr.com/photos/

- julesfarquhar/54211644849/
- from Little Desert, Victoria, photographed by
- taxonomic vandal Jules Farquhar, and
- https://www.flickr.com/photos/
- moloch05/45814384515/
- from Ngarkat, southeast South Australia,
- photographed by David (Moloch05).
- L. dishonestpoliceorum sp. nov. is depicted in life

online at:

https://www.inaturalist.org/observations/251886021 with specimen from Pretty Pine, New South Wales, and photographed by Jim Churches, and

https://www.inaturalist.org/observations/265532535 from Terrick Terrick, Victoria, photographed by "max_ sonn".

In terms of calibrated divergences, the phylogeny of Marin *et al.* (2012, 2013) showed Pliocene divergences (as in over 2.5 MYA) for three of the newly named species and the nominate form of *L. bituberculatus.*

The other species, being *L. ick sp. nov.*, *L. wellsandwellingtonorum sp. nov.* and *L. snakebustersorum sp. nov.* are isolated from each other and the other four species and separated by biogeographical barriers of known antiquity. Other reptile species similarly isolated, which have had molecular samples taken and cross-matched also had Pliocene divergences.

Distribution: *L. wellsandwellingtonorum sp. nov.* is the distinctive form restricted to the Macdonnell Ranges district of central Australia, Northern Territory, generally around the township of Alice Springs.

Etymology: *L. wellsandwellingtonorum sp. nov.* is named in honour of Richard Walter Wells and Cliff Ross Wellington, both of New South Wales, Australia, who as Australia's pre-eminent herpetologists have done considerable taxonomic work on most species and genera at some stage and has included extensive fieldwork in all parts of the continent.

They were also about 40 years ahead of most other Australian herpetologists when they realized that not all Australian Blind Snakes were in a single genus and in 1984 they erected 2 genera for two of the most divergent groups, these being *Libertadictus* and *Sivadictus*.

LIBERTADICTUS SNAKEBUSTERSORUM SP. NOV. LSIDurn:lsid:zoobank.org:act:8CFEF909-6CAF-4E77-99AD-E8234670450F

Holotype: A preserved specimen at the South Australian Museum, Adelaide, South Australia, Australia, specimen number R44841 collected from 10 km north northeast of Mount Woodroffe, South Australia, Latitude -26.2486 S., Longitude 131.7933 E.

This government-owned facility allows access to its holdings.

Paratypes: Three preserved specimens at the South Australian Museum, Adelaide, South Australia, Australia, being specimen number R51545 collected from 37 km east southeast of Amata, South Australia, Australia, Latitude -26.2353 S., Longitude 131.5 E., and specimen numbers R50191 and R50194 both collected from 14 km southeast of Sentinel Hill, South Australia, Australia, Latitude -26.1717 S., Longitude 132.5478 E.

Diagnosis: Until now, putative *Libertadictus bituberculatus* (Peters, 1863), type locality of the Adelaide Plain, near Gawler in South Australia, being the type species of the genus *Libertadictus* Wells and Wellington, 1984, has been treated as a wideranging taxon found in drier parts of the southern half of Australia, effectively excluding the east and west coasts of Australia, the tropical desert areas as well as the hotter west Australian deserts and cooler, wetter parts of southern Australia, in particular the colder south-east.

However, various phylogenies, including Marin *et al.* (2012, 2013) have confirmed the presence of multiple species with Pliocene divergence from one another.

This paper formally names four species identified by Marin *et al.* (2012, 2013) and two others apparently allopatric and separated with biogeographical barriers of similar antiquity that have caused speciation in numerous other Australian reptiles.

The relevant species in the complex are as follows: *L. bituberculatus* is herein confined to the southern region of South Australia, generally near the coast, bound by the Nullarbor Plain in the west and Flinders Ranges / Adelaide Hills in the east.

L. ick sp. nov. is found throughout much of the southern interior of Western Australia, generally west of the Nullarbor Plain in the east and away from the coastal plain and ranges in the south-west.

L. wellsandwellingtonorum sp. nov. is the distinctive form restricted to the Macdonnell Ranges district of central Australia, Northern Territory, generally around the township of Alice Springs.

Separated to the north and south by a mosaic of black soil plains and moving red sand dunes, is a rangerestricted population from the northwestern ranges area of South Australia, herein formally named as *L. snakebustersorum sp. nov.*.

L. britishbombedhere sp. nov. occurs in the area of the Stuart Range, west of Lake Eyre in South Australia.

L. fasciststateorum sp. nov. occurs in the area of the deserts of far north-west Victoria, immediately adjacent New South Wales and also South Australia, extending west to the Flinders Ranges and Adelaide Hills barrier, extending north into north-east South Australia and into far south-west Queensland.

L. dishonestpoliceorum sp. nov. is found in New South Wales, west of the Great Dividing Range, generally east of the main Darling River basin, extending from far north-east Victoria north to southern Queensland.

The seven preceding species are separated from one another as follows:

L. bituberculatus is brownish as an adult, with a pinkish or purplish tinge, moderately trilobed and with the eye spot set well back from the front line of the ocular scale, being either central or slightly to the rear of the centre of the scale. The snout is barely lighter

than the rest of the dorsum of the snake.

L. ick sp. nov. is similar in most respects to *L. bituberculatus* but with the eye spot being set well back on the ocular scale, being pretty much dead centre. Colour is strongly whitish on the head anterior to the eyes, barely extending to the eyes and including the relevant anterior scales.

L. wellswellingtonorum sp. nov. is a distinctive chocolate brown coloured snake as an adult, extremely strongly trilobed, with exaggerated nasal scales. The eye spot is slightly anterior to the centre of the ocular scale. Snout anterior to the eyes is a faded light dull brownish colour.

L. snakebustersorum sp. nov. is similar in most respects to *L. wellswellingtonorum sp. nov.* but instead has a strong yellowish hue in dorsal colouration in adults. The anterior snout is dull whitish above, quite obviously extending back past the eyes.

L. britishbombedhere sp. nov. is a pinkish brown snake on top with an obviously yellow coloured head. The snout is relatively strongly trilobed, being not as strongly trilobed as *L. wellswellingtonorum sp. nov.* and *L. snakebustersorum sp. nov.*, but obviously more strongly trilobed than the other species. The eye spot is slightly anterior to the centre of the ocular scale.

L. fasciststateorum sp. nov. is a pinkish brown snake dorsally as an adult. The anterior snout has a slight dull yellowing only. Snout is only moderately trilobed. Eye spot varies a lot in different populations of this taxon, but is mostly anterior in the ocular scale, sometimes entering the preocular.

L. dishonestpoliceorum sp. nov. is similar in most respects to L. fasciststateorum sp. nov. but is separated from that taxon by having a distinctively vellow anterior snout, a relatively larger eye spot and a more weakly trilobed snout when viewed from above, often appearing smooth in profile. Eye spot is usually slightly posterior in the ocular scale. The seven preceding species are readily separated from Libertadictus margaretae (Storr, 1981), the only other species in the genus by the fact that it has 18 midbody rows, versus 20 in all the other species. The genus Libertadictus as defined here is confined to species of Blind Snakes with the following suite of characters: A moderately dark, small, slender long-snouted Blind Snake up to 35 cm long with 20 or rarely 18, mid body scale rows and a nasal cleft proceeding from the second labial; snout strongly or moderately strongly trilobed as seen from above and slightly angular in profile. Tail is 1.5-3.3 percent of the total length, 414-485 ventrals, 11-18 subcaudals. From above the rostral is very much longer than wide and almost two thirds as wide as the head. The nostril is inferior, markedly swollen, much nearer to the rostral than the preocular. The nasal cleft extends obliquely upwards and forwards from the nostril to about midway between the nostril and the rostral. The upper surface is pinkish grey, bluish purple or a dark

purplish brown, gradually merging with the whitish lower surface. L. bituberculatus of the type form is depicted in life online at: https://www.flickr.com/photos/128497936@ N03/50931993187/ specimen from Yorke Peninsula, South Australia, online at: photographed by Shawn Scott, and https://www.inaturalist.org/observations/144693954 from near Gawler, South Australia, photographed by "Ballzak", and https://www.inaturalist.org/observations/217636871 from near Gawler, South Australia, photographed by sonn". "BTWrenhill", and https://www.inaturalist.org/observations/84275779 from near Locheal, South Australia, photographed by "Nicko Nichols". L. ick sp. nov. is depicted in life in Storr, Smith and Johnstone (2002) on page 101 in image number 3, specimen from Junana Rock, Western Australia, photographed by Ron E. Johnstone and online at: https://www.flickr.com/photos/brian busho/49353869641/ from Coolgardie, Western Australia, photographed by Brian Bush, and https://www.flickr.com/photos/brian_ busho/49353863401/ from Coolgardie, Western Australia, photographed by Brian Bush. L. wellsandwellingtonorum sp. nov. is depicted in life online at: https://www.flickr.com/photos/171250498@ N08/52518375650/ specimen from the West MacDonnell Ranges, Northern Territory, Australia, photographed by Wes Read, and https://www.flickr.com/photos/ euprepiosaur/52568597394/ Snakebusters. specimen from the West MacDonnell Ranges, NT, Australia, photographed by Stephen Zozaya. L. britishbombedhere sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/105130809 from near Roxby Downs, South Australia, same animals. photographed by "JBilby" and https://www.inaturalist.org/observations/151202028 from Olympic Dam, South Australia, photographed by taxonomic vandal Jules Farguhar. L. fasciststateorum sp. nov. is depicted in life online at: https://www.flickr.com/photos/88708273@ N03/10681269095/ from Murrayville, Victoria, photographed by Matt Clancy, and https://www.flickr.com/photos/ julesfarguhar/54211644849/ from Little Desert, Victoria, photographed by

taxonomic vandal Jules Farquhar, and https://www.flickr.com/photos/ moloch05/45814384515/ from Ngarkat, southeast South Australia, photographed by David (Moloch05). *L. dishonestpoliceorum sp. nov*. is depicted in life

https://www.inaturalist.org/observations/251886021 with specimen from Pretty Pine, New South Wales, and photographed by Jim Churches, and https://www.inaturalist.org/observations/265532535 from Terrick Terrick, Victoria, photographed by "max_ sonn".

In terms of calibrated divergences, the phylogeny of Marin *et al.* (2012, 2013) showed Pliocene divergences (as in over 2.5 MYA) for three of the newly named species and the nominate form of *L. bituberculatus*. The other species, being *L. ick sp. nov.*, *L. wellsandwellingtonorum sp. nov.* and *L. snakebustersorum sp. nov.* are isolated from each other and the other four species and separated by biogeographical barriers of known antiquity. Other reptile species similarly isolated, which have had molecular samples taken and cross-matched also had Pliocene divergences.

Distribution: *L. snakebustersorum sp. nov.* is a range restricted taxon from the northwestern ranges area of South Australia, being separated from populations in the same genus in elevated areas to the north and south by a mosaic of black soil plains and moving red sand dunes.

Etymology: *L. snakebustersorum sp. nov.* is named in honor of the crew at Snakebusters: Australia's best reptiles displays for services to wildlife conservation with the only hands-on reptile shows that let people hold the animals in Australia. This is a significant achievement in a country like Australia and the state of Victoria, the main area of operation for Snakebusters.

This is because of the corrupt fascist State Government and their dysfunctional "Zoos Victoria" business which seeks to monopolize the wildlife space to the detriment of the animals themselves as well as those working to save and conserve these same animals.

LIBERTADICTUS BRITISHBOMBEDHERE SP. NOV. LSIDurn:lsid:zoobank.org:act:21719386-AD74-49DF-8E3B-4B9C604F1369

Holotype: A preserved specimen at the South Australian Museum, Adelaide, South Australia, Australia, specimen number R62428 collected from 20 km northeast of Mount Penrhyn, South Australia, Australia, Latitude -29.305 S., Longitude 135.1717 E. This facility allows access to its holdings.

Paratypes: Three preserved specimens at the South Australian Museum, Adelaide, South Australia, Australia, being specimen number R44731 collected

from 6.1 km east of Jamison Bore at Welbourne Hill Station, South Australia, Australia, Latitude -27.5561 S., Longitude 134.425 E., specimen number R58164 collected from 7.1 km northwest of Ant Hill, South Australia, Australia, Latitude -28.4414 S., Longitude 134.5044 E., and specimen number R30404 collected from the Breakaways Reserve, 25 km north northwest of Coober Pedy, South Australia, Australia, Latitude -28.4414 S., Longitude 134.5044 E.

Diagnosis: Until now, putative *Libertadictus bituberculatus* (Peters, 1863), type locality of the Adelaide Plain, near Gawler in South Australia, being the type species of the genus *Libertadictus* Wells and Wellington, 1984, has been treated as a wideranging taxon found in drier parts of the southern half of Australia, effectively excluding the east and west coasts of Australia, the tropical desert areas as well as the hotter west Australian deserts and cooler, wetter parts of southern Australia, in particular the colder south-east.

However, various phylogenies, including Marin *et al.* (2012, 2013) have confirmed the presence of multiple species with Pliocene divergence from one another. This paper formally names four species identified by Marin *et al.* (2012, 2013) and two others apparently allopatric and separated with biogeographical barriers of similar antiquity that have caused speciation in numerous other Australian reptiles.

The relevant species in the complex are as follows: *L. bituberculatus* is herein confined to the southern region of South Australia, generally near the coast, bound by the Nullarbor Plain in the west and Flinders Ranges / Adelaide Hills in the east.

L. ick sp. nov. is found throughout much of the southern interior of Western Australia, generally west of the Nullarbor Plain in the east and away from the coastal plain and ranges in the south-west.

L. wellsandwellingtonorum sp. nov. is the distinctive form restricted to the Macdonnell Ranges district of central Australia, Northern Territory, generally around the township of Alice Springs.

Separated to the north and south by a mosaic of black soil plains and moving red sand dunes, is a rangerestricted population from the northwestern ranges area of South Australia, herein formally named as *L. snakebustersorum sp. nov.*.

L. britishbombedhere sp. nov. occurs in the area of the Stuart Range, west of Lake Eyre in South Australia.

L. fasciststateorum sp. nov. occurs in the area of the deserts of far north-west Victoria, immediately adjacent New South Wales and also South Australia, extending west to the Flinders Ranges and Adelaide Hills barrier, extending north into north-east South Australia and into far south-west Queensland.

L. dishonestpoliceorum sp. nov. is found in New South Wales, west of the Great Dividing Range, generally east of the main Darling River basin,

extending from far north-east Victoria north to southern Queensland.

The seven preceding species are separated from one another as follows:

L. bituberculatus is brownish as an adult, with a pinkish or purplish tinge, moderately trilobed and with the eye spot set well back from the front line of the ocular scale, being either central or slightly to the rear of the centre of the scale. The snout is barely lighter than the rest of the dorsum of the snake.

L. ick sp. nov. is similar in most respects to *L. bituberculatus* but with the eye spot being set well back on the ocular scale, being pretty much dead centre. Colour is strongly whitish on the head anterior to the eyes, barely extending to the eyes and including the relevant anterior scales.

L. wellswellingtonorum sp. nov. is a distinctive chocolate brown coloured snake as an adult, extremely strongly trilobed, with exaggerated nasal scales. The eye spot is slightly anterior to the centre of the ocular scale. Snout anterior to the eyes is a faded light dull brownish colour.

L. snakebustersorum sp. nov. is similar in most respects to L. wellswellingtonorum sp. nov. but instead has a strong yellowish hue in dorsal colouration in adults. The anterior snout is dull whitish above, quite obviously extending back past the eyes. L. britishbombedhere sp. nov. is a pinkish brown snake on top with an obviously yellow coloured head. The snout is relatively strongly trilobed, being not as strongly trilobed as *L. wellswellingtonorum sp. nov*. and L. snakebustersorum sp. nov., but obviously more strongly trilobed than the other species. The eye spot is slightly anterior to the centre of the ocular scale. L. fasciststateorum sp. nov. is a pinkish brown snake dorsally as an adult. The anterior snout has a slight dull yellowing only. Snout is only moderately trilobed. Eye spot varies a lot in different populations of this taxon, but is mostly anterior in the ocular scale, sometimes entering the preocular scale.

L. dishonestpoliceorum sp. nov. is similar in most respects to *L. fasciststateorum sp. nov.* but is separated from that taxon by having a distinctively yellow anterior snout, a relatively larger eye spot and a more weakly trilobed snout when viewed from above, often appearing smooth in profile. Eye spot is usually slightly posterior in the ocular scale. The seven preceding species are readily separated from *Libertadictus margaretae* (Storr, 1981), the only other species in the genus by the fact that it has 18

midbody rows, versus 20 in all the other species. The genus *Libertadictus* as defined here is confined to species of Blind Snakes with the following suite of characters: A moderately dark, small, slender long-snouted Blind Snake up to 35 cm long with 20 or rarely 18, mid body scale rows and a nasal cleft proceeding from the second labial; snout strongly or moderately strongly trilobed as seen from above and

slightly angular in profile. Tail is 1.5-3.3 percent of the total length, 414-485 ventrals, 11-18 subcaudals. From above the rostral is very much longer than wide and almost two thirds as wide as the head. The nostril is inferior, markedly swollen, much nearer to the rostral than the preocular. The nasal cleft extends obliquely upwards and forwards from the nostril to about midway between the nostril and the rostral. The upper surface is pinkish grey, bluish purple or a dark purplish brown, gradually merging with the whitish lower surface.

L. bituberculatus of the type form is depicted in life online at:

https://www.flickr.com/photos/128497936@ N03/50931993187/

specimen from Yorke Peninsula, South Australia, photographed by Shawn Scott, and

https://www.inaturalist.org/observations/144693954 from near Gawler, South Australia, photographed by "Ballzak", and

https://www.inaturalist.org/observations/217636871 from near Gawler, South Australia, photographed by "BTWrenhill", and

https://www.inaturalist.org/observations/84275779 from near Locheal, South Australia, photographed by "Nicko Nichols".

L. ick sp. nov. is depicted in life in Storr, Smith and Johnstone (2002) on page 101 in image number 3, specimen from Junana Rock, Western Australia, photographed by Ron E. Johnstone and online at:

- https://www.flickr.com/photos/brian_
- busho/49353869641/
- from Coolgardie, Western Australia, photographed by Brian Bush, and
- https://www.flickr.com/photos/brian_
- busho/49353863401/

from Coolgardie, Western Australia, photographed by Brian Bush.

L. wellsandwellingtonorum sp. nov. is depicted in life online at:

https://www.flickr.com/photos/171250498@ N08/52518375650/

specimen from the West MacDonnell Ranges,

Northern Territory, Australia, photographed by Wes Read, and

https://www.flickr.com/photos/

- euprepiosaur/52568597394/
- specimen from the West MacDonnell Ranges,

Northern Territory, Australia, photographed by Stephen Zozaya.

L. britishbombedhere sp. nov. is depicted in life online at:

- https://www.inaturalist.org/observations/105130809
- from near Roxby Downs, South Australia,
- photographed by "JBilby" and
- https://www.inaturalist.org/observations/151202028
- from Olympic Dam, South Australia, photographed by

taxonomic vandal Jules Farquhar.

L. fasciststateorum sp. nov. is depicted in life online at:

https://www.flickr.com/photos/88708273@ N03/10681269095/

from Murrayville, Victoria, photographed by Matt Clancy, and

https://www.flickr.com/photos/

julesfarquhar/54211644849/

from Little Desert, Victoria, photographed by

taxonomic vandal Jules Farquhar, and

https://www.flickr.com/photos/

moloch05/45814384515/

from Ngarkat, southeast South Australia, photographed by David (Moloch05).

L. dishonestpoliceorum sp. nov. is depicted in life online at:

https://www.inaturalist.org/observations/251886021 with specimen from Pretty Pine, New South Wales, and photographed by Jim Churches, and https://www.inaturalist.org/observations/265532535 from Terrick Terrick, Victoria, photographed by "max_ sonn".

In terms of calibrated divergences, the phylogeny of Marin *et al.* (2012, 2013) showed Pliocene divergences (as in over 2.5 MYA) for three of the newly named species and the nominate form of *L. bituberculatus.* The other species, being *L. ick sp. nov.*, *L. wellsandwellingtonorum sp. nov.* and *L. snakebustersorum sp. nov.* are isolated from each other and the other four species and separated by biogeographical barriers of known antiquity. Other reptile species similarly isolated, which have had molecular samples taken and cross-matched also had Pliocene divergences.

Distribution: *L. britishbombedhere sp. nov.* occurs in the area of the Stuart Range, west of Lake Eyre in South Australia, Australia and so is a relatively range-restricted taxon.

Etymology: *L. britishbombedhere sp. nov.* is named in honor of the British armed forces who tested their nuclear weapons from 1952 to 1963 in outback South Australia in above ground tests and explosions immediately north-west of where this species occurs. While there is no evidence of this taxon suffering as a

Field and Maralinga, the local indigenous Australian inhabitants certainly did.

Many died of radiation caused diseases at the time as clouds of radioactive dust settled on their homes. Even decades later in the 2000's, birth deformities, cancers and other serious medical conditions plague the few surviving Aboriginals of the Antakirinja tribe who remain in this general area.

... Continued in AJH Issue 77 ...

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Australasian Journal of Herpetology

Hoser, R. T. 2025. Before Australian Blind Snakes (Squamata: Serpentes: Scolecophidia) become extinct through bureaucratic indifference ... The description of four new genera and seventy six new species. *Australasian Journal of Herpetology*, 76-78:1-192.

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... Continued from AJH Issue 76 ...

LIBERTADICTUS FASCISTSTATEORUM SP. NOV. LSIDurn:lsid:zoobank.org:act:28A6C192-59D2-4A39-B7C7-161B8D0A235A

Holotype: A preserved specimen at the South Australian Museum, Adelaide, South Australia, Australia, specimen number R55139 collected from 1.5 km east northeast of Gluepot Homestead, South Australia, Australia, Latitude -33.7611 S., Longitude 140.1375 E.

This facility allows access to its holdings.

Paratypes: Four preserved specimens at the South Australian Museum, Adelaide, South Australia, Australia, being specimen number R46180 (juvenile), collected from the East Boundary Track in the Karte Conservation Park, South Australia, Australia, Latitude -35.1258 S., Longitude 140.7242 E., specimen number R39338 collected from 14 km south-west of Taplan, South Australia, Australia, Latitude -34.6389 S., Longitude 140.7808 E., and specimen numbers R70462 and R70464 both collected from 8 km southeast of Monash, South Australia, Australia, Latitude -34.2928 S.,

Diagnosis: Until now, putative *Libertadictus bituberculatus* (Peters, 1863), type locality of the Adelaide Plain, near Gawler in South Australia, being the type species of the genus *Libertadictus* Wells and Wellington, 1984, has been treated as a wideranging taxon found in drier parts of the southern half of Australia, effectively excluding the east and west coasts of Australia, the tropical desert areas as well as the hotter west Australian deserts and cooler, wetter parts of southern Australia, in particular the colder south-east.

However, various phylogenies, including Marin *et al.* (2012, 2013) have confirmed the presence of multiple species with Pliocene divergence from one another. This paper formally names four species identified by Marin *et al.* (2012, 2013) and two others apparently allopatric and separated with biogeographical barriers of similar antiquity that have caused speciation in numerous other Australian reptiles.

The relevant species in the complex are as follows: *L. bituberculatus* is herein confined to the southern region of South Australia, generally near the coast, bound by the Nullarbor Plain in the west and Flinders Ranges / Adelaide Hills in the east.

L. ick sp. nov. is found throughout much of the southern interior of Western Australia, generally west of the Nullarbor Plain in the east and away from the coastal plain and ranges in the south-west.

L. wellsandwellingtonorum sp. nov. is the distinctive

form restricted to the Macdonnell Ranges district of central Australia, Northern Territory, generally around the township of Alice Springs.

Separated to the north and south by a mosaic of black soil plains and moving red sand dunes, is a rangerestricted population from the northwestern ranges area of South Australia, herein formally named as *L. snakebustersorum sp. nov.*.

L. britishbombedhere sp. nov. occurs in the area of the Stuart Range, west of Lake Eyre in South Australia.

L. fasciststateorum sp. nov. occurs in the area of the deserts of far north-west Victoria, immediately adjacent New South Wales and also South Australia, extending west to the Flinders Ranges and Adelaide Hills barrier, extending north into north-east South Australia and into far south-west Queensland.

L. dishonestpoliceorum sp. nov. is found in New South Wales, west of the Great Dividing Range, generally east of the main Darling River basin, extending from far north-east Victoria north to southern Queensland.

The seven preceding species are separated from one another as follows:

L. bituberculatus is brownish as an adult, with a pinkish or purplish tinge, moderately trilobed and with the eye spot set well back from the front line of the ocular scale, being either central or slightly to the rear of the centre of the scale. The snout is barely lighter than the rest of the dorsum of the snake.

L. ick sp. nov. is similar in most respects to *L. bituberculatus* but with the eye spot being set well back on the ocular scale, being pretty much dead centre. Colour is strongly whitish on the head anterior to the eyes, barely extending to the eyes and including the relevant anterior scales.

L. wellswellingtonorum sp. nov. is a distinctive chocolate brown coloured snake as an adult, extremely strongly trilobed, with exaggerated nasal scales. The eye spot is slightly anterior to the centre of the ocular scale. Snout anterior to the eyes is a faded light dull brownish colour.

L. snakebustersorum sp. nov. is similar in most respects to *L.* wellswellingtonorum sp. nov. but instead has a strong yellowish hue in dorsal colouration in adults. The anterior snout is dull whitish above, quite obviously extending back past the eyes.

L. britishbombedhere sp. nov. is a pinkish brown snake on top with an obviously yellow coloured head. The snout is relatively strongly trilobed, being not as strongly trilobed as *L. wellswellingtonorum sp. nov.* and *L. snakebustersorum sp. nov.*, but obviously more

strongly trilobed than the other species. The eye spot is slightly anterior to the centre of the ocular scale. *L. fasciststateorum sp. nov.* is a pinkish brown snake dorsally as an adult. The anterior snout has a slight dull yellowing only. Snout is only moderately trilobed. Eye spot varies a lot in different populations of this taxon, but is mostly anterior in the ocular scale, sometimes bordering or entering the preocular.

L. dishonestpoliceorum sp. nov. is similar in most respects to *L. fasciststateorum sp. nov.* but is separated from that taxon by having a distinctively yellow anterior snout, a relatively larger eye spot and a more weakly trilobed snout when viewed from above, often appearing smooth in profile. Eye spot is usually slightly posterior in the ocular scale.

The seven preceding species are readily separated from Libertadictus margaretae (Storr, 1981), the only other species in the genus by the fact that it has 18 midbody rows, versus 20 in all the other species. The genus Libertadictus as defined here is confined to species of Blind Snakes with the following suite of characters: A moderately dark, small, slender long-snouted Blind Snake up to 35 cm long with 20 or rarely 18, mid body scale rows and a nasal cleft proceeding from the second labial; snout strongly or moderately strongly trilobed as seen from above and slightly angular in profile. Tail is 1.5-3.3 percent of the total length, 414-485 ventrals, 11-18 subcaudals. From above the rostral is very much longer than wide and almost two thirds as wide as the head. The nostril is inferior, markedly swollen, much nearer to

the rostral than the preocular. The nasal cleft extends obliquely upwards and forwards from the nostril to about midway between the nostril and the rostral. The upper surface is pinkish grey, bluish purple or a dark purplish brown, gradually merging with the whitish lower surface.

L. bituberculatus of the type form is depicted in life online at:

https://www.flickr.com/photos/128497936@ N03/50931993187/

specimen from Yorke Peninsula, South Australia, photographed by Shawn Scott, and

https://www.inaturalist.org/observations/144693954 from near Gawler, South Australia, photographed by "Ballzak", and

https://www.inaturalist.org/observations/217636871

from near Gawler, South Australia, photographed by "BTWrenhill", and

https://www.inaturalist.org/observations/84275779 from near Locheal, South Australia, photographed by "Nicko Nichols".

L. ick sp. nov. is depicted in life in Storr, Smith and Johnstone (2002) on page 101 in image number 3, specimen from Junana Rock, Western Australia, photographed by Ron E. Johnstone and online at: https://www.flickr.com/photos/brian_

busho/49353869641/

from Coolgardie, Western Australia, photographed by Brian Bush, and

https://www.flickr.com/photos/brian_

busho/49353863401/

from Coolgardie, Western Australia, photographed by Brian Bush.

L. wellsandwellingtonorum sp. nov. is depicted in life online at:

https://www.flickr.com/photos/171250498@ N08/52518375650/

specimen from the West MacDonnell Ranges, Northern Territory, Australia, photographed by Wes Read, and

https://www.flickr.com/photos/ euprepiosaur/52568597394/

specimen from the West MacDonnell Ranges, Northern Territory, Australia, photographed by Stephen Zozaya.

L. britishbombedhere sp. nov. is depicted in life online at:

https://www.inaturalist.org/observations/105130809 from near Roxby Downs, South Australia,

photographed by "JBilby" and

https://www.inaturalist.org/observations/151202028 from Olympic Dam, South Australia, photographed by taxonomic vandal Jules Farquhar.

L. fasciststateorum sp. nov. is depicted in life online at:

https://www.flickr.com/photos/88708273@ N03/10681269095/

from Murrayville, Victoria, photographed by Matt Clancy, and

https://www.flickr.com/photos/

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taxonomic vandal Jules Farguhar, and

https://www.flickr.com/photos/

moloch05/45814384515/

from Ngarkat, southeast South Australia, photographed by David (Moloch05).

L. dishonestpoliceorum sp. nov. is depicted in life online at:

https://www.inaturalist.org/observations/251886021 with specimen from Pretty Pine, New South Wales, and photographed by Jim Churches, and

https://www.inaturalist.org/observations/265532535 from Terrick Terrick, Victoria, photographed by "max_ sonn".

In terms of calibrated divergences, the phylogeny of Marin *et al.* (2012, 2013) showed Pliocene divergences (as in over 2.5 MYA) for three of the newly named species and the nominate form of *L. bituberculatus.* The other species, being *L. ick sp. nov.*, *L. wellsandwellingtonorum sp. nov.* and *L. snakebustersorum sp. nov.* are isolated from each other and the other four species and separated by biogeographical barriers of known antiquity. Other reptile species similarly isolated, which have had molecular samples taken and cross-matched also had Pliocene divergences.

Distribution: *L. fasciststateorum sp. nov.* occurs in the area of the deserts of far north-west Victoria, immediately adjacent New South Wales and also South Australia, extending west to the Flinders Ranges and Adelaide Hills barrier, extending north into north-east South Australia and into far south-west Queensland.

Etymology: *L. fasciststateorum sp. nov.* is named in honor of the endemically corrupt Australian government, at Federal, State and local level, all of which are part of the same bureaucratic monster.

Operating in a mega-wealthy country but with an ironfisted rule of terror, typically seen in poor "third world" countries, corrupt law-enforcement agencies, be they police, wildlife, local government or whatever do as they please and at gunpoint when necessary.

This corruption is enforced further with a wholly corrupt judiciary, which is filled with corrupt cocaine addicted judges and magistrates, an obscenely large number of which engage penalty free and untouchable in such activities as child sex trafficking and abuse, bestiality with domestic pets and other nasty crimes.

In terms of wildlife, it only survives in Australia in spite of the corrupt animal-hating bureaucracy and not due to anything useful they do to protect it.

Wildlife departments in Australia and their dysfunctional zoos businesses are bloated multibillion dollar bureaucracies who feather their own nests, engage in empire building but do nothing at all useful for the sciences involving wildlife, or the longterm conservation of species.

One need look no further than the mass extinctions of Australian wildlife as detailed in Hoser (1989, 1991, 1993 and 1996) to get an idea of how bad things are with regards to wildlife conservation in Australia. As the corrupt government bureaucrats like putting their names on things, honoring themselves with "awards" for being nice and the like, as part of their

false narrative, it is appropriate that a species of blind snake also be used to honor the fascist state of Australia in terms of the corrupt government, the evil bureaucrats and law enforcement regime who prop them up.

LIBERTADICTUS DISHONESTPOLICEORUM SP. NOV.

LSIDurn:Isid:zoobank.org:act:1874B8EF-4A0E-4208-A68A-006D1433AA8F

Holotype: A preserved specimen at the Australian National Wildlife Collection (ANWC) owned by the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Canberra, ACT, Australia, specimen number R06665 collected from the Savernake Area, 11 km east of the town of Berrigan in the Berrigan State Forest, New South Wales, Australia, Latitude -35.6883 S., Longitude 145.9239 E.

This government-owned facility allows access to its holdings.

Paratypes: Three preserved specimens at the Australian Museum, Sydney, New South Wales, Australia, being specimen number R.1448 collected from Tocumwal, New South Wales, Australia, Latitude -35.816 S., Longitude 145.566 E. and specimen numbers R.161787 and R.161788 both collected from the Old Coree Station (Macaghie Institute), 17 km west of Jerilderie, New South Wales, Australia, Latitude -35.433 S., Longitude 145.55 E.

Diagnosis: Until now, putative *Libertadictus bituberculatus* (Peters, 1863), type locality of the Adelaide Plain, near Gawler in South Australia, being the type species of the genus *Libertadictus* Wells and Wellington, 1984, has been treated as a wideranging taxon found in drier parts of the southern half of Australia, effectively excluding the east and west coasts of Australia, the tropical desert areas as well as the hotter west Australian deserts and cooler, wetter parts of southern Australia, in particular the colder south-east.

However, various phylogenies, including Marin *et al.* (2012, 2013) have confirmed the presence of multiple species with Pliocene divergence from one another. This paper formally names four species identified by Marin *et al.* (2012, 2013) and two others apparently allopatric and separated with biogeographical barriers of similar antiquity that have caused speciation in numerous other Australian reptiles.

The relevant species in the complex are as follows: *L. bituberculatus* is herein confined to the southern region of South Australia, generally near the coast, bound by the Nullarbor Plain in the west and Flinders Ranges / Adelaide Hills in the east.

L. ick sp. nov. is found throughout much of the southern interior of Western Australia, generally west of the Nullarbor Plain in the east and away from the coastal plain and ranges in the south-west.

L. wellsandwellingtonorum sp. nov. is the distinctive form restricted to the Macdonnell Ranges district of central Australia, Northern Territory, generally around the township of Alice Springs.

Separated to the north and south by a mosaic of black soil plains and moving red sand dunes, is a rangerestricted population from the northwestern ranges area of South Australia, herein formally named as *L. snakebustersorum sp. nov.*.

L. britishbombedhere sp. nov. occurs in the area of the Stuart Range, west of Lake Eyre in South Australia.

L. fasciststateorum sp. nov. occurs in the area of the deserts of far north-west Victoria, immediately adjacent New South Wales and also South Australia, extending west to the Flinders Ranges and Adelaide Hills barrier, extending north into north-east South

Australia and into far south-west Queensland. *L. dishonestpoliceorum sp. nov.* is found in New South Wales, west of the Great Dividing Range, generally east of the main Darling River basin, extending from far north-east Victoria north to southern Queensland.

The seven preceding species are separated from one another as follows:

L. bituberculatus is brownish as an adult, with a pinkish or purplish tinge, moderately trilobed and with the eye spot set well back from the front line of the ocular scale, being either central or slightly to the rear of the centre of the scale. The snout is barely lighter than the rest of the dorsum of the snake.

L. ick sp. nov. is similar in most respects to *L. bituberculatus* but with the eye spot being set well back on the ocular scale, being pretty much dead centre. Colour is strongly whitish on the head anterior to the eyes, barely extending to the eyes and including the relevant anterior scales.

L. wellswellingtonorum sp. nov. is a distinctive chocolate brown coloured snake as an adult, extremely strongly trilobed, with exaggerated nasal scales. The eye spot is slightly anterior to the centre of the ocular scale. Snout anterior to the eyes is a faded light dull brownish colour.

L. snakebustersorum sp. nov. is similar in most respects to L. wellswellingtonorum sp. nov. but instead has a strong yellowish hue in dorsal colouration in adults. The anterior snout is dull whitish above, quite obviously extending back past the eyes. L. britishbombedhere sp. nov. is a pinkish brown snake on top with an obviously yellow coloured head. The snout is relatively strongly trilobed, being not as strongly trilobed as L. wellswellingtonorum sp. nov.

and *L. snakebustersorum sp. nov.*, but obviously more strongly trilobed than the other species. The eye spot is slightly anterior to the centre of the ocular scale.

L. fasciststateorum sp. nov. is a pinkish brown snake dorsally as an adult. The anterior snout has a slight dull yellowing only. Snout is only moderately trilobed. Eye spot varies a lot in different populations of this taxon, but is mostly anterior in the ocular scale, sometimes entering the preocular.

L. dishonestpoliceorum sp. nov. is similar in most respects to *L. fasciststateorum sp. nov.* but is separated from that taxon by having a distinctively yellow anterior snout, a relatively larger eye spot and a more weakly trilobed snout when viewed from above, often appearing smooth in profile. Eye spot is usually slightly posterior in the ocular scale.

The seven preceding species are readily separated from *Libertadictus margaretae* (Storr, 1981), the only other species in the genus by the fact that it has 18 midbody rows, versus 20 in all the other species.

The genus *Libertadictus* as defined here is confined to species of Blind Snakes with the following suite of characters: A moderately dark, small, slender long-snouted Blind Snake up to 35 cm long with 20 or rarely 18, mid body scale rows and a nasal cleft proceeding from the second labial; snout strongly or moderately strongly trilobed as seen from above and slightly angular in profile. Tail is 1.5-3.3 percent of the total length, 414-485 ventrals, 11-18 subcaudals. From above the rostral is very much longer than wide and almost two thirds as wide as the head. The nostril is inferior, markedly swollen, much nearer to the rostral than the preocular. The nasal cleft extends obliquely upwards and forwards from the nostril to about midway between the nostril and the rostral. The upper surface is pinkish grey, bluish purple or a dark purplish brown, gradually merging with the whitish lower surface.

L. bituberculatus of the type form is depicted in life online at:

https://www.flickr.com/photos/128497936@ N03/50931993187/

specimen from Yorke Peninsula, South Australia, photographed by Shawn Scott, and

https://www.inaturalist.org/observations/144693954 from near Gawler, South Australia, photographed by "Ballzak", and

https://www.inaturalist.org/observations/217636871 from near Gawler, South Australia, photographed by "BTWrenhill", and

https://www.inaturalist.org/observations/84275779 from near Locheal, South Australia, photographed by "Nicko Nichols".

L. ick sp. nov. is depicted in life in Storr, Smith and Johnstone (2002) on page 101 in image number 3, specimen from Junana Rock, Western Australia, photographed by Ron E. Johnstone and online at:

https://www.flickr.com/photos/brian_ busho/49353869641/

from Coolgardie, Western Australia, photographed by Brian Bush, and

https://www.flickr.com/photos/brian_

busho/49353863401/

from Coolgardie, Western Australia, photographed by Brian Bush.

L. wellsandwellingtonorum sp. nov. is depicted in life online at:

https://www.flickr.com/photos/171250498@ N08/52518375650/

specimen from the West MacDonnell Ranges, Northern Territory, Australia, photographed by Wes Read, and

https://www.flickr.com/photos/ euprepiosaur/52568597394/

specimen from the West MacDonnell Ranges, Northern Territory, Australia, photographed by Stephen Zozaya.

L. britishbombedhere sp. nov. is depicted in life online at:

https://www.inaturalist.org/observations/105130809

from near Roxby Downs, South Australia, photographed by "JBilby" and

https://www.inaturalist.org/observations/151202028

from Olympic Dam, South Australia, photographed by taxonomic vandal Jules Farquhar.

L. fasciststateorum sp. nov. is depicted in life online at:

https://www.flickr.com/photos/88708273@ N03/10681269095/

from Murrayville, Victoria, photographed by Matt Clancy, and

https://www.flickr.com/photos/

julesfarquhar/54211644849/

from Little Desert, Victoria, photographed by

taxonomic vandal Jules Farquhar, and

https://www.flickr.com/photos/

moloch05/45814384515/

from Ngarkat, southeast South Australia, photographed by David (Moloch05).

L. dishonestpoliceorum sp. nov. is depicted in life online at:

https://www.inaturalist.org/observations/251886021 with specimen from Pretty Pine, New South Wales, and photographed by Jim Churches, and

https://www.inaturalist.org/observations/265532535 from Terrick Terrick, Victoria, photographed by "max_ sonn".

In terms of calibrated divergences, the phylogeny of Marin *et al.* (2012, 2013) showed Pliocene divergences (as in over 2.5 MYA) for three of the newly named species and the nominate form of *L. bituberculatus.* The other species, being *L. ick sp. nov.*, *L. wellsandwellingtonorum sp. nov.* and *L. snakebustersorum sp. nov.* are isolated from each other and the other four species and separated by biogeographical barriers of known antiquity. Other reptile species similarly isolated, which have had molecular samples taken and cross-matched also had Pliocene divergences.

Distribution: *L. dishonestpoliceorum sp. nov.* is found in New South Wales, west of the Great Dividing Range, generally east of the main Darling River basin, extending from far north-east Victoria north to southern Queensland.

Etymology: *L. dishonestpoliceorum sp. nov.* is named in honor of the endemically corrupt New South Wales Police Force, generally known as "the best police force MONEY CAN BUY".

Wholly corrupt and wholly dishonest, this government department and the police officers themselves, pretty much down to the very last officer, is a lying, thieving, thug.

Most bash their wives when not bashing members of the public.

They routinely traffic illicit drugs to a cocaine addicted judiciary that they have full control over.

In the name of "road safety" they hound and harass

law-abiding citizens as they do such mundane things as drive to and from shops, taking kids to school or other simple day-to-day tasks.

Meanwhile the police and their protected mates hoon around roads, running over children, killing them and getting away with it.

Some years ago, I convinced a member of the New South Wales parliament named John Hatton to push for a change and an open public inquisition into the New South Wales Police Force.

Hatton, was a good politician and he kept his promise. When he could, he forced a Royal Commission into the New South Wales Police Force.

The so-called Wood Royal Commission got a few token scalps within the New South Wales Police Force, but then it was back to business as usual for the evil New South Wales Police Force.

Soviet style, the New South Wales Police Force regularly give members bravery awards, promote themselves non-stop in the State controlled media and the like.

Because they generally lie in court to convict innocent people of crimes they have not committed, it is the dishonesty of New South Wales Police that stands out as emblematic of the New South Wales Police Force. This is even more emblematic to most people than their non-stop violence against weak targets, including as already mentioned, their own wives or their control of the illicit drug trade, bribe taking and the like.

As the New South Wales Police Force clearly like honors bestowed upon themselves and their members, it is appropriate that a blind snake be named in their honor as *L. dishonestpoliceorum sp. nov.*.

Further relevant details about the New South Wales Police Force can be found in Hoser (1989, 1991, 1993, 1996, 1999a-b, 2000a-b).

LIBERTADICTUS RADIATIONZONE SP. NOV. LSIDurn:Isid:zoobank.org:act:DE774D9A-EBC8-43E6-A420-8F2933E41227

Holotype: A preserved specimen at the South Australian Museum, Adelaide, South Australia, Australia, specimen number R67495 collected from the Oak Valley Aboriginal Community School, Oak Valley, South Australia, Australia, Latitude -29.4022 S., Longitude 130.74 E.

This government-owned facility allows access to its holdings.

Diagnosis: Until now this species has been treated as an eastern population of "*Ramphotyphlops margaretae* Storr, 1981", herein placed in the genus *Libertadictus* Wells and Wellington, 1984.

L. margaretae has a type locality Lake Throssell, Western Australia, Latitude -27.25 S., Longitude 124.18 E. and a range extending at least 200 km to the south-east of there in Western Australia (Wilson and Swan 2021).

L. radiationzone sp. nov. is only known from a few specimens at the far eastern edge of the Great Victoria Desert in South Australia.

L. radiationzone sp. nov. is readily separated from *L. margaretae* by being a pinkish grey on top, rather than bluish purple and having a moderately trilobed snout versus only weakly trilobed. The boundary between dark upper and lighter below is relatively well-defined in *L. radiationzone sp. nov.* versus poorly defined in *L. margaretae*.

These two species are separated from all other seven species in the genus *Libertadictus* Wells and Wellington, 1984 by the fact that they have 18 midbody rows, versus 20 in all the other species.

The genus Libertadictus as defined here, is confined to species of Blind Snakes with the following suite of characters: A moderately dark, small, slender long-snouted Blind Snake up to 35 cm long with 20 or rarely 18, mid body scale rows and a nasal cleft proceeding from the second labial; snout strongly or moderately strongly trilobed as seen from above and slightly angular in profile. Tail is 1.5-3.3 percent of the total length, 414-485 ventrals, 11-18 subcaudals. From above the rostral is very much longer than wide and almost two thirds as wide as the head. The nostril is inferior, markedly swollen, much nearer to the rostral than the preocular. The nasal cleft extends obliquely upwards and forwards from the nostril to about midway between the nostril and the rostral. The upper surface is pinkish grey, bluish purple or a dark purplish brown, gradually merging with the whitish lower surface.

That the Great Victoria Desert and adjacent Nullarbor Plain to the south is a biogeographic barrier separating *L. radiationzone sp. nov.* and *L. margaretae* is confirmed by the abundance of and collection of other species of Blind Snake in that area (and excluding *L. radiationzone sp. nov.* and *L. margaretae*), most notably including the species *L. ick sp. nov.* as described in this paper, this formerly being the western South Australian and West Australian population of putative *L. bituberculatus* of central south-east South Australia (Type locality of Gawler, a short distance north-east of Adelaide in South Australia).

The large number of putative *L. bituberculatus* now known as *L. ick sp. nov.* as described in this paper that have been collected in the area between the distributions of *L. radiationzone sp. nov.* and *L. margaretae* confirms that the absence of specimens of *L. radiationzone sp. nov.* and *L. margaretae* is an artifact of absence of either species in the intervening area and the presence of a barrier, rather than an absence of collecting Blind Snakes by herpetologists. **Distribution:** *L. radiationzone sp. nov.* is only known from a few specimens at the far eastern edge of the Great Victoria Desert in South Australia.

Etymology: L. radiationzone sp. nov. is only known

from an area virtually at ground zero where the British Government did above ground nuclear weapons detonations from 1952 to 1963 in outback South Australia.

Oak Valley, the type locality for this taxon, is the only community of the Maralinga Tjarutja Aboriginal Council Local Government Area, South Australia. The population fluctuates, but a 2016 survey reported around 128 people inhabiting this radiation zone, mostly Aboriginals unable to afford to live anywhere else.

While there is no evidence of this taxon suffering as a result of the atomic bomb explosions at nearby Emu Field and Maralinga, both in easy walking distance of the Oak Valley village, the local indigenous Australian inhabitants of the Oak Valley Village certainly did. Many died of radiation caused diseases at the time of the atomic bomb explosions as clouds of radioactive dust settled on their homes.

Even decades later in the 2020's, birth deformities, cancers and other serious medical conditions plague the few surviving Aboriginals of the Maralinga Tjarutja tribe who remain in this general area, which explains why the local population is low and barely surviving. It is fitting that an etymology has a historical context and not necessarily one that does not always glorify those who did the raping, pillaging and "conquering". In this case a potentially unpleasant etymology stands as a historical reality check for some.

MANTYPHLOPS WOW SP. NOV.

LSIDurn:Isid:zoobank.org:act:B6A3F204-7001-4DCD-8EAF-BB9B1F01308C

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R108431 collected from 32 km north of the Ord River Crossing, Western Australia, Australia, Latitude -17.228611 S., Longitude 128.099444 E.

This government-owned facility allows access to its holdings.

Paratypes: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R152714 collected from the Purnululu National Park, Western Australia, Australia, Latitude -17.389722 S., Longitude 128.254722 E.

Diagnosis: Until now, the putative species *Mantyphlops guentheri* (Peters, 1865) has been treated as a wide-ranging taxon found from the West Kimberley district of Western Australia across the tropical north of Australia to Arnhem Land, Northern Territory.

The phylogeny of Marin *et al.* (2012, 2013) and numerous later ones, have confirmed that this putative species is in fact a species complex. The divergent West Kimberley taxon has been transferred to the new genus *But gen. nov.*, with a type species of *Ramphotyphlops howi* Storr, 1983. The type locality of *M. guentheri* (Peters, 1865) is given in his paper as "Nordaustralien", but his collector J. R. Elsey in fact obtained the type specimen from the lower Victoria River region of the Northern Territory.

This means that the nominate *M. guentheri* is from that region.

The divergent form from the Daly River / Darwin area is assignable to *Typhlops nigricauda* Boulenger, 1895, (now *M. nigricauda*) with a type locality of "Daly River, North Australia".

This leaves the forms from the Ord River basin, Upper Tanami Desert and upper Alligator Rivers region as those that are hitherto unnamed and herein formally named for the first time.

Mantyphlops wow sp. nov. is confined to the Ord River basin of far north-east Western Australia.

Mantyphlops yes sp. nov. is a taxon apparently confined to the far north of the Tanami Desert region in the west of the Northern Territory.

Mantyphlops donoteatit sp. nov. is a range-restricted endemic found mainly in the hillier parts of the Alligator Rivers drainage basin.

The five species, *Mantyphlops guentheri*, *M. nigricauda*, *Mantyphlops wow sp. nov.*, *Mantyphlops yes sp. nov.* and *Mantyphlops donoteatit sp. nov.* are separated from one another by the following character differences:

M. guentheri is a defined as follows:

Snout rounded, moderately projecting: nostrils lateral. Rostral nearly half the width of the head, broadly truncate posteriorly, extending to the level of the eyes; nasal incompletely divided, the cleft proceeding from the second labial; preocular present, narrower than the nasal or the ocular, in contact with the second and third labials; eyes distinct; prefrontal much enlarged; four upper labials. Diameter of body 60 times in the total length: tail is slightly longer than broad, ending in an obtuse point. 18 midbody rows. 525-580 ventrals, 10-15 subcaudals. Pale reddish brown above, whitish below; end of tail blackish, tip and top of snout yellowish brown (modified from Boulenger 1893, based on description of holotype and Storr, 1981 based on relevant specimens and viewing several live specimens).

M. nigricauda is readily separated from *M. guentheri* by having a dorsum without a reddish tinge, a tail that is ivory black and the snout and upper neck are dark brown to nearly black as a continuum, with a well-defined border at the back of this section.

M. donteatit sp. nov. is separated from the two preceding species by being a dark purplish brown on top, a slight greyish tinge throughout on top, a tail that is ivory black and the snout and upper neck are dark brown to nearly black as a continuum but with a poorly defined posterior border.

M. wow sp. nov. is separated from the three preceding species by the following combination of

characters:

Rostral from above is truncate oval, being a little longer than wide, a little more than half as wide as head and extending back to level of eyes or almost so. Nasals are widely separated behind the rostral. Frontal is much smaller than the prefrontal. Snout is short, rounded in profile and does not moderately project as seen in M. guentheri, M. nigricauda and M. donoteatit sp. nov.. Nostrils inferior, much nearer to the rostral than the preocular. Nasal cleft proceeding from second labial to the nostril, thence curving upwards and forwards for one-quarter to three guarters of the distance between the nostril and rostral. Tip of snout is a pale brown; rest of the head and neck is a slightly darker dark purplish brown, but not significantly darker than the body posterior to the head and neck. Caudal spine and around vent whitish or pale grey; rest of tail on the dorsum and often last few scale rows of body is brownishblack colour. Remaining dorsal surfaces are also purplish-brown, becoming paler on the lateral and ventral surfaces with an obvious demarcation on the lower flank (modified and amended from Storr, 1981, who's description was based mainly on this species). Forebody is barely lighter in colour than hind body (on top).

M. yes sp. nov. is similar in most respects to *M. wow sp. nov.* but is separated from that species by having an ivory-black tail end, a light pinkish-brown dorsum and a whitish tip of snout but otherwise with little differentiation in colour between head, neck and dorsum. Forebody is quite obviously lighter in colour than hind body (on top).

The preceding five species form the entirety of the genus *Mantyphlops* Hoser, 2013 as redefined in this paper. This genus has been split two ways, with the West Kimberley taxa placed in the genus *But gen. nov.*

Mantyphlops Hoser, 2013 species and those in the genus But gen. nov. are separated from all other Australian Blind Snakes by the following suite of characters: Brown to almost black above, merging on the lower flanks with the pale brown to creamish venter. The tail is blackish, as is often the snout or head. The snout is bluntly rounded from above and in profile, sometimes slightly angular or truncate. The nasal cleft isn't visible from above, or if so, only just, contacting the second labial below. Rostral is subcircular from above, scarcely to much longer than broad. 18 midbody rows. Body diameter 40-90 times in its length. Adults average 25 cm and don't exceed 40 cm.

Mantyphlops Hoser, 2013 species are separated from the morphologically similar genus *But gen. nov.* by having over 500 ventrals (versus usually 450-490 in *But gen. nov.*) and a black spot small eye, versus tiny and barely visible eye spot in *But gen. nov.*.

Mantyphlops wow sp. nov. is depicted in life online at:

https://www.inaturalist.org/observations/145822563 and

https://www.inaturalist.org/observations/26045346 and

https://www.inaturalist.org/observations/107938681 *M. nigricauda* is depicted in life in Wilson and Swan 2021 on page 531, second from bottom, from Edith Falls, Northern Territory photographed by Rob Valentic and online at:

https://www.flickr.com/photos/103027574@ N04/50861567226/

the specimen from Palmerston, Northern Territory, photographed by Luke Allen.

The phylogeny of Marin *et al.* (2012, 2013) showed that the five relevant species all diverged from one another around the Pliocene/Miocene boundary or roughly 5 MYA further supporting species-level recognition.

Distribution: *Mantyphlops wow sp. nov.* is confined to the Ord River basin of far north-east Western Australia.

Etymology: When searching for these snakes in a creek bed at night near Lake Argyle in 1983, I recruited the assistance of some Aboriginal children from the Miriwoong tribe. They weren't much help and it seemed that these kids apparently had no knowledge of Blind Snakes.

When I showed a child a live specimen that I had found and caught, he exclaimed "Wow" and that is the etymology for the species.

MANTYPHLOPS YES SP. NOV.

LSIDurn:Isid:zoobank.org:act:23454F5C-12FE-4443-966E-59B66FE382CB

Holotype: A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, specimen number R16488

collected from Top Springs, Northern Territory,

Australia, Latitude -16.533 S., Longitude 131.8 E.

This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, specimen number R27100 collected from Killarney Station, Victoria River Region, Northern Territory, Australia, Latitude -16.246 S., Longitude 131.83 E. **Diagnosis:** Until now, the putative species

Mantyphlops guentheri (Peters, 1865) has been treated as a wide-ranging taxon found from the West Kimberley district of Western Australia across the tropical north of Australia to Arnhem Land, Northern Territory.

The phylogeny of Marin *et al.* (2012, 2013) and numerous later ones, have confirmed that this putative species is in fact a species complex. The divergent West Kimberley taxon has been

transferred to the new genus But gen. nov., with a

type species of *Ramphotyphlops howi* Storr, 1983. The type locality of *M. guentheri* (Peters, 1865) is given in his paper as "Nordaustralien", but his collector J. R. Elsey in fact obtained the type specimen from the lower Victoria River region of the Northern Territory.

This means that the nominate *M. guentheri* is from that region.

The divergent form from the Daly River / Darwin area is assignable to *Typhlops nigricauda* Boulenger, 1895, (now *M. nigricauda*) with a type locality of "Daly River, North Australia".

This leaves the forms from the Ord River basin, Upper Tanami Desert and upper Alligator Rivers region as those that are hitherto unnamed and herein formally named for the first time.

Mantyphlops wow sp. nov. is confined to the Ord River basin of far north-east Western Australia.

Mantyphlops yes sp. nov. is a taxon apparently confined to the far north of the Tanami Desert region in the west of the Northern Territory.

Mantyphlops donoteatit sp. nov. is a range-restricted endemic found mainly in the hillier parts of the Alligator Rivers drainage basin.

The five species, *Mantyphlops guentheri*, *M. nigricauda*, *Mantyphlops wow sp. nov.*, *Mantyphlops yes sp. nov.* and *Mantyphlops donoteatit sp. nov.* are separated from one another by the following character differences:

M. guentheri is a defined as follows:

Snout rounded, moderately projecting: nostrils lateral. Rostral nearly half the width of the head, broadly truncate posteriorly, extending to the level of the eyes; nasal incompletely divided, the cleft proceeding from the second labial; preocular present, narrower than the nasal or the ocular, in contact with the second and third labials; eyes distinct; prefrontal much enlarged; four upper labials. Diameter of body 60 times in the total length: tail is slightly longer than broad, ending in an obtuse point. 18 midbody rows. 525-580 ventrals, 10-15 subcaudals. Pale reddish brown above, whitish below; end of tail blackish, tip and top of snout vellowish brown (modified from Boulenger 1893, based on description of holotype and Storr. 1981 based on relevant specimens and viewing several live specimens).

M. nigricauda is readily separated from *M. guentheri* by having a dorsum without a reddish tinge, a tail that is ivory black and the snout and upper neck are dark brown to nearly black as a continuum, with a well-defined border at the back of this section.

M. donteatit sp. nov. is separated from the two preceding species by being a dark purplish brown on top, a slight greyish tinge throughout on top, a tail that is ivory black and the snout and upper neck are dark brown to nearly black as a continuum but with a poorly defined posterior border.

M. wow sp. nov. is separated from the three

preceding species by the following combination of characters:

Rostral from above is truncate oval, being a little longer than wide, a little more than half as wide as head and extending back to level of eyes or almost so. Nasals are widely separated behind the rostral. Frontal is much smaller than the prefrontal. Snout is short, rounded in profile and does not moderately project as seen in M. guentheri, M. nigricauda and M. donoteatit sp. nov.. Nostrils inferior, much nearer to the rostral than the preocular. Nasal cleft proceeding from second labial to the nostril, thence curving upwards and forwards for one-quarter to three quarters of the distance between the nostril and rostral. Tip of snout is a pale brown; rest of the head and neck is a slightly darker dark purplish brown, but not significantly darker than the body posterior to the head and neck. Caudal spine and around vent whitish or pale grey; rest of tail on the dorsum and often last few scale rows of body is brownishblack colour. Remaining dorsal surfaces are also purplish brown, becoming paler on the lateral and ventral surfaces with an obvious demarcation on the lower flank (modified and amended from Storr, 1981, who's description was based mainly on this species). Forebody is barely lighter in colour than hind body (on top).

M. yes sp. nov. is similar in most respects to *M. wow sp. nov.* but is separated from that species by having an ivory-black tail end, a light pinkish-brown dorsum and a whitish tip of snout but otherwise with little differentiation in colour between head, neck and dorsum. Forebody is quite obviously lighter in colour than hind body (on top).

The preceding five species form the entirety of the genus *Mantyphlops* Hoser, 2013 as redefined in this paper. This genus has been split two ways, with the West Kimberley taxa placed in the genus *But gen. nov.*.

Mantyphlops Hoser, 2013 species and those in the genus *But gen. nov.* are separated from all other Australian Blind Snakes by the following suite of characters: Brown to almost black above, merging on the lower flanks with the pale brown to creamish venter. The tail is blackish, as is often the snout or head. The snout is bluntly rounded from above and in profile, sometimes slightly angular or truncate. The nasal cleft isn't visible from above, or if so, only just, contacting the second labial below. Rostral is subcircular from above, scarcely to much longer than broad. 18 midbody rows. Body diameter 40-90 times in its length. Adults average 25 cm and don't exceed 40 cm.

Mantyphlops Hoser, 2013 species are separated from the morphologically similar genus *But gen. nov.* by having over 500 ventrals (versus usually 450-490 in *But gen. nov.*) and a black spot small eye, versus tiny and barely visible eye spot in *But gen. nov.*. *Mantyphlops wow sp. nov.* is depicted in life online at: https://www.inaturalist.org/observations/145822563 and

https://www.inaturalist.org/observations/26045346 and

https://www.inaturalist.org/observations/107938681 *M. nigricauda* is depicted in life in Wilson and Swan 2021 on page 531, second from bottom, from Edith Falls, Northern Territory photographed by Rob Valentic and online at:

https://www.flickr.com/photos/103027574@ N04/50861567226/

Specimen from Palmerston, Northern Territory, photographed by Luke Allen.

The phylogeny of Marin *et al.* (2012, 2013) showed that the five relevant species all diverged from one another around the Pliocene/Miocene boundary or roughly 5 MYA further supporting species-level recognition.

Distribution: *Mantyphlops yes sp. nov.* is a taxon apparently confined to the far north of the Tanami Desert region in the west of the Northern Territory in the region of the headwaters of the Victoria River basin.

Etymology: I searched for these snakes driving down a road at night in the northern Tanami Desert in 1983 with fellow herpetologist Charles Acheson. He exclaimed to me "yes" when he saw one in the headlights of the car and hence the etymology.

MANTYPHLOPS DONTEATIT SP. NOV. LSIDurn:lsid:zoobank.org:act:EEFA3C88-F392-48E3-BA55-7958C5EFB88C

Holotype: A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, specimen number R05180 collected from Kapalga, South Alligator River area, Kakadu National Park, Northern Territory, Australia, Latitude -12.5 S., Longitude 132.5 E.

This government-owned facility allows access to its holdings.

Paratypes: Two preserved specimens from Jabiluka in Kakadu National Park, Northern Territory, Australia, Latitude -12.7083 S., Longitude 138.8333, being a specimen at the Australian National Wildlife Collection (Commonwealth Scientific and Industrial Research Organisation), Canberra, ACT, Australia, specimen number R03604 and a specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.88947.

Diagnosis: Until now, the putative species *Mantyphlops guentheri* (Peters, 1865) has been treated as a wide-ranging taxon found from the West Kimberley district of Western Australia across the tropical north of Australia to Arnhem Land, Northern Territory.

The phylogeny of Marin *et al.* (2012, 2013) and numerous later ones, have confirmed that this

putative species is in fact a species complex. The divergent West Kimberley taxon has been transferred to the new genus *But gen. nov.*, with a type species of *Ramphotyphlops howi* Storr, 1983. The type locality of *M. guentheri* (Peters, 1865) is given in his paper as "Nordaustralien", but his collector J. R. Elsey in fact obtained the type specimen from the lower Victoria River region of the Northern Territory.

This means that the nominate *M. guentheri* is from that region.

The divergent form from the Daly River / Darwin area is assignable to *Typhlops nigricauda* Boulenger, 1895, (now *M. nigricauda*) with a type locality of "Daly River, North Australia".

This leaves the forms from the Ord River basin, Upper Tanami Desert and upper Alligator Rivers region as those that are hitherto unnamed and herein formally named for the first time.

Mantyphlops wow sp. nov. is confined to the Ord River basin of far north-east Western Australia.

Mantyphlops yes sp. nov. is a taxon apparently confined to the far north of the Tanami Desert region in the west of the Northern Territory in the headwaters region of the Upper Victoria River.

Mantyphlops donoteatit sp. nov. is a range-restricted endemic found mainly in the hillier parts of the Alligator Rivers drainage basin.

The five species, *Mantyphlops guentheri*, *M. nigricauda*, *Mantyphlops wow sp. nov.*, *Mantyphlops yes sp. nov.* and *Mantyphlops donoteatit sp. nov.* are separated from one another by the following character differences:

M. guentheri is a defined as follows:

Snout rounded, moderately projecting: nostrils lateral. Rostral nearly half the width of the head, broadly truncate posteriorly, extending to the level of the eyes; nasal incompletely divided, the cleft proceeding from the second labial; preocular present, narrower than the nasal or the ocular, in contact with the second and third labials; eyes distinct; prefrontal much enlarged; four upper labials. Diameter of body 60 times in the total length: tail is slightly longer than broad, ending in an obtuse point. 18 midbody rows. 525-580 ventrals, 10-15 subcaudals. Pale reddish brown above, whitish below; end of tail blackish, tip and top of snout yellowish brown (modified from Boulenger 1893, based on description of holotype and Storr, 1981 based on relevant specimens and viewing several live specimens).

M. nigricauda is readily separated from *M. guentheri* by having a dorsum without a reddish tinge, a tail that is ivory black and the snout and upper neck are dark brown to nearly black as a continuum, with a well-defined border at the back of this section.

M. donteatit sp. nov. is separated from the two preceding species by being a dark purplish brown on top, a slight greyish tinge throughout on top, a tail

that is ivory black and the snout and upper neck are dark brown to nearly black as a continuum but with a poorly defined posterior border.

M. wow sp. nov. is separated from the three preceding species by the following combination of characters:

Rostral from above is truncate oval, being a little longer than wide, a little more than half as wide as head and extending back to level of eyes or almost so. Nasals are widely separated behind the rostral. Frontal is much smaller than the prefrontal. Snout is short, rounded in profile and does not moderately project as seen in M. guentheri, M. nigricauda and *M. donoteatit sp. nov.*. Nostrils inferior, much nearer to the rostral than the preocular. Nasal cleft proceeding from second labial to the nostril, thence curving upwards and forwards for one-quarter to three quarters of the distance between the nostril and rostral. Tip of snout is a pale brown; rest of the head and neck is a slightly darker dark purplish brown, but not significantly darker than the body posterior to the head and neck. Caudal spine and around vent whitish or pale grey; rest of tail on the dorsum and often last few scale rows of body is brownishblack colour. Remaining dorsal surfaces are also purplish-brown, becoming paler on the lateral and ventral surfaces with an obvious demarcation on the lower flank (modified and amended from Storr, 1981, who's description was based mainly on this species). Forebody is barely lighter in colour than hind body (on top).

M. yes sp. nov. is similar in most respects to *M. wow sp. nov.* but is separated from that species by having an ivory-black tail end, a light pinkish-brown dorsum and a whitish tip of snout but otherwise with little differentiation in colour between head, neck and dorsum. Forebody is quite obviously lighter in colour than hind body (on top).

The preceding five species form the entirety of the genus *Mantyphlops* Hoser, 2013 as redefined in this paper. This genus has been split two ways, with the West Kimberley taxa placed in the genus *But gen. nov.*

Mantyphlops Hoser, 2013 species and those in the genus *But gen. nov.* are separated from all other Australian Blind Snakes by the following suite of characters: Brown to almost black above, merging on the lower flanks with the pale brown to creamish venter. The tail is blackish, as is often the snout or head. The snout is bluntly rounded from above and in profile, sometimes slightly angular or truncate. The nasal cleft isn't visible from above, or if so, only just, contacting the second labial below. Rostral is subcircular from above, scarcely to much longer than broad. 18 midbody rows. Body diameter 40-90 times in its length. Adults average 25 cm and don't exceed 40 cm.

Mantyphlops Hoser, 2013 species are separated from

the morphologically similar genus *But gen. nov.* by having over 500 ventrals (versus usually 450-490 in *But gen. nov.*) and a black spot small eye, versus tiny and barely visible eye spot in *But gen. nov.*.

Mantyphlops wow sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/145822563 and

https://www.inaturalist.org/observations/26045346 and

https://www.inaturalist.org/observations/107938681 *M. nigricauda* is depicted in life in Wilson and Swan 2021 on page 531, second from bottom, from Edith Falls, Northern Territory photographed by Rob Valentic and online at:

https://www.flickr.com/photos/103027574@ N04/50861567226/

Specimen from Palmerston, Northern Territory, photographed by Luke Allen.

The phylogeny of Marin *et al.* (2012, 2013) showed that the five relevant species all diverged from one another around the Pliocene/Miocene boundary or roughly 5 MYA further supporting species-level recognition.

Distribution: *Mantyphlops donoteatit sp. nov.* is a range-restricted endemic found mainly in the hillier parts of the Alligator Rivers drainage basin of the north side of the west Arnhem Land escarpment.

Etymology: When discussing this snake with some of the Arnhem Land aboriginals of the Yolngu tribe, I was told in no uncertain terms "do not eat it" and hence the etymology.

SLOPPTYPHLOPS FLYINGFOAMMASSACRE SP. NOV.

LSIDurn:lsid:zoobank.org:act:DBD9C111-3933-4439-A672-FC9AFC3C5CC7

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R170658 collected from 31 km west southwest of Mount Elvire, Pilbara District, Western Australia, Australia, Latitude -21.873611 S., Longitude 116.5025 E.

This government-owned facility allows access to its holdings.

Paratypes: Five preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, being specimen numbers R110841 and R110842 both from 36.8 km south southeast of Pannawonnica, Western Australia, Australia, Latitude -21.941389 S., Longitude 116.453889 E., specimen number R110856 from 37.9 km south southeast of Pannawonnica, Western Australia, Australia, Latitude -21.948333 S., Longitude 116.463611 E., and specimen numbers R110847 and R110865 both from the Pannawonnica area of Western Australia, Australia, Australia, Australia, Australia, Latitude -21.948333 S., Longitude 116.463611 E., and specimen numbers R110847 and R110865 both from the Pannawonnica area of Western Australia, Australia, Australia, Latitude -21.951111 S., Longitude 116.465278 E.

Diagnosis: Until now, the putative species Typhlops

ammodytes Montague, 1914, with a type locality of Hermite Island, Monte Bello Islands, Western Australia, Australia, Latitude -20.4610 S., Longitude 115.5252 E., has been treated as a taxon found throughout the Pilbara district of Western Australia, including outlier ranges, otherwise closely associated with the putative taxon *Typhlops diversus* Waite, 1914, with a type locality of "Morven, Qld", but otherwise found from north western Queensland, across tropical Australia to the Kimberley district in Western Australia.

Cogger *et al.* (1983) synonymized the former with the latter, but most authors since have recognized both as separate taxa.

Hoser (2013a) recognized both and placed them in the genus *Sloppytyphlops* Hoser, 2013, being over 20 MYA divergent from all other Australian Blind Snakes based on the phylogeny of Marin *et al.* (2012). Although Hoser (2013a) treated *Sloppytyphlops* as a subgenus of *Anilios* Gray, 1845, *Sloppytyphlops* is herein treated as a full genus.

Hoser (2013a) also split the putative species *Typhlops ammodytes* Montague, 1914 into two, recognizing the far east Pilbara populations as different from the type form to the west, naming the new taxon, *S. richardwellsi* (Hoser, 2013a) with a type locality of about 80 km south of Telfer, Little Sandy Desert, Western Australia, Latitude -22.33 S., Longitude 122.06 E.

It has since become apparent that there are no less than 10 species in the "*ammodytes* complex" each apparently confined to mountain blocks and environs. Each appear to be allopatric and are separated from one another by watercourse basins, or otherwise featureless plains.

Whether the separation of allopatric populations has been caused by habitat constraints, including microclimate requirements, food constraints (as in availability), or some kind of predator is not known, but this is certainly worthy of scientific investigation as this is not the only clade of Blind Snakes in the Pilbara or elsewhere that have speciated across a wider previous distribution.

Eight clades are identified by Marin *et al.* (2012), including it appears the two species already named. Two geographically divergent populations, not sampled by Marin *et al.* (2012) being from the Cape Range and from the Barlee/Kenneth Ranges, both South of the main Pilbara area are also formally recognized herein as new species, as is the unsampled type form for "*Typhlops ammodytes*" giving a total of 11 species.

Marin *et al.* (2013) provided new evidence to show that the Barlee Ranges specimens were of a different species.

The eleven species recognized herein are as follows: The type form of *S. ammodytes*, is restricted to the type locality, being the Montebello Islands and

including Barrow Island.

S. richardwellsi Hoser, 2013 is the taxon found generally north and east of the Fortescue River. It is by far the most widespread species in the complex and the one encountered by most herpetologists who visit the Pilbara district. It is found in the region east of Newman and on the coast north of the Burrup Peninsula. There are two main lineages within this population, one from along the coast and the other from inland, but both are treated herein as a single species and no subspecies is named. It is believed the two clades diverged from one another between one and one and a half million years ago.

Exceptional to the north of the Fortescue River distribution of *S. richardwellsi* is the mainly allopatric species *S. timhudsoni sp. nov.* found south of the Burruup Peninsula along the Pilbara coast at least as far south as Cape Preston, and quite likely as far as the ocean outfall of the Fortescue River. *S. richardwellsi* and *S. timhudsoni sp. nov.* both occur around Karratha and are presumably sympatric in this immediate area.

S. flyingfoammassacre sp. nov. is an associated species, found south of the Fortescue River that occurs in the Pannawonnica area of the Pilbara extending at least as far east as Mount Elvira.

S. murderingpoliceorum sp. nov. is found south of the Cane River, generally around Mount Minnie and the nearby Parry Range, with a distribution bound by the Ashburton River to the south.

S. dhuae sp. nov. has a restricted range centered on Mount DeCoucey, which is in the region between the Red Hill Creek in the north and Cane River in the south, being at the far western edge of the Hamersley Ranges.

S. fildesi sp. nov. is found south of the Ashburton River in the Barlee Range and nearby hills, south of the Ashburton River and north of the flat lands further south.

S. exy sp. nov. is the taxon from the Cape Range district, being most similar to the two previously named species.

Within the main Hamersley Ranges and Chichester Range to the north-west are three other well-defined species.

S. johnpati sp. nov. is found in the Chichester Range district and immediately west only.

S. iancooki sp. nov. is found in the central Hamersley Ranges generally around Tom Price and Karijini National Park to the east.

S. *cashcow sp. nov.* is found from Weeli Wolli Creek east to the town of Newman and Fortescue River, in an area known as the Opthalmia Range.

While all the preceding species are morphologically very similar, they can all be separated from one another by the following character traits.

S. richardwellsi sp. nov. is closely related to the type form of *S. ammodytes* (Montague, 1914) as well as

the other 10 species, with which it has been confused. *S. richardwellsi sp. nov.* is most readily separated from some of the other species by tail length, being 2.5 to 4 percent of the total length with 13 to 18 subcaudals in *S. richardwellsi sp. nov.* and 1.4 to 2 percent of the total length with 8 to 12 subcaudals in nominate *S. ammodytes* (Montague, 1914) and all the other species except for *S. johnpati sp. nov.*, *S. iancooki sp. nov.* and *S. cashcow sp. nov.* which is intermediate in this respect.

S. richardwellsi sp. nov. has a tail that is noticeably longer than broad, rather than the same length as broad in all the other species.

The upper nasal is as broad as the rostral in *S. richardwellsi sp. nov.*. This is not quite the case in nominate *S. ammodytes* (Montague, 1914).

S. flyingfoammassacre sp. nov. is similar in most respects to *S. richardwellsi sp. nov.*, being the species it is most closely related to. It differs in the upper nasal not being as broad as the rostral and the scales around the snout between the eyes having semidistinct brown etching, versus distinct as seen in *S. richardwellsi sp. nov.*.

S. timhudsoni sp. nov. is similar in most respects to *S. richardwellsi sp. nov.*, and *S. flyingfoammassacre sp. nov.* being the two species they are most closely related to. It differs in the upper nasal not being as broad as the rostral and the scales around the snout between the eyes having not having brown etching, versus distinct as seen in *S. richardwellsi sp. nov.* or semi distinct as seen in *S. flyingfoammassacre sp. nov.*.

S. timhudsoni sp. nov. is further separated from *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.* by the fact that light whitish and brown marked scales of the snout are coloured this way back and beyond the line between the eyes, whereas this is not the case in *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.*.

Both *S. dhuae sp. nov.* and *S. murderingpoliceorum sp. nov.* are separated from the other ten species by having (as adults) a well-defined brownish coloured rostral, with a thick creamish coloured outline created by the nasal on either side, also brown edged on the outer edge.

S. murderingpoliceorum sp. nov. is separated from S. dhuae sp. nov. by the fact that the rostral barely touches the prefrontal, versus well connected in S. dhuae sp. nov..

S. murderingpoliceorum sp. nov. is further separated from the other ten species by having a dorsum that is not obviously pinkish in colour, but rather is purplish-brown. The head and collar are whitish on top (especially anteriorly), becoming light orange at the back of the head. The mid dorsum and tail region are a dark blackish brown. The blackish region distally commences well on the body and anterior to the ventral area.

S. fildesi sp. nov. is separated from the other 10 species by having a slight light orange tinge to the dorsum, dark brown on the lower neck, mid body and tail region, no lighter scales on the dark tipped tail region dorsal surface and a frontal shield that has a strongly curved edge going up the snout.

S. exy sp. nov. is separated from the other ten species by having a slight beige to yellow brown tinge underlying the purplish-brown dorsum. The dorsum is light beige anterior to the eyes, light orange about two times this distance behind the eyes, including the anterior neck, dark brown beyond this, but fading on the lower neck and anterior body, before darkening along the mid part of the dorsum. Posteriorly the dorsum lightens again, before becoming blackish near the tail region and including some of the body anterior to the tail. There are some obvious lighter scales on the dark tipped tail region dorsal surface, near the tail point. The frontal shield is weakly curved edged going up the snout.

S. johnpati sp. nov., S. iancooki sp. nov. and S. cashcow sp. nov. as a trio are separated from the other eight species by their relatively larger eye spot. It also sits at the back of the ocular scale, versus centre or slightly anterior in the other species.

The three species are also characterized by being a dark purplish-pink colour overall on top. The tip of the snout is a whitish colour, becoming light brown over the main part of the head and extending well past the eyes.

S. iancooki sp. nov. is separated from *S. johnpati sp. nov.* and *S. cashcow sp. nov.* by the fact that adults retain tiny white or whitish spots in the centres of all or most dorsal scales, versus not so in the other two species. Both *S. johnpati sp. nov.* and *S. iancooki sp. nov.* have a rostral that is well joined to the prefrontal, versus only just touching at the centre in *S. cashcow sp. nov.*.

S. johnpati sp. nov. is of similar colour intensity dorsally along its entire length. *S. iancooki sp. nov.* is a slightly darker purplish colour on the lower neck and tail regions above.

S. cashcow sp. nov. has an obvious dark purplish brown colour on the lower neck, mid-section and tail region, with scattered dull white spotting on the posterior flanks of the tail section, all being distinguishable from the dark purplish-pink colour overall on top.

The eleven preceding species are separated from all other Australian Blind Snakes by the following characteristics: a small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals. These 11 species are separated from the similar *S. diversus* (Waite, 1894) clade of nine species as identified and named in this paper that as a group occurs in the Kimberley region, tropics of Australia and including nearby drier areas to far north-west Queensland by the shape of the rostral, being narrower and concave-sided versus straightsided from above in the *S. diversus* (Waite, 1894) clade of species.

The eleven preceding species also have a more vertical orientation of the nasal cleft as opposed to extending forward to approximately the rostral in the *S. diversus* (Waite, 1894) clade of species. The molecular phylogeny of Marin *et al.* (2012) showed 8 of 11 species being divergent from one another by more than 1.8 MYA as a minimum and

most over 2.5 MYA divergent. The phylogeny of Marin *et al.* (2012) found that the species *S. flyingfoammassacre sp. nov.* and *S. richardwellsi* Hoser, 2013 as nearest relatives diverged about 2 MYA.

The three unsampled taxa, included *S. fildesi sp. nov.* and *S. exy sp. nov.*, both of which are found in areas known for endemism and separated by well-defined biogeographical barriers to the other taxa. They are also likely to have diverged from nearest relatives in excess of 2 MYA.

The third unsampled taxon, is the type form from Barrow Island and the Montebello Group, which while connected to the Pilbara mainland in the recent past (as in the last 15 K years), does not have any obvious pathway linking the population to any other, based on sea depth topography and geology and is therefore regarded as specifically distinct from geographically proximal mainland Pilbara species populations. *S. richardwellsi* Hoser, 2013 of the east and north Pilbara is depicted in life in Cogger (2014) on page 795 at top and online at:

https://arod.com.au/arod/reptilia/Squamata/ Typhlopidae/Anilios/ammodytes

from Gorge Range, Western Australia, photographed by Ray Lloyd and

https://pbase.com/austrelaps/image/155160982 from Marble Bar, Western Australia, photographed by Ray Lloyd and

https://www.flickr.com/photos/ euprepiosaur/46257416015/ from near Port Hedland, Western Australia, photographed by Stephen Zozaya, and

https://www.flickr.com/photos/

reptileshots/46214586145/ from the north Pilbara, Western Australia, photographed by Brendan Schembri, and

https://www.flickr.com/photos/127392361@ N04/54009573192/

from Sandfire Flat, Western Australia, photographed by Nick Gale and

https://www.flickr.com/photos/114192916@ N07/54042538129/

from Sandfire Flat, Western Australia, photographed

by Justin Wright, and

https://www.flickr.com/photos/brian_

busho/49353479918/

from Shay Gap, Western Australia, photographed by Brian Bush and

https://www.flickr.com/photos/brian_

busho/49353482343/

from Shay Gap, Western Australia, photographed by Brian Bush, and

https://www.flickr.com/photos/brian_ busho/49354080512/

bush0/49354080512/

from Shay Gap, Western Australia, photographed by Brian Bush.

S. murderingpoliceorum sp. nov. as in the Cape Range species, is depicted in life in Wilson and Swan (2021) page 525 at middle from Bullara Station, Western Australia, photographed by Steve Wilson.

S. inacooki sp. nov. of the central Hamersley District is depicted in life online at:

https://www.flickr.com/photos/171250498@ N08/52511160144/

from Karijini National Park, Western Australia, photographed by Wes Read, and

https://www.flickr.com/photos/

reptileshots/52841144784/

from Karijini National Park, Western Australia, photographed by Brendan Schembri, and https://www.flickr.com/photos/58349528@ N02/52906663519/

from Karijini National Park, Western Australia,

photographed by Jordan Mulder

Distribution: *S. flyingfoammassacre sp. nov.* is found south of the Fortescue River and occurs in the Pannawonnica area of the Pilbara extending at least

as far east as Mount Elvira.

Etymology: *S. flyingfoammassacre sp. nov.* is named in memory of the Flying Foam Massacre.

The Flying Foam Massacre occurred in February of 1868, and was not a singular event, but a

sequence of murders carried out by British invaders against the local Yaburara (Aboriginal) people. It occurred around King Bay and the Flying Foam Passage (Burrup Peninsula, Karratha region of the Pilbara, Western Australia) over the course of three or four days.

SLOPPTYPHLOPS TIMHUDSONI SP. NOV. LSIDurn:lsid:zoobank.org:act:CC29D430-4038-4577-864A-42ACD7B9475E

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R141306 collected from the Cape Preston area, Pilbara District, Western Australia, Australia, Latitude -21.015278 S., Longitude 116.187222 E.

This government-owned facility allows access to its holdings.

Paratypes: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R141313 collected from the Cape Preston area, Pilbara District, Western Australia, Australia, Latitude -20.911389 S., Longitude 116.192222 E.

Diagnosis: Until now, the putative species *Typhlops ammodytes* Montague, 1914, with a type locality of Hermite Island, Monte Bello Islands, Western Australia, Australia, Latitude -20.4610 S., Longitude 115.5252 E., has been treated as a taxon found throughout the Pilbara district of Western Australia, including outlier ranges, otherwise closely associated with the putative taxon *Typhlops diversus* Waite, 1914, with a type locality of "Morven, Qld", but otherwise found from north western Queensland, across tropical Australia to the Kimberley district in Western Australia.

Cogger *et al.* (1983) synonymized the former with the latter, but most authors since have recognized both as separate taxa.

All are herein placed in the genus *Sloppytyphlops* Hoser, 2013, being over 20 MYA divergent from all other Australian Blind Snakes based on the phylogeny of Marin *et al.* (2012 and 2013).

The putative species *Typhlops ammodytes* Montague, 1914 is herein treated as 11 separate species.

The eleven species recognized herein are as follows: The type form of *S. ammodytes*, is restricted to the type locality, being the Montebello Islands and including Barrow Island.

S. richardwellsi Hoser, 2013 is the taxon found generally north and east of the Fortescue River. It is by far the most widespread species in the complex and the one encountered by most herpetologists who visit the Pilbara district. It is found in the region east of Newman and on the coast north of the Burrup Peninsula. There are two main lineages within this population, one from along the coast and the other from inland, but both are treated herein as a single species and no subspecies is named. It is believed the two clades diverged from one another between one and one and a half million years ago.

Exceptional to the north of the Fortescue River distribution of *S. richardwellsi* is the mainly allopatric species *S. timhudsoni sp. nov.* found south of the Burruup Peninsula along the Pilbara coast at least as far south as Cape Preston, and quite likely as far as the ocean outfall of the Fortescue River. *S. richardwellsi* and *S. timhudsoni sp. nov.* both occur around Karratha and are presumably sympatric in this immediate area.

S. flyingfoammassacre sp. nov. is an associated species, found south of the Fortescue River that occurs in the Pannawonnica area of the Pilbara extending at least as far east as Mount Elvira.

S. murderingpoliceorum sp. nov. is found south of the Cane River, generally around Mount Minnie and the

nearby Parry Range, with a distribution bound by the Ashburton River to the south.

S. dhuae sp. nov. has a restricted range centered on Mount DeCoucey, which is in the region between the Red Hill Creek in the north and Cane River in the south, being at the far western edge of the Hamersley Ranges.

S. fildesi sp. nov. is found south of the Ashburton River in the Barlee Range and nearby hills, south of the Ashburton River and north of the flat lands further south.

S. exy sp. nov. is the taxon from the Cape Range district, being most similar to the two previously named species.

Within the main Hamersley Ranges and Chichester Range to the north-west are three other well-defined species.

S. johnpati sp. nov. is found in the Chichester Range district and immediately west only.

S. iancooki sp. nov. is found in the central Hamersley Ranges generally around Tom Price and Karijini National Park to the east.

S. cashcow sp. nov. is found from Weeli Wolli Creek east to the town of Newman and Fortescue River, in an area known as the Opthalmia Range.

While all the preceding species are morphologically very similar, they can all be separated from one another by the following character traits.

S. richardwellsi sp. nov. is closely related to the type form of *S. ammodytes* (Montague, 1914) as well as the other 10 species, with which it has been confused. *S. richardwellsi sp. nov.* is most readily separated from some of the other species by tail length, being 2.5 to 4 percent of the total length with 13 to 18 subcaudals in *S. richardwellsi sp. nov.* and 1.4 to 2 percent of the total length with 8 to 12 subcaudals in nominate *S. ammodytes* (Montague, 1914) and all the other species except for *S. johnpati sp. nov.*, *S. iancooki sp. nov.* and *S. cashcow sp. nov.* which is intermediate in this respect.

S. richardwellsi sp. nov. has a tail that is noticeably longer than broad, rather than the same length as broad in all the other species.

The upper nasal is as broad as the rostral in *S. richardwellsi sp. nov.*. This is not quite the case in nominate *S. ammodytes* (Montague, 1914).

S. flyingfoammassacre sp. nov. is similar in most respects to *S. richardwellsi sp. nov.*, being the species it is most closely related to. It differs in the upper nasal not being as broad as the rostral and the scales around the snout between the eyes having semidistinct brown etching, versus distinct as seen in *S. richardwellsi sp. nov.*.

S. timhudsoni sp. nov. is similar in most respects to *S. richardwellsi sp. nov.*, and *S. flyingfoammassacre sp. nov.* being the two species they are most closely related to. It differs in the upper nasal not being as broad as the rostral and the scales around the snout

between the eyes having not having brown etching, versus distinct as seen in *S. richardwellsi sp. nov.* or semi distinct as seen in *S. flyingfoammassacre sp. nov.*.

S. timhudsoni sp. nov. is further separated from *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.* by the fact that light whitish and brown marked scales of the snout are coloured this way back and beyond the line between the eyes, whereas this is not the case in *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.*.

Both *S. dhuae sp. nov.* and *S. murderingpoliceorum sp. nov.* are separated from the other ten species by having (as adults) a well-defined brownish coloured rostral, with a thick creamish coloured outline created by the nasal on either side, also brown edged on the outer edge.

S. murderingpoliceorum sp. nov. is separated from *S. dhuae sp. nov.* by the fact that the rostral barely touches the prefrontal, versus well connected in *S. dhuae sp. nov.*.

S. murderingpoliceorum sp. nov. is further separated from the other ten species by having a dorsum that is not obviously pinkish in colour, but rather is purplish-brown. The head and collar are whitish on top (especially anteriorly), becoming light orange at the back of the head. The mid dorsum and tail region are a dark blackish brown. The blackish region distally commences well on the body and anterior to the ventral area.

S. fildesi sp. nov. is separated from the other 10 species by having a slight light orange tinge to the dorsum, dark brown on the lower neck, mid body and tail region, no lighter scales on the dark tipped tail region dorsal surface and a frontal shield that has a strongly curved edge going up the snout.

S. exy sp. nov. is separated from the other ten species by having a slight beige to yellow brown tinge underlying the purplish-brown dorsum. The dorsum is light beige anterior to the eyes, light orange about two times this distance behind the eyes, including the anterior neck, dark brown beyond this, but fading on the lower neck and anterior body, before darkening along the mid part of the dorsum. Posteriorly the dorsum lightens again, before becoming blackish near the tail region and including some of the body anterior to the tail. There are some obvious lighter scales on the dark tipped tail region dorsal surface, near the tail point. The frontal shield is weakly curved edged going up the snout.

S. johnpati sp. nov., S. iancooki sp. nov. and S. cashcow sp. nov. as a trio are separated from the other eight species by their relatively larger eye spot. It also sits at the back of the ocular scale, versus centre or slightly anterior in the other species.

The three species are also characterized by being a dark purplish-pink colour overall on top. The tip of the snout is a whitish colour, becoming light brown over

the main part of head and extending well past eyes. *S. iancooki sp. nov.* is separated from *S. johnpati sp. nov.*, and *S. cashcow sp. nov.* by the fact that adults retain tiny white or whitish spots in the centres of all or most dorsal scales, versus not so in the other two species. Both *S. johnpati sp. nov.* and *S. iancooki sp. nov.* have a rostral that is well joined to the prefrontal, versus only just touching at the centre in *S. cashcow sp. nov.*.

S. johnpati sp. nov. is of similar colour intensity dorsally along its entire length. *S. iancooki sp. nov.* is a slightly darker purplish colour on the lower neck and tail regions above.

S. cashcow sp. nov. has an obvious dark purplish brown colour on the lower neck, mid-section and tail region, with scattered dull white spotting on the posterior flanks of the tail section, all being distinguishable from the dark purplish-pink colour overall on top.

The eleven preceding species are separated from all other Australian Blind Snakes by the following characteristics: a small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals. These 11 species are separated from the similar S. diversus (Waite, 1894) clade of nine species as identified and named in this paper that as a group occurs in the Kimberley region, tropics of Australia and including nearby drier areas to far north-west Queensland by the shape of the rostral, being narrower and concave-sided versus straightsided from above in the S. diversus (Waite, 1894) clade of species.

The eleven preceding species also have a more vertical orientation of the nasal cleft as opposed to extending forward to approximately the rostral in the *S. diversus* (Waite, 1894) clade of species. The phylogeny of Marin *et al.* (2012) found that the species *S. timhudsoni sp. nov.* diverged from its nearest relatives, being *S. flyingfoammassacre sp. nov.* and *S. richardwellsi* Hoser, 2013 about 2.5 MYA. Further relevant information and detail in terms of this description is provided within the formal description of *S. flyingfoammassacre sp. nov.* preceding this description and relied on as part of this description. **Distribution:** *S. timhudsoni sp. nov.* is found south of the Burruup Peninsula along the Pilbara coast at least as far south as Cape Preston, and guite likely as far

south near the coast as far as the ocean outfall of the Fortescue River.

Etymology: *S. timhudsoni sp. nov.* is named in honor of Timothy Hudson of Hudson's Snake Catching, at Gilston, Gold Coast, Queensland, Australia in recognition of his services to wildlife conservation in Australia.

SLOPPTYPHLOPS MURDERINGPOLICEORUM SP. NOV.

LSIDurn:lsid:zoobank.org:act:EA6DB739-C71A-44DF-A1E1-FD1B4FC78B6A

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R139430 collected from the Mount Minnie homestead, Western Australia, Australia, Latitude -22.033333 S., Longitude 115.466667 E.

This government-owned facility allows access to its holdings.

Paratypes: Three preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, being specimen number R170620 collected from 17 km northwest of Peedamulla Homestead, Western Australia, Australia, Latitude -21.791389 S., Longitude 115.464167 E., specimen number R161994 collected from 1 km southeast of Mount Murray, Western Australia, Australia, Latitude -22.498333 S., Longitude 115.558056 E., and specimen number R162018 collected from 21.5 km northeast of Mount Mary, Western Australia, Australia, Australia, Latitude -22.255278 S., Longitude 115.436389 E.

Diagnosis: Until now, the putative species *Typhlops ammodytes* Montague, 1914, with a type locality of Hermite Island, Monte Bello Islands, Western Australia, Australia, Latitude -20.4610 S., Longitude 115.5252 E., has been treated as a taxon found throughout the Pilbara district of Western Australia, including outlier ranges, otherwise closely associated with the putative taxon *Typhlops diversus* Waite, 1914, with a type locality of "Morven, Qld", but otherwise found from north western Queensland, across tropical Australia to the Kimberley district in Western Australia.

Cogger *et al.* (1983) synonymized the former with the latter, but most authors since have recognized both as separate taxa.

All are herein placed in the genus *Sloppytyphlops* Hoser, 2013, being over 20 MYA divergent from all other Australian Blind Snakes based on the phylogeny of Marin *et al.* (2012 and 2013).

The putative species *Typhlops ammodytes* Montague, 1914 is herein treated as 11 separate species.

The eleven species recognized herein are as follows: The type form of *S. ammodytes*, is restricted to the type locality, being the Montebello Islands and including Barrow Island.

S. richardwellsi Hoser, 2013 is the taxon found generally north and east of the Fortescue River. It is by far the most widespread species in the complex and the one encountered by most herpetologists who visit the Pilbara district. It is found in the region east of Newman and on the coast north of the Burrup Peninsula. There are two main lineages within this population, one from along the coast and the other from inland, but both are treated herein as a single

species and no subspecies is named. It is believed the two clades diverged from one another between one and one and a half million years ago.

Exceptional to the north of the Fortescue River distribution of *S. richardwellsi* is the mainly allopatric species *S. timhudsoni sp. nov.* found south of the Burruup Peninsula along the Pilbara coast at least as far south as Cape Preston, and quite likely as far as the ocean outfall of the Fortescue River. *S. richardwellsi* and *S. timhudsoni sp. nov.* both occur around Karratha and are presumably sympatric in this immediate area.

S. flyingfoammassacre sp. nov. is an associated species, found south of the Fortescue River that occurs in the Pannawonnica area of the Pilbara extending at least as far east as Mount Elvira.

S. murderingpoliceorum sp. nov. is found south of the Cane River, generally around Mount Minnie and the nearby Parry Range, with a distribution bound by the Ashburton River to the south.

S. dhuae sp. nov. has a restricted range centered on Mount DeCoucey, which is in the region between the Red Hill Creek in the north and Cane River in the south, being at the far western edge of the Hamersley Ranges.

S. fildesi sp. nov. is found south of the Ashburton River in the Barlee Range and nearby hills, south of the Ashburton River and north of the flat lands further south.

S. exy sp. nov. is the taxon from the Cape Range district, being most similar to the two previously named species.

Within the main Hamersley Ranges and Chichester Range to the north-west are three other well-defined species.

S. johnpati sp. nov. is found in the Chichester Range district and immediately west only.

S. iancooki sp. nov. is found in the central Hamersley Ranges generally around Tom Price and Karijini National Park to the east.

S. cashcow sp. nov. is found from Weeli Wolli Creek east to the town of Newman and Fortescue River, in an area known as the Opthalmia Range.

While all the preceding species are morphologically very similar, they can all be separated from one another by the following character traits.

S. richardwellsi sp. nov. is closely related to the type form of *S. ammodytes* (Montague, 1914) as well as the other 10 species, with which it has been confused. *S. richardwellsi sp. nov.* is most readily separated from some of the other species by tail length, being 2.5 to 4 percent of the total length with 13 to 18 subcaudals in *S. richardwellsi sp. nov.* and 1.4 to 2 percent of the total length with 8 to 12 subcaudals in nominate *S. ammodytes* (Montague, 1914) and all the other species except for *S. johnpati sp. nov.*, *S. iancooki sp. nov.* and *S. cashcow sp. nov.* which is intermediate in this respect.

S. richardwellsi sp. nov. has a tail that is noticeably longer than broad, rather than the same length as broad in all the other species.

The upper nasal is as broad as the rostral in *S. richardwellsi sp. nov.*. This is not quite the case in nominate *S. ammodytes* (Montague, 1914).

S. flyingfoammassacre sp. nov. is similar in most respects to *S. richardwellsi sp. nov.*, being the species it is most closely related to. It differs in the upper nasal not being as broad as the rostral and the scales around the snout between the eyes having semi-distinct brown etching, versus distinct as seen in *S. richardwellsi sp. nov.*.

S. timhudsoni sp. nov. is similar in most respects to *S. richardwellsi sp. nov.*, and *S. flyingfoammassacre sp. nov.* being the two species they are most closely related to. It differs in the upper nasal not being as broad as the rostral and the scales around the snout between the eyes having not having brown etching, versus distinct as seen in *S. richardwellsi sp. nov.* or semi distinct as seen in *S. flyingfoammassacre sp. nov.*.

S. timhudsoni sp. nov. is further separated from *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.* by the fact that light whitish and brown marked scales of the snout are coloured this way back and beyond the line between the eyes, whereas this is not the case in *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.*.

Both *S. dhuae sp. nov.* and *S. murderingpoliceorum sp. nov.* are separated from the other ten species by having (as adults) a well-defined brownish coloured rostral, with a thick creamish coloured outline created by the nasal on either side, also brown edged on the outer edge.

S. murderingpoliceorum sp. nov. is separated from *S. dhuae sp. nov.* by the fact that the rostral barely touches the prefrontal, versus well connected in *S. dhuae sp. nov.*.

S. murderingpoliceorum sp. nov. is further separated from the other ten species by having a dorsum that is not obviously pinkish in colour, but rather is purplish-brown. The head and collar are whitish on top (especially anteriorly), becoming light orange at the back of the head. The mid dorsum and tail region are a dark blackish brown. The blackish region distally commences well on the body and anterior to the ventral area.

S. fildesi sp. nov. is separated from the other 10 species by having a slight light orange tinge to the dorsum, dark brown on the lower neck, mid body and tail region, no lighter scales on the dark tipped tail region dorsal surface and a frontal shield that has a strongly curved edge going up the snout. S. exy sp. nov. is separated from the other ten

species by having a slight beige to yellow brown tinge underlying the purplish-brown dorsum. The dorsum is light beige anterior to the eyes, light orange about

two times this distance behind the eyes, including the anterior neck, dark brown beyond this, but fading on the lower neck and anterior body, before darkening along the mid part of the dorsum. Posteriorly the dorsum lightens again, before becoming blackish near the tail region and including some of the body anterior to the tail. There are some obvious lighter scales on the dark tipped tail region dorsal surface, near the tail point. The frontal shield is weakly curved edged going up the snout.

S. johnpati sp. nov., S. iancooki sp. nov. and S. cashcow sp. nov. as a trio are separated from the other eight species by their relatively larger eye spot. It also sits at the back of the ocular scale, versus centre or slightly anterior in the other species.

The three species are also characterized by being a dark purplish-pink colour overall on top. The tip of the snout is a whitish colour, becoming light brown over the main part of the head and extending well past the eyes.

S. iancooki sp. nov. is separated from *S. johnpati sp. nov.*, and *S. cashcow sp. nov.* by the fact that adults retain tiny white or whitish spots in the centres of all or most dorsal scales, versus not so in the other two species. Both *S. johnpati sp. nov.* and *S. iancooki sp. nov.* have a rostral that is well joined to the prefrontal, versus only just touching at the centre in *S. cashcow sp. nov.*.

S. johnpati sp. nov. is of similar colour intensity dorsally along its entire length. *S. iancooki sp. nov.* is a slightly darker purplish colour on the lower neck and tail regions above.

S. cashcow sp. nov. has an obvious dark purplish brown colour on the lower neck, mid-section and tail region, with scattered dull white spotting on the posterior flanks of the tail section, all being distinguishable from the dark purplish-pink colour overall on top.

The eleven preceding species are separated from all other Australian Blind Snakes by the following characteristics: a small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals. These 11 species are separated from the similar S. diversus (Waite, 1894) clade of nine species as identified and named in this paper that as a group occurs in the Kimberley region, tropics of Australia and including nearby drier areas to far north-west Queensland by the shape of the rostral, being narrower and concave-sided versus straightsided from above in the S. diversus (Waite, 1894) clade of species.

The eleven preceding species also have a more vertical orientation of the nasal cleft as opposed to extending forward to approximately the rostral in the *S. diversus* (Waite, 1894) clade of species. The phylogeny of Marin *et al.* (2012) found that the species *S. murderingpoliceorum sp. nov.* and *S. dhuae sp. nov.* as closest relatives, diverged from one another about 2 MYA.

In turn this species pair diverged other nearest nearest relatives, being *S. timhudsoni sp. nov.*, *S. flyingfoammassacre sp. nov.* and *S. richardwellsi* Hoser, 2013 about 3 MYA.

Further relevant information and detail in terms of this description is provided within the formal description of *S. flyingfoammassacre sp. nov.* preceding this description and relied explicitly as part of this formal description.

Distribution: *S. murderingpoliceorum sp. nov.* is found south of the Cane River, generally around Mount Minnie and the nearby Parry Range, with a distribution bound by the Ashburton River to the south.

Etymology: *S. murderingpoliceorum sp. nov.* is named in recognition of the many racist and corrupt police officers in the fascist state of Australia, including in Western Australia, best known for unlawfully murdering native Aboriginal Australians. However, police officers in Australia, better described as paid government thugs rather than law enforcement officers as they like to characterize themselves are also not averse to murdering "white" Australians they see as in their way or otherwise putting their various criminal enterprises at risk. For further details see Hoser (1991, 1993, 1999a-b, 2000a-b).

SLOPPTYPHLOPS DHUAE SP. NOV. LSIDurn:lsid:zoobank.org:act:C952B156-F447-4741-B630-6F02980F8C9F

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R162120 collected from 16 km west of Mount De Courcey, Western Australia, Australia, Latitude -22.74 S., Longitude 116.461111 E. This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R162149 collected from 16 km west of Mount De Courcey, Western Australia, Australia, Latitude -22.74 S., Longitude 116.461111 E. Diagnosis: Until now, the putative species Typhlops ammodytes Montague, 1914, with a type locality of Hermite Island, Monte Bello Islands, Western Australia, Australia, Latitude -20.4610 S., Longitude 115.5252 E., has been treated as a taxon found throughout the Pilbara district of Western Australia, including outlier ranges, otherwise closely associated with the putative taxon Typhlops diversus Waite, 1914, with a type locality of "Morven, Qld", but otherwise found from north western Queensland, across tropical Australia to the Kimberley district in

Western Australia.

Cogger *et al.* (1983) synonymized the former with the latter, but most authors since have recognized both as separate taxa.

All are herein placed in the genus *Sloppytyphlops* Hoser, 2013, being over 20 MYA divergent from all other Australian Blind Snakes based on the phylogeny of Marin *et al.* (2012).

The putative species *Typhlops ammodytes* Montague, 1914 is herein treated as 11 separate species.

The eleven species recognized herein are as follows: The type form of *S. ammodytes*, is restricted to the type locality, being the Montebello Islands and including Barrow Island.

S. richardwellsi Hoser, 2013 is the taxon found generally north and east of the Fortescue River. It is by far the most widespread species in the complex and the one encountered by most herpetologists who visit the Pilbara district. It is found in the region east of Newman and on the coast north of the Burrup Peninsula. There are two main lineages within this population, one from along the coast and the other from inland, but both are treated herein as a single species and no subspecies is named. It is believed the two clades diverged from one another between one and one and a half million years ago.

Exceptional to the north of the Fortescue River distribution of *S. richardwellsi* is the mainly allopatric species *S. timhudsoni sp. nov.* found south of the Burruup Peninsula along the Pilbara coast at least as far south as Cape Preston, and quite likely as far as the ocean outfall of the Fortescue River. *S. richardwellsi* and *S. timhudsoni sp. nov.* both occur around Karratha and are presumably sympatric in this immediate area.

S. flyingfoammassacre sp. nov. is an associated species, found south of the Fortescue River that occurs in the Pannawonnica area of the Pilbara extending at least as far east as Mount Elvira.

S. murderingpoliceorum sp. nov. is found south of the Cane River, generally around Mount Minnie and the nearby Parry Range, with a distribution bound by the Ashburton River to the south.

S. dhuae sp. nov. has a restricted range centered on Mount DeCoucey, which is in the region between the Red Hill Creek in the north and Cane River in the south, being at the far western edge of the Hamersley Ranges.

S. fildesi sp. nov. is found south of the Ashburton River in the Barlee Range and nearby hills, south of the Ashburton River and north of the flat lands further south.

S. exy sp. nov. is the taxon from the Cape Range district, being most similar to the two previously named species.

Within the main Hamersley Ranges and Chichester Range to the north-west are three other well-defined species. *S. johnpati sp. nov.* is found in the Chichester Range district and immediately west only.

S. iancooki sp. nov. is found in the central Hamersley Ranges generally around Tom Price and Karijini National Park to the east.

S. cashcow sp. nov. is found from Weeli Wolli Creek east to the town of Newman and Fortescue River, in an area known as the Opthalmia Range.

While all the preceding species are morphologically very similar, they can all be separated from one another by the following character traits.

S. richardwellsi sp. nov. is closely related to the type form of *S. ammodytes* (Montague, 1914) as well as the other 10 species, with which it has been confused. *S. richardwellsi sp. nov.* is most readily separated from some of the other species by tail length, being 2.5 to 4 percent of the total length with 13 to 18 subcaudals in *S. richardwellsi sp. nov.* and 1.4 to 2 percent of the total length with 8 to 12 subcaudals in nominate *S. ammodytes* (Montague, 1914) and all the other species except for *S. johnpati sp. nov.*, *S. iancooki sp. nov.* and *S. cashcow sp. nov.* which is intermediate in this respect.

S. richardwellsi sp. nov. has a tail that is noticeably longer than broad, rather than the same length as broad in all the other species.

The upper nasal is as broad as the rostral in *S. richardwellsi sp. nov.*. This is not quite the case in nominate *S. ammodytes* (Montague, 1914).

S. flyingfoammassacre sp. nov. is similar in most respects to *S. richardwellsi sp. nov.*, being the species it is most closely related to. It differs in the upper nasal not being as broad as the rostral and the scales around the snout between the eyes having semi-distinct brown etching, versus distinct as seen in *S. richardwellsi sp. nov.*.

S. timhudsoni sp. nov. is similar in most respects to *S. richardwellsi sp. nov.*, and *S. flyingfoammassacre sp. nov.* being the two species they are most closely related to. It differs in the upper nasal not being as broad as the rostral and the scales around the snout between the eyes having not having brown etching, versus distinct as seen in *S. richardwellsi sp. nov.* or semi distinct as seen in *S. flyingfoammassacre sp. nov.*.

S. timhudsoni sp. nov. is further separated from *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.* by the fact that light whitish and brown marked scales of the snout are coloured this way back and beyond the line between the eyes, whereas this is not the case in *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.*

Both *S. dhuae sp. nov.* and *S. murderingpoliceorum sp. nov.* are separated from the other ten species by having (as adults) a well-defined brownish coloured rostral, with a thick creamish coloured outline created by the nasal on either side, also brown edged on the outer edge.

S. murderingpoliceorum sp. nov. is separated from *S. dhuae sp. nov.* by the fact that the rostral barely touches the prefrontal, versus well connected in *S. dhuae sp. nov.*.

S. murderingpoliceorum sp. nov. is further separated from the other ten species by having a dorsum that is not obviously pinkish in colour, but rather is purplish-brown. The head and collar are whitish on top (especially anteriorly), becoming light orange at the back of the head. The mid dorsum and tail region are a dark blackish brown. The blackish region distally commences well on the body and anterior to the ventral area.

S. fildesi sp. nov. is separated from the other 10 species by having a slight light orange tinge to the dorsum, dark brown on the lower neck, mid body and tail region, no lighter scales on the dark tipped tail region dorsal surface and a frontal shield that has a strongly curved edge going up the snout.

S. exy sp. nov. is separated from the other ten species by having a slight beige to yellow brown tinge underlying the purplish-brown dorsum. The dorsum is light beige anterior to the eyes, light orange about two times this distance behind the eyes, including the anterior neck, dark brown beyond this, but fading on the lower neck and anterior body, before darkening along the mid part of the dorsum. Posteriorly the dorsum lightens again, before becoming blackish near the tail region and including some of the body anterior to the tail. There are some obvious lighter scales on the dark tipped tail region dorsal surface, near the tail

point. The frontal shield is weakly curved edged going up the snout.

S. johnpati sp. nov., S. iancooki sp. nov. and S. cashcow sp. nov. as a trio are separated from the other eight species by their relatively larger eye spot. It also sits at the back of the ocular scale, versus centre or slightly anterior in the other species.

The three species are also characterized by being a dark purplish-pink colour overall on top. The tip of the snout is a whitish colour, becoming light brown over the main part of the head and extending well past the eyes.

S. iancooki sp. nov. is separated from *S. johnpati sp. nov.*, and *S. cashcow sp. nov.* by the fact that adults retain tiny white or whitish spots in the centres of all or most dorsal scales, versus not so in the other two species. Both *S. johnpati sp. nov.* and *S. iancooki sp. nov.* have a rostral that is well joined to the prefrontal, versus only just touching at the centre in *S. cashcow sp. nov.*.

S. johnpati sp. nov. is of similar colour intensity dorsally along its entire length. *S. iancooki sp. nov.* is a slightly darker purplish colour on the lower neck and tail regions above.

S. cashcow sp. nov. has an obvious dark purplish brown colour on the lower neck, mid-section and tail region, with scattered dull white spotting on the posterior flanks of the tail section, all being distinguishable from the dark purplish-pink colour overall on top.

The eleven preceding species are separated from all other Australian Blind Snakes by the following characteristics: a small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals. These 11 species are separated from the similar S. diversus (Waite, 1894) clade of nine species as identified and named in this paper that as a group occurs in the Kimberley region, tropics of Australia and including nearby drier areas to far north-west Queensland by the shape of the rostral, being narrower and concave-sided versus straightsided from above in the S. diversus (Waite, 1894) clade of species.

The eleven preceding species also have a more vertical orientation of the nasal cleft as opposed to extending forward to approximately the rostral in the *S. diversus* (Waite, 1894) clade of species.

The phylogeny of Marin *et al.* (2012) found that the species *S. murderingpoliceorum sp. nov.* and *S. dhuae sp. nov.* as closest relatives, diverged from one another about 2 MYA.

In turn this species pair diverged other nearest nearest relatives, being *S. timhudsoni sp. nov.*, *S. flyingfoammassacre sp. nov.* and *S. richardwellsi* Hoser, 2013 about 3 MYA.

Further relevant information and detail in terms of this description is provided within the formal description of *S. flyingfoammassacre sp. nov.* preceding this description and relied explicitly as part of this formal description.

Distribution: *S. dhuae sp. nov.* has a restricted range centered on Mount DeCoucey, which is in the region between the Red Hill Creek in the north and Cane River in the south, being at the far western edge of the Hamersley Ranges.

Etymology: *S. dhuae sp. nov.* is named in recognition of Julieka Ivanna Dhu (commonly referred to as Ms. Dhu). She was a 22-year-old Aboriginal Australian woman killed by violent police at South Hedland, Western Australia, in 2014. Refer also to the etymology of *S. murderingpoliceorum sp. nov.* in this paper.

SLOPPTYPHLOPS FILDESI SP. NOV. LSIDurn:lsid:zoobank.org:act:C31379E7-E1F1-4677-B993-74343B56CAB5

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R102560 collected from the Barlee Range Nature Reserve, Western Australia, Australia, Latitude -23.095833 S., Longitude 116.009722 E. This government-owned facility allows access to its holdings.

Paratype: Four preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen numbers R102482, R102490, R102550 and R102551 all collected from the Barlee Range Nature Reserve, Western Australia, Australia. Diagnosis: Until now, the putative species Typhlops ammodytes Montague, 1914, with a type locality of Hermite Island, Monte Bello Islands, Western Australia, Australia, Latitude -20.4610 S., Longitude 115.5252 E., has been treated as a taxon found throughout the Pilbara district of Western Australia. including outlier ranges, otherwise closely associated with the putative taxon Typhlops diversus Waite, 1914, with a type locality of "Morven, Qld", but otherwise found from north western Queensland, across tropical Australia to the Kimberley district in Western Australia.

Cogger *et al.* (1983) synonymized the former with the latter, but most authors since have recognized both as separate taxa.

All are herein placed in the genus *Sloppytyphlops* Hoser, 2013, being over 20 MYA divergent from all other Australian Blind Snakes based on the phylogeny of Marin *et al.* (2012 and 2013).

The putative species *Typhlops ammodytes* Montague, 1914 is herein treated as 11 separate species.

The eleven species recognized herein are as follows: The type form of *S. ammodytes*, is restricted to the type locality, being the Montebello Islands and including Barrow Island.

S. richardwellsi Hoser, 2013 is the taxon found generally north and east of the Fortescue River. It is by far the most widespread species in the complex and the one encountered by most herpetologists who visit the Pilbara district. It is found in the region east of Newman and on the coast north of the Burrup Peninsula. There are two main lineages within this population, one from along the coast and the other from inland, but both are treated herein as a single species and no subspecies is named. It is believed the two clades diverged from one another between one and one and a half million years ago.

Exceptional to the north of the Fortescue River distribution of *S. richardwellsi* is the mainly allopatric species *S. timhudsoni sp. nov.* found south of the Burruup Peninsula along the Pilbara coast at least as far south as Cape Preston, and quite likely as far as the ocean outfall of the Fortescue River. *S. richardwellsi* and *S. timhudsoni sp. nov.* both occur around Karratha and are presumably sympatric in this immediate area.

S. flyingfoammassacre sp. nov. is an associated species, found south of the Fortescue River that occurs in the Pannawonnica area of the Pilbara extending at least as far east as Mount Elvira. *S. murderingpoliceorum sp. nov*. is found south of the

Cane River, generally around Mount Minnie and the nearby Parry Range, with a distribution bound by the Ashburton River to the south.

S. dhuae sp. nov. has a restricted range centered on Mount DeCoucey, which is in the region between the Red Hill Creek in the north and Cane River in the south, being at the far western edge of the Hamersley Ranges.

S. fildesi sp. nov. is found south of the Ashburton River in the Barlee Range and nearby hills, south of the Ashburton River and north of the flat lands further south.

S. exy sp. nov. is the taxon from the Cape Range district, being most similar to the two previously named species.

Within the main Hamersley Ranges and Chichester Range to the north-west are three other well-defined species.

S. johnpati sp. nov. is found in the Chichester Range district and immediately west only.

S. iancooki sp. nov. is found in the central Hamersley Ranges generally around Tom Price and Karijini National Park to the east.

S. cashcow sp. nov. is found from Weeli Wolli Creek east to the town of Newman and Fortescue River, in an area known as the Opthalmia Range.

While all the preceding species are morphologically very similar, they can all be separated from one another by the following character traits.

S. richardwellsi sp. nov. is closely related to the type form of *S. ammodytes* (Montague, 1914) as well as the other 10 species, with which it has been confused. *S. richardwellsi sp. nov.* is most readily separated from some of the other species by tail length, being 2.5 to 4 percent of the total length with 13 to 18 subcaudals in *S. richardwellsi sp. nov.* and 1.4 to 2 percent of the total length with 8 to 12 subcaudals in nominate *S. ammodytes* (Montague, 1914) and all the other species except for *S. johnpati sp. nov.*, *S. iancooki sp. nov.* and *S. cashcow sp. nov.* which is intermediate in this respect.

S. richardwellsi sp. nov. has a tail that is noticeably longer than broad, rather than the same length as broad in all the other species.

The upper nasal is as broad as the rostral in *S. richardwellsi sp. nov.*. This is not quite the case in nominate *S. ammodytes* (Montague, 1914).

S. flyingfoammassacre sp. nov. is similar in most respects to *S. richardwellsi sp. nov.*, being the species it is most closely related to. It differs in the upper nasal not being as broad as the rostral and the scales around the snout between the eyes having semidistinct brown etching, versus distinct as seen in *S. richardwellsi sp. nov.*.

S. timhudsoni sp. nov. is similar in most respects to *S. richardwellsi sp. nov.*, and *S. flyingfoammassacre sp. nov.* being the two species they are most closely related to. It differs in the upper nasal not being as

broad as the rostral and the scales around the snout between the eyes having not having brown etching, versus distinct as seen in *S. richardwellsi sp. nov.* or semi distinct as seen in *S. flyingfoammassacre sp. nov.*.

S. timhudsoni sp. nov. is further separated from *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.* by the fact that light whitish and brown marked scales of the snout are coloured this way back and beyond the line between the eyes, whereas this is not the case in *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.*

Both *S. dhuae sp. nov.* and *S. murderingpoliceorum sp. nov.* are separated from the other ten species by having (as adults) a well-defined brownish coloured rostral, with a thick creamish coloured outline created by the nasal on either side, also brown edged on the outer edge.

S. murderingpoliceorum sp. nov. is separated from *S. dhuae sp. nov.* by the fact that the rostral barely touches the prefrontal, versus well connected in *S. dhuae sp. nov.*.

S. murderingpoliceorum sp. nov. is further separated from the other ten species by having a dorsum that is not obviously pinkish in colour, but rather is purplish-brown. The head and collar are whitish on top (especially anteriorly), becoming light orange at the back of the head. The mid dorsum and tail region are a dark blackish brown. The blackish region distally commences well on the body and anterior to the ventral area.

S. fildesi sp. nov. is separated from the other 10 species by having a slight light orange tinge to the dorsum, dark brown on the lower neck, mid body and tail region, no lighter scales on the dark tipped tail region dorsal surface and a frontal shield that has a strongly curved edge going up the snout.

S. exy sp. nov. is separated from the other ten species by having a slight beige to yellow brown tinge underlying the purplish-brown dorsum. The dorsum is light beige anterior to the eyes, light orange about two times this distance behind the eyes, including the anterior neck, dark brown beyond this, but fading on the lower neck and anterior body, before darkening along the mid part of the dorsum. Posteriorly the dorsum lightens again, before becoming blackish near the tail region and including some of the body anterior to the tail. There are some obvious lighter scales on the dark tipped tail region dorsal surface, near the tail point. The frontal shield is weakly curved edged going up the snout.

S. johnpati sp. nov., S. iancooki sp. nov. and *S. cashcow sp. nov.* as a trio are separated from the other eight species by their relatively larger eye spot. It also sits at the back of the ocular scale, versus centre or slightly anterior in the other species.

The three species are also characterized by being a dark purplish-pink colour overall on top. The tip of the

snout is a whitish colour, becoming light brown over the main part of the head and extending well past the eyes.

S. iancooki sp. nov. is separated from *S. johnpati sp. nov.*, and *S. cashcow sp. nov.* by the fact that adults retain tiny white or whitish spots in the centres of all or most dorsal scales, versus not so in the other two species. Both *S. johnpati sp. nov.* and *S. iancooki sp. nov.* have a rostral that is well joined to the prefrontal, versus only just touching at the centre in *S. cashcow sp. nov.*.

S. johnpati sp. nov. is of similar colour intensity dorsally along its entire length. *S. iancooki sp. nov.* is a slightly darker purplish colour on the lower neck and tail regions above.

S. cashcow sp. nov. has an obvious dark purplish brown colour on the lower neck, mid-section and tail region, with scattered dull white spotting on the posterior flanks of the tail section, all being distinguishable from the dark purplish-pink colour overall on top.

The eleven preceding species are separated from all other Australian Blind Snakes by the following characteristics: a small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows.

The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals. These 11 species are separated from the similar *S. diversus* (Waite, 1894) clade of nine species as identified and named in this paper that as a group occurs in the Kimberley region, tropics of Australia and including nearby drier areas to far north-west Queensland by the shape of the rostral, being narrower and concave-sided versus straight-sided from above in the *S. diversus* (Waite, 1894) clade of species.

The eleven preceding species also have a more vertical orientation of the nasal cleft as opposed to extending forward to approximately the rostral in the *S. diversus* (Waite, 1894) clade of species.

The species *S. fildesi sp. nov.* is found south of the Ashburton River basin in the Barlee Range and therefore is biogeographically isolated from related species further north and in the Cape Range to the west, that is separated by an area of flat saltbush plains and dunes.

Further relevant information and detail in terms of this description is provided within the formal description of *S. flyingfoammassacre sp. nov.* preceding this description and relied explicitly as part of this formal description.

Distribution: *S. fildesi sp. nov.* is found south of the Ashburton River in the Barlee Range and nearby hills, being south of the Ashburton River and north of the flat lands further south.

Etymology: *S. fildesi sp. nov.* is named in recognition of Ashley Fildes who was fatally shot dead, execution style with three shots, by rogue West Australian Police officer Sergeant Michael Little in company with four other police.

The killing happened on 1 May 2020 at the South Hedland Shopping Centre in front of stunned members of the public.

Ashley Fildes was a white man and merely visiting the area for work as a FIFO (fly in, fly out) worker.

The West Australian Police Commissioner at the time, Christopher Dawson, a recipient of numerous nepotistic government awards, lied when he praised Sergeant Michael Little for his "bravery"!

Police Union President Harry Arnott dishonestly praised Sergeant Michael Little as "a hero." Sergeant Michael Little received a West Australian government sponsored "bravery" award for the

murder in November 2020. Refer also to the etymology of *S*.

murderingpoliceorum sp. nov. in this paper.

SLOPPTYPHLOPS EXY SP. NOV.

LSIDurn:lsid:zoobank.org:act:FA63F347-53A8-4368-B6E2-A4DE492A9523

Holotype: A preserved adult specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R151302 collected in a rotten stump from near Learmonth, Western Australia, Australia, Latitude -22.178333 S., Longitude 114.081667 E.

This government-owned facility allows access to its holdings.

Paratypes: Four preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, being specimen number R61472 collected from a salt plain 27 km south of Exmouth, Western Australia, Australia, Latitude -22.166667 S., Longitude 113.816667 E., specimen numbers R61120 and R61493 both collected from 2-4 km south of Yardie Creek (the watercourse), Cape Range area, Western Australia, Australia, Latitude -22.3 S., Longitude 113.816667 E., and specimen number R142358 (male) collected from the Vlaming Head Lighthouse, Western Australia, Australia, Latitude -21.807778 S., Longitude 113.816667 E..

Diagnosis: Until now, the putative species *Typhlops ammodytes* Montague, 1914, with a type locality of Hermite Island, Monte Bello Islands, Western Australia, Australia, Latitude -20.4610 S., Longitude 115.5252 E., has been treated as a taxon found throughout the Pilbara district of Western Australia, including outlier ranges, otherwise closely associated with the putative taxon *Typhlops diversus* Waite, 1914, with a type locality of "Morven, Qld", but otherwise found from north western Queensland, across tropical Australia to the Kimberley district in Western Australia.

Cogger et al. (1983) synonymized the former with the

latter, but most authors since have recognized both as separate taxa.

All are herein placed in the genus *Sloppytyphlops* Hoser, 2013, being over 20 MYA divergent from all other Australian Blind Snakes based on the phylogeny of Marin *et al.* (2012 and 2013).

The putative species *Typhlops ammodytes* Montague, 1914 is herein treated as 11 separate species.

The eleven species recognized herein are as follows: The type form of *S. ammodytes*, is restricted to the type locality, being the Montebello Islands and including Barrow Island.

S. richardwellsi Hoser, 2013 is the taxon found generally north and east of the Fortescue River. It is by far the most widespread species in the complex and the one encountered by most herpetologists who visit the Pilbara district. It is found in the region east of Newman and on the coast north of the Burrup Peninsula. There are two main lineages within this population, one from along the coast and the other from inland, but both are treated herein as a single species and no subspecies is named. It is believed the two clades diverged from one another between one and one and a half million years ago.

Exceptional to the north of the Fortescue River distribution of *S. richardwellsi* is the mainly allopatric species *S. timhudsoni sp. nov.* found south of the Burruup Peninsula along the Pilbara coast at least as far south as Cape Preston, and quite likely as far as the ocean outfall of the Fortescue River. *S. richardwellsi* and *S. timhudsoni sp. nov.* both occur around Karratha and are presumably sympatric in this immediate area.

S. flyingfoammassacre sp. nov. is an associated species, found south of the Fortescue River that occurs in the Pannawonnica area of the Pilbara extending at least as far east as Mount Elvira.

S. murderingpoliceorum sp. nov. is found south of the Cane River, generally around Mount Minnie and the nearby Parry Range, with a distribution bound by the Ashburton River to the south.

S. dhuae sp. nov. has a restricted range centered on Mount DeCoucey, which is in the region between the Red Hill Creek in the north and Cane River in the south, being at the far western edge of the Hamersley Ranges.

S. fildesi sp. nov. is found south of the Ashburton River in the Barlee Range and nearby hills, south of the Ashburton River and north of the flat lands further south.

S. exy sp. nov. is the taxon from the Cape Range district, being most similar to the two previously named species.

Within the main Hamersley Ranges and Chichester Range to the north-west are three other well-defined species. These are:

S. johnpati sp. nov. which is found in the Chichester Range district and immediately west only.

S. iancooki sp. nov. which is found in the central Hamersley Ranges generally around Tom Price and Karijini National Park to the east.

S. cashcow sp. nov. which is found from Weeli Wolli Creek east to the town of Newman and Fortescue River, in an area known as the Opthalmia Range. While all the preceding species are morphologically very similar, they can all be separated from one another by the following character traits.

S. richardwellsi sp. nov. is closely related to the type form of *S. ammodytes* (Montague, 1914) as well as the other 10 species, with which it has been confused. *S. richardwellsi sp. nov.* is most readily separated from some of the other species by tail length, being 2.5 to 4 percent of the total length with 13 to 18 subcaudals in *S. richardwellsi sp. nov.* and 1.4 to 2 percent of the total length with 8 to 12 subcaudals in nominate *S. ammodytes* (Montague, 1914) and all the other species except for *S. johnpati sp. nov.*, *S. iancooki sp. nov.* and *S. cashcow sp. nov.* which is intermediate in this respect.

S. richardwellsi sp. nov. has a tail that is noticeably longer than broad, rather than the same length as broad in all the other species.

The upper nasal is as broad as the rostral in *S. richardwellsi sp. nov.*. This is not quite the case in nominate *S. ammodytes* (Montague, 1914).

S. flyingfoammassacre sp. nov. is similar in most respects to *S. richardwellsi sp. nov.*, being the species it is most closely related to. It differs in the upper nasal not being as broad as the rostral and the scales

around the snout between the eyes having semidistinct brown etching, versus distinct as seen in *S. richardwellsi sp. nov.*.

S. timhudsoni sp. nov. is similar in most respects to *S. richardwellsi sp. nov.*, and *S. flyingfoammassacre sp. nov.* being the two species they are most closely related to. It differs in the upper nasal not being as broad as the rostral and the scales around the snout between the eyes having not having brown etching, versus distinct as seen in *S. richardwellsi sp. nov.* or semi distinct as seen in *S. flyingfoammassacre sp. nov.*.

S. timhudsoni sp. nov. is further separated from S. flyingfoammassacre sp. nov. and S. richardwellsi sp. nov. by the fact that light whitish and brown marked scales of the snout are coloured this way back and beyond the line between the eyes, whereas this is not the case in S. flyingfoammassacre sp. nov. and S. richardwellsi sp. nov.

Both *S. dhuae sp. nov.* and *S. murderingpoliceorum sp. nov.* are separated from the other ten species by having (as adults) a well-defined brownish coloured rostral, with a thick creamish coloured outline created by the nasal on either side, also brown edged on the outer edge.

S. murderingpoliceorum sp. nov. is separated from *S. dhuae sp. nov.* by the fact that the rostral barely

touches the prefrontal, versus well connected in *S. dhuae sp. nov.*.

S. murderingpoliceorum sp. nov. is further separated from the other ten species by having a dorsum that is not obviously pinkish in colour, but rather is purplish-brown. The head and collar are whitish on top (especially anteriorly), becoming light orange at the back of the head. The mid dorsum and tail region are a dark blackish brown. The blackish region distally commences well on the body and anterior to the ventral area.

S. fildesi sp. nov. is separated from the other 10 species by having a slight light orange tinge to the dorsum, dark brown on the lower neck, mid body and tail region, no lighter scales on the dark tipped tail region dorsal surface and a frontal shield that has a strongly curved edge going up the snout.

S. exy sp. nov. is separated from the other ten species by having a slight beige to yellow brown tinge underlying the purplish-brown dorsum. The dorsum is light beige anterior to the eyes, light orange about two times this distance behind the eyes, including the anterior neck, dark brown beyond this, but fading on the lower neck and anterior body, before darkening along the mid part of the dorsum. Posteriorly the dorsum lightens again, before becoming blackish near the tail region and including some of the body anterior to the tail. There are some obvious lighter scales on the dark tipped tail region dorsal surface, near the tail point. The frontal shield is weakly curved edged going up the snout.

S. johnpati sp. nov., S. iancooki sp. nov. and S. cashcow sp. nov. as a trio are separated from the other eight species by their relatively larger eye spot. It also sits at the back of the ocular scale, versus centre or slightly anterior in the other species. The three species are also characterized by being a dark purplish-pink colour overall on top. The tip of the snout is a whitish colour, becoming light brown over the main part of the head and extending well past the eyes.

S. iancooki sp. nov. is separated from *S. johnpati sp. nov.*, and *S. cashcow sp. nov.* by the fact that adults retain tiny white or whitish spots in the centres of all or most dorsal scales, versus not so in the other two species. Both *S. johnpati sp. nov.* and *S. iancooki sp. nov.* have a rostral that is well joined to the prefrontal, versus only just touching at the centre in *S. cashcow sp. nov.*.

S. johnpati sp. nov. is of similar colour intensity dorsally along its entire length. *S. iancooki sp. nov.* is a slightly darker purplish colour on the lower neck and tail regions above.

S. cashcow sp. nov. has an obvious dark purplish brown colour on the lower neck, mid-section and tail region, with scattered dull white spotting on the posterior flanks of the tail section, all being distinguishable from the dark purplish-pink colour overall on top.

The eleven preceding species are separated from all other Australian Blind Snakes by the following characteristics: a small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals.

These 11 species are separated from the similar *S. diversus* (Waite, 1894) clade of nine species as identified and named in this paper that as a group occurs in the Kimberley region, tropics of Australia and including nearby drier areas to far north-west Queensland by the shape of the rostral, being narrower and concave-sided versus straight-sided from above in the *S. diversus* (Waite, 1894) clade of species.

The eleven preceding species also have a more vertical orientation of the nasal cleft as opposed to extending forward to approximately the rostral in the *S. diversus* (Waite, 1894) clade of species.

The species *S. exy sp. nov.* and *S. fildesi sp. nov.* are both found south of the Ashburton River basin being isolated from other related species by the Ashburton River basin.

S. exy sp. nov. from the Cape Range to the west and *S. fildesi sp. nov.* from the Barlee Range to the east are separated from one another by substantial apparently featureless plains, which appear to form another barrier between introgression of the two taxa with each other or others.

This is in line with other species groups of elapid snakes and geckos previously formally identified and named by Myself (e.g. Hoser, 2002, 2018) the newly named taxa being Cape Range endemics.

Distribution: *S. exy sp. nov.* is a taxon apparently confined to the Cape Range district of Western Australia and occupies a known range of less than 1,000 square km.

This includes areas obviously not inhabited or occupied by the species.

It is therefore a range-restricted taxon and must be deemed vulnerable to extinction in the event of disease, pest species or decline in food source.

Etymology: *S. exy sp. nov.* is named in recognition of the cost expended in finding specimens of this taxon where it occurs for scientific research.

With scientists not being based in the area, and Cape Range being a remote location and lacking in other major economic activities, collecting expeditions have had to be mounted from Perth (the closest major town at 2 hours plane flight or 1250 km away by road), or even further afield, making the cost of just getting to Cape Range very expensive or "*exy*" as they say in Australian slang.

SLOPPTYPHLOPS JOHNPATI SP. NOV. LSIDurn:lsid:zoobank.org:act:8E8A029E-51DB-4A78-9EDE-FF38E9917CBF

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R158097 collected from 5 km north northeast of Python Pool, Western Australia, Australia, Latitude -21.310278 S., Longitude 117.276111 E.

This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R146546 collected from Munni Munni, Western Australia, Australia, Latitude -21.129722 S., Longitude 116.803889 E.

Diagnosis: Until now, the putative species *Typhlops ammodytes* Montague, 1914, with a type locality of Hermite Island, Monte Bello Islands, Western Australia, Australia, Latitude -20.4610 S., Longitude 115.5252 E., has been treated as a taxon found throughout the Pilbara district of Western Australia, including outlier ranges, otherwise closely associated with the putative taxon *Typhlops diversus* Waite, 1914, with a type locality of "Morven, Qld", but otherwise found from north western Queensland, across tropical Australia to the Kimberley district in Western Australia.

Cogger *et al.* (1983) synonymized the former with the latter, but most authors since have recognized both as separate taxa.

All are herein placed in the genus *Sloppytyphlops* Hoser, 2013, being over 20 MYA divergent from all other Australian Blind Snakes based on the phylogeny of Marin *et al.* (2012 and 2013).

The putative species *Typhlops ammodytes* Montague 1914 is herein treated as 11 separate species.

The eleven species recognized herein are as follows: The type form of *S. ammodytes*, is restricted to the type locality, being the Montebello Islands and including Barrow Island.

S. richardwellsi Hoser. 2013 is the taxon found generally north and east of the Fortescue River. It is by far the most widespread species in the complex and the one encountered by most herpetologists who visit the Pilbara district. It is found in the region east of Newman and on the coast north of the Burrup Peninsula. There are two main lineages within this population, one from along the coast and the other from inland, but both are treated herein as a single species and no subspecies is named. It is believed the two clades diverged from one another between one and one and a half million years ago. Exceptional to the north of the Fortescue River distribution of S. richardwellsi is the mainly allopatric species S. timhudsoni sp. nov. found south of the Burruup Peninsula along the Pilbara coast at least

as far south as Cape Preston, and guite likely as

Hence the etymology for the species.

far as the ocean outfall of the Fortescue River. *S. richardwellsi* and *S. timhudsoni sp. nov.* both occur around Karratha and are presumably sympatric in this immediate area.

S. flyingfoammassacre sp. nov. is an associated species, found south of the Fortescue River that occurs in the Pannawonnica area of the Pilbara extending at least as far east as Mount Elvira.

S. murderingpoliceorum sp. nov. is found south of the Cane River, generally around Mount Minnie and the nearby Parry Range, with a distribution bound by the Ashburton River to the south.

S. dhuae sp. nov. has a restricted range centered on Mount DeCoucey, which is in the region between the Red Hill Creek in the north and Cane River in the south, being at the far western edge of the Hamersley Ranges.

S. fildesi sp. nov. is found south of the Ashburton River in the Barlee Range and nearby hills, south of the Ashburton River and north of the flat lands further south.

S. exy sp. nov. is the taxon from the Cape Range district, being most similar to the two previously named species.

Within the main Hamersley Ranges and Chichester Range to the north-west are three other well-defined species. These are:

S. johnpati sp. nov. which is found in the Chichester Range district and immediately west only.

S. iancooki sp. nov. which is found in the central Hamersley Ranges generally around Tom Price and Karijini National Park to the east.

S. cashcow sp. nov. which is found from Weeli Wolli Creek east to the town of Newman and Fortescue River, in an area known as the Opthalmia Range. While all the preceding species are morphologically very similar, they can all be separated from one another by the following character traits.

S. richardwellsi sp. nov. is closely related to the type form of *S. ammodytes* (Montague, 1914) as well as the other 10 species, with which it has been confused. *S. richardwellsi sp. nov.* is most readily separated from some of the other species by tail length, being 2.5 to 4 percent of the total length with 13 to 18 subcaudals in *S. richardwellsi sp. nov.* and 1.4 to 2 percent of the total length with 8 to 12 subcaudals in nominate *S. ammodytes* (Montague, 1914) and all the other species except for *S. johnpati sp. nov., S. iancooki sp. nov.* and *S. cashcow sp. nov.* which is intermediate in this respect.

S. richardwellsi sp. nov. has a tail that is noticeably longer than broad, rather than the same length as broad in all the other species.

The upper nasal is as broad as the rostral in *S. richardwellsi sp. nov.*. This is not quite the case in nominate *S. anmodytes* (Montague, 1914).

S. flyingfoammassacre sp. nov. is similar in most

respects to *S. richardwellsi sp. nov.*, being the species it is most closely related to. It differs in the upper nasal not being as broad as the rostral and the scales around the snout between the eyes having semi-distinct brown etching, versus distinct as seen in *S. richardwellsi sp. nov.*.

S. timhudsoni sp. nov. is similar in most respects to *S. richardwellsi sp. nov.*, and *S. flyingfoammassacre sp. nov.* being the two species they are most closely related to. It differs in the upper nasal not being as broad as the rostral and the scales around the snout between the eyes having not having brown etching, versus distinct as seen in *S. richardwellsi sp. nov.* or semi distinct as seen in *S. flyingfoammassacre sp. nov.*.

S. timhudsoni sp. nov. is further separated from *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.* by the fact that light whitish and brown marked scales of the snout are coloured this way back and beyond the line between the eyes, whereas this is not the case in *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.*.

Both *S. dhuae sp. nov.* and *S. murderingpoliceorum sp. nov.* are separated from the other ten species by having (as adults) a well-defined brownish coloured rostral, with a thick creamish coloured outline created by the nasal on either side, also brown edged on the outer edge.

S. murderingpoliceorum sp. nov. is separated from *S. dhuae sp. nov.* by the fact that the rostral barely touches the prefrontal, versus well connected in *S. dhuae sp. nov.*.

S. murderingpoliceorum sp. nov. is further separated from the other ten species by having a dorsum that is not obviously pinkish in colour, but rather is purplish-brown. The head and collar are whitish on top (especially anteriorly), becoming light orange at the back of the head. The mid dorsum and tail region are a dark blackish brown. The blackish region distally commences well on the body and anterior to the ventral area.

S. fildesi sp. nov. is separated from the other 10 species by having a slight light orange tinge to the dorsum, dark brown on the lower neck, mid body and tail region, no lighter scales on the dark tipped tail region dorsal surface and a frontal shield that has a strongly curved edge going up the snout.

S. exy sp. nov. is separated from the other ten species by having a slight beige to yellow brown tinge underlying the purplish-brown dorsum. The dorsum is light beige anterior to the eyes, light orange about two times this distance behind the eyes, including the anterior neck, dark brown beyond this, but fading on the lower neck and anterior body, before darkening along the mid part of the dorsum. Posteriorly the dorsum lightens again, before becoming blackish near the tail region and including some of the body anterior to the tail. There are some obvious lighter scales on the dark tipped tail region dorsal surface, near the tail point. The frontal shield is weakly curved edged going up the snout.

S. johnpati sp. nov., S. iancooki sp. nov. and S. cashcow sp. nov. as a trio are separated from the other eight species by their relatively larger eye spot. It also sits at the back of the ocular scale, versus centre or slightly anterior in the other species.

The three species are also characterized by being a dark purplish-pink colour overall on top. The tip of the snout is a whitish colour, becoming light brown over the main part of the head and extending well past the eyes.

S. iancooki sp. nov. is separated from *S. johnpati sp. nov.*, and *S. cashcow sp. nov.* by the fact that adults retain tiny white or whitish spots in the centres of all or most dorsal scales, versus not so in the other two species. Both *S. johnpati sp. nov.* and *S. iancooki sp. nov.* have a rostral that is well joined to the prefrontal, versus only just touching at the centre in *S. cashcow sp. nov.*.

S. johnpati sp. nov. is of similar colour intensity dorsally along its entire length. *S. iancooki sp. nov.* is a slightly darker purplish colour on the lower neck and tail regions above.

S. cashcow sp. nov. has an obvious dark purplish brown colour on the lower neck, mid-section and tail region, with scattered dull white spotting on the posterior flanks of the tail section, all being distinguishable from the dark purplish-pink colour overall on top.

The eleven preceding species are separated from all other Australian Blind Snakes by the following characteristics: a small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals. These 11 species are separated from the similar S. diversus (Waite, 1894) clade of nine species as identified and named in this paper that as a group occurs in the Kimberley region, tropics of Australia and including nearby drier areas to far north-west Queensland by the shape of the rostral, being narrower and concave-sided versus straightsided from above in the S. diversus (Waite, 1894) clade of species.

The eleven preceding species also have a more vertical orientation of the nasal cleft as opposed to extending forward to approximately the rostral in the *S. diversus* (Waite, 1894) clade of species.

The species *S. exy sp. nov.* and *S. fildesi sp. nov.* are both found south of the Ashburton River basin being isolated from other related species by the Ashburton River basin.

S. exy sp. nov. from the Cape Range to the west and S. fildesi sp. nov. from the Barlee Range to the east are separated from one another by substantial apparently featureless plains, which appear to form another barrier between introgression of the two taxa with each other or others.

This is in line with other species groups of elapid snakes and geckos previously formally identified and named by Myself (e.g. Hoser, 2002, 2018) the newly named taxa being Cape Range endemics.

Distribution: *S. johnpati sp. nov.* is found in the Chichester Range district and immediately west only, essentially between the type locality for the holotype and the collection location for the single paratype. If distribution extends beyond this area, it is likely to extend east in the nearby Chichester Range area, but not to areas to the north or west.

Etymology: *S. johnpati sp. nov.* is named in honor of John Peter Pat, AKA John Pat (31 October 1966 - 28 September 1983) who was an Aboriginal Australian boy who, at the age of 16, was unlawfully bashed and killed by five racist West Australian police officers at Karratha in Western Australia.

Without any proper reason, the five bored police officers decided to beat John Pat to a pulp as part of a pre-planned "coon bashing".

He was dead within an hour.

After a public outrage and media pressure, the five police officers were reluctantly put on a show trial on counts of manslaughter in the Supreme Court of Western Australia sitting in Karratha in May 1984. Following directions by a judge with casual regard for truth or rule of law, the all white jury picked by the prosecution acquitted each police officer by a "unanimous" verdict. By law in Australia a jury verdict can only be unanimous and the jury must deliberate until they get a unanimous verdict.

Jurors usually want to go home rather than forensically analyze evidence or the relevant law and so tend to deliberate to verdicts very quickly. John Pat, is one of countless Aboriginals killed by corrupt racist police, in turn protected by judges and magistrates, most of whom are cocaine addicted and do as asked by the police who supply them with their illicit drugs.

It is appropriate that rather than naming a species in honor of a racist murderer, or wholly corrupt judicial officer as has been done too many times in Australia's past, a species is instead named recognizing one of their countless victims.

SLOPPTYPHLOPS IANCOOKI SP. NOV. LSIDurn:lsid:zoobank.org:act:3B0B0B92-A1D3-4C4A-9EF7-7B5D34EE8DD4

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R127760 collected from 5 km south of the Mount Tom Price Mine, Western Australia, Australia, Latitude -22.808056 S., Longitude 117.748889 E.

This government-owned facility allows access to its holdings.

Paratypes: Two preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen numbers R127743 and R127814 both collected from 5 km south of the Mount Tom Price Mine, Western Australia, Australia, Latitude -22.808056 S., Longitude 117.748889 E.

Diagnosis: Until now, the putative species *Typhlops ammodytes* Montague, 1914, with a type locality of Hermite Island, Monte Bello Islands, Western Australia, Australia, Latitude -20.4610 S., Longitude 115.5252 E., has been treated as a taxon found throughout the Pilbara district of Western Australia, including outlier ranges, otherwise closely associated with the putative taxon *Typhlops diversus* Waite, 1914, with a type locality of "Morven, Qld", but otherwise found from north western Queensland, across tropical Australia to the Kimberley district in Western Australia.

Cogger *et al.* (1983) synonymized the former with the latter, but most authors since have recognized both as separate taxa.

All are herein placed in the genus *Sloppytyphlops* Hoser, 2013, being over 20 MYA divergent from all other Australian Blind Snakes based on the phylogeny of Marin *et al.* (2012 and 2013).

The putative species *Typhlops ammodytes* Montague, 1914 is herein treated as 11 separate species.

The eleven species recognized herein are as follows: The type form of *S. ammodytes*, is restricted to the type locality, being the Montebello Islands and including Barrow Island.

S. richardwellsi Hoser, 2013 is the taxon found generally north and east of the Fortescue River. It is by far the most widespread species in the complex and the one encountered by most herpetologists who visit the Pilbara district. It is found in the region east of Newman and on the coast north of the Burrup Peninsula. There are two main lineages within this population, one from along the coast and the other from inland, but both are treated herein as a single species and no subspecies is named. It is believed the two clades diverged from one another between one and one and a half million years ago.

Exceptional to the north of the Fortescue River distribution of *S. richardwellsi* is the mainly allopatric species *S. timhudsoni sp. nov.* found south of the Burruup Peninsula along the Pilbara coast at least as far south as Cape Preston, and quite likely as far as the ocean outfall of the Fortescue River. *S. richardwellsi* and *S. timhudsoni sp. nov.* both occur around Karratha and are presumably sympatric in this immediate area.

S. flyingfoammassacre sp. nov. is an associated species, found south of the Fortescue River that occurs in the Pannawonnica area of the Pilbara extending at least as far east as Mount Elvira.

S. murderingpoliceorum sp. nov. is found south of the Cane River, generally around Mount Minnie and the nearby Parry Range, with a distribution bound by the Ashburton River to the south.

S. dhuae sp. nov. has a restricted range centered on Mount DeCoucey, which is in the region between the Red Hill Creek in the north and Cane River in the south, being at the far western edge of the Hamersley Ranges.

S. fildesi sp. nov. is found south of the Ashburton River in the Barlee Range and nearby hills, south of the Ashburton River and north of the flat lands further south.

S. exy sp. nov. is the taxon from the Cape Range district, being most similar to the two previously named species.

Within the main Hamersley Ranges and Chichester Range to the north-west are three other well-defined species. These are:

S. johnpati sp. nov. which is found in the Chichester Range district and immediately west only.

S. iancooki sp. nov. which is found in the central Hamersley Ranges generally around Tom Price and Karijini National Park to the east.

S. cashcow sp. nov. which is found from Weeli Wolli Creek east to the town of Newman and Fortescue River, in an area known as the Opthalmia Range.

While all the preceding species are morphologically very similar, they can all be separated from one another by the following character traits.

S. richardwellsi sp. nov. is closely related to the type form of *S. ammodytes* (Montague, 1914) as well as the other 10 species, with which it has been confused. *S. richardwellsi sp. nov.* is most readily separated from some of the other species by tail length, being 2.5 to 4 percent of the total length with 13 to 18 subcaudals in *S. richardwellsi sp. nov.* and 1.4 to 2 percent of the total length with 8 to 12 subcaudals in nominate *S. ammodytes* (Montague, 1914) and all the other species except for *S. johnpati sp. nov.*, *S. iancooki sp. nov.* and *S. cashcow sp. nov.* which is intermediate in this respect.

S. richardwellsi sp. nov. has a tail that is noticeably longer than broad, rather than the same length as broad in all the other species.

The upper nasal is as broad as the rostral in *S. richardwellsi sp. nov.*. This is not quite the case in nominate *S. ammodytes* (Montague, 1914).

S. flyingfoammassacre sp. nov. is similar in most respects to *S. richardwellsi sp. nov.*, being the species it is most closely related to. It differs in the upper nasal not being as broad as the rostral and the scales around the snout between the eyes having semi-distinct brown etching, versus distinct as seen in *S. richardwellsi sp. nov.*.

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related to. It differs in the upper nasal not being as broad as the rostral and the scales around the snout between the eyes having not having brown etching, versus distinct as seen in *S. richardwellsi sp. nov.* or semi distinct as seen in *S. flyingfoammassacre sp. nov.*.

S. timhudsoni sp. nov. is further separated from *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.* by the fact that light whitish and brown marked scales of the snout are coloured this way back and beyond the line between the eyes, whereas this is not the case in *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.*

Both *S. dhuae sp. nov.* and *S. murderingpoliceorum sp. nov.* are separated from the other ten species by having (as adults) a well-defined brownish coloured rostral, with a thick creamish coloured outline created by the nasal on either side, also brown edged on the outer edge.

S. murderingpoliceorum sp. nov. is separated from *S. dhuae sp. nov.* by the fact that the rostral barely touches the prefrontal, versus well connected in *S. dhuae sp. nov.*.

S. murderingpoliceorum sp. nov. is further separated from the other ten species by having a dorsum that is not obviously pinkish in colour, but rather is purplish-brown. The head and collar are whitish on top (especially anteriorly), becoming light orange at the back of the head. The mid dorsum and tail region are a dark blackish brown. The blackish region distally commences well on the body and anterior to the ventral area.

S. fildesi sp. nov. is separated from the other 10 species by having a slight light orange tinge to the dorsum, dark brown on the lower neck, mid body and tail region, no lighter scales on the dark tipped tail region dorsal surface and a frontal shield that has a strongly curved edge going up the snout.

S. exy sp. nov. is separated from the other ten species by having a slight beige to yellow brown tinge underlying the purplish-brown dorsum. The dorsum is light beige anterior to the eyes, light orange about two times this distance behind the eyes, including the anterior neck, dark brown beyond this, but fading on the lower neck and anterior body, before darkening along the mid part of the dorsum. Posteriorly the dorsum lightens again, before becoming blackish near the tail region and including some of the body anterior to the tail. There are some obvious lighter scales on the dark tipped tail region dorsal surface, near the tail point. The frontal shield is weakly curved edged going up the snout.

S. johnpati sp. nov., S. iancooki sp. nov. and S. cashcow sp. nov. as a trio are separated from the other eight species by their relatively larger eye spot. It also sits at the back of the ocular scale, versus centre or slightly anterior in the other species. The three species are also characterized by being a

dark purplish-pink colour overall on top. The tip of the snout is a whitish colour, becoming light brown over the main part of the head and extending well past the eyes.

S. iancooki sp. nov. is separated from *S. johnpati sp. nov.*, and *S. cashcow sp. nov.* by the fact that adults retain tiny white or whitish spots in the centres of all or most dorsal scales, versus not so in the other two species. Both *S. johnpati sp. nov.* and *S. iancooki sp. nov.* have a rostral that is well joined to the prefrontal, versus only just touching at the centre in *S. cashcow sp. nov.*.

S. johnpati sp. nov. is of similar colour intensity dorsally along its entire length. *S. iancooki sp. nov.* is a slightly darker purplish colour on the lower neck and tail regions above.

S. cashcow sp. nov. has an obvious dark purplish brown colour on the lower neck, mid-section and tail region, with scattered dull white spotting on the posterior flanks of the tail section, all being distinguishable from the dark purplish-pink colour overall on top.

The eleven preceding species are separated from all other Australian Blind Snakes by the following characteristics: a small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals.

These 11 species are separated from the similar *S. diversus* (Waite, 1894) clade of nine species as identified and named in this paper that as a group occurs in the Kimberley region, tropics of Australia and including nearby drier areas to far north-west Queensland by the shape of the rostral, being narrower and concave-sided versus straight-sided from above in the *S. diversus* (Waite, 1894) clade of species.

The eleven preceding species also have a more vertical orientation of the nasal cleft as opposed to extending forward to approximately the rostral in the *S. diversus* (Waite, 1894) clade of species.

The species *S. exy sp. nov.* and *S. fildesi sp. nov.* are both found south of the Ashburton River basin being isolated from other related species by the Ashburton River basin.

S. exy sp. nov. from the Cape Range to the west and S. fildesi sp. nov. from the Barlee Range to the east are separated from one another by substantial apparently featureless plains, which appear to form another barrier between introgression of the two taxa with each other or others.

This is in line with other species groups of elapid snakes and geckos previously formally identified and named by Myself (e.g. Hoser, 2002, 2018) the newly named taxa being Cape Range endemics. Hoser 2025 - Australasian Journal of Herpetology 76-78:1-192.

Distribution: *S. iancooki sp. nov.* is found in the central Hamersley Ranges generally around Tom Price and the Karijini National Park to the east.

Etymology: *S. iancooki sp. nov.* is named in honor of lan Cook a formerly successful businessman from Melbourne, Victoria.

His successful catering business "I Cook Food" in was shut down at gunpoint 2019 by Victorian Government Officials under the directive of health officer Brett Sutton and Dandenong Council Chief Executive Officer (CEO) John Bennie.

Cook was falsely accused of causing the death of an elderly woman from food poisoning.

To support the false claim a slug was planted on the floor of the kitchen in Cook's business by John Bennie's minions at the time of an armed raid by government officials.

That the slug had been planted by John Bennie's underlings to support the false claims against Cook was later confirmed in a Supreme Court finding in Cook's favor in 2023, giving the case the name of "Slug gate"

By then it was too late and by 2023 Cook had lost everything.

Cook's business, named "I Cook Food" lost its clients and had to lay off all 41 of its staff.

Cook's business was targeted in 2019 for "deletion" when a rival business associated with John Bennie sought the contracts and business Cook had.

Unable to offer anything better, the only way that they could get the business from "I Cook Food" was by fabricating claims against Cook and having him shut down.

Bennie the CEO of Dandenong Council had previously been CEO at the City of Manningham and was forced from his position after it became apparent that he was running a hotbed of corruption at the Manningham Council.

Brett Sutton became notorious in Victoria in 2000-2022 as the State's Chief Health Officer, where along with State Premier Daniel Andrews, he gave Victoria world record duration lockdowns in the name of controlling the Covid-19 outbreaks in the complete absence of any medical evidence in favor of the lockdowns.

Sutton and the Police enforcing the regulations at gunpoint also demanded people wear face masks at all times when in public.

This direction seemed lame and hypocritical after Sutton was photographed in a busy public place not wearing a face mask or any other face covering. See at:

https://www.news.com.au/world/coronavirus/ australia/victorias-chief-health-officer-brettsutton-spotted-without-mask/news-story/ dcfcc05b7e45365180e4bfb5885ff3d6 and https://www.heraldsun.com.au/coronavirus/masklesschief-health-officer-brett-sutton-shamed-on-socialmedia-for-not-wearing-mask-at-picnic/news-story/ f389196524d417486a3b4baec8d75304 where it was written:

"How Sutton's picnic became talk of social media Chief Health Officer Brett Sutton's Bright picnic has sent social media into a frenzy - and when you see the pictures you'll quickly understand why."

The severe brutally police-enforced ban on people gathering socially during the lockdowns also seemed lame after footage emerged of high profile citizens snorting cocaine at a late night rave party during a lockdown when all such social gatherings were banned.

The Police Commissioner gave all kinds of lame excuses as to why they would not charge the offenders.

Citizen's prosecutions, previously a fundamental right in so-called democratic countries were also outlawed for the first time ever (and remain so in Victoria) to "protect' the high profile offenders from being prosecuted by non-government people.

Only police and pubic servants now have a right to issue criminal proceedings against people.

In 2022, Ian Cook ran against Labor Party Premier Daniel Andrews in the former premier's seat of Mulgrave on a strong anti-corruption platform. Mr Cook pulled 18 per cent of the primary votes and outperformed the Liberal Party candidate.

This was quite a feat considering the State Controlled media, including the Australian Broadcasting Corporation (ABC) and Murdoch Press ran a wellorganized campaign against Cook at the time. Multiple "stooge" independents were fielded by the major parties in the State election for the purpose of splitting the "independent" vote and diverting preferences back to themselves, making it effectively impossible for people like Ian Cook to ever be elected.

In other words the allegedly democratic voting system in Australia is so shambolic as to be fraudulent and corrupt to the core.

At the time Ian Cook also noted that "*This government* has spent millions trying to destroy us".

This money could have better been spent on studying and conserving wildlife, including Blind Snakes instead!

SLOPPTYPHLOPS CASHCOW SP. NOV. LSIDurn:lsid:zoobank.org:act:C53A5380-180F-4DF0-8221-A3430CC1CB6F

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R121995 collected from Weeli Wolli Spring, Western Australia, Australia, Latitude -22.916667 S., Longitude 119.216667 E. This facility allows access to its holdings. **Paratypes:** Two preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, being specimen number R163235 from Jinayri Mine, Western Australia, Australia, Latitude -22.971389 S., Longitude 119.251111 E. and specimen number R119730 collected from Hope Downs, Western Australia, Australia, Latitude -22.956944 S., Longitude 119.138889 E.

Diagnosis: Until now, the putative species *Typhlops ammodytes* Montague, 1914, with a type locality of Hermite Island, Monte Bello Islands, Western Australia, Australia, Latitude -20.4610 S., Longitude 115.5252 E., has been treated as a taxon found throughout the Pilbara district of Western Australia, including outlier ranges, otherwise closely associated with the putative taxon *Typhlops diversus* Waite, 1914, with a type locality of "Morven, Qld", but otherwise found from north western Queensland, across tropical Australia to the Kimberley district in Western Australia.

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Exceptional to the north of the Fortescue River distribution of *S. richardwellsi* is the mainly allopatric species *S. timhudsoni sp. nov.* found south of the Burruup Peninsula along the Pilbara coast at least as far south as Cape Preston, and quite likely as far as the ocean outfall of the Fortescue River. *S. richardwellsi* and *S. timhudsoni sp. nov.* both occur around Karratha and are presumably sympatric in this immediate area.

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The upper nasal is as broad as the rostral in *S. richardwellsi sp. nov.*. This is not quite the case in nominate *S. ammodytes* (Montague, 1914).

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S. timhudsoni sp. nov. is similar in most respects to S. richardwellsi sp. nov., and S. flyingfoammassacre sp. nov. being the two species they are most closely

related to. It differs in the upper nasal not being as broad as the rostral and the scales around the snout between the eyes having not having brown etching, versus distinct as seen in *S. richardwellsi sp. nov.* or semi distinct as seen in *S. flyingfoammassacre sp. nov.*.

S. timhudsoni sp. nov. is further separated from *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.* by the fact that light whitish and brown marked scales of the snout are coloured this way back and beyond the line between the eyes, whereas this is not the case in *S. flyingfoammassacre sp. nov.* and *S. richardwellsi sp. nov.*

Both *S. dhuae sp. nov.* and *S. murderingpoliceorum sp. nov.* are separated from the other ten species by having (as adults) a well-defined brownish coloured rostral, with a thick creamish coloured outline created by the nasal on either side, also brown edged on the outer edge.

S. murderingpoliceorum sp. nov. is separated from *S. dhuae sp. nov.* by the fact that the rostral barely touches the prefrontal, versus well connected in *S. dhuae sp. nov.*.

S. murderingpoliceorum sp. nov. is further separated from the other ten species by having a dorsum that is not obviously pinkish in colour, but rather is purplish-brown. The head and collar are whitish on top (especially anteriorly), becoming light orange at the back of the head. The mid dorsum and tail region are a dark blackish brown. The blackish region distally commences well on the body and anterior to the ventral area.

S. fildesi sp. nov. is separated from the other 10 species by having a slight light orange tinge to the dorsum, dark brown on the lower neck, mid body and tail region, no lighter scales on the dark tipped tail region dorsal surface and a frontal shield that has a strongly curved edge going up the snout.

S. exy sp. nov. is separated from the other ten species by having a slight beige to yellow brown tinge underlying the purplish-brown dorsum. The dorsum is light beige anterior to the eyes, light orange about two times this distance behind the eyes, including the anterior neck, dark brown beyond this, but fading on the lower neck and anterior body, before darkening along the mid part of the dorsum. Posteriorly the dorsum lightens again, before becoming blackish near the tail region and including some of the body anterior to the tail. There are some obvious lighter scales on the dark tipped tail region dorsal surface, near the tail point. The frontal shield is weakly curved edged going up the snout.

S. johnpati sp. nov., S. iancooki sp. nov. and S. cashcow sp. nov. as a trio are separated from the other eight species by their relatively larger eye spot. It also sits at the back of the ocular scale, versus centre or slightly anterior in the other species. The three species are also characterized by being a

dark purplish-pink colour overall on top. The tip of the snout is a whitish colour, becoming light brown over the main part of the head and extending well past the eyes.

S. iancooki sp. nov. is separated from *S. johnpati sp. nov.*, and *S. cashcow sp. nov.* by the fact that adults retain tiny white or whitish spots in the centres of all or most dorsal scales, versus not so in the other two species. Both *S. johnpati sp. nov.* and *S. iancooki sp. nov.* have a rostral that is well joined to the prefrontal, versus only just touching at the centre in *S. cashcow sp. nov.*.

S. johnpati sp. nov. is of similar colour intensity dorsally along its entire length. *S. iancooki sp. nov.* is a slightly darker purplish colour on the lower neck and tail regions above.

S. cashcow sp. nov. has an obvious dark purplish brown colour on the lower neck, mid-section and tail region, with scattered dull white spotting on the posterior flanks of the tail section, all being distinguishable from the dark purplish-pink colour overall on top.

The eleven preceding species are separated from all other Australian Blind Snakes by the following characteristics: a small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals.

These 11 species are separated from the similar *S. diversus* (Waite, 1894) clade of nine species as identified and named in this paper that as a group occurs in the Kimberley region, tropics of Australia and including nearby drier areas to far north-west Queensland by the shape of the rostral, being narrower and concave-sided versus straight-sided from above in the *S. diversus* (Waite, 1894) clade of species.

The eleven preceding species also have a more vertical orientation of the nasal cleft as opposed to extending forward to approximately the rostral in the *S. diversus* (Waite, 1894) clade of species.

The species *S. exy sp. nov.* and *S. fildesi sp. nov.* are both found south of the Ashburton River basin being isolated from other related species by the Ashburton River basin.

S. exy sp. nov. from the Cape Range to the west and *S. fildesi sp. nov.* from the Barlee Range to the east are separated from one another by substantial apparently featureless plains, which appear to form another barrier between introgression of the two taxa with each other or others.

This is in line with other species groups of elapid snakes and geckos previously formally identified and named by Myself (e.g. Hoser, 2002, 2018) the newly named taxa being Cape Range endemics. **Distribution:** *S. cashcow sp. nov.* is found from Weeli Wolli Creek east to the town of Newman and the Fortescue River, in an area known as the Opthalmia Range.

Etymology: *S. cashcow sp. nov.* is named in reflection of what it effectively is.

The holotype of this species was caught by collectors working for a company called Ecologia, a massive Perth-based environmental consulting company.

As part of the charade of pretending to be concerned about environmental welfare, the State and Federal Governments of Australia demand mining companies and other major corporates do endless field surveys and the like to determine what "protected" animals occupy lands slated for almost any kind of "development".

With all native vertebrates listed as "protected" staff with companies like Ecologia are paid huge sums of money to collect and record animals seen, before the bulldozers come in and wipe them out.

People make money out of the "protected species" but in reality, none actually benefit in any long term way from the monies spent. However, the species do act as cash cows for the public servants administering the scheme and the environmental consultants working on the ground in places like the Opthalmia Range.

See also the etymology for *Cyclodomorphus cashcow* Hoser, 2025 on pages 14-16 in Hoser (2025b).

SLOPPTYPHLOPS FARKINELLE SP. NOV.

LSIDurn:Isid:zoobank.org:act:D308342E-44E9-410C-8860-07E576166246

Holotype: A preserved adult specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R112027 collected from Beagle Bay Aboriginal Community, Western Australia, Australia, Latitude -17.059722 S., Longitude 122.716667 E.

This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R46482 collected from Beagle Bay Aboriginal Community, Western Australia, Australia, Latitude -17.059722 S., Longitude 122.716667 E.

Diagnosis: Until now, the putative taxon Sloppytyphlops diversus (Waite, 1894), with a type locality of west Queensland has been treated by all publishing authors as a single wide-ranging taxon, found in the tropical and near tropical section of Australia including far western Queensland, most of the Northern Territory and northwest Western Australia.

However, the published phylogenies of Marin *et al.* (2012 and 2013) have indicated nine separate species, each divergent from one another on average of about 2.5 MYA.

The eight other forms are formally named herein. Nominate *S. diversus* is herein confined to north-west Queensland, generally east of the Georgina River and not including the southern parts of the Gulf of Carpentaria.

S. farkinelle sp. nov. is a taxon found in the southwest Kimberley district of western Australia and apparently confined to this area.

S. ivebeenshaton sp. nov. is the taxon that occurs in most of the top end of the Northern Territory, including the west and south of the Gulf of Carpentaria.

S. shittythingie sp. nov. occurs in the deserts to the southeast of the Kimberley District in Western Australia, entering the far west of nearby Northern Territory.

S. datsquirmy sp. nov. is a taxon from the Tenant Creek and Simpson Desert region of the central east of the Northern territory, entering far west Queensland, west of the Georgina River basin.

S. antmuncha sp. nov. is a taxon only known from Supplejack Downs at the northern part of the Tanami region in the Northern Territory.

S. murraybrucei sp. nov. is a taxon from the upper Ord Drainage system, generally from around Lake Argyle and further south.

S. hawkeswoodi sp. nov. is from Carlton Hill Station, north-east Kimberley district, Western Australia, extending east into the lower (coastal) Victoria River district in the Northern Territory.

S. jarrodbinghami sp. nov. is a divergent form from around Kununurra in the east Kimberley district of Western Australia.

The nine species are separated from one another as follows:

The type form of *S. diversus* is a strongly bright pinkish coloured snake with a slight purplish tinge, this being the dorsal or visible colouration. Anterior part of the snout is a light whitish brown, becoming light brown at about the line between the eyes, rapidly turning the same pink as the dorsum at this general area. There is no well-defined demarcation of colour charge and there is only a very faint light creamish etching to the scales of the snout region. Belly is a lighter pinkish white, the colour change poorly defined on the lower flank. Commencing anterior to the tail, the tail region develops a very slight and barely noticeable brownish tinge. The black eye spot is slightly below centre of the ocular scale.

S. farkinelle sp. nov. is a dull pinkish colour on top. Extending from a whitish snout tip, the front, middle and back of the upper surfaces of the head are dark brown with well-defined thick cream etchings to each scale, this extending to the back of the head and well behind the eyes, either as far or slightly further than the distance from snout to centre of the frontal. The venter is white and well demarcated on the lower flank with a jagged edge, being caused by the infusion of white scales over the dark along the

position of the lower lateral line. Only anteriorly is this demarcation line not well defined. Commencing slightly anterior to the tail there is a noticeable but slight brownish tinge. The black eye spot is slightly below centre and slightly posterior to centre of the ocular scale. The length is 55-70 times the body diameter.

S. ivebeenshaton sp. nov. is a purplish coloured snake on top. The scales of the venter are ivory white with small purple patches at the anterior part of each. The demarcation line between dark upper and light lower body on the lower flank is straight edged, the colour change cutting across the edges of the scales rather than being of the form a scale is either all dark or all light to create a jagged edge. This demarcation line is well-defined for the entire length of the snake, commencing at the back of the head.

The end of the tail on top is the same colour as the rest of the dorsum. The snout is usually the same colour as the dorsum, or sometimes the most anterior scales have a brownish tinge. They have moderately well-defined white etching. Only at the very tip of the snout is there a white patch. Prefrontal is 2-3 times larger than the frontal. The black eye spot is situated at the centre of the ocular scale. Length is 40-50 times the body diameter.

S. shittythingie sp. nov. is a brilliant light whitish pink coloured snake on top. Tip of snout and end of tail is a light yellow colour. There is no white or whitish at the tip of the snout. Lower flanks are also pinkish and there is a fading to whitish pink in colour only well under the belly. Where there is a line demarcating dark upper and lighter lower body on the lower flank in other species, there is an ill-defined darker purple edge, with above and below it being the usual colour of the rest of the dorsum, with the lower area gradually fading under the belly. There is no obvious etching of the scales on the head. The black eye spot is situated slightly below the centre of the ocular scale. Length is 50-60 times the body diameter. S. datsquirmy sp. nov. is a pinkish coloured snake on top with a strong yellowish tinge throughout the dorsum. tip of snout and end of tail are a fraction lighter than the rest of the body and lack obvious etchings between the scales. There is an indistinct and jagged edged border between dark upper and whitish lower body on the lower flank of consistent nature along the length of the snake. The jagged edge is caused by light and dark scales bordering one another. Length is 50-65 times the body diameter. The black eye spot is placed well back in the ocular scale and usually noticeably lower than centre..

S. antmuncha sp. nov. is a purplish-pink coloured snake on top. Head is dark brown rather than purple, with the very tip of snout becoming whitish in colour. There is a faint lighter etching of scales of the scales of the snout.

From before the vent the tail is brownish in colour

on top and the tail tip is nearly black. The venter is a whitish version of the dorsum and there is no obvious demarcation between dark upper and lighter lower body on the lower flank or belly.

The rostral scale is particularly wide and squarish in shape, though narrowing slightly on the lower edges. The nasal is also expanded in size, impinging and reducing the sizes of the adjacent scales. Length is 55-70 times the body diameter. Black eye spot is relatively small and slightly anterior in the nasal, this caused by the expansion of the more anterior scales. S. murraybrucei sp. nov. is a dark brown coloured snake on top. The anterior of the head is a more muddy brown colour, as opposed to the yellowish brown of the body. There is no obvious etching of scales on the head and the end of the tail has a slight grevish tinge. The demarcation between brownish upper body and creamish lower body on the lower flank is quite well-defined and the border is jagged edged, caused by the meeting of rows of dark and light scales. Top edge of the rostral is pointed sharply and barely touches the prefrontal.

On the dorsum, each scale has a faint but darker blackish centre, meaning that when viewed as a whole the snake appears to have faint longitudinal stripes.

S. hawkeswoodi sp. nov. is similar in most respects to *S. antmuncha sp. nov.* as described above. It is separated from that species and all the others in this complex by being a dark brownish coloured snake on top, obvious yellow or beige etching of scales on the front of the head and a distinctive yellow venter, strongly demarcated from the upper body colour on the lower flanks. Head is of similar colour to the body but generally lighter, but there is no lightening at the tip of snout or anterior snout. Length is 45-55 times the body diameter. Prefrontal is nearly as large as the frontal. Rostral is wider at top than bottom. Nasal is not enlarged in size and eye spot is at centre of the ocular scale.

S. jarrodbinghami sp. nov. is an even brownish colour on top, with a neck that is purplish in colour and a tail that is dark brown, ending in a near black tip. Centres of scales on the dorsum and flanks are brown and outer edges are slightly darker in colour as an illdefined etching. Eye spot is in the centre of the ocular scale, or slightly anterior. Nasal is not expanded in size. Rostral, is square-sided except at the top, where it forms a triangle barely touching the preocular. Head is more-or less the same colour as the body and the end of the tail a different shade of purplish brown to the rest of the body. There is no obvious etching of scales on the snout. Venter is creamish and the edge of light and dark on the flank is reasonably welldefined and jagged edged formed by the interplay of a row of dark shields on top versus light shields below. Length is 55-65 times the body diameter.

The nine preceding species are separated from

all other Australian Blind Snakes by the following characteristics: A small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals. These 9 species are separated from the similar S. ammodytes (Montague, 1914) clade of eleven species as identified and named in this paper that as a group occurs in the Pilbara of Western Australia by the shape of the rostral, being straight-sided from above (except perhaps the most upper edges, or sometimes an inward turn, then straight again midway down the scale, versus narrower and concave-sided versus in the S. ammodytes (Montague, 1914) clade of species. The nine preceding species also have a nasal cleft that extends forward to approximately the rostral

scale, versus a more vertical orientation in the S. ammodytes clade of 11 species.

S. diversus is depicted in life online at:

https://www.flickr.com/photos/ ryanfrancis/14975362459/ and

https://www.flickr.com/photos/ ryanfrancis/16007633642/ and

https://www.flickr.com/photos/ ryanfrancis/14975437250/

all from Mount Isa, Queensland, Australia, photographed by Ryan Francis, and https://www.flickr.com/photos/149281781@ N05/51276095631/

from Mount Isa, Queensland, Australia, photographed by Christina Zdenek.

S. farkinelle sp. nov. is depicted in life online at: https://www.flickr.com/photos/58349528@ N02/52297242557/

from Broom, Western Australia, photographed by Jordan Mulder, and

https://www.flickr.com/photos/ julesfarguhar/52250606494/

from Broom, Western Australia, photographed by taxonomic vandal and fake scientist Jules Farquhar.

S. ivebeenshaton sp. nov. is depicted in life in Storr, Smith and Johnstone (2002) page 101 at bottom left from Berrimah, NT and online at:

https://www.flickr.com/photos/zimny anders/10895963323/

from the Gove area, Northern Territory, Australia photographed by Anders Zimny, and https://www.flickr.com/photos/58349528@ N02/47969394316/

from Arnhem Land, Northern Territory, Australia photographed by Jordan Mulder, and https://www.flickr.com/photos/zimny

anders/53163503685/

from Weddell (Darwin), Northern Territory, Australia photographed by Anders Zimny, and https://www.flickr.com/photos/171250498@ N08/52400668964/ from Wongalara, Northern Territory, Australia photographed by Wes Read. S. shittythingie sp. nov. is depicted in life online at: https://www.flickr.com/photos/ jaricornelis/52462476259/ from Tanami, Western Australia, photographed by Jari Cornelis, and https://www.flickr.com/photos/ euprepiosaur/7237645530/ from the southern Tanami Desert, Northern Territory, Australia, photographed by Stephen Zozaya. S. datsquirmy sp. nov. is depicted in life online at: https://www.flickr.com/photos/ euprepiosaur/51654314525/ from Davenport Range, Northern Territory, Australia photographed by Stephen Zozaya, and https://www.flickr.com/photos/zimny anders/50384861597/ from Cravens Peak, Queensland, Australia, photographed by Anders Zimny. S. murraybrucei sp. nov. is depicted in life in Cogger 2014 on page 800 at top left, from Lake Argyle, Western Australia, photographed by Brad Maryan. Distribution: S. farkinelle sp. nov. is a taxon found in the south-west Kimberley district of Western Australia

and apparently confined to this area. Etymology: It was in 1983, while I was collecting reptiles north of Broome in Western Australia when I pulled a specimen of this taxon out of a pillow case to show a Yawuru Aboriginal. He yelled "farkinelle" and

ran away, so this is the etymology for the species. SLOPPTYPHLOPS IVEBEENSHATON SP. NOV. LSIDurn:Isid:zoobank.org:act:2F76CEED-1EDB-4E00-B738-23A05AC1AA65

Holotype: A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, R19058 collected from Guluwuru Island, Wessel Islands, Northern Territory, Australia, Latitude -11.525 S., Longitude 136.417 E.

This facility allows access to its holdings. Paratypes: 1/ A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, R19071 collected from

Guluwuru Island, Wessel Islands, Northern Territory, Australia, Latitude -11.525 S., Longitude 136.417 E., and 2/ A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, R20279 collected from Bumaga Island, Wessel Islands, Northern Territory, Australia, Latitude -11.767 S., Longitude 136.083 E.

Diagnosis: Until now, the putative taxon Sloppytyphlops diversus (Waite, 1894), with a type locality of west Queensland has been treated by all publishing authors as a single wide-ranging taxon, found in the tropical and near tropical section of Australia including far western Queensland, most of the Northern Territory and northwest Western Australia.

However, the published phylogenies of Marin *et al.* (2012 and 2013) have indicated nine separate species, each divergent from one another on average of about 2.5 MYA.

The eight other forms are formally named herein. Nominate *S. diversus* is herein confined to north-west Queensland, generally east of the Georgina River and not including the southern parts of the Gulf of Carpentaria.

S. farkinelle sp. nov. is a taxon found in the southwest Kimberley district of western Australia and apparently confined to this area.

S. ivebeenshaton sp. nov. is the taxon that occurs in most of the top end of the Northern Territory, including the west and south of the Gulf of Carpentaria.

S. shittythingie sp. nov. occurs in the deserts to the southeast of the Kimberley District in Western Australia, entering the far west of nearby Northern Territory.

S. datsquirmy sp. nov. is a taxon from the Tenant Creek and Simpson Desert region of the central east of the Northern territory, entering far west

Queensland, west of the Georgina River basin. *S. antmuncha sp. nov.* is a taxon only known from Supplejack Downs at the northern part of the Tanami region in the Northern Territory.

S. murraybrucei sp. nov. is a taxon from the upper Ord Drainage system, generally from around Lake Argyle and further south.

S. hawkeswoodi sp. nov. is from Carlton Hill Station, north-east Kimberley district, Western Australia, extending east into the lower (coastal) Victoria River district in the Northern Territory.

S. jarrodbinghami sp. nov. is a divergent form from around Kununurra in the east Kimberley district of Western Australia.

The nine species are separated from one another as follows:

The type form of *S. diversus* is a strongly bright pinkish coloured snake with a slight purplish tinge, this being the dorsal or visible colouration. Anterior part of the snout is a light whitish brown, becoming light brown at about the line between the eyes, rapidly turning the same pink as the dorsum at this general area. There is no well-defined demarcation of colour charge and there is only a very faint light creamish etching to the scales of the snout region. Belly is a lighter pinkish white, the colour change poorly defined on the lower flank. Commencing anterior to the tail, the tail region develops a very slight and barely noticeable brownish tinge. The black eye spot is slightly below centre of the ocular scale.

S. farkinelle sp. nov. is a dull pinkish colour on top. Extending from a whitish snout tip, the front, middle and back of the upper surfaces of the head are dark brown with well-defined thick cream etchings to each scale, this extending to the back of the head and well behind the eyes, either as far or slightly further than the distance from snout to centre of the frontal. The venter is white and well demarcated on the lower flank with a jagged edge, being caused by the infusion of white scales over the dark along the position of the lower lateral line. Only anteriorly is this demarcation line not well defined. Commencing slightly anterior to the tail there is a noticeable but slight brownish tinge. The black eye spot is slightly below centre and slightly posterior to centre of the ocular scale. Length is 55-70 times the body diameter. S. ivebeenshaton sp. nov. is a purplish coloured snake on top. The scales of the venter are ivory white with small purple patches at the anterior part of each. The demarcation line between dark upper and light lower body on the lower flank is straight edged, the colour change cutting across the edges of the scales rather than being of the form a scale is either all dark or all light to create a jagged edge. This demarcation line is well-defined for the entire length of the snake, commencing at the back of the head.

The end of the tail on top is the same colour as the rest of the dorsum. The snout is usually the same colour as the dorsum, or sometimes the most anterior scales have a brownish tinge. They have moderately well-defined white etching. Only at the very tip of the snout is there a white patch. Prefrontal is 2-3 times larger than the frontal. The black eye spot is situated at the centre of the ocular scale. Length is 40-50 times the body diameter.

S. shittythingie sp. nov. is a brilliant light whitish pink coloured snake on top. Tip of snout and end of tail is a light vellow colour. There is no white or whitish at the tip of the snout. Lower flanks are also pinkish and there is a fading to whitish pink in colour only well under the belly. Where there is a line demarcating dark upper and lighter lower body on the lower flank in other species, there is an ill-defined darker purple edge, with above and below it being the usual colour of the rest of the dorsum, with the lower area gradually fading under the belly. There is no obvious etching of the scales on the head. The black eye spot is situated slightly below the centre of the ocular scale. Length is 50-60 times the body diameter. S. datsquirmy sp. nov. is a pinkish coloured snake on top with a strong yellowish tinge throughout the dorsum. tip of snout and end of tail are a fraction lighter than the rest of the body and lack obvious etchings between the scales. There is an indistinct and jagged edged border between dark upper and whitish lower body on the lower flank of consistent

nature along the length of the snake. The jagged edge is caused by light and dark scales bordering one another. Length is 50-65 times the body diameter. The black eye spot is placed well back in the ocular scale and usually noticeably lower than centre..

S. antmuncha sp. nov. is a purplish-pink coloured snake on top. Head is dark brown rather than purple, with the very tip of snout becoming whitish in colour. There is a faint lighter etching of scales of the scales of the snout.

From before the vent the tail is brownish in colour on top and the tail tip is nearly black. The venter is a whitish version of the dorsum and there is no obvious demarcation between dark upper and lighter lower body on the lower flank or belly.

The rostral scale is particularly wide and squarish in shape, though narrowing slightly on the lower edges. The nasal is also expanded in size, impinging and reducing the sizes of the adjacent scales. Length is 55-70 times the body diameter. Black eye spot is relatively small and slightly anterior in the nasal, this caused by the expansion of the more anterior scales. *S. murraybrucei sp. nov.* is a dark brown coloured snake on top. The anterior of the head is a more muddy brown colour, as opposed to the yellowish brown of the body. There is no obvious etching of scales on the head and the end of the tail has a slight greyish tinge. The demarcation between brownish

upper body and creamish lower body on the lower flank is quite well-defined and the border is jagged edged, caused by the meeting of rows of dark and light scales. Top edge of the rostral is pointed sharply and barely touches the prefrontal.

On the dorsum, each scale has a faint but darker blackish centre, meaning that when viewed as a whole the snake appears to have faint longitudinal stripes.

S. hawkeswoodi sp. nov. is similar in most respects to *S. antmuncha sp. nov.* as described above. It is separated from that species and all the others in this complex by being a dark brownish coloured snake on top, obvious yellow or beige etching of scales on the front of the head and a distinctive yellow venter, strongly demarcated from the upper body colour on the lower flanks. Head is of similar colour to the body but generally lighter, but there is no lightening at the tip of snout or anterior snout. Length is 45-55 times the body diameter. Prefrontal is nearly as large as the frontal. Rostral is wider at top than bottom. Nasal is not enlarged in size and eye spot is at centre of the ocular scale.

S. jarrodbinghami sp. nov. is an even brownish colour on top, with a neck that is purplish in colour and a tail that is dark brown, ending in a near black tip. Centres of scales on the dorsum and flanks are brown and outer edges are slightly darker in colour as an illdefined etching. Eye spot is in the centre of the ocular scale, or slightly anterior. Nasal is not expanded in size. Rostral, is square-sided except at the top, where it forms a triangle barely touching the preocular. Head is more-or less the same colour as the body and the end of the tail a different shade of purplish brown to the rest of the body. There is no obvious etching of scales on the snout. Venter is creamish and the edge of light and dark on the flank is reasonably welldefined and jagged edged formed by the interplay of a row of dark shields on top versus light shields below. Length is 55-65 times the body diameter.

The nine preceding species are separated from all other Australian Blind Snakes by the following characteristics: A small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals. These 9 species are separated from the similar S. ammodytes (Montague, 1914) clade of eleven species as identified and named in this paper that as a group occurs in the Pilbara of Western Australia by the shape of the rostral, being straight-sided from above (except perhaps the most upper edges, or sometimes an inward turn, then straight again midway down the scale, versus narrower and concave-sided versus in the S. ammodytes (Montague, 1914) clade of species. The nine preceding species also have a nasal cleft that extends forward to approximately the rostral scale, versus a more vertical orientation in the S. ammodytes clade of 11 species.

S. diversus is depicted in life online at: https://www.flickr.com/photos/ ryanfrancis/14975362459/ and

https://www.flickr.com/photos/ ryanfrancis/16007633642/

and https://www.flickr.com/photos/ ryanfrancis/14975437250/

all from Mount Isa, Queensland, Australia, photographed by Ryan Francis, and

https://www.flickr.com/photos/149281781@ N05/51276095631/

from Mount Isa, Queensland, Australia, photographed by Christina Zdenek.

S. farkinelle sp. nov. is depicted in life online at: https://www.flickr.com/photos/58349528@ N02/52297242557/

from Broom, Western Australia, photographed by Jordan Mulder, and

https://www.flickr.com/photos/ julesfarquhar/52250606494/

from Broom, Western Australia, photographed by taxonomic vandal and fake scientist Jules Farquhar. *S. ivebeenshaton sp. nov.* is depicted in life in Storr,

Smith and Johnstone (2002) page 101 at bottom left from Berrimah, NT and online at: https://www.flickr.com/photos/zimny anders/10895963323/ from the Gove area, Northern Territory, Australia photographed by Anders Zimny, and https://www.flickr.com/photos/58349528@ N02/47969394316/ from Arnhem Land, Northern Territory, Australia photographed by Jordan Mulder, and https://www.flickr.com/photos/zimny anders/53163503685/ from Weddell (Darwin), Northern Territory, Australia photographed by Anders Zimny, and https://www.flickr.com/photos/171250498@ N08/52400668964/ from Wongalara, Northern Territory, Australia photographed by Wes Read. S. shittythingie sp. nov. is depicted in life online at: https://www.flickr.com/photos/ jaricornelis/52462476259/ from Tanami, Western Australia, photographed by Jari Cornelis, and https://www.flickr.com/photos/ euprepiosaur/7237645530/ from the southern Tanami Desert, Northern Territory, Australia, photographed by Stephen Zozaya. S. datsquirmy sp. nov. is depicted in life online at: https://www.flickr.com/photos/ euprepiosaur/51654314525/ from Davenport Range, Northern Territory, Australia photographed by Stephen Zozaya, and https://www.flickr.com/photos/zimny anders/50384861597/ from Cravens Peak, Queensland, Australia, photographed by Anders Zimny. S. murraybrucei sp. nov. is depicted in life in Cogger 2014 on page 800 at top left, from Lake Argyle, Western Australia, photographed by Brad Maryan. Distribution: S. ivebeenshaton sp. nov. occurs in most of the top end of the Northern Territory, including the west and south of the Gulf of Carpentaria. Etymology: It was in January 1983, while I was collecting reptiles at the top end of the Northern Territory, when after a thunderstorm, myself and Charles Acheson were driving roads at night grabbing reptiles we saw crossing. Immediately after Charles Acheson grabbed a specimen of this species he yelled "ivebeenshaton" which is the etymology of the species. SLOPPTYPHLOPS SHITTYTHINGIE SP. NOV. LSIDurn:lsid:zoobank.org:act:51E7D1BB-C425-4C70-BA05-F859C7BD78D0 Holotype: A preserved adult specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R157402 collected from

the Tanami Desert, Western Australia, Australia, Latitude -19.898611 S., Longitude 128.865833 E. This government-owned facility allows access to its holdings.

Paratypes: Three preserved specimens at the Western Australian Museum (WAM), Perth, Western Australia, Australia, being specimen numbers R157464 (adult female) and R157495 both collected from the Tanami Desert, Western Australia, Australia, Latitude -19.898611 S., Longitude 128.865833 E., and specimen number R110916 (adult male), collected from 117 km north northwest of the Tanami Downs Homestead, Western Australia, Australia, Latitude -19.889444 S., Longitude 128.86 E.

Diagnosis: Until now, the putative taxon *Sloppytyphlops diversus* (Waite, 1894), with a type locality of west Queensland has been treated by all publishing authors as a single wide-ranging taxon, found in the tropical and near tropical section of Australia including far western Queensland, most of the Northern Territory and northwest Western Australia.

However, the published phylogenies of Marin *et al.* (2012 and 2013) have indicated nine separate species, each divergent from one another on average of about 2.5 MYA.

The eight other forms are formally named herein. Nominate *S. diversus* is herein confined to north-west Queensland, generally east of the Georgina River and not including the southern parts of the Gulf of Carpentaria.

S. farkinelle sp. nov. is a taxon found in the southwest Kimberley district of western Australia and apparently confined to this area.

S. ivebeenshaton sp. nov. is the taxon that occurs in most of the top end of the Northern Territory, including the west and south of the Gulf of Carpentaria.

S. shittythingie sp. nov. occurs in the deserts to the southeast of the Kimberley District in Western Australia, entering the far west of nearby Northern Territory.

S. datsquirmy sp. nov. is a taxon from the Tenant Creek and Simpson Desert region of the central east of the Northern territory, entering far west Queensland, west of the Georgina River basin.

S. antmuncha sp. nov. is a taxon only known from Supplejack Downs at the northern part of the Tanami region in the Northern Territory.

S. murraybrucei sp. nov. is a taxon from the upper Ord Drainage system, generally from around Lake Argyle and further south.

S. hawkeswoodi sp. nov. is from Carlton Hill Station, north-east Kimberley district, Western Australia, extending east into the lower (coastal) Victoria River district in the Northern Territory.

S. jarrodbinghami sp. nov. is a divergent form from around Kununurra in the east Kimberley district of

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Western Australia.

The nine species are separated from one another as follows:

The type form of *S. diversus* is a strongly bright pinkish coloured snake with a slight purplish tinge, this being the dorsal or visible colouration. Anterior part of the snout is a light whitish brown, becoming light brown at about the line between the eyes, rapidly turning the same pink as the dorsum at this general area. There is no well-defined demarcation of colour charge and there is only a very faint light creamish etching to the scales of the snout region. Belly is a lighter pinkish white, the colour change poorly defined on the lower flank. Commencing anterior to the tail, the tail region develops a very slight and barely noticeable brownish tinge. The black eye spot is slightly below centre of the ocular scale.

S. farkinelle sp. nov. is a dull pinkish colour on top. Extending from a whitish snout tip, the front, middle and back of the upper surfaces of the head are dark brown with well-defined thick cream etchings to each scale, this extending to the back of the head and well behind the eyes, either as far or slightly further than the distance from snout to centre of the frontal.

The venter is white and well demarcated on the lower flank with a jagged edge, being caused by the infusion of white scales over the dark along the position of the lower lateral line. Only anteriorly is this demarcation line not well defined. Commencing slightly anterior to the tail there is a noticeable but slight brownish tinge. The black eye spot is slightly below centre and slightly posterior to centre of the ocular scale. Length is 55-70 times the body diameter. S. ivebeenshaton sp. nov. is a purplish coloured snake on top. The scales of the venter are ivory white with small purple patches at the anterior part of each. The demarcation line between dark upper and light lower body on the lower flank is straight edged, the colour change cutting across the edges of the scales rather than being of the form a scale is either all dark or all light to create a jagged edge. This demarcation line is well-defined for the entire length of the snake, commencing at the back of the head.

The end of the tail on top is the same colour as the rest of the dorsum. The snout is usually the same colour as the dorsum, or sometimes the most anterior scales have a brownish tinge. They have moderately well-defined white etching. Only at the very tip of the snout is there a white patch. Prefrontal is 2-3 times larger than the frontal. The black eye spot is situated at the centre of the ocular scale. Length is 40-50 times the body diameter.

S. shittythingie sp. nov. is a brilliant light whitish pink coloured snake on top. Tip of snout and end of tail is a light yellow colour. There is no white or whitish at the tip of the snout. Lower flanks are also pinkish and there is a fading to whitish pink in colour only well under the belly. Where there is a line demarcating dark upper and lighter lower body on the lower flank in other species, there is an ill-defined darker purple edge, with above and below it being the usual colour of the rest of the dorsum, with the lower area gradually fading under the belly. There is no obvious etching of the scales on the head. The black eye spot is situated slightly below the centre of the ocular scale. Length is 50-60 times the body diameter. S. datsquirmy sp. nov. is a pinkish coloured snake on top with a strong yellowish tinge throughout the dorsum. tip of snout and end of tail are a fraction lighter than the rest of the body and lack obvious etchings between the scales. There is an indistinct and jagged edged border between dark upper and whitish lower body on the lower flank of consistent nature along the length of the snake. The jagged edge is caused by light and dark scales bordering one another. Length is 50-65 times the body diameter. The black eye spot is placed well back in the ocular scale and usually noticeably lower than centre.. S. antmuncha sp. nov. is a purplish-pink coloured

snake on top. Head is dark brown rather than purple, with the very tip of snout becoming whitish in colour. There is a faint lighter etching of scales of the scales of the snout.

From before the vent the tail is brownish in colour on top and the tail tip is nearly black. The venter is a whitish version of the dorsum and there is no obvious demarcation between dark upper and lighter lower body on the lower flank or belly.

The rostral scale is particularly wide and squarish in shape, though narrowing slightly on the lower edges. The nasal is also expanded in size, impinging and reducing the sizes of the adjacent scales. Length is 55-70 times the body diameter. Black eye spot is relatively small and slightly anterior in the nasal, this caused by the expansion of the more anterior scales. S. murraybrucei sp. nov. is a dark brown coloured snake on top. The anterior of the head is a more muddy brown colour, as opposed to the yellowish brown of the body. There is no obvious etching of scales on the head and the end of the tail has a slight greyish tinge. The demarcation between brownish upper body and creamish lower body on the lower flank is guite well-defined and the border is jagged edged, caused by the meeting of rows of dark and light scales. Top edge of the rostral is pointed sharply and barely touches the prefrontal.

On the dorsum, each scale has a faint but darker blackish centre, meaning that when viewed as a whole the snake appears to have faint longitudinal stripes.

S. hawkeswoodi sp. nov. is similar in most respects to *S. antmuncha sp. nov.* as described above. It is separated from that species and all the others in this complex by being a dark brownish coloured snake on top, obvious yellow or beige etching of scales on the front of the head and a distinctive yellow venter,

strongly demarcated from the upper body colour on the lower flanks. Head is of similar colour to the body but generally lighter, but there is no lightening at the tip of snout or anterior snout. Length is 45-55 times the body diameter. Prefrontal is nearly as large as the frontal. Rostral is wider at top than bottom. Nasal is not enlarged in size and eye spot is at centre of the ocular scale.

S. jarrodbinghami sp. nov. is an even brownish colour on top, with a neck that is purplish in colour and a tail that is dark brown, ending in a near black tip. Centres of scales on the dorsum and flanks are brown and outer edges are slightly darker in colour as an illdefined etching. Eye spot is in the centre of the ocular scale, or slightly anterior. Nasal is not expanded in size. Rostral, is square-sided except at the top, where it forms a triangle barely touching the preocular. Head is more-or less the same colour as the body and the end of the tail a different shade of purplish brown to the rest of the body. There is no obvious etching of scales on the snout. Venter is creamish and the edge of light and dark on the flank is reasonably welldefined and jagged edged formed by the interplay of a row of dark shields on top versus light shields below. Length is 55-65 times the body diameter.

The nine preceding species are separated from all other Australian Blind Snakes by the following characteristics: A small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals. These 9 species are separated from the similar S. ammodytes (Montague, 1914) clade of eleven species as identified and named in this paper that as a group occurs in the Pilbara of Western Australia by the shape of the rostral, being straight-sided from above (except perhaps the most upper edges, or sometimes an inward turn, then straight again midway down the scale, versus narrower and concave-sided versus in the S. ammodytes (Montague, 1914) clade of species. The nine preceding species also have a nasal cleft that extends forward to approximately the rostral scale, versus a more vertical orientation in the S. ammodytes clade of 11 species. S. diversus is depicted in life online at:

https://www.flickr.com/photos/

ryanfrancis/14975362459/ and

https://www.flickr.com/photos/ ryanfrancis/16007633642/

and

https://www.flickr.com/photos/

ryanfrancis/14975437250/

all from Mount Isa, Queensland, Australia, photographed by Ryan Francis, and

https://www.flickr.com/photos/149281781@ N05/51276095631/

from Mount Isa, Queensland, Australia, photographed by Christina Zdenek.

S. farkinelle sp. nov. is depicted in life online at: https://www.flickr.com/photos/58349528@ N02/52297242557/

from Broom, Western Australia, photographed by Jordan Mulder, and

https://www.flickr.com/photos/ julesfarquhar/52250606494/

from Broom, Western Australia, photographed by taxonomic vandal and fake scientist Jules Farquhar. *S. ivebeenshaton sp. nov.* is depicted in life in Storr, Smith and Johnstone (2002) page 101 at bottom left from Berrimah, NT and online at:

https://www.flickr.com/photos/zimny_

anders/10895963323/

from the Gove area, Northern Territory, Australia photographed by Anders Zimny, and https://www.flickr.com/photos/58349528@ N02/47969394316/

from Arnhem Land, Northern Territory, Australia photographed by Jordan Mulder, and

https://www.flickr.com/photos/zimny_ anders/53163503685/

from Weddell (Darwin), Northern Territory, Australia photographed by Anders Zimny, and https://www.flickr.com/photos/171250498@ N08/52400668964/

from Wongalara, Northern Territory, Australia photographed by Wes Read.

S. shittythingie sp. nov. is depicted in life online at: https://www.flickr.com/photos/

jaricornelis/52462476259/

from Tanami, Western Australia, photographed by Jari Cornelis, and

https://www.flickr.com/photos/

euprepiosaur/7237645530/

from the southern Tanami Desert, Northern Territory, Australia, photographed by Stephen Zozaya.

S. datsquirmy sp. nov. is depicted in life online at: https://www.flickr.com/photos/

euprepiosaur/51654314525/

from Davenport Range, Northern Territory, Australia photographed by Stephen Zozaya, and

https://www.flickr.com/photos/zimny_

anders/50384861597/

from Cravens Peak, Queensland, Australia, photographed by Anders Zimny.

S. murraybrucei sp. nov. is depicted in life in Cogger 2014 on page 800 at top left, from Lake Argyle, Western Australia, photographed by Brad Maryan. **Distribution:** *S. shittythingie sp. nov.* occurs in the deserts to the southeast of the Kimberley District in Western Australia, entering the far west of the NT.

Etymology: It was in January 1981, when I discussed this taxon with a Warlpiri Aboriginal elder who seemed to be familiar with the species, or if not, confused with another similar Blind Snake from the Tanami region. He described it as a "shitty thingie" and hence the etymology.

SLOPPTYPHLOPS DATSQUIRMY SP. NOV. LSIDurn:Isid:zoobank.org:act:4ECD5B0E-B88B-4093-9FDD-6C7D429C1480

Holotype: A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J85421 collected from the Cravens Peak property, approximately 1.2 km northeast of Salty Bore, Southwest of Boulia, Queensland, Australia, Latitude -23.016389 S., Longitude 138.234444 E. This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J82151 collected from the Big Jewelry Waterhole, Glenormiston, Queensland, Australia, Latitude -23.291667 S., Longitude 138.730833 E.

Diagnosis: Until now, the putative taxon Sloppytyphlops diversus (Waite, 1894), with a type locality of west Queensland has been treated by all publishing authors as a single wide-ranging taxon, found in the tropical and near tropical section of Australia including far western Queensland, most of the Northern Territory and northwest Western Australia.

However, the published phylogenies of Marin *et al.* (2012 and 2013) have indicated nine separate species, each divergent from one another on average of about 2.5 MYA.

The eight other forms are formally named herein. Nominate *S. diversus* is herein confined to north-west Queensland, generally east of the Georgina River and not including the southern parts of the Gulf of Carpentaria.

S. farkinelle sp. nov. is a taxon found in the southwest Kimberley district of western Australia and apparently confined to this area.

S. ivebeenshaton sp. nov. is the taxon that occurs in most of the top end of the Northern Territory, including the west and south of the Gulf of Carpentaria.

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S. datsquirmy sp. nov. is a taxon from the Tenant Creek and Simpson Desert region of the central east of the Northern territory, entering far west Queensland, west of the Georgina River basin.

S. antmuncha sp. nov. is a taxon only known from Supplejack Downs at the northern part of the Tanami region in the Northern Territory.

S. murraybrucei sp. nov. is a taxon from the upper

Ord Drainage system, generally from around Lake Argyle and further south.

S. hawkeswoodi sp. nov. is from Carlton Hill Station, north-east Kimberley district, Western Australia, extending east into the lower (coastal) Victoria River district in the Northern Territory.

S. jarrodbinghami sp. nov. is a divergent form from around Kununurra in the east Kimberley district of Western Australia.

The nine species are separated from one another as follows:

The type form of *S. diversus* is a strongly bright pinkish coloured snake with a slight purplish tinge, this being the dorsal or visible colouration. Anterior part of the snout is a light whitish brown, becoming light brown at about the line between the eyes, rapidly turning the same pink as the dorsum at this general area. There is no well-defined demarcation of colour charge and there is only a very faint light creamish etching to the scales of the snout region. Belly is a lighter pinkish white, the colour change poorly defined on the lower flank. Commencing anterior to the tail, the tail region develops a very slight and barely noticeable brownish tinge. The black eye spot is slightly below centre of the ocular scale.

S. farkinelle sp. nov. is a dull pinkish colour on top. Extending from a whitish snout tip, the front, middle and back of the upper surfaces of the head are dark brown with well-defined thick cream etchings to each scale, this extending to the back of the head and well behind the eyes, either as far or slightly further than the distance from snout to centre of the frontal. The venter is white and well demarcated on the lower flank with a jagged edge, being caused by the infusion of white scales over the dark along the position of the lower lateral line. Only anteriorly is this demarcation line not well defined. Commencing slightly anterior to the tail there is a noticeable but slight brownish tinge. The black eye spot is slightly below centre and slightly posterior to centre of the ocular scale. Length is 55-70 times the body diameter. S. ivebeenshaton sp. nov. is a purplish coloured snake on top. The scales of the venter are ivory white with small purple patches at the anterior part of each. The demarcation line between dark upper and light lower body on the lower flank is straight edged, the colour change cutting across the edges of the scales rather than being of the form a scale is either all dark or all light to create a jagged edge. This demarcation line is well-defined for the entire length of the snake, commencing at the back of the head.

The end of the tail on top is the same colour as the rest of the dorsum. The snout is usually the same colour as the dorsum, or sometimes the most anterior scales have a brownish tinge. They have moderately well-defined white etching. Only at the very tip of the snout is there a white patch. Prefrontal is 2-3 times larger than the frontal. The black eye spot is situated

at the centre of the ocular scale. Length is 40-50 times the body diameter.

S. shittythingie sp. nov. is a brilliant light whitish pink coloured snake on top. Tip of snout and end of tail is a light yellow colour. There is no white or whitish at the tip of the snout. Lower flanks are also pinkish and there is a fading to whitish pink in colour only well under the belly. Where there is a line demarcating dark upper and lighter lower body on the lower flank in other species, there is an ill-defined darker purple edge, with above and below it being the usual colour of the rest of the dorsum, with the lower rea gradually fading under the belly. There is no obvious etching of the scales on the head. The black eye spot is situated slightly below the centre of the ocular scale. Length is 50-60 times the body diameter.

S. datsquirmy sp. nov. is a pinkish coloured snake on top with a strong yellowish tinge throughout the dorsum. tip of snout and end of tail are a fraction lighter than the rest of the body and lack obvious etchings between the scales. There is an indistinct and jagged edged border between dark upper and whitish lower body on the lower flank of consistent nature along the length of the snake. The jagged edge is caused by light and dark scales bordering one another. Length is 50-65 times the body diameter. The black eye spot is placed well back in the ocular scale and usually noticeably lower than centre..

S. antmuncha sp. nov. is a purplish-pink coloured snake on top. Head is dark brown rather than purple, with the very tip of snout becoming whitish in colour. There is a faint lighter etching of scales of the scales of the snout.

From before the vent the tail is brownish in colour on top and the tail tip is nearly black. The venter is a whitish version of the dorsum and there is no obvious demarcation between dark upper and lighter lower body on the lower flank or belly.

The rostral scale is particularly wide and squarish in shape, though narrowing slightly on the lower edges. The nasal is also expanded in size, impinging and reducing the sizes of the adjacent scales. Length is 55-70 times the body diameter. Black eye spot is relatively small and slightly anterior in the nasal, this caused by the expansion of the more anterior scales.

S. murraybrucei sp. nov. is a dark brown coloured snake on top. The anterior of the head is a more muddy brown colour, as opposed to the yellowish brown of the body. There is no obvious etching of scales on the head and the end of the tail has a slight greyish tinge. The demarcation between brownish upper body and creamish lower body on the lower flank is quite well-defined and the border is jagged edged, caused by the meeting of rows of dark and light scales. Top edge of the rostral is pointed sharply and barely touches the prefrontal.

On the dorsum, each scale has a faint but darker blackish centre, meaning that when viewed as a

whole the snake appears to have faint longitudinal stripes.

S. hawkeswoodi sp. nov. is similar in most respects to *S. antmuncha sp. nov.* as described above. It is separated from that species and all the others in this complex by being a dark brownish coloured snake on top, obvious yellow or beige etching of scales on the front of the head and a distinctive yellow venter, strongly demarcated from the upper body colour on the lower flanks. Head is of similar colour to the body but generally lighter, but there is no lightening at the tip of snout or anterior snout. Length is 45-55 times the body diameter. Prefrontal is nearly as large as the frontal. Rostral is wider at top than bottom. Nasal is not enlarged in size and eye spot is at centre of the ocular scale.

S. jarrodbinghami sp. nov. is an even brownish colour on top, with a neck that is purplish in colour and a tail that is dark brown, ending in a near black tip. Centres of scales on the dorsum and flanks are brown and outer edges are slightly darker in colour as an illdefined etching. Eye spot is in the centre of the ocular scale, or slightly anterior. Nasal is not expanded in size. Rostral, is square-sided except at the top, where it forms a triangle barely touching the preocular. Head is more-or less the same colour as the body and the end of the tail a different shade of purplish brown to the rest of the body. There is no obvious etching of scales on the snout. Venter is creamish and the edge of light and dark on the flank is reasonably welldefined and jagged edged formed by the interplay of a row of dark shields on top versus light shields below. Length is 55-65 times the body diameter.

The nine preceding species are separated from all other Australian Blind Snakes by the following characteristics: A small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals. These 9 species are separated from the similar S. ammodytes (Montague, 1914) clade of eleven species as identified and named in this paper that as a group occurs in the Pilbara of Western Australia by the shape of the rostral, being straight-sided from above (except perhaps the most upper edges, or sometimes an inward turn, then straight again midway down the scale, versus narrower and concave-sided versus in the S. ammodytes (Montague, 1914) clade of species. The nine preceding species also have a nasal cleft that extends forward to approximately the rostral scale, versus a more vertical orientation in the S. ammodytes clade of 11 species.

S. diversus is depicted in life online at: https://www.flickr.com/photos/ ryanfrancis/14975362459/

and

https://www.flickr.com/photos/ ryanfrancis/16007633642/ and https://www.flickr.com/photos/ ryanfrancis/14975437250/ all from Mount Isa, Queensland, Australia, photographed by Ryan Francis, and https://www.flickr.com/photos/149281781@ N05/51276095631/ from Mount Isa, Queensland, Australia, photographed by Christina Zdenek. S. farkinelle sp. nov. is depicted in life online at: https://www.flickr.com/photos/58349528@ N02/52297242557/ from Broom, Western Australia, photographed by Jordan Mulder, and https://www.flickr.com/photos/ julesfarguhar/52250606494/ from Broom, Western Australia, photographed by taxonomic vandal and fake scientist Jules Farguhar. S. ivebeenshaton sp. nov. is depicted in life in Storr, Smith and Johnstone (2002) page 101 at bottom left from Berrimah, NT and online at: https://www.flickr.com/photos/zimny_ anders/10895963323/ from the Gove area, Northern Territory, Australia photographed by Anders Zimny, and https://www.flickr.com/photos/58349528@ N02/47969394316/ from Arnhem Land, Northern Territory, Australia photographed by Jordan Mulder, and https://www.flickr.com/photos/zimny anders/53163503685/ from Weddell (Darwin), Northern Territory, Australia photographed by Anders Zimny, and https://www.flickr.com/photos/171250498@ N08/52400668964/ from Wongalara, Northern Territory, Australia photographed by Wes Read. S. shittythingie sp. nov. is depicted in life online at: https://www.flickr.com/photos/ jaricornelis/52462476259/ from Tanami, Western Australia, photographed by Jari Cornelis, and https://www.flickr.com/photos/ euprepiosaur/7237645530/ from the southern Tanami Desert. Northern Territory. Australia, photographed by Stephen Zozaya. S. datsquirmy sp. nov. is depicted in life online at: https://www.flickr.com/photos/ euprepiosaur/51654314525/ from Davenport Range, Northern Territory, Australia photographed by Stephen Zozaya, and https://www.flickr.com/photos/zimny anders/50384861597/

from Cravens Peak, Queensland, Australia, photographed by Anders Zimny.

S. murraybrucei sp. nov. is depicted in life in Cogger 2014 on page 800 at top left, from Lake Argyle, Western Australia, photographed by Brad Maryan. **Distribution:** S. datsquirmy sp. nov. occurs in the

Tenant Creek and Simpson Desert region of the central east of the Northern territory, entering far west Queensland, west of the Georgina River basin.

Etymology: It was in 1977, when I was in far west Queensland catching this species and I showed a specimen to an Aboriginal child from the Wangkangurru Yarluyandi tribe of the Simpson Desert. He made the comment "dat squirmy" and hence the etymology.

SLOPPTYPHLOPS ANTMUNCHA SP. NOV. LSIDurn:lsid:zoobank.org:act:32C2D4F7-FB47-4054-A5ED-723605BDA200

Holotype: A preserved specimen at the Museum and Art Gallerv of the Northern Territory, Darwin, Northern Territory, Australia, specimen number R16427 collected from 8 Mile Bore, at Supplejack Station, Northern Territory, Australia, Latitude -19.167 S., Longitude 129.917 E.

This government-owned facility allows access to its holdings.

Diagnosis: Until now, the putative taxon Sloppytyphlops diversus (Waite, 1894), with a type locality of west Queensland has been treated by all publishing authors as a single wide-ranging taxon, found in the tropical and near tropical section of Australia including far western Queensland, most of the Northern Territory and northwest Western Australia.

However, the published phylogenies of Marin et al. (2012 and 2013) have indicated nine separate species, each divergent from one another on average of about 2.5 MYA.

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S. shittythingie sp. nov. occurs in the deserts to the southeast of the Kimberley District in Western Australia, entering the far west of nearby Northern Territory.

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S. antmuncha sp. nov. is a taxon only known from Supplejack Downs at the northern part of the Tanami region in the Northern Territory.

S. murraybrucei sp. nov. is a taxon from the upper Ord Drainage system, generally from around Lake Argyle and further south.

S. hawkeswoodi sp. nov. is from Carlton Hill Station, north-east Kimberley district, Western Australia, extending east into the lower (coastal) Victoria River district in the Northern Territory.

S. jarrodbinghami sp. nov. is a divergent form from around Kununurra in the east Kimberley district of Western Australia.

The nine species are separated from one another as follows:

The type form of *S. diversus* is a strongly bright pinkish coloured snake with a slight purplish tinge, this being the dorsal or visible colouration. Anterior part of the snout is a light whitish brown, becoming light brown at about the line between the eyes, rapidly turning the same pink as the dorsum at this general area. There is no well-defined demarcation of colour charge and there is only a very faint light creamish etching to the scales of the snout region. Belly is a lighter pinkish white, the colour change poorly defined on the lower flank. Commencing anterior to the tail, the tail region develops a very slight and barely noticeable brownish tinge. The black eye spot is slightly below centre of the ocular scale.

S. farkinelle sp. nov. is a dull pinkish colour on top. Extending from a whitish snout tip, the front, middle and back of the upper surfaces of the head are dark brown with well-defined thick cream etchings to each scale, this extending to the back of the head and well behind the eyes, either as far or slightly further than the distance from snout to centre of the frontal. The venter is white and well demarcated on the lower flank with a jagged edge, being caused by the infusion of white scales over the dark along the position of the lower lateral line. Only anteriorly is this demarcation line not well defined. Commencing slightly anterior to the tail there is a noticeable but slight brownish tinge. The black eye spot is slightly below centre and slightly posterior to centre of the ocular scale. Length is 55-70 times the body diameter. S. ivebeenshaton sp. nov. is a purplish coloured snake on top. The scales of the venter are ivory white with small purple patches at the anterior part of each. The demarcation line between dark upper and light lower body on the lower flank is straight edged, the colour change cutting across the edges of the scales rather than being of the form a scale is either all dark or all light to create a jagged edge. This demarcation line is well-defined for the entire length of the snake, commencing at the back of the head.

The end of the tail on top is the same colour as the rest of the dorsum. The snout is usually the same colour as the dorsum, or sometimes the most anterior

scales have a brownish tinge. They have moderately well-defined white etching. Only at the very tip of the snout is there a white patch. Prefrontal is 2-3 times larger than the frontal. The black eye spot is situated at the centre of the ocular scale. Length is 40-50 times the body diameter.

S. shittythingie sp. nov. is a brilliant light whitish pink coloured snake on top. Tip of snout and end of tail is a light yellow colour. There is no white or whitish at the tip of the snout. Lower flanks are also pinkish and there is a fading to whitish pink in colour only well under the belly. Where there is a line demarcating dark upper and lighter lower body on the lower flank in other species, there is an ill-defined darker purple edge, with above and below it being the usual colour of the rest of the dorsum, with the lower area gradually fading under the belly. There is no obvious etching of the scales on the head. The black eye spot is situated slightly below the centre of the ocular scale. Length is 50-60 times the body diameter. S. datsquirmy sp. nov. is a pinkish coloured snake on top with a strong yellowish tinge throughout the dorsum. tip of snout and end of tail are a fraction lighter than the rest of the body and lack obvious etchings between the scales. There is an indistinct and jagged edged border between dark upper and whitish lower body on the lower flank of consistent nature along the length of the snake. The jagged edge is caused by light and dark scales bordering one another. Length is 50-65 times the body diameter. The black eye spot is placed well back in the ocular scale and usually noticeably lower than centre..

S. antmuncha sp. nov. is a purplish-pink coloured snake on top. Head is dark brown rather than purple, with the very tip of snout becoming whitish in colour. There is a faint lighter etching of scales of the scales of the snout.

From before the vent the tail is brownish in colour on top and the tail tip is nearly black. The venter is a whitish version of the dorsum and there is no obvious demarcation between dark upper and lighter lower body on the lower flank or belly.

The rostral scale is particularly wide and squarish in shape, though narrowing slightly on the lower edges. The nasal is also expanded in size, impinging and reducing the sizes of the adjacent scales. Length is 55-70 times the body diameter. Black eye spot is relatively small and slightly anterior in the nasal, this caused by the expansion of the more anterior scales. S. murraybrucei sp. nov. is a dark brown coloured snake on top. The anterior of the head is a more muddy brown colour, as opposed to the yellowish brown of the body. There is no obvious etching of scales on the head and the end of the tail has a slight greyish tinge. The demarcation between brownish upper body and creamish lower body on the lower flank is quite well-defined and the border is jagged edged, caused by the meeting of rows of dark and

light scales. Top edge of the rostral is pointed sharply and barely touches the prefrontal.

On the dorsum, each scale has a faint but darker blackish centre, meaning that when viewed as a whole the snake appears to have faint longitudinal stripes.

S. hawkeswoodi sp. nov. is similar in most respects to *S. antmuncha sp. nov.* as described above. It is separated from that species and all the others in this complex by being a dark brownish coloured snake on top, obvious yellow or beige etching of scales on the front of the head and a distinctive yellow venter, strongly demarcated from the upper body colour on the lower flanks. Head is of similar colour to the body but generally lighter, but there is no lightening at the tip of snout or anterior snout. Length is 45-55 times the body diameter. Prefrontal is nearly as large as the frontal. Rostral is wider at top than bottom. Nasal is not enlarged in size and eye spot is at centre of the ocular scale.

S. jarrodbinghami sp. nov. is an even brownish colour on top, with a neck that is purplish in colour and a tail that is dark brown, ending in a near black tip. Centres of scales on the dorsum and flanks are brown and outer edges are slightly darker in colour as an illdefined etching. Eye spot is in the centre of the ocular scale, or slightly anterior. Nasal is not expanded in size. Rostral, is square-sided except at the top, where it forms a triangle barely touching the preocular. Head is more-or less the same colour as the body and the end of the tail a different shade of purplish brown to the rest of the body. There is no obvious etching of scales on the snout. Venter is creamish and the edge of light and dark on the flank is reasonably welldefined and jagged edged formed by the interplay of a row of dark shields on top versus light shields below. Length is 55-65 times the body diameter.

The nine preceding species are separated from all other Australian Blind Snakes by the following characteristics: A small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals. These 9 species are separated from the similar S. ammodytes (Montague, 1914) clade of eleven species as identified and named in this paper that as a group occurs in the Pilbara of Western Australia by the shape of the rostral, being straight-sided from above (except perhaps the most upper edges, or sometimes an inward turn, then straight again midway down the scale, versus narrower and concave-sided versus in the S. ammodytes (Montague, 1914) clade of species. The nine preceding species also have a nasal cleft that extends forward to approximately the rostral scale, versus a more vertical orientation in the S.

ammodytes clade of 11 species.

S. diversus is depicted in life online at: https://www.flickr.com/photos/ ryanfrancis/14975362459/ and

https://www.flickr.com/photos/ ryanfrancis/16007633642/ and

https://www.flickr.com/photos/

ryanfrancis/14975437250/

all from Mount Isa, Queensland, Australia,

photographed by Ryan Francis, and

https://www.flickr.com/photos/149281781@ N05/51276095631/

from Mount Isa, Queensland, Australia, photographed by Christina Zdenek.

S. farkinelle sp. nov. is depicted in life online at: https://www.flickr.com/photos/58349528@

N02/52297242557/ from Broom, Western Australia, photographed by

Jordan Mulder, and

https://www.flickr.com/photos/ julesfarquhar/52250606494/

from Broom, Western Australia, photographed by taxonomic vandal and fake scientist Jules Farquhar. *S. ivebeenshaton sp. nov.* is depicted in life in Storr, Smith and Johnstone (2002) page 101 at bottom left from Berrimah, NT and online at:

https://www.flickr.com/photos/zimny_ anders/10895963323/

from the Gove area, Northern Territory, Australia photographed by Anders Zimny, and https://www.flickr.com/photos/58349528@ N02/47969394316/

from Arnhem Land, Northern Territory, Australia photographed by Jordan Mulder, and

https://www.flickr.com/photos/zimny_

anders/53163503685/

from Weddell (Darwin) , Northern Territory, Australia photographed by Anders Zimny, and

https://www.flickr.com/photos/171250498@ N08/52400668964/

from Wongalara, Northern Territory, Australia photographed by Wes Read.

S. shittythingie sp. nov. is depicted in life online at: https://www.flickr.com/photos/

jaricornelis/52462476259/

from Tanami, Western Australia, photographed by Jari Cornelis, and

https://www.flickr.com/photos/

euprepiosaur/7237645530/

from the southern Tanami Desert, Northern Territory,

Australia, photographed by Stephen Zozaya.

S. datsquirmy sp. nov. is depicted in life online at: https://www.flickr.com/photos/

euprepiosaur/51654314525/

from Davenport Range, Northern Territory, Australia photographed by Stephen Zozaya, and https://www.flickr.com/photos/zimny_ anders/50384861597/

from Cravens Peak, Queensland, Australia, photographed by Anders Zimny.

S. murraybrucei sp. nov. is depicted in life in Cogger 2014 on page 800 at top left, from Lake Argyle, Western Australia, photographed by Brad Maryan.

Distribution: *S. antmuncha sp. nov.* is only known from Supplejack Downs Station at the northern part of the Tanami region in the Northern Territory.

Etymology: It was in February 1983 when I was describing the ecology of this species and other Blind Snakes to a group of Warlpiri Aboriginals from the central west Northern Territory, that one of them said "ant muncha", giving this species its etymology.

SLOPPTYPHLOPS MURRAYBRUCEI SP. NOV. LSIDurn:lsid:zoobank.org:act:D2AFD911-3EF3-485B-9795-DA0D99E964DC

Holotype: A preserved adult male specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R151035 collected from under a rock at Lake Argyle, Western Australia, Australia, Latitude -16.216667 S., Longitude 128.9 E.

This government-owned facility allows access to its holdings.

Paratypes: Three preserved specimens at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, being specimen number R42721

collected 10 miles south of the Main Ord Dam site at Lake Argyle, Western Australia, Australia, Latitude -16.266667 S., Longitude 128.733333 E., specimen number R61351 collected from 11 miles south of the Main Ord Dam site at Lake Argyle, Western Australia, Australia, Latitude -16.216667 S., Longitude 128.7 E., and specimen number R61350 collected from 16 miles south of the Main Ord Dam site at Lake Argyle, Western Australia, Australia, Latitude -16.266667 S., Longitude 128.7 E.

Diagnosis: Until now, the putative taxon *Sloppytyphlops diversus* (Waite, 1894), with a type locality of west Queensland has been treated by all publishing authors as a single wide-ranging taxon, found in the tropical and near tropical section of Australia including far western Queensland, most of the Northern Territory and northwest Western Australia.

However, the published phylogenies of Marin *et al.* (2012 and 2013) have indicated nine separate species, each divergent from one another on average of about 2.5 MYA.

The eight other forms are formally named herein.

Nominate S. diversus is herein confined to north-west

Queensland, generally east of the Georgina River and not including the southern parts of the Gulf of Carpentaria.

S. farkinelle sp. nov. is a taxon found in the southwest Kimberley district of western Australia and apparently confined to this area.

S. ivebeenshaton sp. nov. is the taxon that occurs in most of the top end of the Northern Territory, including the west and south of the Gulf of Carpentaria.

S. shittythingie sp. nov. occurs in the deserts to the southeast of the Kimberley District in Western Australia, entering the far west of nearby Northern Territory.

S. datsquirmy sp. nov. is a taxon from the Tenant Creek and Simpson Desert region of the central east of the Northern territory, entering far west Queensland, west of the Georgina River basin.

S. antmuncha sp. nov. is a taxon only known from Supplejack Downs at the northern part of the Tanami region in the Northern Territory.

S. murraybrucei sp. nov. is a taxon from the upper Ord Drainage system, generally from around Lake Argyle and further south.

S. hawkeswoodi sp. nov. is from Carlton Hill Station, north-east Kimberley district, Western Australia, extending east into the lower (coastal) Victoria River district in the Northern Territory.

S. jarrodbinghami sp. nov. is a divergent form from around Kununurra in the east Kimberley district of Western Australia.

The nine species are separated from one another as follows:

The type form of *S. diversus* is a strongly bright pinkish coloured snake with a slight purplish tinge, this being the dorsal or visible colouration. Anterior part of the snout is a light whitish brown, becoming light brown at about the line between the eyes, rapidly turning the same pink as the dorsum at this general area. There is no well-defined demarcation of colour charge and there is only a very faint light creamish etching to the scales of the snout region. Belly is a lighter pinkish white, the colour change poorly defined on the lower flank. Commencing anterior to the tail, the tail region develops a very slight and barely noticeable brownish tinge. The black eye spot is slightly below centre of the ocular scale.

S. farkinelle sp. nov. is a dull pinkish colour on top. Extending from a whitish snout tip, the front, middle and back of the upper surfaces of the head are dark brown with well-defined thick cream etchings to each scale, this extending to the back of the head and well behind the eyes, either as far or slightly further than the distance from snout to centre of the frontal. The venter is white and well demarcated on the lower flank with a jagged edge, being caused by the infusion of white scales over the dark along the position of the lower lateral line. Only anteriorly is this demarcation line not well defined. Commencing

slightly anterior to the tail there is a noticeable but slight brownish tinge. The black eye spot is slightly below centre and slightly posterior to centre of the ocular scale. Length is 55-70 times the body diameter. *S. ivebeenshaton sp. nov.* is a purplish coloured snake on top. The scales of the venter are ivory white with small purple patches at the anterior part of each. The demarcation line between dark upper and light lower body on the lower flank is straight edged, the colour change cutting across the edges of the scales rather than being of the form a scale is either all dark or all light to create a jagged edge. This demarcation line is well-defined for the entire length of the snake, commencing at the back of the head.

The end of the tail on top is the same colour as the rest of the dorsum. The snout is usually the same colour as the dorsum, or sometimes the most anterior scales have a brownish tinge. They have moderately well-defined white etching. Only at the very tip of the snout is there a white patch. Prefrontal is 2-3 times larger than the frontal. The black eye spot is situated at the centre of the ocular scale. Length is 40-50 times the body diameter.

S. shittythingie sp. nov. is a brilliant light whitish pink coloured snake on top. Tip of snout and end of tail is a light yellow colour. There is no white or whitish at the tip of the snout. Lower flanks are also pinkish and there is a fading to whitish pink in colour only well under the belly. Where there is a line demarcating dark upper and lighter lower body on the lower flank in other species, there is an ill-defined darker purple edge, with above and below it being the usual colour of the rest of the dorsum, with the lower area gradually fading under the belly. There is no obvious etching of the scales on the head. The black eye spot is situated slightly below the centre of the ocular scale. Length is 50-60 times the body diameter.

S. datsquirmy sp. nov. is a pinkish coloured snake on top with a strong yellowish tinge throughout the dorsum. tip of snout and end of tail are a fraction lighter than the rest of the body and lack obvious etchings between the scales. There is an indistinct and jagged edged border between dark upper and whitish lower body on the lower flank of consistent nature along the length of the snake. The jagged edge is caused by light and dark scales bordering one another. Length is 50-65 times the body diameter. The black eye spot is placed well back in the ocular scale and usually noticeably lower than centre..

S. antmuncha sp. nov. is a purplish-pink coloured snake on top. Head is dark brown rather than purple, with the very tip of snout becoming whitish in colour. There is a faint lighter etching of scales of the scales of the snout.

From before the vent the tail is brownish in colour on top and the tail tip is nearly black. The venter is a whitish version of the dorsum and there is no obvious demarcation between dark upper and lighter lower body on the lower flank or belly.

The rostral scale is particularly wide and squarish in shape, though narrowing slightly on the lower edges. The nasal is also expanded in size, impinging and reducing the sizes of the adjacent scales. Length is 55-70 times the body diameter. Black eye spot is relatively small and slightly anterior in the nasal, this caused by the expansion of the more anterior scales. S. murraybrucei sp. nov. is a dark brown coloured snake on top. The anterior of the head is a more muddy brown colour, as opposed to the yellowish brown of the body. There is no obvious etching of scales on the head and the end of the tail has a slight greyish tinge. The demarcation between brownish upper body and creamish lower body on the lower flank is quite well-defined and the border is jagged edged, caused by the meeting of rows of dark and light scales. Top edge of the rostral is pointed sharply and barely touches the prefrontal.

On the dorsum, each scale has a faint but darker blackish centre, meaning that when viewed as a whole the snake appears to have faint longitudinal stripes.

S. hawkeswoodi sp. nov. is similar in most respects to *S. antmuncha sp. nov.* as described above. It is separated from that species and all the others in this complex by being a dark brownish coloured snake on top, obvious yellow or beige etching of scales on the front of the head and a distinctive yellow venter, strongly demarcated from the upper body colour on the lower flanks. Head is of similar colour to the body but generally lighter, but there is no lightening at the tip of snout or anterior snout. Length is 45-55 times the body diameter. Prefrontal is nearly as large as the frontal. Rostral is wider at top than bottom. Nasal is not enlarged in size and eye spot is at centre of the ocular scale.

S. jarrodbinghami sp. nov. is an even brownish colour on top, with a neck that is purplish in colour and a tail that is dark brown, ending in a near black tip. Centres of scales on the dorsum and flanks are brown and outer edges are slightly darker in colour as an illdefined etching. Eye spot is in the centre of the ocular scale, or slightly anterior. Nasal is not expanded in size. Rostral, is square-sided except at the top, where it forms a triangle barely touching the preocular. Head is more-or less the same colour as the body and the end of the tail a different shade of purplish brown to the rest of the body. There is no obvious etching of scales on the snout. Venter is creamish and the edge of light and dark on the flank is reasonably welldefined and jagged edged formed by the interplay of a row of dark shields on top versus light shields below. Length is 55-65 times the body diameter.

The nine preceding species are separated from all other Australian Blind Snakes by the following characteristics: A small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The

snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals. These 9 species are separated from the similar S. ammodytes (Montague, 1914) clade of eleven species as identified and named in this paper that as a group occurs in the Pilbara of Western Australia by the shape of the rostral, being straight-sided from above (except perhaps the most upper edges, or sometimes an inward turn, then straight again midway down the scale, versus narrower and concave-sided versus in the S. ammodytes (Montague, 1914) clade of species. The nine preceding species also have a nasal cleft that extends forward to approximately the rostral scale, versus a more vertical orientation in the S. ammodytes clade of 11 species.

S. diversus is depicted in life online at:

https://www.flickr.com/photos/ ryanfrancis/14975362459/ and

anu

https://www.flickr.com/photos/ ryanfrancis/16007633642/ and

https://www.flickr.com/photos/ ryanfrancis/14975437250/

all from Mount Isa, Queensland, Australia, photographed by Ryan Francis, and https://www.flickr.com/photos/149281781@

N05/51276095631/

- from Mount Isa, Queensland, Australia, photographed by Christina Zdenek.
- S. farkinelle sp. nov. is depicted in life online at:
- https://www.flickr.com/photos/58349528@
- N02/52297242557/
- from Broom, Western Australia, photographed by Jordan Mulder, and
- https://www.flickr.com/photos/
- julesfarquhar/52250606494/
- from Broom, Western Australia, photographed by taxonomic vandal and fake scientist Jules Farquhar.
- *S. ivebeenshaton sp. nov.* is depicted in life in Storr, Smith and Johnstone (2002) page 101 at bottom left from Berrimah, NT and online at:
- https://www.flickr.com/photos/zimny_ anders/10895963323/
- from the Gove area, Northern Territory, Australia photographed by Anders Zimny, and
- https://www.flickr.com/photos/58349528@
- N02/47969394316/
- from Arnhem Land, Northern Territory, Australia photographed by Jordan Mulder, and
- https://www.flickr.com/photos/zimny

anders/53163503685/

from Weddell (Darwin), Northern Territory, Australia

photographed by Anders Zimny, and https://www.flickr.com/photos/171250498@ N08/52400668964/ from Wongalara, Northern Territory, Australia photographed by Wes Read. S. shittythingie sp. nov. is depicted in life online at: https://www.flickr.com/photos/ jaricornelis/52462476259/ from Tanami, Western Australia, photographed by Jari Cornelis, and https://www.flickr.com/photos/ euprepiosaur/7237645530/ from the southern Tanami Desert, Northern Territory, Australia, photographed by Stephen Zozaya. S. datsquirmy sp. nov. is depicted in life online at: https://www.flickr.com/photos/ euprepiosaur/51654314525/ from Davenport Range, Northern Territory, Australia photographed by Stephen Zozaya, and https://www.flickr.com/photos/zimny_ anders/50384861597/ from Cravens Peak, Queensland, Australia, photographed by Anders Zimny. S. murravbrucei sp. nov. is depicted in life in Cogger

to ornithology and his active involvement in stopping unlawful acts of taxonomic vandalism in Ornithology. For further detail see Elliott *et al.* (2023). **SLOPPTYPHLOPS HAWKESWOODI SP. NOV.**

2014 on page 800 at top left, from Lake Argyle,

the upper Ord Drainage system, generally from

further south.

around Lake Argyle and extending in distribution

Etymology: S. murraybrucei sp. nov. is named

in honor of Murray D. Bruce, of Turramurra, New

South Wales, Australia for a lifetime's contributions

Western Australia, photographed by Brad Maryan.

Distribution: S. *murraybrucei sp. nov*. occurs from

LSIDurn:lsid:zoobank.org:act:C83E9A25-233A-4490-95B8-A98E1FE1ADDD

Holotype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R126054 collected from about 5 km south of the Carlton Hill Homestead, Kimberley District, Western Australia, Australia, Latitude -15.538611 S., Longitude 128.523333 E.

This government-owned facility allows access to its holdings.

Diagnosis: Until now, the putative taxon *Sloppytyphlops diversus* (Waite, 1894), with a type locality of west Queensland has been treated by all publishing authors as a single wide-ranging taxon, found in the tropical and near tropical section of Australia including far western Queensland, most of the Northern Territory and northwest Western Australia.

However, the published phylogenies of Marin *et al.* (2012 and 2013) have indicated nine separate species, each divergent from one another on average of about 2.5 MYA.

The eight other forms are formally named herein. Nominate *S. diversus* is herein confined to north-west Queensland, generally east of the Georgina River and not including the southern parts of the Gulf of Carpentaria.

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S. datsquirmy sp. nov. is a taxon from the Tenant Creek and Simpson Desert region of the central east of the Northern territory, entering far west Queensland, west of the Georgina River basin.

S. antmuncha sp. nov. is a taxon only known from Supplejack Downs at the northern part of the Tanami region in the Northern Territory.

S. murraybrucei sp. nov. is a taxon from the upper Ord Drainage system, generally from around Lake Argyle and further south.

S. hawkeswoodi sp. nov. is from Carlton Hill Station, north-east Kimberley district, Western Australia, extending east into the lower (coastal) Victoria River district in the Northern Territory.

S. jarrodbinghami sp. nov. is a divergent form from around Kununurra in the east Kimberley district of Western Australia.

The nine species are separated from one another as follows:

The type form of *S. diversus* is a strongly bright pinkish coloured snake with a slight purplish tinge, this being the dorsal or visible colouration. Anterior part of the snout is a light whitish brown, becoming light brown at about the line between the eyes, rapidly turning the same pink as the dorsum at this general area. There is no well-defined demarcation of colour charge and there is only a very faint light creamish etching to the scales of the snout region. Belly is a lighter pinkish white, the colour change poorly defined on the lower flank. Commencing anterior to the tail, the tail region develops a very slight and barely noticeable brownish tinge. The black eye spot is slightly below centre of the ocular scale.

S. farkinelle sp. nov. is a dull pinkish colour on top. Extending from a whitish snout tip, the front, middle and back of the upper surfaces of the head are dark brown with well-defined thick cream etchings to each scale, this extending to the back of the head and well behind the eyes, either as far or slightly further than the distance from snout to centre of the frontal. The venter is white and well demarcated on the lower flank with a jagged edge, being caused by the infusion of white scales over the dark along the position of the lower lateral line. Only anteriorly is this demarcation line not well defined. Commencing slightly anterior to the tail there is a noticeable but slight brownish tinge. The black eye spot is slightly below centre and slightly posterior to centre of the ocular scale. Length is 55-70 times the body diameter. S. ivebeenshaton sp. nov. is a purplish coloured snake on top. The scales of the venter are ivory white with small purple patches at the anterior part of each. The demarcation line between dark upper and light lower body on the lower flank is straight edged, the colour change cutting across the edges of the scales rather than being of the form a scale is either all dark or all light to create a jagged edge. This demarcation line is well-defined for the entire length of the snake, commencing at the back of the head.

The end of the tail on top is the same colour as the rest of the dorsum. The snout is usually the same colour as the dorsum, or sometimes the most anterior scales have a brownish tinge. They have moderately well-defined white etching. Only at the very tip of the snout is there a white patch. Prefrontal is 2-3 times larger than the frontal. The black eye spot is situated at the centre of the ocular scale. Length is 40-50 times the body diameter.

S. shittythingie sp. nov. is a brilliant light whitish pink coloured snake on top. Tip of snout and end of tail is a light yellow colour. There is no white or whitish at the tip of the snout. Lower flanks are also pinkish and there is a fading to whitish pink in colour only well under the belly. Where there is a line demarcating dark upper and lighter lower body on the lower flank in other species, there is an ill-defined darker purple edge, with above and below it being the usual colour of the rest of the dorsum, with the lower area gradually fading under the belly. There is no obvious etching of the scales on the head. The black eye spot is situated slightly below the centre of the ocular scale. Length is 50-60 times the body diameter. S. datsquirmy sp. nov. is a pinkish coloured snake on top with a strong yellowish tinge throughout the dorsum. tip of snout and end of tail are a fraction lighter than the rest of the body and lack obvious etchings between the scales. There is an indistinct and jagged edged border between dark upper and whitish lower body on the lower flank of consistent nature along the length of the snake. The jagged edge is caused by light and dark scales bordering one another. Length is 50-65 times the body diameter. The black eye spot is placed well back in the ocular scale and usually noticeably lower than centre..

S. antmuncha sp. nov. is a purplish-pink coloured snake on top. Head is dark brown rather than purple, with the very tip of snout becoming whitish in colour.

There is a faint lighter etching of scales of the scales of the snout.

From before the vent the tail is brownish in colour on top and the tail tip is nearly black. The venter is a whitish version of the dorsum and there is no obvious demarcation between dark upper and lighter lower body on the lower flank or belly.

The rostral scale is particularly wide and squarish in shape, though narrowing slightly on the lower edges. The nasal is also expanded in size, impinging and reducing the sizes of the adjacent scales. Length is 55-70 times the body diameter. Black eye spot is relatively small and slightly anterior in the nasal, this caused by the expansion of the more anterior scales.

S. murraybrucei sp. nov. is a dark brown coloured snake on top. The anterior of the head is a more muddy brown colour, as opposed to the yellowish brown of the body. There is no obvious etching of scales on the head and the end of the tail has a slight greyish tinge. The demarcation between brownish upper body and creamish lower body on the lower flank is quite well-defined and the border is jagged edged, caused by the meeting of rows of dark and light scales. Top edge of the rostral is pointed sharply and barely touches the prefrontal.

On the dorsum, each scale has a faint but darker blackish centre, meaning that when viewed as a whole the snake appears to have faint longitudinal stripes.

S. hawkeswoodi sp. nov. is similar in most respects to *S. antmuncha sp. nov.* as described above. It is separated from that species and all the others in this complex by being a dark brownish coloured snake on top, obvious yellow or beige etching of scales on the front of the head and a distinctive yellow venter, strongly demarcated from the upper body colour on the lower flanks. Head is of similar colour to the body but generally lighter, but there is no lightening at the tip of snout or anterior snout. Length is 45-55 times the body diameter. Prefrontal is nearly as large as the frontal. Rostral is wider at top than bottom. Nasal is not enlarged in size and eye spot is at centre of the ocular scale.

S. jarrodbinghami sp. nov. is an even brownish colour on top, with a neck that is purplish in colour and a tail that is dark brown, ending in a near black tip. Centres of scales on the dorsum and flanks are brown and outer edges are slightly darker in colour as an illdefined etching. Eye spot is in the centre of the ocular scale, or slightly anterior. Nasal is not expanded in size. Rostral, is square-sided except at the top, where it forms a triangle barely touching the preocular. Head is more-or less the same colour as the body and the end of the tail a different shade of purplish brown to the rest of the body. There is no obvious etching of scales on the snout. Venter is creamish and the edge of light and dark on the flank is reasonably welldefined and jagged edged formed by the interplay of a row of dark shields on top versus light shields below. Length is 55-65 times the body diameter.

The nine preceding species are separated from all other Australian Blind Snakes by the following characteristics: A small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals. These 9 species are separated from the similar S. ammodytes (Montague, 1914) clade of eleven species as identified and named in this paper that as a group occurs in the Pilbara of Western Australia by the shape of the rostral, being straight-sided from above (except perhaps the most upper edges, or sometimes an inward turn, then straight again midway down the scale, versus narrower and concave-sided versus in the S. ammodytes (Montague, 1914) clade of species. The nine preceding species also have a nasal cleft that extends forward to approximately the rostral scale, versus a more vertical orientation in the S. ammodytes clade of 11 species.

S. diversus is depicted in life online at: https://www.flickr.com/photos/ ryanfrancis/14975362459/

and

https://www.flickr.com/photos/ ryanfrancis/16007633642/ and

https://www.flickr.com/photos/ ryanfrancis/14975437250/

all from Mount Isa, Queensland, Australia, photographed by Ryan Francis, and https://www.flickr.com/photos/149281781@

N05/51276095631/

from Mount Isa, Queensland, Australia, photographed by Christina Zdenek.

S. farkinelle sp. nov. is depicted in life online at: https://www.flickr.com/photos/58349528@ N02/52297242557/

from Broom, Western Australia, photographed by Jordan Mulder, and

https://www.flickr.com/photos/ julesfarguhar/52250606494/

from Broom, Western Australia, photographed by taxonomic vandal and fake scientist Jules Farquhar. *S. ivebeenshaton sp. nov.* is depicted in life in Storr,

Smith and Johnstone (2002) page 101 at bottom left from Berrimah, NT and online at:

https://www.flickr.com/photos/zimny_ anders/10895963323/

from the Gove area, Northern Territory, Australia photographed by Anders Zimny, and https://www.flickr.com/photos/58349528@ N02/47969394316/

from Arnhem Land, Northern Territory, Australia photographed by Jordan Mulder, and https://www.flickr.com/photos/zimny_ anders/53163503685/ from Weddell (Darwin) , Northern Territory, Australia photographed by Anders Zimny, and https://www.flickr.com/photos/171250498@ N08/52400668964/ from Wongalara, Northern Territory, Australia photographed by Wes Read. *S. shittythingie sp. nov.* is depicted in life online at:

https://www.flickr.com/photos/

jaricornelis/52462476259/

from Tanami, Western Australia, photographed by Jari Cornelis, and

https://www.flickr.com/photos/ euprepiosaur/7237645530/

from the southern Tanami Desert, Northern Territory, Australia, photographed by Stephen Zozaya.

S. datsquirmy sp. nov. is depicted in life online at:

https://www.flickr.com/photos/ euprepiosaur/51654314525/

from Davenport Range, Northern Territory, Australia photographed by Stephen Zozaya, and https://www.flickr.com/photos/zimny_ anders/50384861597/

from Cravens Peak, Queensland, Australia, photographed by Anders Zimny.

S. murraybrucei sp. nov. is depicted in life in Cogger 2014 on page 800 at top left, from Lake Argyle, Western Australia, photographed by Brad Maryan.

Distribution: *S. hawkeswoodei sp. nov.* is known from the Carlton Hill Station, north-east Kimberley district, Western Australia, extending east into the lower (coastal) Victoria River district in the Northern Territory.

Etymology: *S. hawkeswoodei sp. nov.* is named in honor of Dr. Trevor J. Hawkeswood of Northmead, New South Wales, Australia recognizing a lifetime's services to zoology and in particular entomology, including as editor of the peer reviewed scientific journal *Calodema*.

He has also published against taxonomic vandalism and been subjected to attacks on personal property and late-night telephone death threats as a result.

SLOPPTYPHLOPS JARRODBINGHAMI SP. NOV. LSIDurn:Isid:zoobank.org:act:5E6E5FD5-6789-4A68-8E84-B334C60C01DD

Holotype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R119543 collected from the Mirima National Park, Western Australia, Australia, Latitude -15.783333 S., Longitude 128.783333 E.

This government-owned facility allows access to its holdings.

Paratypes: 1/ Two preserved specimens at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, being specimen numbers R119513 and R119542 both collected from the Mirima National Park, Western Australia, Australia, Latitude -15.783333 S., Longitude 128.783333 E., 2/ Two preserved specimens at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, being specimen numbers R73777 and R101371 both collected from Kununurra, Western Australia, Australia, Latitude -15.766667 S., Longitude 128.733333 E., and 3/ A preserved specimen at the South Australian Museum Herpetology Collection (SAM), Adelaide, South Australia, Australia, specimen number R51126 collected from Kununurra, Western Australia, Australia, Latitude -15.766667 S., Longitude 128.733333 E.

Diagnosis: Until now, the putative taxon *Sloppytyphlops diversus* (Waite, 1894), with a type locality of west Queensland has been treated by all publishing authors as a single wide-ranging taxon, found in the tropical and near tropical section of Australia including far western Queensland, most of the Northern Territory and northwest Western Australia.

However, the published phylogenies of Marin *et al.* (2012 and 2013) have indicated nine separate species, each divergent from one another on average of about 2.5 MYA.

The eight other forms are formally named herein. Nominate *S. diversus* is herein confined to north-west Queensland, generally east of the Georgina River and not including the southern parts of the Gulf of Carpentaria.

S. farkinelle sp. nov. is a taxon found in the southwest Kimberley district of western Australia and apparently confined to this area.

S. ivebeenshaton sp. nov. is the taxon that occurs in most of the top end of the Northern Territory, including the west and south of the Gulf of Carpentaria.

S. shittythingie sp. nov. occurs in the deserts to the southeast of the Kimberley District in Western Australia, entering the far west of nearby Northern Territory.

S. datsquirmy sp. nov. is a taxon from the Tenant Creek and Simpson Desert region of the central east of the Northern territory, entering far west Queensland, west of the Georgina River basin.

S. antmuncha sp. nov. is a taxon only known from Supplejack Downs at the northern part of the Tanami region in the Northern Territory.

S. murraybrucei sp. nov. is a taxon from the upper Ord Drainage system, generally from around Lake Argyle and further south.

S. hawkeswoodi sp. nov. is from Carlton Hill Station, north-east Kimberley district, Western Australia, extending east into the lower (coastal) Victoria River

district in the Northern Territory.

S. jarrodbinghami sp. nov. is a divergent form from around Kununurra in the east Kimberley district of Western Australia.

The nine species are separated from one another as follows:

The type form of *S. diversus* is a strongly bright pinkish coloured snake with a slight purplish tinge, this being the dorsal or visible colouration. Anterior part of the snout is a light whitish brown, becoming light brown at about the line between the eyes, rapidly turning the same pink as the dorsum at this general area. There is no well-defined demarcation of colour charge and there is only a very faint light creamish etching to the scales of the snout region. Belly is a lighter pinkish white, the colour change poorly defined on the lower flank. Commencing anterior to the tail, the tail region develops a very slight and barely noticeable brownish tinge. The black eye spot is slightly below centre of the ocular scale.

S. farkinelle sp. nov. is a dull pinkish colour on top. Extending from a whitish snout tip, the front, middle and back of the upper surfaces of the head are dark brown with well-defined thick cream etchings to each scale, this extending to the back of the head and well behind the eyes, either as far or slightly further than the distance from snout to centre of the frontal.

The venter is white and well demarcated on the lower flank with a jagged edge, being caused by the infusion of white scales over the dark along the position of the lower lateral line. Only anteriorly is this demarcation line not well defined. Commencing

slightly anterior to the tail there is a noticeable but slight brownish tinge. The black eye spot is slightly below centre and slightly posterior to centre of the ocular scale. Length is 55-70 times the body diameter. *S. ivebeenshaton sp. nov.* is a purplish coloured snake on top. The scales of the venter are ivory white with small purple patches at the anterior part of each. The demarcation line between dark upper and light lower body on the lower flank is straight edged, the colour change cutting across the edges of the scales

rather than being of the form a scale is either all dark or all light to create a jagged edge. This demarcation line is well-defined for the entire length of the snake, commencing at the back of the head.

The end of the tail on top is the same colour as the rest of the dorsum. The snout is usually the same colour as the dorsum, or sometimes the most anterior scales have a brownish tinge. They have moderately well-defined white etching. Only at the very tip of the snout is there a white patch. Prefrontal is 2-3 times larger than the frontal. The black eye spot is situated at the centre of the ocular scale. Length is 40-50 times the body diameter.

S. shittythingie sp. nov. is a brilliant light whitish pink coloured snake on top. Tip of snout and end of tail is a light yellow colour. There is no white or whitish

at the tip of the snout. Lower flanks are also pinkish and there is a fading to whitish pink in colour only well under the belly. Where there is a line demarcating dark upper and lighter lower body on the lower flank in other species, there is an ill-defined darker purple edge, with above and below it being the usual colour of the rest of the dorsum, with the lower area gradually fading under the belly. There is no obvious etching of the scales on the head. The black eye spot is situated slightly below the centre of the ocular scale. Length is 50-60 times the body diameter. S. datsquirmy sp. nov. is a pinkish coloured snake on top with a strong yellowish tinge throughout the dorsum. tip of snout and end of tail are a fraction lighter than the rest of the body and lack obvious etchings between the scales. There is an indistinct and jagged edged border between dark upper and whitish lower body on the lower flank of consistent nature along the length of the snake. The jagged edge is caused by light and dark scales bordering one another. Length is 50-65 times the body diameter. The black eye spot is placed well back in the ocular scale and usually noticeably lower than centre..

S. antmuncha sp. nov. is a purplish-pink coloured snake on top. Head is dark brown rather than purple, with the very tip of snout becoming whitish in colour. There is a faint lighter etching of scales of the scales of the snout.

From before the vent the tail is brownish in colour on top and the tail tip is nearly black. The venter is a whitish version of the dorsum and there is no obvious demarcation between dark upper and lighter lower body on the lower flank or belly.

The rostral scale is particularly wide and squarish in shape, though narrowing slightly on the lower edges. The nasal is also expanded in size, impinging and reducing the sizes of the adjacent scales. Length is 55-70 times the body diameter. Black eye spot is relatively small and slightly anterior in the nasal, this caused by the expansion of the more anterior scales. S. murraybrucei sp. nov. is a dark brown coloured snake on top. The anterior of the head is a more muddy brown colour, as opposed to the yellowish brown of the body. There is no obvious etching of scales on the head and the end of the tail has a slight greyish tinge. The demarcation between brownish upper body and creamish lower body on the lower flank is guite well-defined and the border is jagged edged, caused by the meeting of rows of dark and light scales. Top edge of the rostral is pointed sharply and barely touches the prefrontal.

On the dorsum, each scale has a faint but darker blackish centre, meaning that when viewed as a whole the snake appears to have faint longitudinal stripes.

S. hawkeswoodi sp. nov. is similar in most respects to *S. antmuncha sp. nov.* as described above. It is separated from that species and all the others in this

complex by being a dark brownish coloured snake on top, obvious yellow or beige etching of scales on the front of the head and a distinctive yellow venter, strongly demarcated from the upper body colour on the lower flanks. Head is of similar colour to the body but generally lighter, but there is no lightening at the tip of snout or anterior snout. Length is 45-55 times the body diameter. Prefrontal is nearly as large as the frontal. Rostral is wider at top than bottom. Nasal is not enlarged in size and eye spot is at centre of the ocular scale.

S. jarrodbinghami sp. nov. is an even brownish colour on top, with a neck that is purplish in colour and a tail that is dark brown, ending in a near black tip. Centres of scales on the dorsum and flanks are brown and outer edges are slightly darker in colour as an illdefined etching. Eye spot is in the centre of the ocular scale, or slightly anterior. Nasal is not expanded in size. Rostral, is square-sided except at the top, where it forms a triangle barely touching the preocular. Head is more-or less the same colour as the body and the end of the tail a different shade of purplish brown to the rest of the body. There is no obvious etching of scales on the snout. Venter is creamish and the edge of light and dark on the flank is reasonably welldefined and jagged edged formed by the interplay of a row of dark shields on top versus light shields below. Length is 55-65 times the body diameter.

The nine preceding species are separated from all other Australian Blind Snakes by the following characteristics: A small and moderately slender Blind Snake getting to a maximum of 35 cm in length. The snout is rounded to slightly angular in profile with 20 midbody scale rows. The nasal cleft proceeds from the preocular and passes a short distance upwards and forwards of the nostril on to the top of the head. 389-498 ventrals. These 9 species are separated from the similar S. ammodytes (Montague, 1914) clade of eleven species as identified and named in this paper that as a group occurs in the Pilbara of Western Australia by the shape of the rostral, being straight-sided from above (except perhaps the most upper edges, or sometimes an inward turn, then straight again midway down the scale, versus narrower and concave-sided versus in the S. ammodytes (Montague, 1914) clade of species. The nine preceding species also have a nasal cleft that extends forward to approximately the rostral scale, versus a more vertical orientation in the S. ammodytes clade of 11 species.

S. diversus is depicted in life online at:

https://www.flickr.com/photos/ ryanfrancis/14975362459/ and

https://www.flickr.com/photos/ ryanfrancis/16007633642/ and https://www.flickr.com/photos/ ryanfrancis/14975437250/

all from Mount Isa, Queensland, Australia, photographed by Ryan Francis, and https://www.flickr.com/photos/149281781@ N05/51276095631/

from Mount Isa, Queensland, Australia, photographed by Christina Zdenek.

S. farkinelle sp. nov. is depicted in life online at: https://www.flickr.com/photos/58349528@ N02/52297242557/

from Broom, Western Australia, photographed by Jordan Mulder, and

https://www.flickr.com/photos/ julesfarquhar/52250606494/

from Broom, Western Australia, photographed by taxonomic vandal and fake scientist Jules Farguhar. S. ivebeenshaton sp. nov. is depicted in life in Storr, Smith and Johnstone (2002) page 101 at bottom left from Berrimah, NT and online at: https://www.flickr.com/photos/zimny_ anders/10895963323/ from the Gove area, Northern Territory, Australia photographed by Anders Zimny, and https://www.flickr.com/photos/58349528@ N02/47969394316/ from Arnhem Land, Northern Territory, Australia photographed by Jordan Mulder, and https://www.flickr.com/photos/zimny anders/53163503685/ from Weddell (Darwin), Northern Territory, Australia photographed by Anders Zimny, and https://www.flickr.com/photos/171250498@ N08/52400668964/ from Wongalara, Northern Territory, Australia photographed by Wes Read. S. shittythingie sp. nov. is depicted in life online at: https://www.flickr.com/photos/ jaricornelis/52462476259/ from Tanami, Western Australia, photographed by Jari Cornelis, and https://www.flickr.com/photos/ euprepiosaur/7237645530/ from the southern Tanami Desert, Northern Territory, Australia, photographed by Stephen Zozaya. S. datsquirmy sp. nov. is depicted in life online at: https://www.flickr.com/photos/ euprepiosaur/51654314525/ from Davenport Range, Northern Territory, Australia photographed by Stephen Zozaya, and

https://www.flickr.com/photos/zimny_ anders/50384861597/

from Cravens Peak, Queensland, Australia, photographed by Anders Zimny.

S. murraybrucei sp. nov. is depicted in life in Cogger 2014 on page 800 at top left, from Lake Argyle, Western Australia, photographed by Brad Maryan.

Distribution: *S. jarrodbinghami sp. nov.* is a divergent form only known from around Kununurra in the east Kimberley district of Western Australia.

Etymology: *S. jarrodbinghami sp. nov.* is named in honor of well-known Melbourne-based snake catcher, Jarrod Bingham, of Bacchus Marsh, Victoria, known as the "Snake Wrangler" for services to wildlife conservation.

JACKYHOSERTYPHLOPS YETANOTHERONE SP. NOV.

LSIDurn:lsid:zoobank.org:act:0D33DD0E-3F02-4208-A5E2-AB8AB8B8F975

Holotype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R136311 collected from Muggon station, Western Australia, Australia, Latitude -26.382778 S., Longitude 115.463889 E.

This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R136270 collected from Muggon station, Western Australia, Australia, Latitude -26.382778 S., Longitude 115.463889 E.

Diagnosis: Jackyhosertyphlops yetanotherone sp. nov. known only from the type locality has until now been treated as a divergent population of Jackyhosertyphlops leptosoma (Robb, 1972) a relatively range restricted taxon with a distribution extending from Shark Bay in the north to about Northampton, just south of Kalbarri in the South and

extending inland to about Muggon Station. Specimens from further south, around Geraldton in a narrow zone extending about 110 km inland are of the associated taxon *Jackyhosertyphlops systemos* (Ellis and Doughty, 2017), which were hitherto treated as *J. leptosoma*, but easily separated by having 18 midbody scale rows, instead of 16 as seen in both *J. leptosoma* and *J. yetanotherone sp. nov.*.

Another associated taxon, *J. obtusifrons* (Ellis and Doughty, 2017), which were also hitherto treated as *J. leptosoma*, are easily separated by having 18 midbody scale rows, instead of 16 as seen in both *J. leptosoma* and *J. yetanotherone sp. nov.*.

Jackyhosertyphlops yetanotherone sp. nov. is separated from the main population of *J. leptosoma* of the west coastal strip and nearby elevated hinterland by a zone of low-lying clay pans, constituting unsuitable habitat, running north-south to the immediate west of Muggon station, Western Australia, which in turn is over 100 km in a straight line from the west coast of Australia being the centre of distribution for the three above-mentioned species.

Jackyhosertyphlops yetanotherone sp. nov. is separated from *J. leptosoma* by having a bold yellow head and neck, the yellow extending well behind the

eyes, and a greater distance than that from tip of snout to level with the eyes, in turn well demarcated from the pink dorsum behind, versus dull yellowish brown on the snout, fading to pink between the eyes, not extending much further back, or well demarcated from the pink further back.

J. yetanotherone sp. nov. is further separated from *J. leptosoma* by having the terminal portion of the body and tail a whitish colour, versus barely different in colour to the anterior body in *J. leptosoma.*

J. yetanotherone sp. nov. and *J. leptosoma* are separated from all other Australian Blind Snakes by the combination of 16 midbody scale rows, 583-781 dorsal body scales, snout in profile is prominent with an obtusely angular horizontal edge, snout rounded and weakly trilobed in dorsal view, nasal cleft originating from the second supralabial, extending anteriorly to the nostril and terminating at the rostral scale, presence of a terminal tail spine and lack of any black colouration on head, body or tail (modified from Ellis *et al.*, 2017).

The termination point of nasal cleft at the rostral completely dividing the nasal scale and a relatively undepressed head separate both *J. yetanotherone sp. nov.* and *J. leptosoma* from all other Australian Blind Snake species with 16 midbody scale rows.

The phylogenies of Marin *et al.* (2012 and 2013) indicated a divergence of *J. yetanotherone sp. nov.* of about 4 MYA from nearest relative, being putative *J. leptosoma* thereby supporting the separation of each taxon at the species level.

Distribution: While only known from the type locality of Muggon station, Western Australia, Australia, Latitude -26.382778 S., Longitude 115.463889 E., it is reasonable to infer that *J. yetanotherone sp. nov.* occurs from the Badgeradda Range in the south to Mount Rebecca in the North, including associated elevated areas, being a fairly straight-line distribution. This gives a maximum likely range of 3,000 square km, not all of which is inhabitable for the Blind Snakes.

This makes it a severely range restricted taxon worthy of immediate conservation attention.

Etymology: When discussing this taxon with west Australian herpetologist Kaj Erik Bulliard in 2019, he exclaimed "Yet another one" in terms of it being another recently identified species.

This is therefore its etymology, being a noun in apposition.

JACKYHOSERTYPHLOPS SHITBOMB SP. NOV. LSIDurn:Isid:zoobank.org:act:AC863CFD-A155-4653-AA11-25C5FB777C2E

Holotype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R127522 collected from 10 km south of Onslow, Western Australia, Australia, Latitude -21.733333 S., Longitude 115.083333 S. This government-owned facility allows access to its holdings.

Paratypes: Seven preserved specimens at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, being specimen number R127521 collected from 10 km south of Onslow, Western Australia, Australia, Latitude -21.733333 S., Longitude 115.083333 S., specimen numbers R156259 (female), R112183, R112184 and R112683 (adult) all collected from the Onslow area, Western Australia, Australia, Latitude -21.741111 S., Longitude 115.113889 E. and specimen numbers R112684 and R112685 (juvenile) both collected from 10 km south southeast of Onslow, Western Australia, Australia

Diagnosis: Until recently, "*Typhlops grypus* Waite, 1918" with a holotype (NMV D12351, formerly R7102 at the National Museum of Victoria), type locality of Gregory Downs, North-west Queensland, Australia has been treated by most herpetologists as a pan-Australian species occupying most of the drier half of Australia, excluding the tropics and the southern deserts.

Parker (1931) formally described *Typhlops nigroterminatus* Parker, 1931 based on a holotype at the Museum of Natural History (UK), specimen number BMNH 1946.1.11.58, collected from Roebuck Bay, northwest Western Australia.

Robb (1972) formally named "*Ramphotyphlops leptosoma* Robb, 1972" based on a holotype from at the Western Australian Museum, WAM, R29623 collected from near Kalbarri in Western Australia. More recently, and following the publications of Marin *et al.* (2012, 2013) "*Ramphotyphlops leptosoma* Robb, 1972" was divided three ways, and the associated taxa "*Anilios systenos* Ellis and Doughty, 2017" and "*Anilios obtusifrons* Ellis and Doughty, 2017" were formally described.

Hoser (2013a) formally named "*Libertadictus* (*Jackyhosertyphlops*) *cliffrosswellingtoni* Hoser, 2013" with a holotype being a specimen at the Australian Museum in Sydney, New South Wales, Australia, specimen number: R110535, from Scott's Tank, Diamantina Lakes, Northwest of Windorah in Western Queensland, Latitude -23.97 S., Longitude 141.53 E. being a south-west Queensland taxon.

Hoser (2013a) also formally named "*Libertadictus* (*Jackyhosertyphlops*) *adelynhoserae*" with a holotype specimen at the Western Australian Museum (WAM), number: R22887 from Marble Bar, Western Australia, Latitude -21.18 S., Longitude 119.70 E. to account for Pilbara specimens of putative "*Typhlops grypus* Waite, 1918".

The genus *Jackyhosertyphlops* Hoser, 2013 had as its type species, *Ramphotyphlops longissimus* Aplin, 1998, a west Australian taxon.

The various published phylogenies of Marin *et al.* (2012, 2013) and other more recent ones have

confirmed the validity of the all the preceding putative species. More importantly a number of other forms were also flagged in these studies.

In light of the published phylogenies of Marin *et al.* (2012, 2013), the populations of putative "*Typhlops grypus* Waite, 1918" as defined by most publishing herpetologists actually fit within two distinct genus groupings.

The eastern Australian populations (Queensland, New South Wales, southern Gulf of Carpentaria), including the type "*Typhlops grypus* Waite, 1918" does not fit into any established genus grouping *sensu* Hoser, 2013, so a new genus *Zzzzz gen. nov.* has been erected accommodate that cluster of species.

Zzzzz gen. nov. has a type species of "*Libertadictus* (*Jackyhosertyphlops*) *cliffrosswellingtoni* Hoser, 2013" and the genus includes several species.

Another is formally named in this paper as *Zzzzz zzzzz sp. nov.*, being a taxon from around Hughenden in central north Queensland.

Tiatragul *et al.* (2023a-b, 2024) in their phylogenies have established that the species within *Zzzzz gen. nov.* as defined in this paper diverged from nearest related species more than 20 MYA and that those are not of the west Australian *Jackyhosertyphlops* species.

Species in the genus *Zzzzz gen. nov.* are dealt with elsewhere in this paper.

All west and central Australian putative "*Typhlops grypus* Waite, 1918" including all forms formally described herein, excluding those explicitly mentioned above are placed within *Jackyhosertyphlops* Hoser, 2013, with a type species of "*Ophthalmidion longissimum* Duméril and Bibron, 1844" as outlined elsewhere in this paper. This is the only logical genus-level placement.

One of these West Australian taxa has been named in this paper as *Jackyhosertyphlops yetanotherone sp. nov.*.

It is known only from the type locality of Muggon station, Western Australia, Australia, Latitude -26.382778 S., Longitude 115.463889 E. (WAM specimen number R136311).

It had until now been treated as a divergent population of *Jackyhosertyphlops leptosoma* (Robb, 1972), itself a relatively range restricted taxon with a distribution extending from Shark Bay in the north to about Northampton, just south of Kalbarri in the South and extending inland about 50 km (not including the population further east at Muggon Station transferred to the new species).

The other 12 previously unnamed species until now associated with putative *Jackyhosertyphlops grypus* of the west and central lineage, have always been treated as populations of that species.

However, based on morphological differences, allopatry across apparently unpassable habitat in the form of biogeographical barriers and deep genetic

divergences, all 12 identified species are formally named herein as new.

These are as follows:

Jackyhosertyphlops shitbomb sp. nov. is a taxon from the Onslow and Cape Range areas of the West Australian coast.

J. leavemalone sp. nov. occurs around the Waldburg Range in the Upper Gascoyne Shire, extending west to Mount Augustus, all in Western Australia.

J. tylertritti sp. nov. is a taxon from the elevated areas east and southeast of the upper Fortescue River drainage system, east of Newman in the Little Sandy Desert.

As a trio of species the three preceding species share a lot of traits with the so-called "*Ramphotyphlops leptosoma* Robb, 1972" group, to which they are also most closely related to. This separates them from all the other species and includes thinner more elongate body and higher average ventral counts (over 640, versus less than 640) as well as a lighter head and/ or neck than body, versus much darker head and/ or neck than body in all the other species in the complex.

The remaining species are all from the Pilbara region and arid areas west to central Australia.

They all have distributions in line with constraints caused by biogeographical barriers that affect other reptile species groups, including for example the Fortescue and Ashburton River basins, as well as inland claypan and flood zones. Whether the

long-term species isolation is caused by habitat, microclimate, competing species, other factors, or combinations of them is not known.

These other species are as follows:

The type form of *Jackyhosertyphlops nigroterminatus* occurs from the southern edge of the Great Sandy Desert to Broome and Derby in the south-west Kimberley district of Western Australia.

Jackyhosertyphlops leverorum sp. nov. is confined to the Wittenoom and Tom Price area of the central Hamersley Ranges district.

J. mariolisi sp. nov. is a taxon from the Rhodes Ridge and Newman area in the Opthalmia Range.

J. gambellae sp. nov. is a taxon from the west

Hamersley district of Western Australia.

J. adelynhoserae Hoser, 2013 is herein confined to the region generally north of the Fortescue River and south of the De Grey River in the northern Pilbara of Western Australia.

J. ohno sp. nov. is a taxon from the hilly area between the Robe River in the north and the Cane River in the South, in the west Pilbara of western Australia.

J. toriswedoshae sp. nov. is a species from the Paterson Range area on the south-west edge of the Great Sandy Desert in Western Australia.

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and Great Sandy Deserts of north-east Western Australia.

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Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov. and J. tylertritti sp. nov. are all separated from the other ten West and central Australian species until now treated as putative J. grypus by having a thinner more elongate body and higher average ventral counts (over 640, versus less than 640) as well as a lighter head and/or neck than body, versus much darker head and/or neck than body in all the other eleven species in the complex. Not included in the preceding statement was a lightening of the snout tip seen in many specimens, as opposed to the general colour of the top of the head from the eyes back, which is darker in the other eleven species.

Jackyhosertyphlops shitbomb sp. nov. has a light yellowish top of head roughly even to between the eyes and an end of tail that rapidly turns blackish, distally to the rest of the snake's pinkish upper body colour. There is not a well-defined boundary at either end.

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J. tylertritti sp. nov. is different to the two preceding species in that it is very light in colour in life, being almost a translucent pink in colour, making it easy to see internal organs and the like in the snake when viewed. The snout is also more squarish than angular as seen in the other two species.

All the preceding species are separated from all other Australian Blind Snakes by the following character combination:

A moderately large, very slender, blackish-tailed blind snake with snout beaked in profile, 18 midbody scale rows, nasal cleft usually proceeding from the second labial and 535 to 680 ventrals, 13-36 subcaudals, with males far higher than females.

The preceding species are all also characterized as follows:

Rostral (from above) is much longer than wide, about

three-quarters as wide as the head and extending back to the level of the eyes or nearly so. Nasals are usually narrowly separated behind rostral. Frontal is smaller than the prefrontal. Snout angular from above, weakly or strongly beaked in profile. Nostrils inferior, very slightly or not swollen and much nearer to rostral than the preocular. Nasal cleft proceeds from the second labial most of the time and usually proceeds for varying distances obliquely upwards and forwards towards the rostral reaching it about half the time or getting very close the other half.

Snout may be white or whitish tipped. Rest of head and neck may be blackish. Tail is blackish towards the tip. Venter is usually white or greyish white in colour. *Jackyhosertyphlops shitbomb sp. nov.* is depicted in life online at:

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The phylogenies of Martin *et al.* (2012 and 2013) showed Pliocene divergences of each of *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* from one another and more from other species. *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* diverged from each other about 2.7 MYA. *J. tylertritti sp. nov.* diverged nearly 5 MYA from the other two species.

Distribution: *Jackyhosertyphlops shitbomb sp. nov.* is a taxon from the Onslow and Cape Range areas of the West Australian coast.

Etymology: In 1981, I picked up a specimen off the road near Mindaroo, Western Australia and after it defecated on about five people who handled it at the time, the snake was labelled a "shit bomb" and hence the etymology.

JACKYHOSERTYPHLOPS LEAVEMEALONE SP. NOV.

LSIDurn:Isid:zoobank.org:act:FF845517-DB6E-43C4-AE34-5386FEA501DB

Holotype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R156164 collected from Waldburg station, Western Australia, Australia, Latitude -24.761111 S., Longitude 117.190278 E.

This government-owned facility allows access to its holdings.

Paratypes: Two preserved specimens at the

Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, being specimen numbers R156163 and R156163 (adult female) collected from Waldburg station, Western Australia, Australia, Latitude -24.761111 S., Longitude 117.190278 E.

Diagnosis: Until recently, "*Typhlops grypus* Waite, 1918" with a holotype (NMV D12351, formerly R7102 at the National Museum of Victoria), type locality of Gregory Downs, North-west Queensland, Australia has been treated by most herpetologists as a pan-Australian species occupying most of the drier half of Australia, excluding the tropics and the southern deserts.

Parker (1931) formally described *Typhlops nigroterminatus* Parker, 1931 based on a holotype at the Museum of Natural History (UK), specimen number BMNH 1946.1.11.58, collected from Roebuck Bay, northwest Western Australia.

Robb (1972) formally named "*Ramphotyphlops leptosoma* Robb, 1972" based on a holotype from at the Western Australian Museum, WAM, R29623 collected from near Kalbarri in Western Australia. More recently, and following the publications of Marin *et al.* (2012, 2013) "*Ramphotyphlops leptosoma* Robb, 1972" was divided three ways, and the associated taxa "*Anilios systenos* Ellis and Doughty, 2017" and "*Anilios obtusifrons* Ellis and Doughty, 2017" were formally described.

Hoser (2013a) formally named "*Libertadictus* (*Jackyhosertyphlops*) *cliffrosswellingtoni* Hoser, 2013" with a holotype being a specimen at the Australian Museum in Sydney, New South Wales, Australia, specimen number: R110535, from Scott's Tank, Diamantina Lakes, Northwest of Windorah in Western Queensland, Latitude -23.97 S., Longitude 141.53 E. being a south-west Queensland taxon.

Hoser (2013a) also formally named "*Libertadictus* (*Jackyhosertyphlops*) *adelynhoserae*" with a holotype specimen at the Western Australian Museum (WAM), number: R22887 from Marble Bar, Western Australia, Latitude -21.18 S., Longitude 119.70 E. to account for Pilbara specimens of putative "*Typhlops grypus* Waite, 1918".

The genus *Jackyhosertyphlops* Hoser, 2013 had as its type species, *Ramphotyphlops longissimus* Aplin, 1998, a west Australian taxon.

The various published phylogenies of Marin *et al.* (2012, 2013) and other more recent ones have confirmed the validity of the all the preceding putative species. More importantly a number of other forms were also flagged in these studies.

In light of the published phylogenies of Marin *et al.* (2012, 2013), the populations of putative "*Typhlops grypus* Waite, 1918" as defined by most publishing herpetologists actually fit within two distinct genus groupings.

The eastern Australian populations (Queensland, New

South Wales, southern Gulf of Carpentaria), including the type "*Typhlops grypus* Waite, 1918" does not fit into any established genus grouping *sensu* Hoser, 2013, so a new genus *Zzzz gen. nov.* has been erected accommodate that cluster of species.

Zzzzz gen. nov. has a type species of "*Libertadictus* (*Jackyhosertyphlops*) *cliffrosswellingtoni* Hoser, 2013" and the genus includes several species.

Another is formally named in this paper as *Zzzzz zzzzz sp. nov.*, being a taxon from around Hughenden in central north Queensland.

Tiatragul *et al.* (2023a-b, 2024) in their phylogenies have established that the species within *Zzzzz gen. nov.* as defined in this paper diverged from nearest related species more than 20 MYA and that those are not of the west Australian *Jackyhosertyphlops* species.

Species in the genus *Zzzz gen. nov*. are dealt with elsewhere in this paper.

All west and central Australian putative "*Typhlops grypus* Waite, 1918" including all forms formally described herein, excluding those explicitly mentioned above are placed within *Jackyhosertyphlops* Hoser, 2013, with a type species of "*Ophthalmidion longissimum* Duméril and Bibron, 1844" as outlined elsewhere in this paper. This is the only logical genus-level placement.

One of these West Australian taxa has been named in this paper as *Jackyhosertyphlops yetanotherone sp. nov.*.

It is known only from the type locality of Muggon station, Western Australia, Australia, Latitude -26.382778 S., Longitude 115.463889 E. (WAM specimen number R136311).

It had until now been treated as a divergent population of *Jackyhosertyphlops leptosoma* (Robb, 1972), itself a relatively range restricted taxon with a distribution extending from Shark Bay in the north to about Northampton, just south of Kalbarri in the South and extending inland about 50 km (not including the population further east at Muggon Station transferred to the new species).

The other 12 previously unnamed species until now associated with putative *Jackyhosertyphlops grypus* of the west and central lineage, have always been treated as populations of this species.

However, based on morphological differences, allopatry across apparently unpassable habitat in the form of biogeographical barriers and deep genetic divergences, all 12 identified species are formally named herein as new.

These are as follows:

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As a trio of species the three preceding species share a lot of traits with the so-called "*Ramphotyphlops leptosoma* Robb, 1972" group, to which they are also most closely related to. This separates them from all the other species and includes thinner more elongate body and higher average ventral counts (over 640, versus less than 640) as well as a lighter head and/ or neck than body, versus much darker head and/ or neck than body in all the other species in the complex.

The remaining species are all from the Pilbara region and arid areas west to central Australia.

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J. ohno sp. nov. is a taxon from the hilly area between the Robe River in the north and the Cane River in the South, in the west Pilbara of western Australia.

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Jackyhosertyphlops shitbomb sp. nov. has a light yellowish top of head roughly even to between the eyes and an end of tail that rapidly turns blackish, distally to the rest of the snake's pinkish upper body colour. There is not a well-defined boundary at either end.

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J. tylertritti sp. nov. is different to the two preceding species in that it is very light in colour in life, being almost a translucent pink in colour, making it easy to see internal organs and the like in the snake when viewed. The snout is also more squarish than angular as seen in the other two species.

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Distribution: *J. leavemalone sp. nov.* occurs around the Waldburg Range in the Upper Gascoyne Shire, extending west to Mount Augustus, all in Western Australia.

Etymology: The etymology "leave me alone" is a reflection on the habit of this species defecating on people when they are handled. It is their way of saying "leave me alone".

JACKYHOSERTYPHLOPS TYLERTRITTI SP. NOV. LSIDurn:lsid:zoobank.org:act:D8B172EF-B1D0-4F4C-B4F9-22C1815D05E4

Holotype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R102679 collected from the Little Sandy Desert, Western Australia, Australia, Latitude -24.075278 S., Longitude 120.360556 E.

This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R102717 collected from the Little Sandy Desert, Western Australia, Australia, Latitude -23.923333 S., Longitude 120.531389 E.

Diagnosis: Until recently, "*Typhlops grypus* Waite, 1918" with a holotype (NMV D12351, formerly R7102 at the National Museum of Victoria), type locality of Gregory Downs, North-west Queensland, Australia has been treated by most herpetologists as a pan-

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J. tylertritti sp. nov. is different to the two preceding species in that it is very light in colour in life, being almost a translucent pink in colour, making it easy to see internal organs and the like in the snake when viewed. The snout is also more squarish than angular as seen in the other two species.

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https://www.flickr.com/photos/114192916@ N07/54081707432/

and

https://www.flickr.com/photos/114192916@ N07/54082584736/

both from Mount Augustus, Western Australia, photographed by Justin Wright.

The phylogenies of Martin *et al.* (2012 and 2013) showed Pliocene divergences of each of *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* from one another and more from other species. *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* diverged from each other about 2.7 MYA. *J. tylertritti sp. nov.* diverged nearly 5 MYA from the other two species.

Distribution: *J. tylertritti sp. nov.* is a taxon from the elevated areas east and southeast of the upper Fortescue River drainage system, east of Newman in the Little Sandy Desert.

Etymology: *J. tylertritti sp. nov.* is named in honor of Tyler Tritt of Forest Hill, Victoria in recognition of his services to herpetology over several years.

This has been done working with Snakebusters: Australia's best reptiles shows, being the only hands on reptile shows in Victoria, Australia that let people hold the animals.

JACKYHOSERTYPHLOPS LEVERORUM SP. NOV. LSIDurn:lsid:zoobank.org:act:FD71C32B-7E41-44A9-97E1-28910677E8D0

Holotype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R114282 collected from Wittenoom, Western Australia, Australia, Latitude -22.233333 S., Longitude 118.316667 E.

This government-owned facility allows access to its holdings.

Paratypes: Two preserved specimens at the Western Australian Museum, Perth, Western Australia, Australia, being specimen number R13432 collected from Wittenoom Gorge, Western Australia, Australia, Latitude -22.283333 S., Longitude 118.316667 E. and specimen number

R111671 collected from Knox Gorge, Western Australia, Australia, Latitude -22.371667 S., Longitude 118.298056 E.

Diagnosis: Until now, eleven relevant species detailed in this description have been treated as populations of putative "*Typhlops grypus* Waite, 1918" with a holotype (NMV D12351, formerly R7102 at the National Museum of Victoria), type locality of Gregory Downs, North-west Queensland, Australia.

West and central Australia specimens of the putative species "*Typhlops grypus* Waite, 1918" are not closely related to the type form and associated species. West and central Australia specimens remain in the genus *Jackyhosertyphlops* Hoser, 2013 as explained in the description of *Jackyhosertyphlops shitbomb sp. nov.* published in this paper and relied upon as part of this description.

"Typhlops grypus Waite, 1918" and associated species are placed in the genus *Zzzz gen. nov.* being an east Australian assemblage.

The three species *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* all occur on the south and south-east rim of the main Pilbara district in Western Australia in adjoining elevated areas such as the north Gascoyne and hills south-east of the Pilbara.

As a trio of species the three preceding species share a lot of traits with the so-called "*Ramphotyphlops leptosoma* Robb, 1972" group, to which they are also most closely related to. This separates them from all the other west and central Australian species formerly treated as *J. grypus*.

They are separated from other species previously treated as West and Central Australian *J. grypus* by their thinner more elongate body and higher average ventral counts (over 640, versus less than 640) as well as a lighter head and/or neck than body colour, versus very much darker head and/or neck than body colour in all the other species in the complex including the following ten.

Not included in the preceding statement was a lightening of the snout tip seen in many specimens, as opposed to the general colour of the top of the head from the eyes back, which is darker in the other eleven species.

The remaining and relevant eleven species are all from the Pilbara region and arid areas west to central Australia.

They all have distributions in line with constraints caused by biogeographical barriers that affect other reptile species groups, including for example the Fortescue and Ashburton River basins, as well as inland claypan and flood zones. Whether the long-term species isolation is caused by habitat, microclimate, competing species, other factors, or combinations of them is not known.

These relevant eleven species are as follows:

The type form of the species *Jackyhosertyphlops nigroterminatus* (Parker, 1931) occurs from the southern edge of the Great Sandy Desert, north of the De Grey River to Broome and Derby in the south-west Kimberley district of Western Australia.

Jackyhosertyphlops leverorum sp. nov. is confined to the Wittenoom and Tom Price area of the central Hamersley Ranges district.

J. mariolisi sp. nov. is a taxon from the Rhodes Ridge and Newman area in the Opthalmia Range.

... Continued in AJH Issue 78 ...

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Australasian Journal of Herpetology

Hoser, R. T. 2005. Before Australian Blind Snakes (Squamata: Serpentes: Scolecophidia) become extinct through bureaucratic indifference ... The description of four new genera and seventy six new species. *Australasian Journal of Herpetology*, 76-78:1-192.



... Continued from AJH Issue 77 ...

Jackyhosertyphlops leverorum sp. nov. description continued. ...

JACKYHOSERTYPHLOPS LEVERORUM SP. NOV. LSIDurn:lsid:zoobank.org:act:FD71C32B-7E41-44A9-97E1-28910677E8D0

Holotype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R114282 collected from Wittenoom, Western Australia, Australia, Latitude -22.233333 S., Longitude 118.316667 E.

Diagnosis (contionued from AJH Issue 77).

Jackyhosertyphlops leverorum sp. nov. is confined to the Wittenoom and Tom Price area of the central Hamersley Ranges district.*J. gambellae sp. nov.* is a taxon from the west Hamersley district of Western Australia.

J. adelynhoserae (Hoser, 2013) is herein confined to the region generally north of the Fortescue River and south of the De Grey River in the northern Pilbara of Western Australia.

J. ohno sp. nov. is a taxon from the hilly area between the Robe River in the north and the Cane River in the South, in the west Pilbara of western Australia.

J. toriswedoshae sp. nov. is a species from the Paterson Range area on the south-west edge of the Great Sandy Desert in Western Australia.

J. timbukthree sp. nov. is a species from the vicinity of Reeves Knoll in the border zone between the Gibson and Great Sandy Deserts of north-east Western Australia.

J. gregswedoshi sp. nov. is a species from the elevated western parts of the Tanami Desert in association with the Gardiner Range on the Western Australia and Northern Territory border in far east Western Australia and adjacent Northern Territory.

J. haydnmcphiei sp. nov. is from the central Australian ranges, generally within 150 km of Alice Springs, Northern Territory.

J. lachlandundasi sp. nov. occurs south of the Amadeus basin in association with the elevated areas of the Petermann Ranges, in the far south-west of the Northern Territory, Australia.

The eleven preceding species (refer also to the part of this description in *AJH* Issue 77) are separated from one another by the following relevant unique character combinations:

Jackyhosertyphlops nigroterminatus is a greyish purple coloured snake on top. Each scale on the dorsum has a pale cream etching, while the centre is coloured, giving the snake a very faint lined patterning of lighter and darker purplish lines. There is no obvious lightening at the tip of the snout, (except in young specimens where the snout may appear whitish in colour).

Top of head and neck behind the eyes is a dark chocolate brown as is the tail. There is faint brown, yellow or grey etching on the anterior scales of the head in front of the eyes in most specimens, or no etching at all in some. The brown of the head continues from 1 to 2 times the distance of the snout to between the eyes and fades indistinctly and gradually to the dorsal colour, which is the same for the entire length of the snake save for the chocolate brown tail tip.

Venter is a lighter colour than the dorsum, but of similar colour.

Eye spot is slightly anterior of centre in the ocular scale.

Jackyhosertyphlops leverorum sp. nov. is a reddish coloured snake with purple tinge on top. Each scale of the dorsum is dark etched and paler at the centre. This means there is no impression of longitudinal lines running along the body. The front of the snout. including all or most of the rostral is yellow in colour. The rostral itself is extremely oversized and more strongly beaked than in most other species in this complex. From anterior to the eyes to the back of the head and nearby neck the colour is blackish on top. The black extending 2.5 to 3.5 times the distance of snout to between the eyes. Etching of scales on the anterior snout is either non-existent or extremely faint. The tail only is black in colour, the transition in the pelvic area being abrupt. There is a reasonably welldefined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

Eye spot is either dead centre or slightly posterior in the ocular scale.

J. mariolisi sp. nov. is a reddish orange coloured snake on top. Each scale of the dorsum has a whitish patch at the anterior edge. The latter half of the body has a slight purple or brown tinge to it. The front of snout and adjacent scales are whitish in colour, this not extending as far as the eyes. Rostral is bluntly beaked. Tail only is dark brownish black, the transition from the anterior upper body colour being ill-defined over 2-3 scale rows. The dark brown of the back of the head commences anterior to the eyes and extends 2 times the distance from snout

to eyes back, from where it transitions gradually to the normal dorsal colouration. The transition occurs over 6-7 scale rows. There is no etching of scales on the snout. There is a reasonably well-defined border between dark upper and light (as in white) lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

J. gambellae sp. nov. is a pinkish coloured snake on top. Snout is whitish in colour extending to between the eyes, where the colour transitions to a dull yellowish brown colour before transitioning again tom the pink of the rest of the dorsum. The area of dull vellow brown extends back slightly more than the distance from snout to eyes. The pink of the dorsum is the same along the length of the snake until about the last 15 percent of the body where there is a transition to a strong yellowish-brown tinge. The tail only is ivory black. The transition at the tail area from dull yellow brown to black is across three scales wide. There is a reasonably well-defined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The venter itself is pinkish white rather than white.

J. adelynhoserae (Hoser, 2013) is a yellowish brown coloured snake on top, with the latter third of the snake being a noticeably different colour to the anterior two thirds.

Snout is bluntly beaked. Rostral and nasal scales wholly off white. Other dorsal anterior scales of the snout are dark brown, extending 1.5 to 2 times the distance of snout to eyes behind the eyes. Transition from dark to lighter body colour occurs across about 5 rows of scales, the transition being affected by reducing amount of dark pigment on the scales. That is the scales have either dark (brown) pigment) or the yellowish brown of the dorsum, but not any intermediate or other colour pigment. The flanks are noticeable in that the transition to white of the venter is higher up the flank than in the preceding species making the white demarcation line easily visible when the snake is viewed from the side. It is also jagged edged caused by the interplay of the row of dark scales meeting the row of immaculate white scales of the venter. The tail is extremely dark brown to black in colour, the transition occurring at the vent or anterior to the vent. Eye spot is slightly below and anterior to centre of the ocular scale.

J. ohno sp. nov. is similar in most respects to *J. adelynhoserae* (Hoser, 2013) as detailed above. It is separated from that species by being reddish orange, brown in colour on top, blackish on top of the head and near neck rather than dark brown and by having an eye spot at the centre of the ocular scale.

J. toriswedoshae sp. nov. is a very light whitish pink

coloured snake on top, enabling one to see materials inside the snake. Tip of snout it brown, behind that (on top) is yellowish-white and behind that, commencing anterior to the eyes is brownish black. This extends about 1.5 times the distance of the snout to the eyes back behind the eyes to the upper neck, where the usual dorsal colour takes over. The dark blackish scales between the eyes are strongly (thickly) yellow etched. The entire dorsum is of the same very light whitish pink colour, except at the tail, where there is a sudden transition to black (as in entire black scales). The transition from dorsal colour to lighter venter is poorly defined and the venter is pinkish rather than white. Rostral is slightly ovoid in shape. Eye spot is slightly below the centre of the ocular scale.

J. timbukthree sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* as just detailed above but separated from that species by having a white tip of snout and slightly posterior of it, distinct thin yellow etching of the dark blackish scales between the eyes and a rostral that is square sided (as opposed to ovoid).

J. gregswedoshi sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* and *J. timbukthree sp. nov.* as just detailed above but separated from those species by having a strong reddish-brown tinge to the pink on top, becoming more brownish posteriorly and only semidistinct and thin etching of the dark blackish scales between the eyes. The rostral is square sided (as opposed to ovoid).

J. haydnmcphiei sp. nov. is a brick red coloured snake on top. The head and upper neck are dark chocolate brown. The snout tip is barely lighter, but otherwise essentially the same colour. The beak is blunt. Tail tip only is dark brown in colour. The transition to the dark of the tail is somewhat jagged edged when viewed from above. The transition from dark upper body to light lower body on the flanks is poorly defined. There are no etchings of scales on the anterior snout, between the eyes or elsewhere on the head and neck. The dorsum is the same colour throughout, excluding the dark brown tail tip. Eye spot is at the centre of the ocular scale.

J. lachlandundasi sp. nov. is similar in most respects to *J. haydnmcphiei sp. nov.* as detailed above. It is separated from that species by having a rostral that is oversized and bulbous at the top, (versus not so in *J. haydnmcphiei sp. nov.*), tip of snout and adjacent (anterior to eyes) is yellow in colour, dark brown to black of tail commences well anterior to the vent and the eye spot is below the centre of the ocular scale. All the fourteen preceding west and central Australian species are separated from all other Australian Blind Snakes by the following character combination:

A moderately large, very slender, blackish-tailed blind snake with snout beaked in profile, 18 midbody scale rows, nasal cleft usually proceeding from the second labial and 535 to 680 ventrals, 13-36 subcaudals, with

males far higher than females.

The preceding species are all also characterized as follows:

Rostral (from above) is much longer than wide, about three-quarters as wide as the head and extending back to the level of the eyes or nearly so. Nasals are usually narrowly separated behind rostral. Frontal is smaller than the prefrontal. Snout angular from above, weakly to strongly beaked in profile and generally species specific. Nostrils inferior, very slightly or not swollen and much nearer to rostral than the preocular. Nasal cleft proceeds from the second labial most of the time and usually proceeds for varying distances obliquely upwards and forwards towards the rostral reaching it about half the time or getting very close the other half.

Snout may be white or whitish tipped. Rest of head and neck may be very dark brown to blackish. Tail is very dark brown to blackish towards the tip. Venter is usually white, pinkish white or light greyish white in colour. Ventral scales may or may not have darker centres, this usually being species specific.

The phylogenies of Martin *et al.* (2012 and 2013) showed Pliocene divergences of each of *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* from one another and more from other species. *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* diverged from each other about 2.7 MYA. *J. tylertritti sp. nov.* diverged nearly 5 MYA from the other two species.

According to the phylogenies of Martin *et al.* (2012 and 2013) of the other eleven species, eight diverged from nearest relatives in either the Pliocene or Miocene periods, meaning a minimum of 2.5 MYA for each species from nearest relative.

The three more-or-less Centralian taxa have not been genetically sampled, but similar divergences can be inferred from other species groups in the region that have been sampled and are constrained by the exact same biogeographical barriers, or from the geological timelines of relevance, as detailed in Hoser (2025a) and sources cited therein.

J. nigroterminatus is depicted in life online at: https://www.flickr.com/photos/ euprepiosaur/52516235654/ from Broome, Western Australia, Australia, photographed by Stephen Zozaya, and https://www.flickr.com/photos/171250498@ N08/52496618323/ from Broome, Western Australia, Australia

from Broome, Western Australia, Australia, photographed by Wes Read, and

https://www.inaturalist.org/observations/32222989 from Broome, Western Australia, Australia,

photographed by Mikael Poquet, and

https://www.inaturalist.org/observations/172833617 from Lagrange, Western Australia, Australia,

photographed by Alistair Harry, and https://www.flickr.com/photos/ moloch05/32456966158/ and https://www.flickr.com/photos/ moloch05/46278719252/ both from 80-mile beach near Broome. Western Australia, Australia, photographed by David "Moloch". J. leverorum sp. nov. is depicted in life online at: https://www.flickr.com/photos/ reptileshots/52790199041/ from Karijini region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.inaturalist.org/observations/241282627 from Karijini National Park, Western Australia, Australia, photographed by "Curious chase". J. mariolisi sp. nov. is depicted in life online at: https://www.flickr.com/photos/zimny anders/52444811953/ from the Opthalmia Range, Western Australia, Australia, photographed by Anders Zimny, and https://www.inaturalist.org/observations/265672969 from Newman, Western Australia, Australia, photographed by Lee Cornish. J. adelynhoserae is depicted in life online at: https://www.inaturalist.org/observations/189459838 from Marble Bar, Western Australia, Australia, photographed by "Pam Town", and https://www.flickr.com/photos/ euprepiosaur/46447971914/ from Port Hedland, Western Australia, Australia, photographed by Stephen Zozoya, and https://www.flickr.com/photos/ reptileshots/12262823534/ and https://www.flickr.com/photos/ reptileshots/12262971246/ both from the Indee Region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.flickr.com/photos/brian busho/49354092742/ from the Indee Region, Western Australia, Australia, photographed by Brian Bush. J. toriswedoshae sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/248720254 from the Parnngurr Community, Telfer, Western Australia, Australia, photographed by Stephen G. Hamilton. J. haydnmcphiei sp. nov. is depicted in life online at: https://www.flickr.com/photos/128497936@ N03/39784647853/

from the West MacDonnell Ranges of the Northern Territory, Australia, photographed by Shawn Scott. *J. lachlandundasi sp. nov.* is depicted in life online at: https://www.flickr.com/photos/

mattsummerville/49036981323/

from Kata Tjuta, Northern Territory, Australia, photographed by Matt Summerville, and https://www.flickr.com/photos/128365570@ N04/32749827663/

from Yulara, Northern Territory, Australia photographed by Max Jackson.

Distribution: *Jackyhosertyphlops leverorum sp. nov.* is confined to the Wittenoom and Tom Price area of the central Hamersley Ranges district.

Etymology: *J. leverorum sp. nov.* is named in honor of John and Lillian Lever, the founders and owners of the Koorana Crocodile farm (opened in 1981 and still going as of 2025), being the first commercial crocodile farm in Queensland, for services to wildlife conservation in Australia spanning many decades.

JACKYHOSERTYPHLOPS MARIOLISI SP. NOV. LSIDurn:lsid:zoobank.org:act:93EB06B5-9505-46DF-8C08-422E8FF775F1

Holotype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R162233 collected from 11.5 km southwest of Rhodes Ridge, Western Australia, Australia, Latitude -23.145833 S., Longitude 119.265556 E.

This government-owned facility allows access to its holdings.

Paratypes: Two preserved specimens at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen numbers R166893 (juvenile) and R166895 (subadult)

humbers R166893 (juvenile) and R166895 (subadult) both collected from 45 km north of Newman, Western Australia, Australia, Latitude -22.968056 S., Longitude 119.630556 E.

Diagnosis: Until now, eleven relevant species detailed in this description have been treated as populations of putative "*Typhlops grypus* Waite, 1918" with a holotype (NMV D12351, formerly R7102 at the National Museum of Victoria), type locality of Gregory Downs, North-west Queensland, Australia.

West and central Australia specimens of the putative species "*Typhlops grypus* Waite, 1918" are not closely related to the type form and associated species. West and central Australia specimens remain in the genus *Jackyhosertyphlops* Hoser, 2013 as explained

in the description of *Jackyhosertyphlops shitbomb sp. nov.* published in this paper and relied upon as part of this description.

"Typhlops grypus Waite, 1918" and associated species are placed in the genus *Zzzz gen. nov.* being an east Australian assemblage.

The three species *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* all occur on the south and south-east rim of the main Pilbara district in Western Australia in adjoining elevated areas such as the north Gascoyne and hills south-east of the Pilbara.

As a trio of species the three preceding species share a lot of traits with the so-called "*Ramphotyphlops leptosoma* Robb, 1972" group, to which they are also most closely related to. This separates them from all the other west and central Australian species formerly treated as *J. grypus*.

They are separated from other species previously treated as West and Central Australian *J. grypus* by their thinner more elongate body and higher average ventral counts (over 640, versus less than 640) as well as a lighter head and/or neck than body colour, versus very much darker head and/or neck than body colour in all the other species in the complex including the following ten.

Not included in the preceding statement was a lightening of the snout tip seen in many specimens, as opposed to the general colour of the top of the head from the eyes back, which is darker in the other eleven species.

The remaining and relevant eleven species are all from the Pilbara region and arid areas west to central Australia.

They all have distributions in line with constraints caused by biogeographical barriers that affect other reptile species groups, including for example the Fortescue and Ashburton River basins, as well as inland claypan and flood zones. Whether the long-term species isolation is caused by habitat, microclimate, competing species, other factors, or combinations of them is not known.

These relevant eleven species are as follows: The type form of the species *Jackyhosertyphlops nigroterminatus* (Parker, 1931) occurs from the southern edge of the Great Sandy Desert, north of the De Grey River to Broome and Derby in the south-west Kimberley district of Western Australia.

Jackyhosertyphlops leverorum sp. nov. is confined to the Wittenoom and Tom Price area of the central Hamersley Ranges district.

J. mariolisi sp. nov. is a taxon from the Rhodes Ridge and Newman area in the Opthalmia Range.

J. gambellae sp. nov. is a taxon from the west Hamersley district of Western Australia.

J. adelynhoserae (Hoser, 2013) is herein confined to the region generally north of the Fortescue River and south of the De Grey River in the northern Pilbara of Western Australia.

J. ohno sp. nov. is a taxon from the hilly area between the Robe River in the north and the Cane River in the South, in the west Pilbara of western Australia.

J. toriswedoshae sp. nov. is a species from the Paterson Range area on the south-west edge of the Great Sandy Desert in Western Australia.

J. timbukthree sp. nov. is a species from the vicinity of Reeves Knoll in the border zone between the Gibson and Great Sandy Deserts of north-east Western Australia.

J. gregswedoshi sp. nov. is a species from the elevated western parts of the Tanami Desert in association with the Gardiner Range on the Western Australia and Northern Territory border in far east Western Australia and adjacent Northern Territory.

J. haydnmcphiei sp. nov. is from the central Australian ranges, generally within 150 km of Alice Springs, Northern Territory.

J. lachlandundasi sp. nov. occurs south of the Amadeus basin in association with the elevated areas of the Petermann Ranges, in the far south-west of the Northern Territory, Australia.

The eleven preceding species are separated from one another by the following relevant unique character combinations:

Jackyhosertyphlops nigroterminatus is a greyish purple coloured snake on top. Each scale on the dorsum has a pale cream etching, while the centre is coloured, giving the snake a very faint lined patterning of lighter and darker purplish lines. There is no obvious lightening at the tip of the snout, (except in young specimens where the snout may appear whitish in colour).

Top of head and neck behind the eyes is a dark chocolate brown as is the tail. There is faint brown, yellow or grey etching on the anterior scales of the head in front of the eyes in most specimens, or no etching at all in some. The brown of the head continues from 1 to 2 times the distance of the snout to between the eyes and fades indistinctly and gradually to the dorsal colour, which is the same for the entire length of the snake save for the chocolate brown tail tip.

Venter is a lighter colour than the dorsum, but of similar colour.

Eye spot is slightly anterior of centre in the ocular scale.

Jackyhosertyphlops leverorum sp. nov. is a reddish coloured snake with purple tinge on top. Each scale of the dorsum is dark etched and paler at the centre. This means there is no impression of longitudinal lines running along the body. The front of the snout, including all or most of the rostral is yellow in colour. The rostral itself is extremely oversized and more strongly beaked than in most other species in this complex. From anterior to the eyes to the back of the head and nearby neck the colour is blackish on top. The black extending 2.5 to 3.5 times the distance of snout to between the eyes. Etching of scales on the anterior snout is either non-existent or extremely faint. The tail only is black in colour, the transition in the pelvic area being abrupt. There is a reasonably welldefined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

Eye spot is either dead centre or slightly posterior in the ocular scale.

J. mariolisi sp. nov. is a reddish orange coloured snake on top. Each scale of the dorsum has a whitish patch at the anterior edge. The latter half of the body has a slight purple or brown tinge to it. The front of snout and adjacent scales are whitish in colour, this not extending as far as the eyes. Rostral is bluntly beaked. Tail only is dark brownish black, the transition from the anterior upper body colour being ill-defined over 2-3 scale rows. The dark brown of the back of the head commences anterior to the eyes and extends 2 times the distance from snout to eyes back, from where it transitions gradually to the normal dorsal colouration. The transition occurs over 6-7 scale rows. There is no etching of scales on the snout. There is a reasonably well-defined border between dark upper and light (as in white) lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

J. gambellae sp. nov. is a pinkish coloured snake on top. Snout is whitish in colour extending to between the eyes, where the colour transitions to a dull vellowish brown colour before transitioning again tom the pink of the rest of the dorsum. The area of dull yellow brown extends back slightly more than the distance from snout to eyes. The pink of the dorsum is the same along the length of the snake until about the last 15 percent of the body where there is a transition to a strong yellowish-brown tinge. The tail only is ivory black. The transition at the tail area from dull yellow brown to black is across three scales wide. There is a reasonably well-defined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The venter itself is pinkish white rather than white.

J. adelynhoserae (Hoser, 2013) is a yellowish brown coloured snake on top, with the latter third of the snake being a noticeably different colour to the anterior two thirds.

Snout is bluntly beaked. Rostral and nasal scales wholly off white. Other dorsal anterior scales of the snout are dark brown, extending 1.5 to 2 times the distance of snout to eyes behind the eyes. Transition from dark to lighter body colour occurs across about 5 rows of scales, the transition being affected by reducing amount of dark pigment on the scales. That is the scales have either dark (brown) pigment) or the yellowish brown of the dorsum, but not any intermediate or other colour pigment. The flanks are noticeable in that the transition to white of the venter is higher up the flank than in the preceding species making the white demarcation line easily visible when the snake is viewed from the side. It is also jagged

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edged caused by the interplay of the row of dark scales meeting the row of immaculate white scales of the venter. The tail is extremely dark brown to black in colour, the transition occurring at the vent or anterior to the vent. Eye spot is slightly below and anterior to centre of the ocular scale.

J. ohno sp. nov. is similar in most respects to *J. adelynhoserae* (Hoser, 2013) as detailed above. It is separated from that species by being reddish orange, brown in colour on top, blackish on top of the head and near neck rather than dark brown and by having an eye spot at the centre of the ocular scale.

J. toriswedoshae sp. nov. is a very light whitish pink coloured snake on top, enabling one to see materials inside the snake. Tip of snout it brown, behind that (on top) is yellowish-white and behind that, commencing anterior to the eyes is brownish black. This extends about 1.5 times the distance of the snout to the eyes back behind the eyes to the upper neck, where the usual dorsal colour takes over. The dark blackish scales between the eyes are strongly (thickly) yellow etched. The entire dorsum is of the same very light whitish pink colour, except at the tail, where there is a sudden transition to black (as in entire black scales). The transition from dorsal colour to lighter venter is poorly defined and the venter is pinkish rather than white. Rostral is slightly ovoid in shape. Eye spot is slightly below the centre of the ocular scale.

J. timbukthree sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* as just detailed above but separated from that species by having a white tip of snout and slightly posterior of it, distinct thin yellow etching of the dark blackish scales between the eyes and a rostral that is square sided (as opposed to ovoid).

J. gregswedoshi sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* and *J. timbukthree sp. nov.* as just detailed above but separated from those species by having a strong reddish-brown tinge to the pink on top, becoming more brownish posteriorly and only semidistinct and thin etching of the dark blackish scales between the eyes. The rostral is square sided (as opposed to ovoid).

J. haydnmcphiei sp. nov. is a brick red coloured snake on top. The head and upper neck are dark chocolate brown. The snout tip is barely lighter, but otherwise essentially the same colour. The beak is blunt. Tail tip only is dark brown in colour. The transition to the dark of the tail is somewhat jagged edged when viewed from above. The transition from dark upper body to light lower body on the flanks is poorly defined. There are no etchings of scales on the anterior snout, between the eyes or elsewhere on the head and neck. The dorsum is the same colour throughout, excluding the dark brown tail tip. Eye spot is at the centre of the ocular scale.

J. lachlandundasi sp. nov. is similar in most respects to *J. haydnmcphiei sp. nov.* as detailed above. It is

separated from that species by having a rostral that is oversized and bulbous at the top, (versus not so in *J. haydnmcphiei sp. nov.*), tip of snout and adjacent (anterior to eyes) is yellow in colour, dark brown to black of tail commences well anterior to the vent and the eye spot is below the centre of the ocular scale. All the fourteen preceding west and central Australian species are separated from all other Australian Blind Snakes by the following character combination: A moderately large, very slender, blackish-tailed blind snake with snout beaked in profile, 18 midbody scale rows, nasal cleft usually proceeding from the second labial and 535 to 680 ventrals, 13-36 subcaudals, with males far higher than females.

The preceding species are all also characterized as follows:

Rostral (from above) is much longer than wide, about three-quarters as wide as the head and extending back to the level of the eyes or nearly so. Nasals are usually narrowly separated behind rostral. Frontal is smaller than the prefrontal. Snout angular from above, weakly to strongly beaked in profile and generally species specific. Nostrils inferior, very slightly or not swollen and much nearer to rostral than the preocular. Nasal cleft proceeds from the second labial most of the time and usually proceeds for varying distances obliquely upwards and forwards towards the rostral reaching it about half the time or getting very close the other half.

Snout may be white or whitish tipped. Rest of head and neck may be very dark brown to blackish. Tail is very dark brown to blackish towards the tip. Venter is usually white, pinkish white or light greyish white in colour. Ventral scales may or may not have darker centres, this usually being species specific.

The phylogenies of Martin *et al.* (2012 and 2013) showed Pliocene divergences of each of *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* from one another and more from other species. *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* diverged from each other about 2.7 MYA. *J. tylertritti sp. nov.* diverged nearly 5 MYA from the other two species.

According to the phylogenies of Martin *et al.* (2012 and 2013) of the other eleven species, eight diverged from nearest relatives in either the Pliocene or Miocene periods, meaning a minimum of 2.5 MYA for each species from nearest relative.

The three more-or-less Centralian taxa have not been genetically sampled, but similar divergences can be inferred from other species groups in the region that have been sampled and are constrained by the exact same biogeographical barriers, or from the geological timelines of relevance, as detailed in Hoser (2025a) and sources cited therein.

J. nigroterminatus is depicted in life online at: https://www.flickr.com/photos/

euprepiosaur/52516235654/ from Broome, Western Australia, Australia, photographed by Stephen Zozaya, and https://www.flickr.com/photos/171250498@ N08/52496618323/ from Broome, Western Australia, Australia, photographed by Wes Read, and https://www.inaturalist.org/observations/32222989 from Broome, Western Australia, Australia, photographed by Mikael Poquet, and https://www.inaturalist.org/observations/172833617 from Lagrange, Western Australia, Australia, photographed by Alistair Harry, and https://www.flickr.com/photos/ moloch05/32456966158/ and https://www.flickr.com/photos/ moloch05/46278719252/ both from 80-mile beach near Broome, Western Australia, Australia, photographed by David "Moloch". J. leverorum sp. nov. is depicted in life online at: https://www.flickr.com/photos/ reptileshots/52790199041/ from Karijini region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.inaturalist.org/observations/241282627 from Karijini National Park, Western Australia, Australia, photographed by "Curious chase". J. mariolisi sp. nov. is depicted in life online at: https://www.flickr.com/photos/zimny_ anders/52444811953/ from the Opthalmia Range, Western Australia, Australia, photographed by Anders Zimny, and https://www.inaturalist.org/observations/265672969 from Newman, Western Australia, Australia, photographed by Lee Cornish. J. adelynhoserae is depicted in life online at: https://www.inaturalist.org/observations/189459838 from Marble Bar, Western Australia, Australia, photographed by "Pam Town", and https://www.flickr.com/photos/ euprepiosaur/46447971914/ from Port Hedland, Western Australia, Australia, photographed by Stephen Zozoya, and https://www.flickr.com/photos/ reptileshots/12262823534/ and https://www.flickr.com/photos/ reptileshots/12262971246/ both from the Indee Region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.flickr.com/photos/brian busho/49354092742/

from the Indee Region, Western Australia, Australia, photographed by Brian Bush.

J. toriswedoshae sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/248720254 from the Parnngurr Community, Telfer, Western Australia, Australia, photographed by Stephen G. Hamilton.

J. haydnmcphiei sp. nov. is depicted in life online at: https://www.flickr.com/photos/128497936@ N03/39784647853/

from the West MacDonnell Ranges of the Northern Territory, Australia, photographed by Shawn Scott. *J. lachlandundasi sp. nov.* is depicted in life online at: https://www.flickr.com/photos/

mattsummerville/49036981323/

from Kata Tjuta, Northern Territory, Australia, photographed by Matt Summerville, and https://www.flickr.com/photos/128365570@ N04/32749827663/

from Yulara, Northern Territory, Australia photographed by Max Jackson.

Distribution: *J. mariolisi sp. nov.* is a taxon from the Rhodes Ridge and Newman area in the Opthalmia Range, of the Pilbara district of Western Australia, Australia.

Etymology: *J. mariolisi sp. nov.* is named in honor of George Mariolis currently (2025) of the Sunshine Coast, Queensland, Australia, formerly of Burwood, Victoria, Australia for numerous services to the health, personal welfare and fitness industries in Australia, improving the lives of thousands of people whom he and his collaborators have trained over many decades, including through the operation of numerous successful businesses.

JACKYHOSERTYPHLOPS GAMBELLAE SP. NOV. LSIDurn:lsid:zoobank.org:act:22346424-104C-4D2B-9DD9-1833B0304C78

Holotype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R110716 collected from Brockman Mine, Pilbara District, Western Australia, Australia, Latitude -22.613333 S., Longitude 117.188056 E. This government-owned facility allows access to its

holdings. **Paratype:** A preserved adult specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R110721 collected from Brockman Mine, Pilbara District, Western Australia, Australia, Latitude -22.613333 S., Longitude 117.188056 E.

Diagnosis: Until now, eleven relevant species detailed in this description have been treated as populations of putative "*Typhlops grypus* Waite, 1918" with a holotype (NMV D12351, formerly R7102 at the National Museum of Victoria), type locality of Gregory Downs, North-west Queensland, Australia.

West and central Australia specimens of the putative species "*Typhlops grypus* Waite, 1918" are not closely

related to the type form and associated species. West and central Australia specimens remain in the genus *Jackyhosertyphlops* Hoser, 2013 as explained in the description of *Jackyhosertyphlops shitbomb sp. nov.* published in this paper and relied upon as part of this description.

"Typhlops grypus Waite, 1918" and associated species are placed in the genus *Zzzz gen. nov.* being an east Australian assemblage.

The three species *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* all occur on the south and south-east rim of the main Pilbara district in Western Australia in adjoining elevated areas such as the north Gascoyne and hills south-east of the Pilbara.

As a trio of species the three preceding species share a lot of traits with the so-called "*Ramphotyphlops leptosoma* Robb, 1972" group, to which they are also most closely related to. This separates them from all the other west and central Australian species formerly treated as *J. grypus*.

They are separated from other species previously treated as West and Central Australian *J. grypus* by their thinner more elongate body and higher average ventral counts (over 640, versus less than 640) as well as a lighter head and/or neck than body colour, versus very much darker head and/or neck than body colour in all the other species in the complex including the following ten.

Not included in the preceding statement was a lightening of the snout tip seen in many specimens, as opposed to the general colour of the top of the head from the eyes back, which is darker in the other eleven species.

The remaining and relevant eleven species are all from the Pilbara region and arid areas west to central Australia.

They all have distributions in line with constraints caused by biogeographical barriers that affect other reptile species groups, including for example the Fortescue and Ashburton River basins, as well as inland claypan and flood zones. Whether the long-term species isolation is caused by habitat, microclimate, competing species, other factors, or combinations of them is not known.

These relevant eleven species are as follows:

The type form of the species *Jackyhosertyphlops nigroterminatus* (Parker, 1931) occurs from the southern edge of the Great Sandy Desert, north of the De Grey River to Broome and Derby in the south-west Kimberley district of Western Australia.

Jackyhosertyphlops leverorum sp. nov. is confined to the Wittenoom and Tom Price area of the central Hamersley Ranges district.

J. mariolisi sp. nov. is a taxon from the Rhodes Ridge and Newman area in the Opthalmia Range.

J. gambellae sp. nov. is a taxon from the west Hamersley district of Western Australia.

J. adelynhoserae (Hoser, 2013) is herein confined to the region generally north of the Fortescue River and south of the De Grey River in the northern Pilbara of Western Australia.

J. ohno sp. nov. is a taxon from the hilly area between the Robe River in the north and the Cane River in the South, in the west Pilbara of western Australia.

J. toriswedoshae sp. nov. is a species from the Paterson Range area on the south-west edge of the Great Sandy Desert in Western Australia.

J. timbukthree sp. nov. is a species from the vicinity of Reeves Knoll in the border zone between the Gibson and Great Sandy Deserts of north-east Western Australia.

J. gregswedoshi sp. nov. is a species from the elevated western parts of the Tanami Desert in association with the Gardiner Range on the Western Australia and Northern Territory border in far east Western Australia and adjacent Northern Territory.

J. haydnmcphiei sp. nov. is from the central Australian ranges, generally within 150 km of Alice Springs, Northern Territory.

J. lachlandundasi sp. nov. occurs south of the Amadeus basin in association with the elevated areas of the Petermann Ranges, in the far south-west of the Northern Territory, Australia.

The eleven preceding species are separated from one another by the following relevant unique character combinations:

Jackyhosertyphlops nigroterminatus is a greyish purple coloured snake on top. Each scale on the dorsum has a pale cream etching, while the centre is coloured, giving the snake a very faint lined patterning of lighter and darker purplish lines. There is no obvious lightening at the tip of the snout, (except in young specimens where the snout may appear whitish in colour).

Top of head and neck behind the eyes is a dark chocolate brown as is the tail. There is faint brown, yellow or grey etching on the anterior scales of the head in front of the eyes in most specimens, or no etching at all in some. The brown of the head continues from 1 to 2 times the distance of the snout to between the eyes and fades indistinctly and gradually to the dorsal colour, which is the same for the entire length of the snake save for the chocolate brown tail tip.

Venter is a lighter colour than the dorsum, but of similar colour.

Eye spot is slightly anterior of centre in the ocular scale.

Jackyhosertyphlops leverorum sp. nov. is a reddish coloured snake with purple tinge on top. Each scale of the dorsum is dark etched and paler at the centre. This means there is no impression of longitudinal lines running along the body. The front of the snout, including all or most of the rostral is yellow in colour. The rostral itself is extremely oversized and more

strongly beaked than in most other species in this complex. From anterior to the eyes to the back of the head and nearby neck the colour is blackish on top. The black extending 2.5 to 3.5 times the distance of snout to between the eyes. Etching of scales on the anterior snout is either non-existent or extremely faint. The tail only is black in colour, the transition in the pelvic area being abrupt. There is a reasonably welldefined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

Eye spot is either dead centre or slightly posterior in the ocular scale.

J. mariolisi sp. nov. is a reddish orange coloured snake on top. Each scale of the dorsum has a whitish patch at the anterior edge. The latter half of the body has a slight purple or brown tinge to it. The front of snout and adjacent scales are whitish in colour, this not extending as far as the eyes. Rostral is bluntly beaked. Tail only is dark brownish black, the transition from the anterior upper body colour being ill-defined over 2-3 scale rows. The dark brown of the back of the head commences anterior to the eves and extends 2 times the distance from snout to eyes back, from where it transitions gradually to the normal dorsal colouration. The transition occurs over 6-7 scale rows. There is no etching of scales on the snout. There is a reasonably well-defined border between dark upper and light (as in white) lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

J. gambellae sp. nov. is a pinkish coloured snake on top. Snout is whitish in colour extending to between the eyes, where the colour transitions to a dull yellowish brown colour before transitioning again tom the pink of the rest of the dorsum. The area of dull yellow brown extends back slightly more than the distance from snout to eyes. The pink of the dorsum is the same along the length of the snake until about the last 15 percent of the body where there is a transition to a strong yellowish-brown tinge. The tail only is ivory black. The transition at the tail area from dull yellow brown to black is across three scales wide. There is a reasonably well-defined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The venter itself is pinkish white rather than white.

J. adelynhoserae (Hoser, 2013) is a yellowish brown coloured snake on top, with the latter third of the snake being a noticeably different colour to the anterior two thirds.

Snout is bluntly beaked. Rostral and nasal scales wholly off white. Other dorsal anterior scales of the snout are dark brown, extending 1.5 to 2 times the distance of snout to eyes behind the eyes. Transition from dark to lighter body colour occurs across about 5 rows of scales, the transition being affected by reducing amount of dark pigment on the scales. That is the scales have either dark (brown) pigment) or the yellowish brown of the dorsum, but not any intermediate or other colour pigment. The flanks are noticeable in that the transition to white of the venter is higher up the flank than in the preceding species making the white demarcation line easily visible when the snake is viewed from the side. It is also jagged edged caused by the interplay of the row of dark scales meeting the row of immaculate white scales of the venter. The tail is extremely dark brown to black in colour, the transition occurring at the vent or anterior to the vent. Eye spot is slightly below and anterior to centre of the ocular scale.

J. ohno sp. nov. is similar in most respects to *J. adelynhoserae* (Hoser, 2013) as detailed above. It is separated from that species by being reddish orange, brown in colour on top, blackish on top of the head and near neck rather than dark brown and by having an eye spot at the centre of the ocular scale. *J. toriswedoshae sp. nov.* is a very light whitish pink coloured snake on top, enabling one to see materials

coloured snake on top, enabling one to see materials inside the snake. Tip of snout it brown, behind that (on top) is yellowish-white and behind that, commencing anterior to the eyes is brownish black. This extends about 1.5 times the distance of the snout to the eyes back behind the eyes to the upper neck, where the usual dorsal colour takes over. The dark blackish scales between the eyes are strongly (thickly) yellow etched. The entire dorsum is of the same very light whitish pink colour, except at the tail, where there is a sudden transition to black (as in entire black scales). The transition from dorsal colour to lighter venter is poorly defined and the venter is pinkish rather than white. Rostral is slightly ovoid in shape. Eye spot is slightly below the centre of the ocular scale.

J. timbukthree sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* as just detailed above but separated from that species by having a white tip of snout and slightly posterior of it, distinct thin yellow etching of the dark blackish scales between the eyes and a rostral that is square sided (as opposed to ovoid).

J. gregswedoshi sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* and *J. timbukthree sp. nov.* as just detailed above but separated from those species by having a strong reddish-brown tinge to the pink on top, becoming more brownish posteriorly and only semidistinct and thin etching of the dark blackish scales between the eyes. The rostral is square sided (as opposed to ovoid).

J. haydnmcphiei sp. nov. is a brick red coloured snake on top. The head and upper neck are dark chocolate

brown. The snout tip is barely lighter, but otherwise essentially the same colour. The beak is blunt. Tail tip only is dark brown in colour. The transition to the dark of the tail is somewhat jagged edged when viewed from above. The transition from dark upper body to light lower body on the flanks is poorly defined. There are no etchings of scales on the anterior snout, between the eyes or elsewhere on the head and neck. The dorsum is the same colour throughout, excluding the dark brown tail tip. Eye spot is at the centre of the ocular scale.

J. lachlandundasi sp. nov. is similar in most respects to *J. haydnmcphiei sp. nov.* as detailed above. It is separated from that species by having a rostral that is oversized and bulbous at the top, (versus not so in *J. haydnmcphiei sp. nov.*), tip of snout and adjacent (anterior to eyes) is yellow in colour, dark brown to black of tail commences well anterior to the vent and the eye spot is below the centre of the ocular scale. All the fourteen preceding west and central Australian species are separated from all other Australian Blind Snakes by the following character combination:

A moderately large, very slender, blackish-tailed blind snake with snout beaked in profile, 18 midbody scale rows, nasal cleft usually proceeding from the second labial and 535 to 680 ventrals, 13-36 subcaudals, with males far higher than females.

The preceding species are all also characterized as follows:

Rostral (from above) is much longer than wide, about three-quarters as wide as the head and extending back to the level of the eyes or nearly so. Nasals are usually narrowly separated behind rostral. Frontal is smaller than the prefrontal. Snout angular from above, weakly to strongly beaked in profile and generally species specific. Nostrils inferior, very slightly or not swollen and much nearer to rostral than the preocular. Nasal cleft proceeds from the second labial most of the time and usually proceeds for varying distances obliquely upwards and forwards towards the rostral reaching it about half the time or getting very close the other half.

Snout may be white or whitish tipped. Rest of head and neck may be very dark brown to blackish. Tail is very dark brown to blackish towards the tip. Venter is usually white, pinkish white or light greyish white in colour. Ventral scales may or may not have darker centres, this usually being species specific.

The phylogenies of Martin *et al.* (2012 and 2013) showed Pliocene divergences of each of *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* from one another and more from other species. *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* diverged from each other about 2.7 MYA. *J. tylertritti sp. nov.* diverged nearly 5 MYA

from the other two species.

According to the phylogenies of Martin et al. (2012

and 2013) of the other eleven species, eight diverged from nearest relatives in either the Pliocene or Miocene periods, meaning a minimum of 2.5 MYA for each species from nearest relative.

The three more-or-less Centralian taxa have not been genetically sampled, but similar divergences can be inferred from other species groups in the region that have been sampled and are constrained by the exact same biogeographical barriers, or from the geological timelines of relevance, as detailed in Hoser (2025a) and sources cited therein.

J. nigroterminatus is depicted in life online at: https://www.flickr.com/photos/ euprepiosaur/52516235654/ from Broome, Western Australia, Australia, photographed by Stephen Zozaya, and https://www.flickr.com/photos/171250498@

N08/52496618323/ from Broome, Western Australia, Australia, photographed by Wes Read, and https://www.inaturalist.org/observations/32222989 from Broome, Western Australia, Australia, photographed by Mikael Poquet, and https://www.inaturalist.org/observations/172833617 from Lagrange, Western Australia, Australia, photographed by Alistair Harry, and https://www.flickr.com/photos/ moloch05/32456966158/ and

https://www.flickr.com/photos/ moloch05/46278719252/

both from 80-mile beach near Broome, Western Australia, Australia, photographed by David "Moloch". *J. leverorum sp. nov.* is depicted in life online at: https://www.flickr.com/photos/

reptileshots/52790199041/

from Karijini region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.inaturalist.org/observations/241282627 from Karijini National Park, Western Australia, Australia, photographed by "Curious chase".

J. mariolisi sp. nov. is depicted in life online at: https://www.flickr.com/photos/zimny_ anders/52444811953/

from the Opthalmia Range, Western Australia, Australia, photographed by Anders Zimny, and https://www.inaturalist.org/observations/265672969 from Newman, Western Australia, Australia, photographed by Lee Cornish.

J. adelynhoserae is depicted in life online at: https://www.inaturalist.org/observations/189459838 from Marble Bar, Western Australia, Australia, photographed by "Pam Town", and https://www.flickr.com/photos/ euprepiosaur/46447971914/

from Port Hedland, Western Australia, Australia,

photographed by Stephen Zozoya, and https://www.flickr.com/photos/ reptileshots/12262823534/ and

https://www.flickr.com/photos/ reptileshots/12262971246/

both from the Indee Region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.flickr.com/photos/brian_ busho/49354092742/

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mattsummerville/49036981323/

from Kata Tjuta, Northern Territory, Australia, photographed by Matt Summerville, and https://www.flickr.com/photos/128365570@ N04/32749827663/

from Yulara, Northern Territory, Australia photographed by Max Jackson.

Distribution: *J. gambellae sp. nov.* is a taxon from the west Hamersley district of Western Australia generally near the type locality (Brockman Mine, Pilbara District, Western Australia), effectively confined by major low-lying drainage systems on all sides including lesser sized systems to the east of where this taxon occurs.

Etymology: *J. gambellae sp. nov.* is named in honor of Karla Gambell currently (2025) of the Sunshine Coast, Queensland, Australia, formerly of Burwood, Victoria, Australia for numerous services to the health, personal welfare and fitness industries in Australia, improving the lives of thousands of people whom she and her collaborators (including husband George Mariolis) have trained over many decades, including through the operation of numerous successful businesses.

JACKYHOSERTYPHLOPS OHNO SP. NOV. LSIDurn:lsid:zoobank.org:act:996BB81E-DB23-4DE8-8BF8-C45A8D16D2DD

Holotype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R108596 collected from 8 km east of Yarra Bluff (AKA Yerra Bluff), Western Australia, Australia, Latitude -21.783333 S., Longitude 116.25 E. This government-owned facility allows access to its holdings.

Paratypes: Four preserved specimens at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, being 1/ Specimen number R110901 (adult) collected 18.5 km southwest of Pannawonnica, Western Australia, Australia, Latitude -21.756389 S., Longitude 116.196389 E., 2/ Specimen number R108614 collected from 8 km east of Yarra Bluff (AKA Yerra Bluff), Western Australia, Eatitude -21.783333 S., Longitude 116.25 E., and 3/ Specimen numbers R102200 and R113845 both collected from Pannawonica, Western Australia, Australia, Latitude -21.65 S., Longitude 116.316667 E.

Diagnosis: Until now, eleven relevant species detailed in this description have been treated as populations of putative "*Typhlops grypus* Waite, 1918" with a holotype (NMV D12351, formerly R7102 at the National Museum of Victoria), type locality of Gregory Downs, North-west Queensland, Australia.

West and central Australia specimens of the putative species "*Typhlops grypus* Waite, 1918" are not closely related to the type form and associated species. West and central Australia specimens remain in the genus *Jackyhosertyphlops* Hoser, 2013 as explained in the description of *Jackyhosertyphlops shitbomb sp. nov.* published in this paper and relied upon as part of this description.

"Typhlops grypus Waite, 1918" and associated species are placed in the genus *Zzzzz gen. nov.* being an east Australian assemblage.

The three species *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* all occur on the south and south-east rim of the main Pilbara district in Western Australia in adjoining elevated areas such as the north Gascoyne and hills south-east of the Pilbara.

As a trio of species the three preceding species share a lot of traits with the so-called "*Ramphotyphlops leptosoma* Robb, 1972" group, to which they are also most closely related to. This separates them from all the other west and central Australian species formerly treated as *J. grypus*.

They are separated from other species previously treated as West and Central Australian *J. grypus* by their thinner more elongate body and higher average ventral counts (over 640, versus less than 640) as well as a lighter head and/or neck than body colour, versus very much darker head and/or neck than body colour in all the other species in the complex including the following ten.

Not included in the preceding statement was a lightening of the snout tip seen in many specimens, as opposed to the general colour of the top of the head from the eyes back, which is darker in the other eleven species.

The remaining and relevant eleven species are all from the Pilbara region and arid areas west to central Australia.

They all have distributions in line with constraints caused by biogeographical barriers that affect other reptile species groups, including for example the Fortescue and Ashburton River basins, as well as inland claypan and flood zones. Whether the long-term species isolation is caused by habitat, microclimate, competing species, other factors, or combinations of them is not known.

These relevant eleven species are as follows:

The type form of the species *Jackyhosertyphlops nigroterminatus* (Parker, 1931) occurs from the southern edge of the Great Sandy Desert, north of the De Grey River to Broome and Derby in the south-west Kimberley district of Western Australia.

Jackyhosertyphlops leverorum sp. nov. is confined to the Wittenoom and Tom Price area of the central Hamersley Ranges district.

J. mariolisi sp. nov. is a taxon from the Rhodes Ridge and Newman area in the Opthalmia Range.

J. gambellae sp. nov. is a taxon from the west Hamersley district of Western Australia.

J. adelynhoserae (Hoser, 2013) is herein confined to the region generally north of the Fortescue River and south of the De Grey River in the northern Pilbara of Western Australia.

J. ohno sp. nov. is a taxon from the hilly area between the Robe River in the north and the Cane River in the South, in the west Pilbara of western Australia.

J. toriswedoshae sp. nov. is a species from the

Paterson Range area on the south-west edge of the Great Sandy Desert in Western Australia.

J. timbukthree sp. nov. is a species from the vicinity of Reeves Knoll in the border zone between the Gibson and Great Sandy Deserts of north-east Western Australia.

J. gregswedoshi sp. nov. is a species from the elevated western parts of the Tanami Desert in association with the Gardiner Range on the Western Australia and Northern Territory border in far east Western Australia and adjacent Northern Territory. *J. haydnmcphiei sp. nov.* is from the central Australian ranges, generally within 150 km of Alice Springs, Northern Territory.

J. lachlandundasi sp. nov. occurs south of the Amadeus basin in association with the elevated areas of the Petermann Ranges, in the far south-west of the Northern Territory, Australia.

The eleven preceding species are separated from one another by the following relevant unique character combinations:

Jackyhosertyphlops nigroterminatus is a greyish purple coloured snake on top. Each scale on the dorsum has a pale cream etching, while the centre is coloured, giving the snake a very faint lined patterning of lighter and darker purplish lines. There is no obvious lightening at the tip of the snout, (except in young specimens where the snout may appear whitish in colour).

Top of head and neck behind the eyes is a dark chocolate brown as is the tail. There is faint brown, yellow or grey etching on the anterior scales of the head in front of the eyes in most specimens, or no etching at all in some. The brown of the head continues from 1 to 2 times the distance of the snout to between the eyes and fades indistinctly and gradually to the dorsal colour, which is the same for the entire length of the snake save for the chocolate brown tail tip.

Venter is a lighter colour than the dorsum, but of similar colour.

Eye spot is slightly anterior of centre in the ocular scale.

Jackyhosertyphlops leverorum sp. nov. is a reddish coloured snake with purple tinge on top. Each scale of the dorsum is dark etched and paler at the centre. This means there is no impression of longitudinal lines running along the body. The front of the snout, including all or most of the rostral is yellow in colour. The rostral itself is extremely oversized and more strongly beaked than in most other species in this complex. From anterior to the eyes to the back of the head and nearby neck the colour is blackish on top. The black extending 2.5 to 3.5 times the distance of snout to between the eyes. Etching of scales on the anterior snout is either non-existent or extremely faint. The tail only is black in colour, the transition in the pelvic area being abrupt. There is a reasonably welldefined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

Eye spot is either dead centre or slightly posterior in the ocular scale.

J. mariolisi sp. nov. is a reddish orange coloured snake on top. Each scale of the dorsum has a whitish patch at the anterior edge. The latter half of the body has a slight purple or brown tinge to it. The front of snout and adjacent scales are whitish in colour, this not extending as far as the eyes. Rostral is bluntly beaked. Tail only is dark brownish black, the transition from the anterior upper body colour being ill-defined over 2-3 scale rows. The dark brown of the back of the head commences anterior to the eyes and extends 2 times the distance from snout to eyes back, from where it transitions gradually to the normal dorsal colouration. The transition occurs over 6-7 scale rows. There is no etching of scales on the snout. There is a reasonably well-defined border between dark upper and light (as in white) lower body on the lower flank, caused by the colour change

running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

J. gambellae sp. nov. is a pinkish coloured snake on top. Snout is whitish in colour extending to between the eyes, where the colour transitions to a dull yellowish brown colour before transitioning again tom the pink of the rest of the dorsum. The area of dull yellow brown extends back slightly more than the distance from snout to eyes. The pink of the dorsum is the same along the length of the snake until about the last 15 percent of the body where there is a transition to a strong yellowish-brown tinge. The tail only is ivory black. The transition at the tail area from dull yellow brown to black is across three scales wide. There is a reasonably well-defined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The venter itself is pinkish white rather than white.

J. adelynhoserae (Hoser, 2013) is a yellowish brown coloured snake on top, with the latter third of the snake being a noticeably different colour to the anterior two thirds.

Snout is bluntly beaked. Rostral and nasal scales wholly off white. Other dorsal anterior scales of the snout are dark brown, extending 1.5 to 2 times the distance of snout to eyes behind the eyes. Transition from dark to lighter body colour occurs across about 5 rows of scales, the transition being affected by reducing amount of dark pigment on the scales. That is the scales have either dark (brown) pigment) or the yellowish brown of the dorsum, but not any intermediate or other colour pigment. The flanks are noticeable in that the transition to white of the venter is higher up the flank than in the preceding species making the white demarcation line easily visible when the snake is viewed from the side. It is also jagged edged caused by the interplay of the row of dark scales meeting the row of immaculate white scales of the venter. The tail is extremely dark brown to black in colour, the transition occurring at the vent or anterior to the vent. Eye spot is slightly below and anterior to centre of the ocular scale.

J. ohno sp. nov. is similar in most respects to *J. adelynhoserae* (Hoser, 2013) as detailed above. It is separated from that species by being reddish orange, brown in colour on top, blackish on top of the head and near neck rather than dark brown and by having an eye spot at the centre of the ocular scale.

J. toriswedoshae sp. nov. is a very light whitish pink coloured snake on top, enabling one to see materials inside the snake. Tip of snout it brown, behind that (on top) is yellowish-white and behind that, commencing anterior to the eyes is brownish black. This extends about 1.5 times the distance of the snout to the eyes back behind the eyes to the upper neck, where the

usual dorsal colour takes over. The dark blackish scales between the eyes are strongly (thickly) yellow etched. The entire dorsum is of the same very light whitish pink colour, except at the tail, where there is a sudden transition to black (as in entire black scales). The transition from dorsal colour to lighter venter is poorly defined and the venter is pinkish rather than white. Rostral is slightly ovoid in shape. Eye spot is slightly below the centre of the ocular scale.

J. timbukthree sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* as just detailed above but separated from that species by having a white tip of snout and slightly posterior of it, distinct thin yellow etching of the dark blackish scales between the eyes and a rostral that is square sided (as opposed to ovoid).

J. gregswedoshi sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* and *J. timbukthree sp. nov.* as just detailed above but separated from those species by having a strong reddish-brown tinge to the pink on top, becoming more brownish posteriorly and only semidistinct and thin etching of the dark blackish scales between the eyes. The rostral is square sided (as opposed to ovoid).

J. haydnmcphiei sp. nov. is a brick red coloured snake on top. The head and upper neck are dark chocolate brown. The snout tip is barely lighter, but otherwise essentially the same colour. The beak is blunt. Tail tip only is dark brown in colour. The transition to the dark of the tail is somewhat jagged edged when viewed from above. The transition from dark upper body to light lower body on the flanks is poorly defined. There are no etchings of scales on the anterior snout, between the eyes or elsewhere on the head and neck. The dorsum is the same colour throughout, excluding the dark brown tail tip. Eye spot is at the centre of the ocular scale.

J. lachlandundasi sp. nov. is similar in most respects to *J. haydnmcphiei sp. nov.* as detailed above. It is separated from that species by having a rostral that is oversized and bulbous at the top, (versus not so in *J. haydnmcphiei sp. nov.*), tip of snout and adjacent (anterior to eyes) is yellow in colour, dark brown to black of tail commences well anterior to the vent and the eye spot is below the centre of the ocular scale.

All the fourteen preceding west and central Australian species are separated from all other Australian Blind Snakes by the following character combination:

A moderately large, very slender, blackish-tailed blind snake with snout beaked in profile, 18 midbody scale rows, nasal cleft usually proceeding from the second labial and 535 to 680 ventrals, 13-36 subcaudals, with males far higher than females.

The preceding species are all also characterized as follows:

Rostral (from above) is much longer than wide, about three-quarters as wide as the head and extending back to the level of the eyes or nearly so. Nasals are

usually narrowly separated behind rostral. Frontal is smaller than the prefrontal. Snout angular from above, weakly to strongly beaked in profile and generally species specific. Nostrils inferior, very slightly or not swollen and much nearer to rostral than the preocular. Nasal cleft proceeds from the second labial most of the time and usually proceeds for varying distances obliquely upwards and forwards towards the rostral reaching it about half the time or getting very close the other half.

Snout may be white or whitish tipped. Rest of head and neck may be very dark brown to blackish. Tail is very dark brown to blackish towards the tip. Venter is usually white, pinkish white or light greyish white in colour. Ventral scales may or may not have darker centres, this usually being species specific.

The phylogenies of Martin *et al.* (2012 and 2013) showed Pliocene divergences of each of *Jackyhosertyphlops shitbomb sp. nov.*, *J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* from one another and more from other species. *Jackyhosertyphlops shitbomb sp. nov.*, *J. leavemalone sp. nov.* diverged from each other about 2 7 MYA. *J. tylertritti sp. nov.* diverged nearly 5 MYA

2.7 MYA. *J. tylertritti sp. nov.* diverged nearly 5 MYA from the other two species.

According to the phylogenies of Martin *et al.* (2012 and 2013) of the other eleven species, eight diverged from nearest relatives in either the Pliocene or Miocene periods, meaning a minimum of 2.5 MYA for each species from nearest relative.

The three more-or-less Centralian taxa have not been genetically sampled, but similar divergences can be inferred from other species groups in the region that have been sampled and are constrained by the exact same biogeographical barriers, or from the geological timelines of relevance, as detailed in Hoser (2025a) and sources cited therein.

J. nigroterminatus is depicted in life online at:

https://www.flickr.com/photos/

euprepiosaur/52516235654/

- from Broome, Western Australia, Australia,
- photographed by Stephen Zozaya, and

https://www.flickr.com/photos/171250498@ N08/52496618323/

- from Broome, Western Australia, Australia,
- photographed by Wes Read, and

https://www.inaturalist.org/observations/32222989

from Broome, Western Australia, Australia,

photographed by Mikael Poquet, and

https://www.inaturalist.org/observations/172833617

- from Lagrange, Western Australia, Australia,
- photographed by Alistair Harry, and

https://www.flickr.com/photos/

moloch05/32456966158/

and

https://www.flickr.com/photos/

moloch05/46278719252/

both from 80-mile beach near Broome, Western Australia, Australia, photographed by David "Moloch". *J. leverorum sp. nov.* is depicted in life online at: https://www.flickr.com/photos/ reptileshots/52790199041/

from Karijini region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.inaturalist.org/observations/241282627 from Karijini National Park, Western Australia, Australia, photographed by "Curious chase". *J. mariolisi sp. nov.* is depicted in life online at: https://www.flickr.com/photos/zimny_ anders/52444811953/

from the Opthalmia Range, Western Australia, Australia, photographed by Anders Zimny, and https://www.inaturalist.org/observations/265672969 from Newman, Western Australia, Australia, photographed by Lee Cornish.

J. adelynhoserae is depicted in life online at: https://www.inaturalist.org/observations/189459838 from Marble Bar, Western Australia, Australia, photographed by "Pam Town", and https://www.flickr.com/photos/

euprepiosaur/46447971914/

from Port Hedland, Western Australia, Australia, photographed by Stephen Zozoya, and https://www.flickr.com/photos/ reptileshots/12262823534/ and

https://www.flickr.com/photos/ reptileshots/12262971246/

both from the Indee Region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.flickr.com/photos/brian_ busho/49354092742/

from the Indee Region, Western Australia, Australia, photographed by Brian Bush.

J. toriswedoshae sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/248720254 from the Parnngurr Community, Telfer, Western Australia, Australia, photographed by Stephen G. Hamilton.

J. haydnmcphiei sp. nov. is depicted in life online at: https://www.flickr.com/photos/128497936@ N03/39784647853/

from the West MacDonnell Ranges of the Northern Territory, Australia, photographed by Shawn Scott.

J. lachlandundasi sp. nov. is depicted in life online at: https://www.flickr.com/photos/

mattsummerville/49036981323/

from Kata Tjuta, Northern Territory, Australia, photographed by Matt Summerville, and https://www.flickr.com/photos/128365570@ N04/32749827663/

from Yulara, Northern Territory, Australia

photographed by Max Jackson.

Distribution: *J. ohno sp. nov.* is a taxon from the hilly area between the Robe River in the north and the Cane River in the South, potentially extending north to the Fortescue River, in the west Pilbara of Western Australia, Australia.

Etymology: It was in January 1981 when I was grabbing a specimen of this taxon crossing a road on a rainy night, that it sprayed feces into my face. This led to an Aboriginal accomplice exclaiming "oh no" and hence the etymology.

JACKYHOSERTYPHLOPS TORISWEDOSHAE SP. NOV.

LSIDurn:lsid:zoobank.org:act:4DADF90C-CEBD-42D9-B99B-90A9AB7DAF7E

Holotype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R108923 collected from 25 km southeast of Telfer, Western Australia, Australia, Latitude -21.883333 S., Longitude 122.366667 E.

This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R47784 collected from Paterson Range, 217 km east of Nullagine, Western Australia, Australia, Latitude -21.833333 S., Longitude 122.116667 E.

Diagnosis: Until now, eleven relevant species detailed in this description have been treated as populations of putative "*Typhlops grypus* Waite, 1918" with a holotype (NMV D12351, formerly R7102 at the National Museum of Victoria), type locality of Gregory Downs, North-west Queensland, Australia.

West and central Australia specimens of the putative species "*Typhlops grypus* Waite, 1918" are not closely related to the type form and associated species.

West and central Australia specimens remain in the genus *Jackyhosertyphlops* Hoser, 2013 as explained in the description of *Jackyhosertyphlops shitbomb sp. nov.* published in this paper and relied upon as part of this description.

"Typhlops grypus Waite, 1918" and associated species are placed in the genus *Zzzz gen. nov.* being an east Australian assemblage.

The three species *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* all occur on the south and south-east rim of the main Pilbara district in Western Australia in adjoining elevated areas such as the north Gascoyne and hills south-east of the Pilbara.

As a trio of species the three preceding species share a lot of traits with the so-called "*Ramphotyphlops leptosoma* Robb, 1972" group, to which they are also most closely related to. This separates them from all the other west and central Australian species formerly treated as *J. grypus*. They are separated from other species previously treated as West and Central Australian *J. grypus* by their thinner more elongate body and higher average ventral counts (over 640, versus less than 640) as well as a lighter head and/or neck than body colour, versus very much darker head and/or neck than body colour in all the other species in the complex including the following ten.

Not included in the preceding statement was a lightening of the snout tip seen in many specimens, as opposed to the general colour of the top of the head from the eyes back, which is darker in the other eleven species.

The remaining and relevant eleven species are all from the Pilbara region and arid areas west to central Australia.

They all have distributions in line with constraints caused by biogeographical barriers that affect other reptile species groups, including for example the Fortescue and Ashburton River basins, as well as inland claypan and flood zones. Whether the long-term species isolation is caused by habitat, microclimate, competing species, other factors, or combinations of them is not known.

These relevant eleven species are as follows: The type form of the species *Jackyhosertyphlops nigroterminatus* (Parker, 1931) occurs from the southern edge of the Great Sandy Desert, north of the De Grey River to Broome and Derby in the south-west Kimberley district of Western Australia.

Jackyhosertyphlops leverorum sp. nov. is confined to the Wittenoom and Tom Price area of the central Hamersley Ranges district.

J. mariolisi sp. nov. is a taxon from the Rhodes Ridge and Newman area in the Opthalmia Range.

J. gambellae sp. nov. is a taxon from the west Hamersley district of Western Australia.

J. adelynhoserae (Hoser, 2013) is herein confined to the region generally north of the Fortescue River and south of the De Grey River in the northern Pilbara of Western Australia.

J. ohno sp. nov. is a taxon from the hilly area between the Robe River in the north and the Cane River in the South, in the west Pilbara of western Australia.

J. toriswedoshae sp. nov. is a species from the Paterson Range area on the south-west edge of the Great Sandy Desert in Western Australia.

J. timbukthree sp. nov. is a species from the vicinity of Reeves Knoll in the border zone between the Gibson and Great Sandy Deserts of north-east Western Australia.

J. gregswedoshi sp. nov. is a species from the elevated western parts of the Tanami Desert in association with the Gardiner Range on the Western Australia and Northern Territory border in far east Western Australia and adjacent Northern Territory. J. haydnmcphiei sp. nov. is from the central Australian

ranges, generally within 150 km of Alice Springs, Northern Territory.

J. lachlandundasi sp. nov. occurs south of the Amadeus basin in association with the elevated areas of the Petermann Ranges, in the far south-west of the Northern Territory, Australia.

The eleven preceding species are separated from one another by the following relevant unique character combinations:

Jackyhosertyphlops nigroterminatus is a greyish purple coloured snake on top. Each scale on the dorsum has a pale cream etching, while the centre is coloured, giving the snake a very faint lined patterning of lighter and darker purplish lines. There is no obvious lightening at the tip of the snout, (except in young specimens where the snout may appear whitish in colour).

Top of head and neck behind the eyes is a dark chocolate brown as is the tail. There is faint brown, yellow or grey etching on the anterior scales of the head in front of the eyes in most specimens, or no etching at all in some. The brown of the head continues from 1 to 2 times the distance of the snout to between the eyes and fades indistinctly and gradually to the dorsal colour, which is the same for the entire length of the snake save for the chocolate brown tail tip.

Venter is a lighter colour than the dorsum, but of similar colour.

Eye spot is slightly anterior of centre in the ocular scale.

Jackyhosertyphlops leverorum sp. nov. is a reddish coloured snake with purple tinge on top. Each scale of the dorsum is dark etched and paler at the centre. This means there is no impression of longitudinal lines running along the body. The front of the snout, including all or most of the rostral is yellow in colour. The rostral itself is extremely oversized and more strongly beaked than in most other species in this complex. From anterior to the eyes to the back of the head and nearby neck the colour is blackish on top. The black extending 2.5 to 3.5 times the distance of snout to between the eyes. Etching of scales on the anterior snout is either non-existent or extremely faint. The tail only is black in colour, the transition in the pelvic area being abrupt. There is a reasonably welldefined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

Eye spot is either dead centre or slightly posterior in the ocular scale.

J. mariolisi sp. nov. is a reddish orange coloured snake on top. Each scale of the dorsum has a whitish patch at the anterior edge. The latter half of the body has a slight purple or brown tinge to it.

The front of snout and adjacent scales are whitish in colour, this not extending as far as the eyes. Rostral is bluntly beaked. Tail only is dark brownish black, the transition from the anterior upper body colour being ill-defined over 2-3 scale rows. The dark brown of the back of the head commences anterior to the eves and extends 2 times the distance from snout to eyes back, from where it transitions gradually to the normal dorsal colouration. The transition occurs over 6-7 scale rows. There is no etching of scales on the snout. There is a reasonably well-defined border between dark upper and light (as in white) lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

J. gambellae sp. nov. is a pinkish coloured snake on top. Snout is whitish in colour extending to between the eyes, where the colour transitions to a dull yellowish brown colour before transitioning again tom the pink of the rest of the dorsum. The area of dull yellow brown extends back slightly more than the distance from snout to eyes. The pink of the dorsum is the same along the length of the snake until about the last 15 percent of the body where there is a transition to a strong yellowish-brown tinge. The tail only is ivory black. The transition at the tail area from dull yellow brown to black is across three scales wide. There is a reasonably well-defined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The venter itself is pinkish white rather than white.

J. adelynhoserae (Hoser, 2013) is a yellowish brown coloured snake on top, with the latter third of the snake being a noticeably different colour to the anterior two thirds.

Snout is bluntly beaked. Rostral and nasal scales wholly off white. Other dorsal anterior scales of the snout are dark brown, extending 1.5 to 2 times the distance of snout to eyes behind the eyes. Transition from dark to lighter body colour occurs across about 5 rows of scales, the transition being affected by reducing amount of dark pigment on the scales. That is the scales have either dark (brown) pigment) or the yellowish brown of the dorsum, but not any intermediate or other colour pigment. The flanks are noticeable in that the transition to white of the venter is higher up the flank than in the preceding species making the white demarcation line easily visible when the snake is viewed from the side. It is also jagged edged caused by the interplay of the row of dark scales meeting the row of immaculate white scales of the venter. The tail is extremely dark brown to black in colour, the transition occurring at the vent or anterior to the vent. Eye spot is slightly below and anterior to centre of the ocular scale.

J. ohno sp. nov. is similar in most respects to *J. adelynhoserae* (Hoser, 2013) as detailed above. It is separated from that species by being reddish orange, brown in colour on top, blackish on top of the head and near neck rather than dark brown and by having an eye spot at the centre of the ocular scale.

J. toriswedoshae sp. nov. is a very light whitish pink coloured snake on top, enabling one to see materials inside the snake. Tip of snout it brown, behind that (on top) is yellowish-white and behind that, commencing anterior to the eyes is brownish black. This extends about 1.5 times the distance of the snout to the eyes back behind the eyes to the upper neck, where the usual dorsal colour takes over. The dark blackish scales between the eyes are strongly (thickly) yellow etched. The entire dorsum is of the same very light whitish pink colour, except at the tail, where there is a sudden transition to black (as in entire black scales). The transition from dorsal colour to lighter venter is poorly defined and the venter is pinkish rather than white. Rostral is slightly ovoid in shape. Eye spot is slightly below the centre of the ocular scale.

J. timbukthree sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* as just detailed above but separated from that species by having a white tip of snout and slightly posterior of it, distinct thin yellow etching of the dark blackish scales between the eyes and a rostral that is square sided (as opposed to ovoid).

J. gregswedoshi sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* and *J. timbukthree sp. nov.* as just detailed above but separated from those species by having a strong reddish-brown tinge to the pink on top, becoming more brownish posteriorly and only semidistinct and thin etching of the dark blackish scales between the eyes. The rostral is square sided (as opposed to ovoid).

J. haydnmcphiei sp. nov. is a brick red coloured snake on top. The head and upper neck are dark chocolate brown. The snout tip is barely lighter, but otherwise essentially the same colour. The beak is blunt. Tail tip only is dark brown in colour. The transition to the dark of the tail is somewhat jagged edged when viewed from above. The transition from dark upper body to light lower body on the flanks is poorly defined. There are no etchings of scales on the anterior snout, between the eyes or elsewhere on the head and neck. The dorsum is the same colour throughout, excluding the dark brown tail tip. Eye spot is at the centre of the ocular scale.

J. lachlandundasi sp. nov. is similar in most respects to *J. haydnmcphiei sp. nov.* as detailed above. It is separated from that species by having a rostral that is oversized and bulbous at the top, (versus not so in *J. haydnmcphiei sp. nov.*), tip of snout and adjacent (anterior to eyes) is yellow in colour, dark brown to black of tail commences well anterior to the vent and the eye spot is below the centre of the ocular scale.

All the fourteen preceding west and central Australian species are separated from all other Australian Blind Snakes by the following character combination: A moderately large, very slender, blackish-tailed blind snake with snout beaked in profile, 18 midbody scale rows, nasal cleft usually proceeding from the second labial and 535 to 680 ventrals, 13-36 subcaudals, with males far higher than females.

The preceding species are all also characterized as follows:

Rostral (from above) is much longer than wide, about three-quarters as wide as the head and extending back to the level of the eyes or nearly so. Nasals are usually narrowly separated behind rostral. Frontal is smaller than the prefrontal. Snout angular from above, weakly to strongly beaked in profile and generally species specific. Nostrils inferior, very slightly or not swollen and much nearer to rostral than the preocular. Nasal cleft proceeds from the second labial most of the time and usually proceeds for varying distances obliquely upwards and forwards towards the rostral reaching it about half the time or getting very close the other half.

Snout may be white or whitish tipped. Rest of head and neck may be very dark brown to blackish. Tail is very dark brown to blackish towards the tip. Venter is usually white, pinkish white or light greyish white in colour. Ventral scales may or may not have darker centres, this usually being species specific.

The phylogenies of Martin *et al.* (2012 and 2013) showed Pliocene divergences of each of *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* from one another and more from other species. *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* diverged from each other about

2.7 MYA. *J. tylertritti sp. nov.* diverged nearly 5 MYA from the other two species.

According to the phylogenies of Martin *et al.* (2012 and 2013) of the other eleven species, eight diverged from nearest relatives in either the Pliocene or Miocene periods, meaning a minimum of 2.5 MYA for each species from nearest relative.

The three more-or-less Centralian taxa have not been genetically sampled, but similar divergences can be inferred from other species groups in the region that have been sampled and are constrained by the exact same biogeographical barriers, or from the geological timelines of relevance, as detailed in Hoser (2025a) and sources cited therein.

J. nigroterminatus is depicted in life online at: https://www.flickr.com/photos/ euprepiosaur/52516235654/

from Broome, Western Australia, Australia, photographed by Stephen Zozaya, and https://www.flickr.com/photos/171250498@ N08/52496618323/

from Broome, Western Australia, Australia,

photographed by Wes Read, and https://www.inaturalist.org/observations/32222989 from Broome, Western Australia, Australia, photographed by Mikael Poquet, and https://www.inaturalist.org/observations/172833617 from Lagrange, Western Australia, Australia, photographed by Alistair Harry, and https://www.flickr.com/photos/ moloch05/32456966158/ and https://www.flickr.com/photos/

moloch05/46278719252/

both from 80-mile beach near Broome, Western Australia, Australia, photographed by David "Moloch".

J. leverorum sp. nov. is depicted in life online at:

https://www.flickr.com/photos/ reptileshots/52790199041/

from Karijini region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.inaturalist.org/observations/241282627

from Karijini National Park, Western Australia, Australia, photographed by "Curious chase".

J. mariolisi sp. nov. is depicted in life online at:

https://www.flickr.com/photos/zimny_ anders/52444811953/

from the Opthalmia Range, Western Australia, Australia, photographed by Anders Zimny, and https://www.inaturalist.org/observations/265672969 from Newman, Western Australia, Australia,

photographed by Lee Cornish.

J. adelynhoserae is depicted in life online at:

https://www.inaturalist.org/observations/189459838

from Marble Bar, Western Australia, Australia,

photographed by "Pam Town", and

https://www.flickr.com/photos/

euprepiosaur/46447971914/

from Port Hedland, Western Australia, Australia,

photographed by Stephen Zozoya, and

https://www.flickr.com/photos/ reptileshots/12262823534/

and

https://www.flickr.com/photos/ reptileshots/12262971246/

both from the Indee Region, Western Australia,

Australia, photographed by Brendan Schembri, and

https://www.flickr.com/photos/brian_

busho/49354092742/

from the Indee Region, Western Australia, Australia, photographed by Brian Bush.

J. toriswedoshae sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/248720254 from the Parnngurr Community, Telfer, Western Australia, Australia, photographed by Stephen G. Hamilton.

J. haydnmcphiei sp. nov. is depicted in life online at:

https://www.flickr.com/photos/128497936@ N03/39784647853/

from the West MacDonnell Ranges of the Northern Territory, Australia, photographed by Shawn Scott.

J. lachlandundasi sp. nov. is depicted in life online at: https://www.flickr.com/photos/

mattsummerville/49036981323/

from Kata Tjuta, Northern Territory, Australia, photographed by Matt Summerville, and https://www.flickr.com/photos/128365570@ N04/32749827663/

from Yulara, Northern Territory, Australia photographed by Max Jackson.

Distribution: *J. toriswedoshae sp. nov.* is a species from the Paterson Range area on the south-west edge of the Great Sandy Desert in Western Australia. **Etymology:** *J. toriswedoshae sp. nov.* is named in honor of Tori Swedosh of Warrandyte, Victoria, Australia in recognition of her services to the arts. See details at: https://toriswedosh.com/chapters *JACKYHOSERTYPHLOPS TIMBUKTHREE SP. NOV.*

LSIDurn:Isid:zoobank.org:act:73CC9480-F0A0-4AE9-BBE1-300D32B66CA9

Holotype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R4073 collected from near Well 39 at the Canning Stock Route, Western Australia, Australia, Latitude -21.766667 S., Longitude 125.65 E.

This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R64185 collected from 1 km south of Well 40 (Waddawalla) on the Canning Stock Route, Western Australia, Australia, Latitude -21.683333 S., Longitude 125.766667 E.

Diagnosis: Until now, eleven relevant species detailed in this description have been treated as populations of putative "*Typhlops grypus* Waite, 1918" with a holotype (NMV D12351, formerly R7102 at the National Museum of Victoria), type locality of Gregory Downs, North-west Queensland, Australia.

West and central Australia specimens of the putative species "*Typhlops grypus* Waite, 1918" are not closely related to the type form and associated species. West and central Australia specimens remain in the genus *Jackyhosertyphlops* Hoser, 2013 as explained in the description of *Jackyhosertyphlops shitbomb sp. nov.* published in this paper and relied upon as part of this description.

"Typhlops grypus Waite, 1918" and associated species are placed in the genus *Zzzzz gen. nov.* being an east Australian assemblage.

The three species Jackyhosertyphlops shitbomb

sp. nov., *J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* all occur on the south and south-east rim of the main Pilbara district in Western Australia in adjoining elevated areas such as the north Gascoyne and hills south-east of the Pilbara.

As a trio of species the three preceding species share a lot of traits with the so-called "*Ramphotyphlops leptosoma* Robb, 1972" group, to which they are also most closely related to. This separates them from all the other west and central Australian species formerly treated as *J. grypus*.

They are separated from other species previously treated as West and Central Australian *J. grypus* by their thinner more elongate body and higher average ventral counts (over 640, versus less than 640) as well as a lighter head and/or neck than body colour, versus very much darker head and/or neck than body colour in all the other species in the complex including the following ten.

Not included in the preceding statement was a lightening of the snout tip seen in many specimens, as opposed to the general colour of the top of the head from the eyes back, which is darker in the other eleven species.

The remaining and relevant eleven species are all from the Pilbara region and arid areas west to central Australia.

They all have distributions in line with constraints caused by biogeographical barriers that affect other reptile species groups, including for example the Fortescue and Ashburton River basins, as well as inland claypan and flood zones. Whether the long-term species isolation is caused by habitat, microclimate, competing species, other factors, or combinations of them is not known.

These relevant eleven species are as follows: The type form of the species *Jackyhosertyphlops nigroterminatus* (Parker, 1931) occurs from the southern edge of the Great Sandy Desert, north of the De Grey River to Broome and Derby in the south-west Kimberley district of Western Australia.

Jackyhosertyphlops leverorum sp. nov. is confined to the Wittenoom and Tom Price area of the central Hamersley Ranges district.

J. mariolisi sp. nov. is a taxon from the Rhodes Ridge and Newman area in the Opthalmia Range.

J. gambellae sp. nov. is a taxon from the west Hamersley district of Western Australia.

J. adelynhoserae (Hoser, 2013) is herein confined to the region generally north of the Fortescue River and south of the De Grey River in the northern Pilbara of Western Australia.

J. ohno sp. nov. is a taxon from the hilly area between the Robe River in the north and the Cane River in the South, in the west Pilbara of western Australia.

J. toriswedoshae sp. nov. is a species from the Paterson Range area on the south-west edge of the Great Sandy Desert in Western Australia.

J. timbukthree sp. nov. is a species from the vicinity of Reeves Knoll in the border zone between the Gibson and Great Sandy Deserts.

J. gregswedoshi sp. nov. is a species from the elevated western parts of the Tanami Desert in association with the Gardiner Range on the Western Australia and Northern Territory border in far east Western Australia and adjacent Northern Territory.

J. haydnmcphiei sp. nov. is from the central Australian ranges, generally within 150 km of Alice Springs, Northern Territory.

J. lachlandundasi sp. nov. occurs south of the Amadeus basin in association with the elevated areas of the Petermann Ranges, in the far south-west of the Northern Territory, Australia.

The eleven preceding species are separated from one another by the following relevant unique character combinations:

Jackyhosertyphlops nigroterminatus is a greyish purple coloured snake on top. Each scale on the dorsum has a pale cream etching, while the centre is coloured, giving the snake a very faint lined patterning of lighter and darker purplish lines. There is no obvious lightening at the tip of the snout, (except in young specimens where the snout may appear whitish in colour).

Top of head and neck behind the eyes is a dark chocolate brown as is the tail. There is faint brown, yellow or grey etching on the anterior scales of the head in front of the eyes in most specimens, or no etching at all in some. The brown of the head continues from 1 to 2 times the distance of the snout to between the eyes and fades indistinctly and gradually to the dorsal colour, which is the same for the entire length of the snake save for the chocolate brown tail tip.

Venter is a lighter colour than the dorsum, but of similar colour.

Eye spot is slightly anterior of centre in the ocular scale.

Jackyhosertyphlops leverorum sp. nov. is a reddish coloured snake with purple tinge on top. Each scale of the dorsum is dark etched and paler at the centre. This means there is no impression of longitudinal lines running along the body. The front of the snout, including all or most of the rostral is yellow in colour. The rostral itself is extremely oversized and more strongly beaked than in most other species in this complex. From anterior to the eyes to the back of the head and nearby neck the colour is blackish on top. The black extending 2.5 to 3.5 times the distance of snout to between the eyes. Etching of scales on the anterior snout is either non-existent or extremely faint. The tail only is black in colour, the transition in the pelvic area being abrupt. There is a reasonably welldefined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual

scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

Eye spot is either dead centre or slightly posterior in the ocular scale.

J. mariolisi sp. nov. is a reddish orange coloured snake on top. Each scale of the dorsum has a whitish patch at the anterior edge. The latter half of the body has a slight purple or brown tinge to it. The front of snout and adjacent scales are whitish in colour, this not extending as far as the eyes. Rostral is bluntly beaked. Tail only is dark brownish black, the transition from the anterior upper body colour being ill-defined over 2-3 scale rows. The dark brown of the back of the head commences anterior to the eyes and extends 2 times the distance from snout to eyes back, from where it transitions gradually to the normal dorsal colouration. The transition occurs over 6-7 scale rows. There is no etching of scales on the snout. There is a reasonably well-defined border between dark upper and light (as in white) lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

J. gambellae sp. nov. is a pinkish coloured snake on top. Snout is whitish in colour extending to between the eyes, where the colour transitions to a dull yellowish brown colour before transitioning again tom the pink of the rest of the dorsum. The area of dull yellow brown extends back slightly more than the distance from snout to eyes. The pink of the dorsum is the same along the length of the snake until about the last 15 percent of the body where there is a transition to a strong yellowish-brown tinge. The tail only is ivory black. The transition at the tail area from dull yellow brown to black is across three scales wide. There is a reasonably well-defined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The venter itself is pinkish white rather than white.

J. adelynhoserae (Hoser, 2013) is a yellowish brown coloured snake on top, with the latter third of the snake being a noticeably different colour to the anterior two thirds.

Snout is bluntly beaked. Rostral and nasal scales wholly off white. Other dorsal anterior scales of the snout are dark brown, extending 1.5 to 2 times the distance of snout to eyes behind the eyes. Transition from dark to lighter body colour occurs across about 5 rows of scales, the transition being affected by reducing amount of dark pigment on the scales. That is the scales have either dark (brown) pigment) or the yellowish brown of the dorsum, but not any intermediate or other colour pigment. The flanks are noticeable in that the transition to white of the venter is higher up the flank than in the preceding species making the white demarcation line easily visible when the snake is viewed from the side. It is also jagged edged caused by the interplay of the row of dark scales meeting the row of immaculate white scales of the venter. The tail is extremely dark brown to black in colour, the transition occurring at the vent or anterior to the vent. Eye spot is slightly below and anterior to centre of the ocular scale.

J. ohno sp. nov. is similar in most respects to J. adelynhoserae (Hoser, 2013) as detailed above. It is separated from that species by being reddish orange, brown in colour on top, blackish on top of the head and near neck rather than dark brown and by having an eye spot at the centre of the ocular scale. *J. toriswedoshae sp. nov.* is a very light whitish pink coloured snake on top, enabling one to see materials inside the snake. Tip of snout it brown, behind that (on top) is yellowish-white and behind that, commencing anterior to the eyes is brownish black. This extends about 1.5 times the distance of the snout to the eyes back behind the eyes to the upper neck, where the usual dorsal colour takes over. The dark blackish scales between the eyes are strongly (thickly) yellow etched. The entire dorsum is of the same very light whitish pink colour, except at the tail, where there is a sudden transition to black (as in entire black scales). The transition from dorsal colour to lighter venter is poorly defined and the venter is pinkish rather than white. Rostral is slightly ovoid in shape. Eye spot is slightly below the centre of the ocular scale.

J. timbukthree sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* as just detailed above but separated from that species by having a white tip of snout and slightly posterior of it, distinct thin yellow etching of the dark blackish scales between the eyes and a rostral that is square sided (as opposed to ovoid).

J. gregswedoshi sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* and *J. timbukthree sp. nov.* as just detailed above but separated from those species by having a strong reddish-brown tinge to the pink on top, becoming more brownish posteriorly and only semidistinct and thin etching of the dark blackish scales between the eyes. The rostral is square sided (as opposed to ovoid).

J. haydnmcphiei sp. nov. is a brick red coloured snake on top. The head and upper neck are dark chocolate brown. The snout tip is barely lighter, but otherwise essentially the same colour. The beak is blunt. Tail tip only is dark brown in colour. The transition to the dark of the tail is somewhat jagged edged when viewed from above. The transition from dark upper body to light lower body on the flanks is poorly defined. There are no etchings of scales on the anterior snout, between the eyes or elsewhere on the head and neck. The dorsum is the same colour throughout, excluding the dark brown tail tip. Eye spot is at the centre of the ocular scale.

J. lachlandundasi sp. nov. is similar in most respects to *J. haydnmcphiei sp. nov.* as detailed above. It is separated from that species by having a rostral that is oversized and bulbous at the top, (versus not so in *J. haydnmcphiei sp. nov.*), tip of snout and adjacent (anterior to eyes) is yellow in colour, dark brown to black of tail commences well anterior to the vent and the eye spot is below the centre of the ocular scale. All the fourteen preceding west and central Australian species are separated from all other Australian Blind Snakes by the following character combination:

A moderately large, very slender, blackish-tailed blind snake with snout beaked in profile, 18 midbody scale rows, nasal cleft usually proceeding from the second labial and 535 to 680 ventrals, 13-36 subcaudals, with males far higher than females.

The preceding species are all also characterized as follows:

Rostral (from above) is much longer than wide, about three-quarters as wide as the head and extending back to the level of the eyes or nearly so. Nasals are usually narrowly separated behind rostral. Frontal is smaller than the prefrontal. Snout angular from above, weakly to strongly beaked in profile and generally species specific. Nostrils inferior, very slightly or not swollen and much nearer to rostral than the preocular. Nasal cleft proceeds from the second labial most of the time and usually proceeds for varying distances obliquely upwards and forwards towards the rostral reaching it about half the time or getting very close the other half.

Snout may be white or whitish tipped. Rest of head and neck may be very dark brown to blackish. Tail is very dark brown to blackish towards the tip. Venter is usually white, pinkish white or light greyish white in colour. Ventral scales may or may not have darker centres, this usually being species specific.

The phylogenies of Martin *et al.* (2012 and 2013) showed Pliocene divergences of each of *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* from one another and more from other species. *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* diverged from each other about 2.7 MYA. *J. tylertritti sp. nov.* diverged nearly 5 MYA from the other two species.

According to the phylogenies of Martin *et al.* (2012 and 2013) of the other eleven species, eight diverged from nearest relatives in either the Pliocene or Miocene periods, meaning a minimum of 2.5 MYA for each species from nearest relative.

The three more-or-less Centralian taxa have not been genetically sampled, but similar divergences can be inferred from other species groups in the region that have been sampled and are constrained by the exact same biogeographical barriers, or from the geological timelines of relevance, as detailed in Hoser (2025a) and sources cited therein.

J. nigroterminatus is depicted in life online at: https://www.flickr.com/photos/ euprepiosaur/52516235654/ from Broome, Western Australia, Australia, photographed by Stephen Zozaya, and https://www.flickr.com/photos/171250498@ N08/52496618323/ from Broome, Western Australia, Australia, photographed by Wes Read, and https://www.inaturalist.org/observations/32222989 from Broome, Western Australia, Australia, photographed by Mikael Poquet, and https://www.inaturalist.org/observations/172833617 from Lagrange, Western Australia, Australia, photographed by Alistair Harry, and https://www.flickr.com/photos/ moloch05/32456966158/ and https://www.flickr.com/photos/ moloch05/46278719252/ both from 80-mile beach near Broome, Western Australia, Australia, photographed by David "Moloch". J. leverorum sp. nov. is depicted in life online at: https://www.flickr.com/photos/ reptileshots/52790199041/ from Karijini region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.inaturalist.org/observations/241282627 from Karijini National Park, Western Australia, Australia, photographed by "Curious chase". J. mariolisi sp. nov. is depicted in life online at: https://www.flickr.com/photos/zimny anders/52444811953/ from the Opthalmia Range, Western Australia, Australia, photographed by Anders Zimny, and https://www.inaturalist.org/observations/265672969 from Newman, Western Australia, Australia, photographed by Lee Cornish. J. adelynhoserae is depicted in life online at: https://www.inaturalist.org/observations/189459838

https://www.inaturalist.org/observations/189459838 from Marble Bar, Western Australia, Australia, photographed by "Pam Town", and https://www.flickr.com/photos/ euprepiosaur/46447971914/ from Port Hedland, Western Australia, Australia,

photographed by Stephen Zozoya, and https://www.flickr.com/photos/

reptileshots/12262823534/ and

https://www.flickr.com/photos/ reptileshots/12262971246/ both from the Indee Region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.flickr.com/photos/brian_ busho/49354092742/

from the Indee Region, Western Australia, Australia, photographed by Brian Bush.

J. toriswedoshae sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/248720254 from the Parnngurr Community, Telfer, Western

Australia, Australia, photographed by Stephen G. Hamilton.

J. haydnmcphiei sp. nov. is depicted in life online at: https://www.flickr.com/photos/128497936@ N03/39784647853/

from the West MacDonnell Ranges of the Northern Territory, Australia, photographed by Shawn Scott.

J. lachlandundasi sp. nov. is depicted in life online at: https://www.flickr.com/photos/

mattsummerville/49036981323/

from Kata Tjuta, Northern Territory, Australia, photographed by Matt Summerville, and https://www.flickr.com/photos/128365570@ N04/32749827663/

from Yulara, Northern Territory, Australia photographed by Max Jackson.

Distribution: *J. timbukthree sp. nov.* is a species from the vicinity of Reeves Knoll in the border zone between the Gibson and Great Sandy Deserts. **Etymology:** *J. timbukthree sp. nov.* is a species from

a very remote part of Australia and the world at large. For many years in England and Australia, people would describe a remote place as being "beyond Timbuktu". Timbuktu is a very famous and remote place in Mali, Africa, that is remote to pretty much

everyone, except those who live there. Timbukthree is Australian slang for a very distant

place, as befits the location this snake is found. The "ensis" part of the name, as would normally be added to a location-based scientific name is deliberately omitted in order to shorten the species name and therefore should not be added by way of unjustified emendation later on.

JACKYHOSERTYPHLOPS GREGSWEDOSHI SP. NOV.

LSIDurn:Isid:zoobank.org:act:B6D3CC9B-937F-4C2E-80A4-2AE937F79E11

Holotype: A preserved adult specimen at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen number R157403 collected from the Tanami Desert in east Western Australia, Australia, Latitude -19.593333 S., Longitude 128.861111 E.

This government-owned facility allows access to its holdings.

Paratypes: Two juvenile specimens at the Western Australian Museum Herpetology Collection (WAM), Perth, Western Australia, Australia, specimen numbers R157381 and R157399 both collected from the Tanami Desert in east Western Australia, Australia.

Diagnosis: Until now, eleven relevant species

detailed in this description have been treated as populations of putative "*Typhlops grypus* Waite, 1918" with a holotype (NMV D12351, formerly R7102 at the National Museum of Victoria), type locality of Gregory Downs, North-west Queensland, Australia.

West and central Australia specimens of the putative species "*Typhlops grypus* Waite, 1918" are not closely related to the type form and associated species.

West and central Australia specimens remain in the genus *Jackyhosertyphlops* Hoser, 2013 as explained in the description of *Jackyhosertyphlops shitbomb sp. nov.* published in this paper and relied upon as part of this description.

"Typhlops grypus Waite, 1918" and associated species are placed in the genus *Zzzzz gen. nov.* being an east Australian assemblage.

The three species *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* all occur on the south and south-east rim of the main Pilbara district in Western Australia in adjoining elevated areas such as the north Gascoyne and hills south-east of the Pilbara.

As a trio of species the three preceding species share a lot of traits with the so-called "*Ramphotyphlops leptosoma* Robb, 1972" group, to which they are also most closely related to. This separates them from all the other west and central Australian species formerly treated as *J. grypus*.

They are separated from other species previously treated as West and Central Australian *J. grypus* by their thinner more elongate body and higher average ventral counts (over 640, versus less than 640) as well as a lighter head and/or neck than body colour, versus very much darker head and/or neck than body colour in all the other species in the complex including the following ten.

Not included in the preceding statement was a lightening of the snout tip seen in many specimens, as opposed to the general colour of the top of the head from the eyes back, which is darker in the other eleven species.

The remaining and relevant eleven species are all from the Pilbara region and arid areas west to central Australia.

They all have distributions in line with constraints caused by biogeographical barriers that affect other reptile species groups, including for example the Fortescue and Ashburton River basins, as well as inland claypan and flood zones. Whether the long-term species isolation is caused by habitat, microclimate, competing species, other factors, or combinations of them is not known.

These relevant eleven species are as follows:

The type form of the species *Jackyhosertyphlops nigroterminatus* (Parker, 1931) occurs from the southern edge of the Great Sandy Desert, north of the De Grey River to Broome and Derby in the south-west Kimberley district of Western Australia. *Jackyhosertyphlops leverorum sp. nov.* is confined to the Wittenoom and Tom Price area of the central Hamersley Ranges district.

J. mariolisi sp. nov. is a taxon from the Rhodes Ridge and Newman area in the Opthalmia Range.

J. gambellae sp. nov. is a taxon from the west Hamersley district of Western Australia.

J. adelynhoserae (Hoser, 2013) is herein confined to the region generally north of the Fortescue River and south of the De Grey River in the northern Pilbara of Western Australia.

J. ohno sp. nov. is a taxon from the hilly area between the Robe River in the north and the Cane River in the South, in the west Pilbara of western Australia.

J. toriswedoshae sp. nov. is a species from the Paterson Range area on the south-west edge of the Great Sandy Desert in Western Australia.

J. timbukthree sp. nov. is a species from the vicinity of Reeves Knoll in the border zone between the Gibson and Great Sandy Deserts of north-east Western Australia.

J. gregswedoshi sp. nov. is a species from the elevated western parts of the Tanami Desert in association with the Gardiner Range on the Western Australia and Northern Territory border in far east Western Australia and adjacent Northern Territory. *J. haydnmcphiei sp. nov.* is from the central Australian ranges, generally within 150 km of Alice Springs, Northern Territory.

J. lachlandundasi sp. nov. occurs south of the Amadeus basin in association with the elevated areas of the Petermann Ranges, in the far south-west of the Northern Territory, Australia.

The eleven preceding species are separated from one another by the following relevant unique character combinations:

Jackyhosertyphlops nigroterminatus is a greyish purple coloured snake on top. Each scale on the dorsum has a pale cream etching, while the centre is coloured, giving the snake a very faint lined patterning of lighter and darker purplish lines. There is no obvious lightening at the tip of the snout, (except in young specimens where the snout may appear whitish in colour).

Top of head and neck behind the eyes is a dark chocolate brown as is the tail. There is faint brown, yellow or grey etching on the anterior scales of the head in front of the eyes in most specimens, or no etching at all in some. The brown of the head continues from 1 to 2 times the distance of the snout to between the eyes and fades indistinctly and gradually to the dorsal colour, which is the same for the entire length of the snake save for the chocolate brown tail tip.

Venter is a lighter colour than the dorsum, but of similar colour.

Eye spot is slightly anterior of centre in the ocular

scale.

Jackyhosertyphlops leverorum sp. nov. is a reddish coloured snake with purple tinge on top. Each scale of the dorsum is dark etched and paler at the centre. This means there is no impression of longitudinal lines running along the body. The front of the snout, including all or most of the rostral is yellow in colour. The rostral itself is extremely oversized and more strongly beaked than in most other species in this complex. From anterior to the eyes to the back of the head and nearby neck the colour is blackish on top. The black extending 2.5 to 3.5 times the distance of snout to between the eyes. Etching of scales on the anterior snout is either non-existent or extremely faint. The tail only is black in colour, the transition in the pelvic area being abrupt. There is a reasonably welldefined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

Eye spot is either dead centre or slightly posterior in the ocular scale.

J. mariolisi sp. nov. is a reddish orange coloured snake on top. Each scale of the dorsum has a whitish patch at the anterior edge. The latter half of the body has a slight purple or brown tinge to it. The front of snout and adjacent scales are whitish in colour, this not extending as far as the eyes. Rostral is bluntly beaked. Tail only is dark brownish black, the transition from the anterior upper body colour being ill-defined over 2-3 scale rows. The dark brown of the back of the head commences anterior to the eyes and extends 2 times the distance from snout to eyes back, from where it transitions gradually to the normal dorsal colouration. The transition occurs over 6-7 scale rows. There is no etching of scales on the snout. There is a reasonably well-defined border between dark upper and light (as in white) lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

J. gambellae sp. nov. is a pinkish coloured snake on top. Snout is whitish in colour extending to between the eyes, where the colour transitions to a dull yellowish brown colour before transitioning again tom the pink of the rest of the dorsum. The area of dull yellow brown extends back slightly more than the distance from snout to eyes. The pink of the dorsum is the same along the length of the snake until about the last 15 percent of the body where there is a transition to a strong yellowish-brown tinge. The tail only is ivory black. The transition at the tail area from dull yellow brown to black is across three scales wide. There is a reasonably well-defined border between dark upper and light lower body on the lower flank,

caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The venter itself is pinkish white rather than white.

J. adelynhoserae (Hoser, 2013) is a yellowish brown coloured snake on top, with the latter third of the snake being a noticeably different colour to the anterior two thirds.

Snout is bluntly beaked. Rostral and nasal scales wholly off white. Other dorsal anterior scales of the snout are dark brown, extending 1.5 to 2 times the distance of snout to eyes behind the eyes. Transition from dark to lighter body colour occurs across about 5 rows of scales, the transition being affected by reducing amount of dark pigment on the scales. That is the scales have either dark (brown) pigment) or the yellowish brown of the dorsum, but not any intermediate or other colour pigment. The flanks are noticeable in that the transition to white of the venter is higher up the flank than in the preceding species making the white demarcation line easily visible when the snake is viewed from the side. It is also jagged edged caused by the interplay of the row of dark scales meeting the row of immaculate white scales of the venter. The tail is extremely dark brown to black in colour, the transition occurring at the vent or anterior to the vent. Eye spot is slightly below and anterior to centre of the ocular scale.

J. ohno sp. nov. is similar in most respects to J. adelynhoserae (Hoser, 2013) as detailed above. It is separated from that species by being reddish orange, brown in colour on top, blackish on top of the head and near neck rather than dark brown and by having an eye spot at the centre of the ocular scale. J. toriswedoshae sp. nov. is a very light whitish pink coloured snake on top, enabling one to see materials inside the snake. Tip of snout it brown, behind that (on top) is yellowish-white and behind that, commencing anterior to the eyes is brownish black. This extends about 1.5 times the distance of the snout to the eyes back behind the eyes to the upper neck, where the usual dorsal colour takes over. The dark blackish scales between the eyes are strongly (thickly) yellow etched. The entire dorsum is of the same very light whitish pink colour, except at the tail, where there is a sudden transition to black (as in entire black scales). The transition from dorsal colour to lighter venter is poorly defined and the venter is pinkish rather than white. Rostral is slightly ovoid in shape. Eye spot is slightly below the centre of the ocular scale.

J. timbukthree sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* as just detailed above but separated from that species by having a white tip of snout and slightly posterior of it, distinct thin yellow etching of the dark blackish scales between the eyes and a rostral that is square sided (as opposed to ovoid).

J. gregswedoshi sp. nov. is similar in most respects

to *J. toriswedoshae sp. nov.* and *J. timbukthree sp. nov.* as just detailed above but separated from those species by having a strong reddish-brown tinge to the pink on top, becoming more brownish posteriorly and only semidistinct and thin etching of the dark blackish scales between the eyes. The rostral is square sided (as opposed to ovoid).

J. haydnmcphiei sp. nov. is a brick red coloured snake on top. The head and upper neck are dark chocolate brown. The snout tip is barely lighter, but otherwise essentially the same colour. The beak is blunt. Tail tip only is dark brown in colour. The transition to the dark of the tail is somewhat jagged edged when viewed from above. The transition from dark upper body to light lower body on the flanks is poorly defined. There are no etchings of scales on the anterior snout, between the eyes or elsewhere on the head and neck. The dorsum is the same colour throughout, excluding the dark brown tail tip. Eye spot is at the centre of the ocular scale.

J. lachlandundasi sp. nov. is similar in most respects to *J. haydnmcphiei sp. nov.* as detailed above. It is separated from that species by having a rostral that is oversized and bulbous at the top, (versus not so in *J. haydnmcphiei sp. nov.*), tip of snout and adjacent (anterior to eyes) is yellow in colour, dark brown to black of tail commences well anterior to the vent and the eye spot is below the centre of the ocular scale.

All the fourteen preceding west and central Australian species are separated from all other Australian Blind Snakes by the following character combination:

A moderately large, very slender, blackish-tailed blind snake with snout beaked in profile, 18 midbody scale rows, nasal cleft usually proceeding from the second labial and 535 to 680 ventrals, 13-36 subcaudals, with males far higher than females.

The preceding species are all also characterized as follows:

Rostral (from above) is much longer than wide, about three-quarters as wide as the head and extending back to the level of the eyes or nearly so. Nasals are usually narrowly separated behind rostral. Frontal is smaller than the prefrontal. Snout angular from above, weakly to strongly beaked in profile and generally species specific. Nostrils inferior, very slightly or not swollen and much nearer to rostral than the preocular. Nasal cleft proceeds from the second labial most of the time and usually proceeds for varying distances obliquely upwards and forwards towards the rostral reaching it about half the time or getting very close the other half.

Snout may be white or whitish tipped. Rest of head and neck may be very dark brown to blackish. Tail is very dark brown to blackish towards the tip. Venter is usually white, pinkish white or light greyish white in colour. Ventral scales may or may not have darker centres, this usually being species specific. The phylogenies of Martin *et al.* (2012 and

2013) showed Pliocene divergences of each of Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov. and J. tylertritti sp. nov. from one another and more from other species. Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov. diverged from each other about 2.7 MYA. J. tylertritti sp. nov. diverged nearly 5 MYA from the other two species.

According to the phylogenies of Martin *et al.* (2012 and 2013) of the other eleven species, eight diverged from nearest relatives in either the Pliocene or Miocene periods, meaning a minimum of 2.5 MYA for each species from nearest relative.

The three more-or-less Centralian taxa have not been genetically sampled, but similar divergences can be inferred from other species groups in the region that have been sampled and are constrained by the exact same biogeographical barriers, or from the geological timelines of relevance, as detailed in Hoser (2025a) and sources cited therein.

J. nigroterminatus is depicted in life online at: https://www.flickr.com/photos/ euprepiosaur/52516235654/

from Broome, Western Australia, Australia, photographed by Stephen Zozaya, and https://www.flickr.com/photos/171250498@ N08/52496618323/

from Broome, Western Australia, Australia, photographed by Wes Read, and

https://www.inaturalist.org/observations/32222989

from Broome, Western Australia, Australia,

photographed by Mikael Poquet, and

https://www.inaturalist.org/observations/172833617

from Lagrange, Western Australia, Australia,

photographed by Alistair Harry, and

https://www.flickr.com/photos/ moloch05/32456966158/

and

https://www.flickr.com/photos/ moloch05/46278719252/

both from 80-mile beach near Broome, Western Australia, Australia, photographed by David "Moloch". *J. leverorum sp. nov.* is depicted in life online at: https://www.flickr.com/photos/

reptileshots/52790199041/

from Karijini region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.inaturalist.org/observations/241282627 from Karijini National Park, Western Australia, Australia, photographed by "Curious chase".

J. mariolisi sp. nov. is depicted in life online at: https://www.flickr.com/photos/zimny_ anders/52444811953/

from the Opthalmia Range, Western Australia, Australia, photographed by Anders Zimny, and https://www.inaturalist.org/observations/265672969 from Newman, Western Australia, Australia, photographed by Lee Cornish. *J. adelynhoserae* is depicted in life online at: https://www.inaturalist.org/observations/189459838 from Marble Bar, Western Australia, Australia, photographed by "Pam Town", and https://www.flickr.com/photos/ euprepiosaur/46447971914/ from Port Hedland, Western Australia, Australia, photographed by Stephen Zozoya, and

https://www.flickr.com/photos/ reptileshots/12262823534/

and

https://www.flickr.com/photos/ reptileshots/12262971246/

both from the Indee Region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.flickr.com/photos/brian_ busho/49354092742/

from the Indee Region, Western Australia, Australia, photographed by Brian Bush.

J. toriswedoshae sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/248720254 from the Parnngurr Community, Telfer, Western Australia, Australia, photographed by Stephen G. Hamilton.

J. haydnmcphiei sp. nov. is depicted in life online at: https://www.flickr.com/photos/128497936@ N03/39784647853/

from the West MacDonnell Ranges of the Northern Territory, Australia, photographed by Shawn Scott.

J. lachlandundasi sp. nov. is depicted in life online at: https://www.flickr.com/photos/

mattsummerville/49036981323/

from Kata Tjuta, Northern Territory, Australia, photographed by Matt Summerville, and https://www.flickr.com/photos/128365570@ N04/32749827663/

from Yulara, Northern Territory, Australia photographed by Max Jackson.

Distribution: *J. gregswedoshi sp. nov.* is a species from the elevated western parts of the Tanami Desert in association with the Gardiner Range on the Western Australia and Northern Territory border in far east Western Australia and adjacent Northern Territory.

Etymology: *J. gregswedoshi sp. nov.* is named in honor of Greg Swedosh of Warrandyte, Victoria, Australia in recognition of his services to the arts and sciences over some decades.

JACKYHOSERTYPHLOPS HAYDNMCPHIEI SP. NOV.

LSIDurn:lsid:zoobank.org:act:771CDC1B-370E-425C-B582-BF15EBAF647D

Holotype: A preserved specimen at the Australian Museum Herpetology Collection, Sydney, New South

Wales, Australia, specimen number R.65228 collected from Utopia Station at Standover, Northern Territory, Australia, Latitude -22.233 S., Longitude 134.566 E. This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Museum and Art Gallery of the Northern Territory Reptile Collection, Darwin, Northern Territory, Australia, specimen number R34499 collected from east of Queens Bore, east Tanami Desert, Northern Territory, Australia, Latitude -23.017 S., Longitude 132.7 E.

Diagnosis: Until now, eleven relevant species detailed in this description have been treated as populations of putative "*Typhlops grypus* Waite, 1918" with a holotype (NMV D12351, formerly R7102 at the National Museum of Victoria), type locality of Gregory Downs, North-west Queensland, Australia.

West and central Australia specimens of the putative species "*Typhlops grypus* Waite, 1918" are not closely related to the type form and associated species.

West and central Australia specimens remain in the genus *Jackyhosertyphlops* Hoser, 2013 as explained in the description of *Jackyhosertyphlops shitbomb sp. nov.* published in this paper and relied upon as part of this description.

"Typhlops grypus Waite, 1918" and associated species are placed in the genus *Zzzz gen. nov.* being an east Australian assemblage.

The three species *Jackyhosertyphlops shitbomb sp. nov.*, *J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* all occur on the south and south-east rim of the main Pilbara district in Western Australia in adjoining elevated areas such as the north Gascoyne and hills south-east of the Pilbara.

As a trio of species the three preceding species share a lot of traits with the so-called "*Ramphotyphlops leptosoma* Robb, 1972" group, to which they are also most closely related to. This separates them from all the other west and central Australian species formerly treated as *J. grypus*.

They are separated from other species previously treated as West and Central Australian *J. grypus* by their thinner more elongate body and higher average ventral counts (over 640, versus less than 640) as well as a lighter head and/or neck than body colour, versus very much darker head and/or neck than body colour in all the other species in the complex including the following ten.

Not included in the preceding statement was a lightening of the snout tip seen in many specimens, as opposed to the general colour of the top of the head from the eyes back, which is darker in the other eleven species.

The remaining and relevant eleven species are all from the Pilbara region and arid areas west to central Australia.

They all have distributions in line with constraints caused by biogeographical barriers that affect other

reptile species groups, including for example the Fortescue and Ashburton River basins, as well as inland claypan and flood zones. Whether the long-term species isolation is caused by habitat, microclimate, competing species, other factors, or combinations of them is not known.

These relevant eleven species are as follows:

The type form of the species *Jackyhosertyphlops nigroterminatus* (Parker, 1931) occurs from the southern edge of the Great Sandy Desert, north of the De Grey River to Broome and Derby in the south-west Kimberley district of Western Australia.

Jackyhosertyphlops leverorum sp. nov. is confined to the Wittenoom and Tom Price area of the central Hamersley Ranges district.

J. mariolisi sp. nov. is a taxon from the Rhodes Ridge and Newman area in the Opthalmia Range.

J. gambellae sp. nov. is a taxon from the west Hamersley district of Western Australia.

J. adelynhoserae (Hoser, 2013) is herein confined to the region generally north of the Fortescue River and south of the De Grey River in the northern Pilbara of Western Australia.

J. ohno sp. nov. is a taxon from the hilly area between the Robe River in the north and the Cane River in the South, in the west Pilbara of western Australia. J. toriswedoshae sp. nov. is a species from the Paterson Range area on the south-west edge of the Great Sandy Desert in Western Australia.

J. timbukthree sp. nov. is a species from the vicinity of Reeves Knoll in the border zone between the Gibson and Great Sandy Deserts of north-east Western Australia.

J. gregswedoshi sp. nov. is a species from the elevated western parts of the Tanami Desert in association with the Gardiner Range on the Western Australia and Northern Territory border in far east Western Australia and adjacent Northern Territory. *J. haydnmcphiei sp. nov.* is from the central Australian ranges, generally within 150 km of Alice Springs, Northern Territory.

J. lachlandundasi sp. nov. occurs south of the Amadeus basin in association with the elevated areas of the Petermann Ranges, in the far south-west of the Northern Territory, Australia.

The eleven preceding species are separated from one another by the following relevant unique character combinations:

Jackyhosertyphlops nigroterminatus is a greyish purple coloured snake on top. Each scale on the dorsum has a pale cream etching, while the centre is coloured, giving the snake a very faint lined patterning of lighter and darker purplish lines. There is no obvious lightening at the tip of the snout, (except in young specimens where the snout may appear whitish in colour).

Top of head and neck behind the eyes is a dark

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chocolate brown as is the tail. There is faint brown, yellow or grey etching on the anterior scales of the head in front of the eyes in most specimens, or no etching at all in some. The brown of the head continues from 1 to 2 times the distance of the snout to between the eyes and fades indistinctly and gradually to the dorsal colour, which is the same for the entire length of the snake save for the chocolate brown tail tip.

Venter is a lighter colour than the dorsum, but of similar colour.

Eye spot is slightly anterior of centre in the ocular scale.

Jackyhosertyphlops leverorum sp. nov. is a reddish coloured snake with purple tinge on top. Each scale of the dorsum is dark etched and paler at the centre. This means there is no impression of longitudinal lines running along the body. The front of the snout, including all or most of the rostral is yellow in colour. The rostral itself is extremely oversized and more strongly beaked than in most other species in this complex. From anterior to the eyes to the back of the head and nearby neck the colour is blackish on top. The black extending 2.5 to 3.5 times the distance of snout to between the eyes. Etching of scales on the anterior snout is either non-existent or extremely faint. The tail only is black in colour, the transition in the pelvic area being abrupt. There is a reasonably welldefined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

Eye spot is either dead centre or slightly posterior in the ocular scale.

J. mariolisi sp. nov. is a reddish orange coloured snake on top. Each scale of the dorsum has a whitish patch at the anterior edge. The latter half of the body has a slight purple or brown tinge to it. The front of snout and adjacent scales are whitish in colour, this not extending as far as the eyes. Rostral is bluntly beaked. Tail only is dark brownish black, the transition from the anterior upper body colour being ill-defined over 2-3 scale rows. The dark brown of the back of the head commences anterior to the eyes and extends 2 times the distance from snout to eyes back, from where it transitions gradually to the normal dorsal colouration. The transition occurs over 6-7 scale rows. There is no etching of scales on the snout. There is a reasonably well-defined border between dark upper and light (as in white) lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

J. gambellae sp. nov. is a pinkish coloured snake on

top. Snout is whitish in colour extending to between the eyes, where the colour transitions to a dull yellowish brown colour before transitioning again tom the pink of the rest of the dorsum. The area of dull yellow brown extends back slightly more than the distance from snout to eyes. The pink of the dorsum is the same along the length of the snake until about the last 15 percent of the body where there is a transition to a strong yellowish-brown tinge. The tail only is ivory black. The transition at the tail area from dull yellow brown to black is across three scales wide. There is a reasonably well-defined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The venter itself is pinkish white rather than white.

J. adelynhoserae (Hoser, 2013) is a yellowish brown coloured snake on top, with the latter third of the snake being a noticeably different colour to the anterior two thirds.

Snout is bluntly beaked. Rostral and nasal scales wholly off white. Other dorsal anterior scales of the snout are dark brown, extending 1.5 to 2 times the distance of snout to eyes behind the eyes. Transition from dark to lighter body colour occurs across about 5 rows of scales, the transition being affected by reducing amount of dark pigment on the scales. That is the scales have either dark (brown) pigment) or the yellowish brown of the dorsum, but not any intermediate or other colour pigment. The flanks are noticeable in that the transition to white of the venter is higher up the flank than in the preceding species making the white demarcation line easily visible when the snake is viewed from the side. It is also jagged edged caused by the interplay of the row of dark scales meeting the row of immaculate white scales of the venter. The tail is extremely dark brown to black in colour, the transition occurring at the vent or anterior to the vent. Eye spot is slightly below and anterior to centre of the ocular scale.

J. ohno sp. nov. is similar in most respects to J. adelynhoserae (Hoser, 2013) as detailed above. It is separated from that species by being reddish orange, brown in colour on top, blackish on top of the head and near neck rather than dark brown and by having an eye spot at the centre of the ocular scale. *J. toriswedoshae sp. nov.* is a very light whitish pink coloured snake on top, enabling one to see materials inside the snake. Tip of snout it brown, behind that (on top) is yellowish-white and behind that, commencing anterior to the eyes is brownish black. This extends about 1.5 times the distance of the snout to the eyes back behind the eyes to the upper neck, where the usual dorsal colour takes over. The dark blackish scales between the eyes are strongly (thickly) yellow etched. The entire dorsum is of the same very light whitish pink colour, except at the tail, where there is a sudden transition to black (as in entire black scales).

Hoser 2025 - Australasian Journal of Herpetology 76-78:1-192.

The transition from dorsal colour to lighter venter is poorly defined and the venter is pinkish rather than white. Rostral is slightly ovoid in shape. Eye spot is slightly below the centre of the ocular scale.

J. timbukthree sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* as just detailed above but separated from that species by having a white tip of snout and slightly posterior of it, distinct thin yellow etching of the dark blackish scales between the eyes and a rostral that is square sided (as opposed to ovoid).

J. gregswedoshi sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* and *J. timbukthree sp. nov.* as just detailed above but separated from those species by having a strong reddish-brown tinge to the pink on top, becoming more brownish posteriorly and only semidistinct and thin etching of the dark blackish scales between the eyes. The rostral is square sided (as opposed to ovoid).

J. haydnmcphiei sp. nov. is a brick red coloured snake on top. The head and upper neck are dark chocolate brown. The snout tip is barely lighter, but otherwise essentially the same colour. The beak is blunt. Tail tip only is dark brown in colour. The transition to the dark of the tail is somewhat jagged edged when viewed from above. The transition from dark upper body to light lower body on the flanks is poorly defined. There are no etchings of scales on the anterior snout, between the eyes or elsewhere on the head and neck. The dorsum is the same colour throughout, excluding the dark brown tail tip. Eye spot is at the centre of the ocular scale.

J. lachlandundasi sp. nov. is similar in most respects to J. haydnmcphiei sp. nov. as detailed above. It is separated from that species by having a rostral that is oversized and bulbous at the top, (versus not so in J. haydnmcphiei sp. nov.), tip of snout and adjacent (anterior to eyes) is yellow in colour, dark brown to black of tail commences well anterior to the vent and the eye spot is below the centre of the ocular scale. All the fourteen preceding west and central Australian species are separated from all other Australian Blind Snakes by the following character combination:

A moderately large, very slender, blackish-tailed blind snake with snout beaked in profile, 18 midbody scale rows, nasal cleft usually proceeding from the second labial and 535 to 680 ventrals, 13-36 subcaudals, with males far higher than females.

The preceding species are all also characterized as follows:

Rostral (from above) is much longer than wide, about three-quarters as wide as the head and extending back to the level of the eyes or nearly so. Nasals are usually narrowly separated behind rostral. Frontal is smaller than the prefrontal. Snout angular from above, weakly to strongly beaked in profile and generally species specific. Nostrils inferior, very slightly or not swollen and much nearer to rostral than the preocular. Nasal cleft proceeds from the second labial most of the time and usually proceeds for varying distances obliquely upwards and forwards towards the rostral reaching it about half the time or getting very close the other half.

Snout may be white or whitish tipped. Rest of head and neck may be very dark brown to blackish. Tail is very dark brown to blackish towards the tip. Venter is usually white, pinkish white or light greyish white in colour. Ventral scales may or may not have darker centres, this usually being species specific.

The phylogenies of Martin *et al.* (2012 and 2013) showed Pliocene divergences of each of *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* from one another and more from other species. *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* diverged from each other about 2.7 MYA. *J. tylertritti sp. nov.* diverged nearly 5 MYA from the other two species.

According to the phylogenies of Martin *et al.* (2012 and 2013) of the other eleven species, eight diverged from nearest relatives in either the Pliocene or Miocene periods, meaning a minimum of 2.5 MYA for each species from nearest relative.

The three more-or-less Centralian taxa have not been genetically sampled, but similar divergences can be inferred from other species groups in the region that have been sampled and are constrained by the exact same biogeographical barriers, or from the geological timelines of relevance, as detailed in Hoser (2025a) and sources cited therein.

J. nigroterminatus is depicted in life online at: https://www.flickr.com/photos/

euprepiosaur/52516235654/

from Broome, Western Australia, Australia, photographed by Stephen Zozaya, and https://www.flickr.com/photos/171250498@ N08/52496618323/

from Broome, Western Australia, Australia, photographed by Wes Read, and https://www.inaturalist.org/observations/32222989 from Broome, Western Australia, Australia, photographed by Mikael Poquet, and https://www.inaturalist.org/observations/172833617 from Lagrange, Western Australia, Australia, photographed by Alistair Harry, and https://www.flickr.com/photos/ moloch05/32456966158/ and https://www.flickr.com/photos/

moloch05/46278719252/ both from 80-mile beach near Broome, Western Australia, Australia, photographed by David "Moloch". *J. leverorum sp. nov.* is depicted in life online at: https://www.flickr.com/photos/ reptileshots/52790199041/

from Karijini region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.inaturalist.org/observations/241282627 from Karijini National Park, Western Australia, Australia, photographed by "Curious chase".

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from the Opthalmia Range, Western Australia, Australia, photographed by Anders Zimny, and https://www.inaturalist.org/observations/265672969 from Newman, Western Australia, Australia, photographed by Lee Cornish.

J. adelynhoserae is depicted in life online at: https://www.inaturalist.org/observations/189459838

from Marble Bar, Western Australia, Australia,

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https://www.flickr.com/photos/ reptileshots/12262971246/

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from the Indee Region, Western Australia, Australia, photographed by Brian Bush.

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from the West MacDonnell Ranges of the Northern Territory, Australia, photographed by Shawn Scott.

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mattsummerville/49036981323/

from Kata Tjuta, Northern Territory, Australia, photographed by Matt Summerville, and

https://www.flickr.com/photos/128365570@ N04/32749827663/

from Yulara, Northern Territory, Australia photographed by Max Jackson.

Distribution: *J. haydnmcphiei sp. nov.* is from the central Australian ranges, generally within 150 km of Alice Springs, Northern Territory, including the southeast edge of the Tanami Desert.

Etymology: *J. haydnmcphiei sp. nov.* is named in honor of Haydn McPhie of Mirboo North, Victoria, Australia in recognition of his services to herpetology spanning some decades.

JACKYHOSERTYPHLOPS LACHLANDUNDASI SP. NOV.

LSIDurn:lsid:zoobank.org:act:AD1F8F87-C099-490D-9D70-0B7ADC867BD9

Holotype: A preserved specimen at the Museum and Art Gallery of the Northern Territory Reptile Collection, Darwin, Northern Territory, Australia, specimen number R34093 collected from the Ayers Rock (AKA Uluru) area, Uluru-Kata Tjuta National Park, Central Australia, Northern Territory, Australia, Latitude -25.35 S., Longitude 131.033 E.

This government-owned facility allows access to its holdings.

Paratypes: Four preserved specimens at the Museum and Art Gallery of the Northern Territory Reptile Collection, Darwin, Northern Territory, Australia, specimen numbers R17515, R34094, R34095 and R34096 all collected from the Ayers Rock (AKA Uluru) area, Uluru-Kata Tjuta National Park, Central Australia, Northern Territory, Australia, Latitude -25.35 S., Longitude 131.033 E.

Diagnosis: Until now, eleven relevant species detailed in this description have been treated as populations of putative "*Typhlops grypus* Waite, 1918" with a holotype (NMV D12351, formerly R7102 at the National Museum of Victoria), type locality of Gregory Downs, North-west Queensland, Australia.

West and central Australia specimens of the putative species "*Typhlops grypus* Waite, 1918" are not closely related to the type form and associated species. West and central Australia specimens remain in the genus *Jackyhosertyphlops* Hoser, 2013 as explained in the description of *Jackyhosertyphlops shitbomb sp. nov.* published in this paper and relied upon as part of this description.

"Typhlops grypus Waite, 1918" and associated species are placed in the genus *Zzzz gen. nov.* being an east Australian assemblage.

The three species *Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov.* and *J. tylertritti sp. nov.* all occur on the south and south-east rim of the main Pilbara district in Western Australia in adjoining elevated areas such as the north Gascoyne and hills south-east of the Pilbara.

As a trio of species the three preceding species share a lot of traits with the so-called "*Ramphotyphlops leptosoma* Robb, 1972" group, to which they are also most closely related to. This separates them from all the other west and central Australian species formerly treated as *J. grypus*.

They are separated from other species previously treated as West and Central Australian *J. grypus* by their thinner more elongate body and higher average ventral counts (over 640, versus less than 640) as

well as a lighter head and/or neck than body colour, versus very much darker head and/or neck than body colour in all the other species in the complex including the following ten.

Not included in the preceding statement was a lightening of the snout tip seen in many specimens, as opposed to the general colour of the top of the head from the eyes back, which is darker in the other eleven species.

The remaining and relevant eleven species are all from the Pilbara region and arid areas west to central Australia.

They all have distributions in line with constraints caused by biogeographical barriers that affect other reptile species groups, including for example the Fortescue and Ashburton River basins, as well as inland claypan and flood zones. Whether the long-term species isolation is caused by habitat, microclimate, competing species, other factors, or combinations of them is not known.

These relevant eleven species are as follows:

The type form of the species *Jackyhosertyphlops nigroterminatus* (Parker, 1931) occurs from the southern edge of the Great Sandy Desert, north of the De Grey River to Broome and Derby in the south-west Kimberley district of Western Australia.

Jackyhosertyphlops leverorum sp. nov. is confined to the Wittenoom and Tom Price area of the central Hamersley Ranges district.

J. mariolisi sp. nov. is a taxon from the Rhodes Ridge and Newman area in the Opthalmia Range.

J. gambellae sp. nov. is a taxon from the west Hamersley district of Western Australia.

J. adelynhoserae (Hoser, 2013) is herein confined to the region generally north of the Fortescue River and south of the De Grey River in the northern Pilbara of Western Australia.

J. ohno sp. nov. is a taxon from the hilly area between the Robe River in the north and the Cane River in the South, in the west Pilbara of western Australia.

J. toriswedoshae sp. nov. is a species from the

Paterson Range area on the south-west edge of the Great Sandy Desert in Western Australia.

J. timbukthree sp. nov. is a species from the vicinity of Reeves Knoll in the border zone between the Gibson and Great Sandy Deserts of north-east Western Australia.

J. gregswedoshi sp. nov. is a species from the elevated western parts of the Tanami Desert in association with the Gardiner Range on the Western Australia and Northern Territory border in far east Western Australia and adjacent Northern Territory. *J. haydnmcphiei sp. nov.* is from the central Australian ranges, generally within 150 km of Alice Springs,

Northern Territory.

J. lachlandundasi sp. nov. occurs south of the

Amadeus basin in association with the elevated areas

of the Petermann Ranges, in the far south-west of the Northern Territory, Australia.

The eleven preceding species are separated from one another by the following relevant unique character combinations:

Jackyhosertyphlops nigroterminatus is a greyish purple coloured snake on top. Each scale on the dorsum has a pale cream etching, while the centre is coloured, giving the snake a very faint lined patterning of lighter and darker purplish lines. There is no obvious lightening at the tip of the snout, (except in young specimens where the snout may appear whitish in colour).

Top of head and neck behind the eyes is a dark chocolate brown as is the tail. There is faint brown, yellow or grey etching on the anterior scales of the head in front of the eyes in most specimens, or no etching at all in some. The brown of the head continues from 1 to 2 times the distance of the snout to between the eyes and fades indistinctly and gradually to the dorsal colour, which is the same for the entire length of the snake save for the chocolate brown tail tip.

Venter is a lighter colour than the dorsum, but of similar colour.

Eye spot is slightly anterior of centre in the ocular scale.

Jackyhosertyphlops leverorum sp. nov. is a reddish coloured snake with purple tinge on top. Each scale of the dorsum is dark etched and paler at the centre. This means there is no impression of longitudinal lines running along the body. The front of the snout, including all or most of the rostral is yellow in colour. The rostral itself is extremely oversized and more strongly beaked than in most other species in this complex. From anterior to the eves to the back of the head and nearby neck the colour is blackish on top. The black extending 2.5 to 3.5 times the distance of snout to between the eyes. Etching of scales on the anterior snout is either non-existent or extremely faint. The tail only is black in colour, the transition in the pelvic area being abrupt. There is a reasonably welldefined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

Eye spot is either dead centre or slightly posterior in the ocular scale.

J. mariolisi sp. nov. is a reddish orange coloured snake on top. Each scale of the dorsum has a whitish patch at the anterior edge. The latter half of the body has a slight purple or brown tinge to it. The front of snout and adjacent scales are whitish in colour, this not extending as far as the eyes. Rostral is bluntly beaked. Tail only is dark brownish black, the transition from the anterior upper body colour

being ill-defined over 2-3 scale rows. The dark brown of the back of the head commences anterior to the eyes and extends 2 times the distance from snout to eyes back, from where it transitions gradually to the normal dorsal colouration. The transition occurs over 6-7 scale rows. There is no etching of scales on the snout. There is a reasonably well-defined border between dark upper and light (as in white) lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The lower scales are immaculately whitish as opposed to having dark centres.

J. gambellae sp. nov. is a pinkish coloured snake on top. Snout is whitish in colour extending to between the eyes, where the colour transitions to a dull yellowish brown colour before transitioning again tom the pink of the rest of the dorsum. The area of dull yellow brown extends back slightly more than the distance from snout to eyes. The pink of the dorsum is the same along the length of the snake until about the last 15 percent of the body where there is a transition to a strong yellowish-brown tinge. The tail only is ivory black. The transition at the tail area from dull yellow brown to black is across three scales wide. There is a reasonably well-defined border between dark upper and light lower body on the lower flank, caused by the colour change running over the scales, as opposed to individual scales being either all one colour or other. The venter itself is pinkish white rather than white.

J. adelynhoserae (Hoser, 2013) is a yellowish brown coloured snake on top, with the latter third of the snake being a noticeably different colour to the anterior two thirds.

Snout is bluntly beaked. Rostral and nasal scales wholly off white. Other dorsal anterior scales of the snout are dark brown, extending 1.5 to 2 times the distance of snout to eyes behind the eyes. Transition from dark to lighter body colour occurs across about 5 rows of scales, the transition being affected by reducing amount of dark pigment on the scales. That is the scales have either dark (brown) pigment) or the yellowish brown of the dorsum, but not any intermediate or other colour pigment. The flanks are noticeable in that the transition to white of the venter is higher up the flank than in the preceding species making the white demarcation line easily visible when the snake is viewed from the side. It is also jagged edged caused by the interplay of the row of dark scales meeting the row of immaculate white scales of the venter. The tail is extremely dark brown to black in colour, the transition occurring at the vent or anterior to the vent. Eye spot is slightly below and anterior to centre of the ocular scale.

J. ohno sp. nov. is similar in most respects to *J. adelynhoserae* (Hoser, 2013) as detailed above. It is separated from that species by being reddish orange, brown in colour on top, blackish on top of the head

and near neck rather than dark brown and by having an eye spot at the centre of the ocular scale. *J. toriswedoshae sp. nov.* is a very light whitish pink coloured snake on top, enabling one to see materials inside the snake. Tip of snout it brown, behind that (on top) is yellowish-white and behind that, commencing anterior to the eyes is brownish black. This extends about 1.5 times the distance of the snout to the eyes back behind the eyes to the upper neck, where the usual dorsal colour takes over. The dark blackish scales between the eyes are strongly (thickly) yellow etched. The entire dorsum is of the same very light whitish pink colour, except at the tail, where there is a sudden transition to black (as in entire black scales). The transition from dorsal colour to lighter venter is poorly defined and the venter is pinkish rather than white. Rostral is slightly ovoid in shape. Eye spot is slightly below the centre of the ocular scale.

J. timbukthree sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* as just detailed above but separated from that species by having a white tip of snout and slightly posterior of it, distinct thin yellow etching of the dark blackish scales between the eyes and a rostral that is square sided (as opposed to ovoid).

J. gregswedoshi sp. nov. is similar in most respects to *J. toriswedoshae sp. nov.* and *J. timbukthree sp. nov.* as just detailed above but separated from those species by having a strong reddish-brown tinge to the pink on top, becoming more brownish posteriorly and only semidistinct and thin etching of the dark blackish scales between the eyes. The rostral is square sided (as opposed to ovoid).

J. haydnmcphiei sp. nov. is a brick red coloured snake on top. The head and upper neck are dark chocolate brown. The snout tip is barely lighter, but otherwise essentially the same colour. The beak is blunt. Tail tip only is dark brown in colour. The transition to the dark of the tail is somewhat jagged edged when viewed from above. The transition from dark upper body to light lower body on the flanks is poorly defined. There are no etchings of scales on the anterior snout, between the eyes or elsewhere on the head and neck. The dorsum is the same colour throughout, excluding the dark brown tail tip. Eye spot is at the centre of the ocular scale.

J. lachlandundasi sp. nov. is similar in most respects to *J. haydnmcphiei sp. nov.* as detailed above. It is separated from that species by having a rostral that is oversized and bulbous at the top, (versus not so in *J. haydnmcphiei sp. nov.*), tip of snout and adjacent (anterior to eyes) is yellow in colour, dark brown to black of tail commences well anterior to the vent and the eye spot is below the centre of the ocular scale. All the fourteen preceding west and central Australian species are separated from all other Australian Blind Snakes by the following character combination: A moderately large, very slender, blackish-tailed blind

snake with snout beaked in profile, 18 midbody scale rows, nasal cleft usually proceeding from the second labial and 535 to 680 ventrals, 13-36 subcaudals, with males far higher than females.

The preceding species are all also characterized as follows:

Rostral (from above) is much longer than wide, about three-quarters as wide as the head and extending back to the level of the eyes or nearly so. Nasals are usually narrowly separated behind rostral. Frontal is smaller than the prefrontal. Snout angular from above, weakly to strongly beaked in profile and generally species specific. Nostrils inferior, very slightly or not swollen and much nearer to rostral than the preocular. Nasal cleft proceeds from the second labial most of the time and usually proceeds for varying distances obliquely upwards and forwards towards the rostral reaching it about half the time or getting very close the other half.

Snout may be white or whitish tipped. Rest of head and neck may be very dark brown to blackish. Tail is very dark brown to blackish towards the tip. Venter is usually white, pinkish white or light greyish white in colour. Ventral scales may or may not have darker centres, this usually being species specific. The phylogenies of Martin et al. (2012 and 2013) showed Pliocene divergences of each of Jackyhosertyphlops shitbomb sp. nov., J. leavemalone sp. nov. and J. tylertritti sp. nov. from one another and more from other species. Jackyhosertyphlops shitbomb sp. nov., J.

leavemalone sp. nov. diverged from each other about 2.7 MYA. J. tylertritti sp. nov. diverged nearly 5 MYA from the other two species.

According to the phylogenies of Martin et al. (2012 and 2013) of the other eleven species, eight diverged from nearest relatives in either the Pliocene or Miocene periods, meaning a minimum of 2.5 MYA for each species from nearest relative.

The three more-or-less Centralian taxa have not been genetically sampled, but similar divergences can be inferred from other species groups in the region that have been sampled and are constrained by the exact same biogeographical barriers, or from the geological timelines of relevance, as detailed in Hoser (2025a) and sources cited therein.

J. nigroterminatus is depicted in life online at: https://www.flickr.com/photos/ euprepiosaur/52516235654/

from Broome, Western Australia, Australia, photographed by Stephen Zozaya, and

https://www.flickr.com/photos/171250498@ N08/52496618323/

from Broome, Western Australia, Australia,

photographed by Wes Read, and

https://www.inaturalist.org/observations/32222989

from Broome, Western Australia, Australia,

photographed by Mikael Poquet, and

https://www.inaturalist.org/observations/172833617 from Lagrange, Western Australia, Australia, photographed by Alistair Harry, and https://www.flickr.com/photos/ moloch05/32456966158/

and

https://www.flickr.com/photos/ moloch05/46278719252/

both from 80-mile beach near Broome, Western Australia, Australia, photographed by David "Moloch". J. leverorum sp. nov. is depicted in life online at: https://www.flickr.com/photos/ reptileshots/52790199041/

from Karijini region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.inaturalist.org/observations/241282627 from Karijini National Park, Western Australia, Australia, photographed by "Curious chase".

J. mariolisi sp. nov. is depicted in life online at: https://www.flickr.com/photos/zimny_ anders/52444811953/

from the Opthalmia Range, Western Australia, Australia, photographed by Anders Zimny, and https://www.inaturalist.org/observations/265672969 from Newman, Western Australia, Australia, photographed by Lee Cornish.

J. adelynhoserae is depicted in life online at: https://www.inaturalist.org/observations/189459838 from Marble Bar, Western Australia, Australia,

photographed by "Pam Town", and

https://www.flickr.com/photos/ euprepiosaur/46447971914/

from Port Hedland, Western Australia, Australia, photographed by Stephen Zozoya, and

https://www.flickr.com/photos/ reptileshots/12262823534/ and

https://www.flickr.com/photos/ reptileshots/12262971246/

both from the Indee Region, Western Australia, Australia, photographed by Brendan Schembri, and https://www.flickr.com/photos/brian

busho/49354092742/

from the Indee Region, Western Australia, Australia, photographed by Brian Bush.

J. toriswedoshae sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/248720254 from the Parnngurr Community, Telfer, Western Australia, Australia, photographed by Stephen G. Hamilton.

J. haydnmcphiei sp. nov. is depicted in life online at: https://www.flickr.com/photos/128497936@ N03/39784647853/

from the West MacDonnell Ranges of the Northern Territory, Australia, photographed by Shawn Scott.

J. lachlandundasi sp. nov. is depicted in life online at: https://www.flickr.com/photos/

mattsummerville/49036981323/

from Kata Tjuta, Northern Territory, Australia, photographed by Matt Summerville, and https://www.flickr.com/photos/128365570@ N04/32749827663/

from Yulara, Northern Territory, Australia photographed by Max Jackson.

Distribution: *J. lachlandundasi sp. nov.* occurs south of the Amadeus basin in association with the elevated areas of the Petermann Ranges, in the far south-west of the Northern Territory, Australia.

Etymology: *J. lachlandundasi sp. nov.* is named in honor of Lachlan Dundas of Frankston, Victoria, Australia in recognition of his services to underprivileged and disadvantaged people in Australia.

BENNETTTYPHLOPS

DONOTHANDLEWITHTONGS SP. NOV. LSIDurn:Isid:zoobank.org:act:3FF544D9-FA00-43FC-BEA1-18114C0B3FF6

Holotype: A preserved specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R172519 collected by Brian Bush from near Forrestania, Western Australia, Australia, Latitude -32.65 S., Longitude 119.766667 E.

This government-owned facility allows access to its holdings.

Paratype: A preserved adult female specimen at the Western Australian Museum (WAM), Perth, Western Australia, Australia, specimen number R173032 (adult female) collected from 28 km south of Lake Cronin, Western Australia, Australia, Latitude -32.639444 S., Longitude 119.755278 E.

Diagnosis: Until now, Bennetttyphlops

donothandlewithtongs sp. nov. has been treated as a divergent eastern population of "*Typhlops pinguis* Waite, 1897.", being the type species for the genus *Bennetttyphlops* Hoser, 2013, being a south and south-west Australian group of species.

B. donothandlewithtongs sp. nov. is readily separated from *B. pinguis* by being a dark grey brown in colour as opposed to chocolate brown (in *B. pinguis*), the rostral well borders the prefrontal, as opposed to just touches it or not quite touching it (in *B. pinguis*), the rostral turns inwards sharply on the mid to lower part of the snout, versus only a slight curve inwards in *B. pinguis*, and there are two to three smallish scales above the nasal, versus one or none only in *B. pinguis*.

The species *Typhlops opisthopachys* Werner, 1917 being a synonym of *B. pinguis* according to Cogger *et al.* (1983) as described by Werner, 1917 does not match *Bennetttyphlops donothandlewithtongs sp. nov..* This includes because the dorsal body colour of Werner's specimen is described as being a brassy brown colour, which is contrary to that of *B. donothandlewithtongs sp. nov..*

Both B. donothandlewithtongs sp. nov. and B. pinguis are separated from all other Australian Blind Snakes as follows: They are large, very stout, moderately dark blind-snakes with 20 midbody scale rows, snout slightly angular in profile and nasal cleft proceeding from second labial. Rostral is more-or-less urnshaped, this shape separating these two species from the others in the genus Bennetttyphlops Hoser, 2013, also being much longer than wide, about half as wide as the head and not extending back to the level of the eyes. Nasals are narrowly separated behind rostral, much narrower at the top than midway or bottom. Frontal is usually much smaller than prefrontal which is large and triangular in shape, the base being anterior. Snout is very slightly angular in profile, but otherwise roundish in shape. Nostrils are inferior, slightly swollen, roughly equidistant from rostral and preocular. Nasal cleft proceeds from the second labial to the nostril, thence curving upwards and forwards for one-fifth to one half of the distance to the rostral. 20 midbody scale rows, 277-331 ventrals and 12-19 subcaudals.

Dorsal and upper lateral surfaces are dark brown or dark brownish grey, either merging gradually with or fairly sharply demarcated from whitish lower surfaces, this trait often varying in a single specimen at different parts along the body.

The species "*Anilios splendidus* (Aplin, 1998)", has been suggested as a synonym of *A. pinguis* (Waite, 1897). It is retained as valid until molecular evidence confirms the matter one way or other. This is done so noting that to date many putative taxa within the Cape Range area are locally endemic species.

Furthermore this northern taxon is morphologically divergent from the more southern distributed *A. pinguis.*

A. splendidus a Cape Range endemic is readily separated from the two preceding species by having over 340 ventrals (usually around 377), a strongly contrasting white lower and greyish-brown upper body, the demarcation being bold and jagged caused by infusions up or down of dark or light and eyes that are also significantly reduced in size as compared to the previous two species.

The only other species in the genus *Bennetttyphlops* Hoser, 2013 are *B. bicolor* (Jan, 1864), the related *B. preissi* (Jan, 1864), treated by Marin *et al.* (2013) as the same species and the slightly less closely related *B. bennetti sp. nov.* identified by Marin *et al.* (2013) as a separate and unnamed species.

These three species are separated from the other preceding species by having a well-defined black tail that strongly contrasts with the body and 22 midbody rows (instead of 20).

Bennetttyphlops Hoser, 2013 species are separated

from all other Australian Blind Snakes by the following suite of characters: Large, very stout build and dark in colour, usually purplish-grey, dark brown, brownish-grey or blackish, attaining up to 50 cm total length. The snout is very slightly angular in profile. There are 20-22 midbody scale rows and the nasal cleft proceeds from the second labial. The snout is subrectangular when viewed from above, weakly trilobed in appearance due to the slight swelling above the nostrils and it is short roundish and slightly angular in profile, sometimes with a distinct hook at the end. From above the rostral is slightly to much longer than wide (species dependent) and about half as wide as the head. The nostril is inferior, slightly swollen and about midway between the rostral and preocular. Attains up to 50 cm in total length and the tail is 2.6-5.7 per cent of the total length. 278-377 ventrals, 10-19 subcaudals.

B. donothandlewithtongs sp. nov. is depicted in life online at:

https://www.flickr.com/photos/brian_ busho/49354166387/

and

https://www.flickr.com/photos/brian_ busho/49349902141/

and

https://www.flickr.com/photos/brian_ busho/49353442558/

all from near Forrestania, Western Australia, Australia, and all photographed by Brian Bush.

B. pinguis of the type form is depicted in life in Storr, Smith and Johnstone (2002) on page 103 middle left, in Wilson and Swan (2021) on page 537 bottom right, from Canning Dam, Western Australia and online at: https://www.inaturalist.org/observations/254570386 from the Helena National Park, Western Australia, Australia, photographed by Jack Llewelyn, and https://www.inaturalist.org/observations/259436213 from Ashendon, Western Australia, Australia, photographed by Andy Tuckey. *B. splendidus* is depicted in life in Storr, Smith and Johnstone (2002) on page 103 middle right, in in

Wilson and Swan (2021) on page 539 bottom left and Cogger (2014) on page 811 at top left.

Distribution: At the moment *B. donothandlewithtongs sp. nov.* is only known from near Forrestania, Western Australia, Australia, Latitude -32.65 S., Longitude 119.766667 E., with the distribution limits for the taxon largely unknown. It may be a range-restricted endemic confined to an elevated region between two strings of lakes and low lying areas, to the east and west, each of these running in a north-south direction. **Etymology:** The holotype was collected and photographed by Brian Bush, a well-known snake fancier of Western Australia who has made positive and negative contributions to herpetology in Australia. On the negative side, Brian Bush actively aided in

supporting and promoting an animal abuser named Bruce George.

George, unknown in herpetology was unlawfully using the Snakebusters trademark in the early 2000's as an act of envy, after I, Raymond Hoser had discovered and named the Pilbara Death Adder, *Acanthophis wellsei* Hoser, 1998 in Hoser (1998) giving me a status with these iconic snakes that he (Brian Bush) in hindsight coveted.

The promotion of Bruce George who enjoyed a sizeable chunk of a \$3 million hand out from the government to promote himself on TV using the Hoser registered Snakebusters trademark was particularly egregious as he always used barbaric metal tongs to catch and handle snakes.

These devices break snake's bones and internal organs, generally resulting in a slow and painful death for the animal.

This makes the use of tongs in handling snakes one of the most disgraceful acts of animal abuse and cruelty possible.

I therefore have absolutely no hesitation in giving an innocuous snake species, and one that poses zero risk to human safety, an etymology that when read and scrutinized by others carries a blatant and strong animal welfare aspect to it.

BENNETTTYPHLOPS BENNETTI SP. NOV. LSIDurn:Isid:zoobank.org:act:A7247F04-2F38-47CB-B35B-1E4F5417EBB7

Holotype: A preserved specimen at the Australian Museum in Sydney, New South Wales, Australia, specimen number R.156528 collected from the Yathong Nature Reserve, New South Wales, Australia, Latitude -32.58694 S., Longitude 145.49638 E.

This government-owned facility allows access to its holdings.

Paratypes: Two preserved specimens at the Australian Museum in Sydney, New South Wales, Australia, being specimen number R.135436 collected 13 miles north northwest of Barellan, New South Wales, Australia, Latitude -34.05752 S., Longitude 146.39729 E. and specimen number R.153475 collected from Budgeree Station, New South Wales, Australia, Latitude -32.88388 S., Longitude 141.17082 E.

Diagnosis: Until now, *Bennetttyphlops bennetti sp. nov.* has been treated as an eastern population of "Onychocephalus bicolor Peters, 1858", herein placed into the genus *Bennetttyphlops* Hoser, 2013, with a type species of *Typhlops pinguis* Waite, 1897. The molecular phylogenies of Marin *et al.* (2012 and 2013) identified *B. bennetti sp. nov.* as defined herein as a separate species to *B. bicolor* (Peters, 1858). The results of Marin *et al.* (2014) in terms of west Australian putative *B. bicolor* were ambiguous in terms of whether or not it was a separate species. Therefore, the putative species *B. preissi* (Jan, 1864),

with a west Australian type locality is tentatively recognized as a taxon distinct from the nominate form of *B. bicolor*, which has a type locality of Adelaide, South Australia.

B. bicolor as identified herein and by the molecular results of Marin *et al.* (2012 and 2013) occupies an area commencing from about Adelaide in South Australia, along the west side of the Adelaide Hills, expanding over them to the north and generally most locations to the north and west including most parts of the southern half of South Australia, to the West Australian border. Assuming West Australian *B. preissi* to be a valid taxon, the Great Victoria Desert and Nullarbor Plain are presumed to separate the two taxa.

B. bennetti sp. nov. occurs east of the Adelaide Hills from near Tailem Bend, South Australia, east into far western Victoria, and including south-western New South Wales away from the Great Dividing Range.

B. bennetti sp. nov. is separated from B. bicolor and B. preissi by having thick yellow etching around the scales of the anterior of the head, versus thin in B. bicolor and B. preissi and by having a rostral that is roughly as wide as it is long and expanding outwards on the lower part of the snout, versus a rostral that is obviously longer than wide and runs straight down the snout on the lower sides in B. bicolor and B. preissi. The white tips on the posterior part of the dorsal scales is minute in *B. bennetti sp. nov*. versus larger and obvious in both B. bicolor and B. preissi. Adult B. preissi and B. bicolor have a preponderance of white patches on the mid or upper flanks that as a rule is not seen in *B. bennetti sp. nov.*. Both *B. preissi* and *B. bicolor* have a more well-defined boundary between dark upper scales and white lower ones than is seen in B. bennetti sp. nov..

These three preceding species are separated from the other species in the genus *Bennetttyphlops* Hoser, 2013 by having a well-defined black tail that strongly contrasts with the body and 22 midbody rows (instead of 20 in the others).

The other species in the genus are *Bennetttyphlops pinguis* (Waite, 1897) (type species), *B. donothandlewithtongs sp. nov.* (this paper) and *B. splendidus* (Aplin, 1998).

Bennetttyphlops Hoser, 2013 species are separated from all other Australian Blind Snakes by the following suite of characters: Large, very stout build and dark in colour, usually purplish-grey, dark brown, brownish-grey or blackish, attaining up to 50 cm total length. The snout is very slightly angular in profile. There are 20-22 midbody scale rows and the nasal cleft proceeds from the second labial. The snout is subrectangular when viewed from above, weakly trilobed in appearance due to the slight swelling above the nostrils and it is short roundish and slightly angular in profile, sometimes with a distinct hook at the end. From above the rostral is slightly to much longer than wide (species dependent) and about half as wide as the head. The nostril is inferior, slightly swollen and about midway between the rostral and preocular. Attains up to 50 cm in total length and the tail is 2.6-5.7 per cent of the total length. 278-377 ventrals, 10-19 subcaudals.

B. bennetti sp. nov. is depicted in life in Cogger (2014) on page 796 at top right, from Round Hill Fauna Reserve in New South Wales, in Wilson and Swan (2021) on page 527, second from bottom, from Hattah, Victoria and online at:

https://www.flickr.com/photos/88708273@ N03/10681549143/

from Big Desert, Victoria, photographed by Matt Clancy, and

https://www.flickr.com/photos/127392361@ N04/29716503658/

from the Victorian Mallee, photographed by Nick Gale.

B. bicolor is depicted in life online at:

https://www.inaturalist.org/observations/247433857 from the Middleback Ranges, South Australia, Australia, photographed by Connor Margetts, and https://www.inaturalist.org/observations/61850954 from Secret Rocks, South Australia, Australia, photographed by Darcy Whittaker, and https://www.inaturalist.org/observations/38419815 from Mount Rearkable Conservation Park,

photographed by Asimakis Patitsas.

B. preissi is depicted in life online at: https://www.flickr.com/photos/brian_ busho/14432863582/

and

https://www.flickr.com/photos/brian_ busho/14247553810/

and

https://www.flickr.com/photos/brian_ busho/14434148195/

all from Ilkurlka, Western Australia, Australia, photographed by Brian Bush.

The molecular evidence of Marin *et al.* (2012, 2013) indicated a divergence of about 3 MYA between *B. bennetti sp. nov.* and *B. bicolor*, supporting the contention of them being recognized as separate species.

Distribution: *B. bennetti sp. nov.* occurs east of the Adelaide Hills from near Tailem Bend, South Australia, east into far western Victoria, and including southwestern NSW away from the Great Dividing Range. **Etymology:** *B. bennetti sp. nov.* is named in honor of Steve Bennett of Narre Warren South, Victoria, Australia, formerly of Newcastle, New South Wales (NSW) and Rowville, Victoria, in recognition for his valuable work and contributions to the hands-on conservation of reptiles in Australia and globally in the period spanning the late 1980's to the present (year 2025). Refer to Hoser (2013a) for more details.

BUCKLEYTYPHLOPS SINCERUS SP. NOV. LSIDurn:lsid:zoobank.org:act:63EB9F96-C787-494A-A047-FEB5BE2A76A2

Holotype: A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J91822 collected 12 km south of Julia Creek, Queensland, Australia, Latitude -20.768056 S., Longitude 141.741667 E.

This government-owned facility allows access to its holdings.

Diagnosis: This species, known from a single specimen (the holotype) has until now been treated as a north-western population of the recently described species "*Ramphotyphlops aspina* Couper, Covacevich and Wilson, 1998".

At the time the paper of Couper, Covacevich and Wilson (1998) was published, the authors wrote: *"Ramphotyphlops aspina sp. nov."* is known from the holotype and one paratype from the Barcaldine area, central Queensland. This species is very distinct, lacking the caudal spine which appears to be present in all other Australian *Ramphotyphlops spp."*.

On the basis of this significant morphological divergence, Hoser (2013a) created the monotypic genus *Buckleytyphlops* Hoser, 2013.

Upon discovery of the single specimen of *B. sincerus sp. nov.* on 8 July 2012, Eric Vanderduys published a paper the following year Vanderduys (2013) in which he assigned the specimen to the species *B. aspina* on the basis of the basis of the absence of a caudal spine.

However, it is sufficiently morphologically divergent to be flagged as a different species.

As it is also separated from the other two specimens of *B. aspina* by one or more known biogeographical barriers, effectively closing likelihood of clinal variation, I have no hesitation in describing the Julia Creek specimen as a new species.

B. sincerus sp. nov. is readily separated from *B. aspina* by having a higher ventral count, 437 (versus 403-428 in *B. aspina*) and a larger prefrontal, being much larger than the frontal, as opposed to either the same size or only slightly larger and dark speckling on the dorsum is relatively evenly spread, as opposed to unevenly spread.

Both *B. sincerus sp. nov.* and *B. aspina* are separated from all other Australian Blind Snakes by the absence of a tail spine.

They are further distinguished from other Australian Blind Snakes by the following characters combined: 18 midbody scale rows; 403-437 ventrals; the snout is bluntly-rounded from above, rounded and flattened laterally; rostral elongate from above; nasal not completely divided by nasal cleft, clearly visible from above and joining second supralabial below.

Further details about *B. aspina* can be found in the paper of Couper, Covacevich and Wilson (1998).

Further details about *B. sincerus sp. nov.* can be found in the paper of Vanderduys (2013), reported as a specimen of "*Ramphotyphlops. aspina sp. nov.*". Taitragul *et al.* (2014) published a phylogeny that showed that a sample of putative *B. aspina* diverged from nearest relatives over 20 MYA, confirming the genus placement in *Buckleytyphlops* Hoser, 2013 Vanderduys (2013) asserted that *B. aspina* as defined by himself was a taxon of the Mitchell Grass Downs. However, this may not strictly be the case.

Both collection localities are relatively elevated and separated from one another by low-lying flood plains. Barcaldine is red dirt rather than black (the black soil being west) and the collection location near Julia Creek is relatively elevated and with surface rocks. The intervening area has been heavily collected and so far, no further specimens found.

This implies the two taxa are in fact inhabitants of somewhat elevated areas rather than the lower lying floodplain or black soil type habitats as asserted by Vanderduys (2013).

This is confirmed by the fact that the low-lying Mitchell Grass Downs are inhabited by large numbers of *Z. cliffrosswellingtoni* (Hoser, 2013) and *Z. zzzzz sp. nov.*, verified by the large number of specimens of these taxa held at the Queensland Museum from intervening places like Longreach to the west of the collection location of the holotype of *B. aspina* on the black soil plains proper.

On the black soil plains of the Cooper's Creek drainage system, one finds *Z. zzzzz sp. nov.*, and over the intervening higher ground one finds more black soil plains as part of the Diamantina River system where *Z. cliffrosswellingtoni* (Hoser, 2013) occurs.

The collection of large numbers of these species in these areas and yet no putative *B. aspina* implies that they are not there, rather than being merely overlooked.

There is also the inference of competitive exclusion between species of morphologically similar reptiles. Alternatively, if Vanderduys (2013) is correct about the habits of *B. sincerus sp. nov.* and *B. aspina* being an inhabitant of the Mitchell Grass Downs (unlikely based on the above), then the populations of two taxa will be still be biogeographically separated and of separate species.

This fact is not outlined or indicated in the broad brush map in Fig. 3. of Vanderduys (2013).

B. aspina has been caught in the Barcoo River / Cooper's Creek / Lake Eyre Basin, whereas *B. sincerus sp. nov.* occupies the Flinders River / Gulf of Carpentaria Basin.

These are biogeographically very well separated places!

If one notes the species pair of *Strophurus krisalys* Sadlier, Omeally and Shea, 2005 from the Flinders River system and *Strophurus gedyei* Hoser, 2017 of the Diamantina River system, the molecular results of Sadlier, Omeally and Shea (2005), shows species level divergence for the two taxa.

The ranges of these species broadly parallel those of *B. sincerus sp. nov.* and *B. aspina* as is known to date, or alternatively those of *Z. cliffrosswellingtoni* (Hoser, 2013), *Z. zzzzz sp. nov.*, and *Z. grypus* (Waite, 1918).

The holotype of *B. sincerus sp. nov.* is depicted in life in Wilson (2022) on page 242 bottom left.

The holotype of *B. aspina* is depicted in Couper, Covacevich and Wilson (1998).

Distribution: *B. sincerus sp. nov.* is only known from the holotype collected 12 km south of Julia Creek, Queensland, Australia, Latitude -20.768056 S., Longitude 141.741667 E.

Etymology: *B. sincerus sp. nov.* is named in reflection of the fact that unlike most Australian Blind Snakes, the holotype did not defecate on the handler after being caught and handled.

The word "*sincerus*" in Latin is an adjective that means clean, pure, uninjured, or whole.

SIVADICTUS GREATSTINKOFAUSTRALIA SP. NOV.

LSIDurn:lsid:zoobank.org:act:DF463619-B295-4CC4-AB47-40552E6038CF

Holotype: A preserved specimen at the South Australian Museum Herpetology Collection, Adelaide, South Australia, Australia, specimen number R40954 collected from 5 km south of Euroa on the road to Mansfield, Victoria, Australia, Latitude -36.82 S., Longitude 145.58 E.

This government-owned facility allows access to its holdings.

Paratype: A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.157200 collected from Butler Road in the Torrington State Recreation Area, New South Wales, Australia, Latitude -29.29444 S., Longitude 151.67721 E.

Diagnosis: Without exception, all publishing authors within the last 100 years have treated the species "*Anilios nigrescens* Gray, 1845" as a single wide-ranging taxon, occurring from the east coast of Queensland and hilly hinterland, south along the nearby coast and ranges to central and western inland Victoria.

The phylogenies of Marin *et al.* (2012, 2013) indicated five or six species, with a conservative total of five recognized herein. The type form for "*Anilios nigrescens* Gray, 1845", being the type species for the genus *Sivadictus* Wells and Wellington, 1985, has a type locality of Parramatta (Sydney) and includes populations from the coast and near ranges of New South Wales, south of the Hunter Valley to the New South Wales south coast, just north of the Victorian border.

S. reginae (Boulenger, 1889) is the form from

Brisbane and most areas north in Queensland, extending south to the far north coast of New South Wales, and adjacent ranges and nearby slopes to about Tenterfield in far northern New South Wales. The species *S. greatstinkofaustralia sp. nov.* is found generally west of the Great Dividing Range in a zone including the slopes and nearby plains from north and central Victoria, extending along the west of the Great Dividing Range to far north New South Wales to Tenterfield, where it appears to be sympatric with *S. reginae*.

S. graysoni sp. nov. is a taxon restricted to the upper New England Tableland Region of north New South Wales, generally around Glen Innes in New South Wales.

S. altmani sp. nov. is a taxon from the lower New England region of New South Wales, found in the Guyra to Walcha area and presumably further afield within the lower New England region of New South Wales.

The five species are separated from one another as follows:

S. nigrescens is a pinkish to purple coloured snake on top with a white venter. On the lower flanks the demarcation from dark to light is not boldly defined, but rather is formed by scales on the lower flank being dark centred rather than dark all over like above.

The rostral is horse-shoe shaped and the top well touches the extremely large prefrontal. Frontal is either tiny, or not different in size and shape to the rows of scales posterior.

S. altmani sp. nov., which is the closest relative of S. nigrescens is readily separated from that species by the demarcation of dark and light on the lower flank. This is well-defined in that the scales are either dark or light, generally running along the demarcation edge. There are some infusions up or down of light or dark scales, but again these scales are either dark or light. There are no light scales with dark centres on the lower flank as seen in *S. nigrescens*. The nasal scale of S. altmani sp. nov. is almost rectangular in shape, versus obviously triangular in S. nigrescens. The eye spot is placed slightly above centre and slightly posterior to centre in the ocular scale. S. greatstinkofaustralia sp. nov. is most similar in colour, including that of the flanks, to S. nigrescens, but the change from dark above to light below is more sudden in that there is only one row of light scales with dark centres, below the final row of dark scales. The rostral is tending to be more rectangular than horse-shoe shaped and the nasal scale is more-orless triangular in shape, but curved in and narrow at the top and bulbous towards the nasal and lip. The black eye spot is slightly higher than centre of the ocular scale, but otherwise placed centrally. S. reginae is starkly different to the preceding species in that it is an obviously brownish coloured snake on top and the scales of the snout have heavy yellow



Top: *Sivadictus greatstinkofaustralia sp. nov.* from 2.5 km west of Beechworth, Victoria, Australia. Bottom: Habitat 2.5 km west of Beechworth, Victoria, Australia, where the above specimen was located.



or cream etching, versus thin white or pale etching on the snout in the three preceding species. The eye spot is set slightly back of centre in the ocular scale. The demarcation on the lower flank of the top upper body and light under side is well-defined by a jagged line caused by the interface of dark and light scales. The light scales below do have dark centres that are pale in colour. There are no dark or light infusions above or below this line.

The rostral, while curved at the top, is otherwise rectangular in shape and much longer than wide. S. graysoni sp. nov. is similar in most respects to S. reginae, (as compared to the three guite different species, S. nigrescens, S. altmani sp. nov. and S. greatstinkofaustralia sp. nov.) but is readily separated from that species by the fact that the heavily yellow etched scales of the snout extend back to include the scales well behind the eye spots, and on the flanks of the body there are numerous white infusions upwards from the venter. The lower scales of the flanks and venter are ivory white and without any dark centres. The eye spot is set in the centre of the ocular scale. The rostral, is barely curved at the top, is very wide and while rectangular in shape is roughly as wide as long.

Noting how different the five preceding species are from one another, I find it astounding that no one had considered the prospect of them being different taxa until now.

The five preceding species, being S. nigrescens, S. reginae, S. altmani sp. nov., S. graysoni sp. nov. and S. greatstinkofaustralia sp. nov., comprise the entirety of the genus Sivadictus Wells and Wellington, 1985. Sivadictus as a genus is separated from all other Blind Snakes by the following suite of characters: Purplish pink-brown to nearly black above, cream, yellow or pinkish below. Snout is rounded from above and in profile. Nasal cleft is long, joining the second supralabial or the suture between the first and second labials, projecting forward and upwards to partially divide the nasal, visible from above. Rostral is large, oval or elliptical, sometimes horseshoe shaped, sometimes almost rectangular and if so, with a curved upper edge, usually much longer than broad. 22 mid body scale rows. Body diameter is 35-60 times in its length; the tail terminates in a spine.

The genus *Sivadictus* is separated from the genus *Ackytyphlops* Hoser, 2013 by the fact that the nasal cleft does not completely divide the nasal scale, extending from near the rostral scale to the first upper labial scale; as opposed to the second upper labial scale or suture between the first and second in genus *Ackytyphlops* Hoser, 2013. Adults of the genus *Sivadictus* are pinkish, pinkish-purple, or purplish brown as opposed to greyish brown in *Ackytyphlops* Hoser, 2013. In the genus *Sivadictus* the ventral surfaces are pinkish white with a weak ragged junction between the upper and lower colours or

otherwise defined by lighter scales with dark centres as opposed to an evenly merging darker upper and lighter lower colouration in *Ackytyphlops* Hoser, 2013. *S. nigrescens* in life is depicted in Hoser (1989) on page 123 at top right, specimen from Cottage Point, New South Wales, Australia, Cogger (2014) on page 807, top right, specimen from Sydney, New South Wales, Australia, Swan *et al.* (2022) on page 231 at top from Helensburgh, New South Wales and online at:

https://www.inaturalist.org/observations/103229876 from near Hornsby, New South Wales, Australia, photographed by Liz Noble, and https://www.flickr.com/photos/159249812@ N05/32543351238/

from Top Hill, New South Wales, Australia, photographed by Adam Parsons, and https://www.inaturalist.org/observations/267037826 from West Head, New South Wales, Australia, photographed by "George EV" and,

https://www.inaturalist.org/observations/186523959 from north Turramurra, New South Wales, Australia, photographed by Liz Noble.

S. reginae is depicted in life in Wilson and Swan at page 537 middle left, specimen from Canungra, Queensland and online at:

https://www.flickr.com/photos/ ryanfrancis/9795599835/

from Boondall Wetlands, Brisbane, Queensland, Australia, photographed by Ryan Francis, and https://www.flickr.com/photos/zimny_

anders/37045369970/

from the D'aguilar Range National Park, Queensland, Australia, photographed by Anders Zimny, and

https://www.flickr.com/photos/

julesfarquhar/25044930835/

from the Lamington Plateau, Queensland, Australia, photographed by taxonomic vandal Jules Farquhar, and

https://www.flickr.com/photos/ euprepiosaur/8479622707/

from D'Aguilar Range, Queensland, Australia, photographed by Stephen Zozaya, and https://www.flickr.com/photos/194274402@N06/

from Mount Glorious, Queensland, Australia, photographed by Melissa Bruton.

S. graysoni sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/105549334 from Glen Elgin, New South Wales, Australia, photographed by Darren Fielder.

S. altmani sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/129790702 from Rocky River, New South Wales, Australia, photographed by Max Tibby, and https://www.inaturalist.org/observations/260241580

from near Armidale, New South Wales, Australia,

photographed by "Sockrosma", and

https://www.inaturalist.org/observations/253363355 from near Armidale, New South Wales, Australia, photographed by "Casey".

S. greatstinkofaustralia sp. nov. is depicted in life on the front covers of issues 76 and 78 of this journal (*Australasian Journal of Herpetology*), the specimen being found under a slab of Granite, about 2.5 km west of Beechworth, Victoria, about 40 metres north of Flat Rock Road as shown in the image on the back cover of issue 76.

The snake was located at about 7 AM under the rock in December of 2023 at about 7.30 AM.

S. greatstinkofaustralia sp. nov. is depicted in life online at:

https://x.com/therealsnakeman/ status/1913243800065151250

from Beechworth, Victoria, photographed by Raymond Hoser.

The phylogenies of Marin *et al.* (2012, 2013) indicated that *S. greatstinkofaustralia sp. nov.* diverged from nearest relatives *S. nigrescens* and *S. altmani sp. nov.* over 3 MYA and from *S. reginae* and *S. graysoni sp. nov.* about 5 MYA supporting the concept of the five relevant morphologically diagnosable species.

Distribution: The species *S. greatstinkofaustralia sp. nov.* is found generally west of the Great Dividing Range in a zone including the slopes and nearby plains from north and central Victoria, extending along the west of the Great Dividing Range to far north New South Wales to Tenterfield, where it appears to be sympatric with *S. reginae*.

S. greatstinkofaustralia sp. nov. may also be sympatric with *S. graysoni sp. nov.* and *S. altmani sp. nov.* where the ranges of the species abut in northern New South Wales.

Etymology: The species S. greatstinkofaustralia sp. *nov*. is named in recognition of the completely corrupt and dysfunctional Australian legal system. In this system compliance with or enforcement of the law are optional, depending on who is being looked at. Roughly a third of the population are wholly immune from ever being charged for any criminal offences no matter what crimes they commit. These are usually police, public servants, drug traffickers, paedophiles, the latter of whom are usually green-lighted by the former and other similarly protected persons. Most of the rest of the population are merely subjects in a fascist state and do their best to comply with an ever-increasing raft of laws, subject to a never ending variety of interpretations. A small percentage, myself included are hounded and harassed as targeted individuals, who are regularly charged with contrived offences and prosecuted using the most insane and creative interpretations of laws. New laws may even be made up, just to effect a prosecution.

The tyranny is enforced by judges and magistrates who as a cohort are wholly corrupt and most are

compromised by police as drug addicts (cocaine, heroin and "Ice" are the drugs of choice). They in turn make "findings" and rulings at variance with evidence, the facts and readily peddle false narratives against innocent people who have either been in the wrong place at the wrong time, or foolishly tried to expose corruption and wrongdoing in government at some time in their past and must now pay for the rest of their life as a result.

The system is not so much corrupt as a result of failure, but rather by design.

Australia's legal system is internationally known as "*The Great Stink Of Australia*" as a so was a large wall built in China as also called "The Great Wall of China".

This species of Blind Snake has a notorious habit of defecating on people after being picked up and handled. This causes a great stink. So the etymology also fits the habit of the snake.

SIVADICTUS ALTMANI SP. NOV.

LSIDurn:Isid:zoobank.org:act:BB39046E-04FA-40B5-BC4E-C03A6E3D46B0

Holotype: A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.157050 collected on the Langothlin to Ben Lomand Road, New South Wales, Australia, Latitude -30.07582 S., Longitude 151.67471 E.

This government-owned facility allows access to its holdings.

Paratypes: Two preserved specimens at the South Australian Museum Herpetology Collection, Adelaide, South Australia, Australia, specimen numbers R31020 and R31025 both collected from the Bendemeer to Walcha Road at 8 km west of Woolbrook, New South Wales, Australia, Latitude -30.92 S., Longitude 151.3 E.

Diagnosis: Without exception, all publishing authors within the last 100 years have treated the species "*Anilios nigrescens* Gray, 1845" as a single wide-ranging taxon, occurring from the east coast of Queensland and hilly hinterland, south along the nearby coast and ranges to central and western inland Victoria.

The phylogenies of Marin *et al.* (2012, 2013) indicated five or six species, with a conservative total of five recognized herein. The type form for "*Anilios nigrescens* Gray, 1845", being the type species for the genus *Sivadictus* Wells and Wellington, 1985, has a type locality of Parramatta (Sydney) and includes populations from the coast and near ranges of New South Wales, south of the Hunter Valley to the New South Wales south coast, just north of the Victorian border.

S. reginae (Boulenger, 1889) is the form from Brisbane and most areas north in Queensland, extending south to the far north coast of New South Wales, and adjacent ranges and nearby slopes to

about Tenterfield in far northern New South Wales. The species *S. greatstinkofaustralia sp. nov.* is found generally west of the Great Dividing Range in a zone including the slopes and nearby plains from north and central Victoria, extending along the west of the Great Dividing Range to far north New South Wales to Tenterfield, where it appears to be sympatric with *S. reginae*.

S. graysoni sp. nov. is a taxon restricted to the upper New England Tableland Region of north New South Wales, generally around Glen Innes in New South Wales.

S. altmani sp. nov. is a taxon from the lower New England region of New South Wales, found in the Guyra to Walcha area and presumably further afield within the lower New England region of New South Wales.

The five species are separated from one another as follows:

S. nigrescens is a pinkish to purple coloured snake on top with a white venter. On the lower flanks the demarcation from dark to light is not boldly defined but rather is formed by scales on the lower flank being dark centred rather than dark all over like above.

The rostral is horseshoe shaped and the top well touches the extremely large prefrontal. Frontal is either tiny, or not different in size and shape to the rows of scales posterior.

S. altmani sp. nov., which is the closest relative of *S. nigrescens* is readily separated from that species by the demarcation of dark and light on the lower flank. This is well-defined in that the scales are either dark or light, generally running along the demarcation edge. There are some infusions up or down of light or dark scales, but again these scales are either dark or light. There are no light scales with dark centres on the lower flank as seen in *S. nigrescens*. The nasal scale of *S. altmani sp. nov.* is almost rectangular in shape, versus obviously triangular in *S. nigrescens*. The eye spot is placed slightly above centre and slightly posterior to centre in the ocular scale.

S. greatstinkofaustralia sp. nov. is most similar in colour, including that of the flanks, to *S. nigrescens*, but the change from dark above to light below is more sudden in that there is only one row of light scales with dark centres, below the final row of dark scales.

The rostral is tending to be more rectangular than horseshoe shaped and the nasal scale is more-orless triangular in shape, but curved in and narrow at the top and bulbous towards the labials and lip. The black eye spot is slightly higher than centre of the ocular scale but otherwise placed centrally.

S. reginae is starkly different to the preceding species in that it is an obviously brownish coloured snake on top and the scales of the snout have heavy yellow or cream etching, versus thin white or pale etching on the snout in the three preceding species. The eye spot is set slightly back of centre in the ocular scale. The demarcation on the lower flank of the top upper body and light under side is well-defined by a jagged line caused by the interface of dark and light scales. The light scales below do have dark centres that are pale in colour. There are no dark or light infusions above or below this line.

The rostral, while curved at the top, is otherwise rectangular in shape and much longer than wide. S. graysoni sp. nov. is similar in most respects to S. *reginae*, (as compared to the three guite different species, S. nigrescens, S. altmani sp. nov. and S. greatstinkofaustralia sp. nov.) but is readily separated from that species by the fact that the heavily vellow etched scales of the snout extend back to include the scales well behind the eye spots, and on the flanks of the body there are numerous white infusions upwards from the venter. The lower scales of the flanks and venter are ivory white and without any dark centres. The eye spot is set in the centre of the ocular scale. The rostral, is barely curved at the top, is very wide and while rectangular in shape is roughly as wide as long.

Noting how different the five preceding species are from one another, I find it astounding that no one had considered the prospect of them being different taxa until now.

The five preceding species, being S. nigrescens, S. reginae, S. altmani sp. nov., S. graysoni sp. nov. and S. greatstinkofaustralia sp. nov., comprise the entirety of the genus Sivadictus Wells and Wellington, 1985. Sivadictus as a genus is separated from all other Blind Snakes by the following suite of characters: Purplish pink-brown to nearly black above, cream, yellow or pinkish below. Snout is rounded from above and in profile. Nasal cleft is long, joining the second supralabial or the suture between the first and second labials, projecting forward and upwards to partially divide the nasal, visible from above. Rostral is large, oval or elliptical, sometimes horse-shoe shaped, sometimes almost rectangular and if so, with a curved upper edge, usually much longer than broad. 22 mid body scale rows. Body diameter is 35-60 times in its length; the tail terminates in a spine.

The genus *Sivadictus* is separated from the genus *Ackytyphlops* Hoser, 2013 by the fact that the nasal cleft does not completely divide the nasal scale, extending from near the rostral scale to the first upper labial scale; as opposed to the second upper labial scale or suture between the first and second in genus *Ackytyphlops* Hoser, 2013. Adults of the genus *Sivadictus* are pinkish, pinkish-purple, or purplish brown as opposed to greyish brown in *Ackytyphlops* Hoser, 2013. In the genus *Sivadictus* the ventral surfaces are pinkish white with a weak ragged junction between the upper and lower colours or otherwise defined by lighter scales with dark centres as opposed to an evenly merging darker upper and lighter lower colouration in *Ackytyphlops* Hoser, 2013.

Hoser 2025 - Australasian Journal of Herpetology 76-78:1-192.

S. nigrescens in life is depicted in Hoser (1989) on page 123 at top right, specimen from Cottage Point, New South Wales, Australia, Cogger (2014) on page 807, top right, specimen from Sydney, New South Wales, Australia, Swan et al. (2022) on page 231 at top from Helensburgh, New South Wales and online at:

https://www.inaturalist.org/observations/103229876 from near Hornsby, New South Wales, Australia, photographed by Liz Noble, and https://www.flickr.com/photos/159249812@

N05/32543351238/

from Top Hill, New South Wales, Australia, photographed by Adam Parsons, and

https://www.inaturalist.org/observations/267037826

from West Head, New South Wales, Australia,

photographed by "George EV" and,

https://www.inaturalist.org/observations/186523959 from north Turramurra, New South Wales, Australia, photographed by Liz Noble.

S. reginae is depicted in life in Wilson and Swan at page 537 middle left, specimen from Canungra, Queensland and online at:

https://www.flickr.com/photos/

ryanfrancis/9795599835/

from Boondall Wetlands, Brisbane, Queensland, Australia, photographed by Ryan Francis, and https://www.flickr.com/photos/zimny anders/37045369970/

- from the D'aguilar Range National Park, Queensland, Australia, photographed by Anders Zimny, and https://www.flickr.com/photos/ julesfarquhar/25044930835/

from the Lamington Plateau, Queensland, Australia, photographed by taxonomic vandal Jules Farquhar, and

https://www.flickr.com/photos/

euprepiosaur/8479622707/

from D'Aguilar Range, Queensland, Australia,

photographed by Stephen Zozaya, and

https://www.flickr.com/photos/194274402@N06/

from Mount Glorious, Queensland, Australia, photographed by Melissa Bruton.

S. graysoni sp. nov. is depicted in life online at:

https://www.inaturalist.org/observations/105549334

from Glen Elgin, New South Wales, Australia,

photographed by Darren Fielder. S. altmani sp. nov. is depicted in life online at:

https://www.inaturalist.org/observations/129790702

from Rocky River, New South Wales, Australia,

photographed by Max Tibby, and

https://www.inaturalist.org/observations/260241580

from near Armidale, New South Wales, Australia,

photographed by "Sockrosma", and

https://www.inaturalist.org/observations/253363355

from near Armidale, New South Wales, Australia,

photographed by "Casey".

S. greatstinkofaustralia sp. nov. is depicted in life on the front covers of issues 76 and 78 of this journal (Australasian Journal of Herpetology).

S. greatstinkofaustralia sp. nov. is depicted in life online at:

https://x.com/therealsnakeman/ status/1913243800065151250

from 2.5 km west of Beechworth, Victoria, photographed by Raymond Hoser.

The phylogenies of Marin et al. (2012, 2013) indicated that S. greatstinkofaustralia sp. nov. diverged from nearest relatives S. nigrescens and S. altmani sp. nov. over 3 MYA and from S. reginae and S. graysoni sp. nov. about 5 MYA supporting the concept of the five relevant morphologically diagnosable species.

Distribution: S. altmani sp. nov. is a taxon from the lower New England region of New South Wales, found in the Guyra to Walcha area and presumably further afield within the lower New England region of New South Wales.

Etymology: The species S. altmani sp. nov. is named in honour of David Altman, originally of Scotland, but having spent time in Bondi and St. Ives, New South Wales, Australia, also in Israel and more recently Chirnside Park, Victoria for his services to herpetology. As a teen, he was famous for belching putrid clouds of wind in his sleep, earning him the nicknames "earthquake Altman", so it is also fitting he be honoured by a species of snake known to pass stink at times.

See also the etymology for Altmantyphlops Hoser, 2012 in Hoser (2012d) for further details.

SIVADICTUS GRAYSONI SP. NOV.

LSIDurn:Isid:zoobank.org:act:1AFF5DF0-DF4F-458C-AB47-E7B7405057C9

Holotype: A preserved specimen at the Australian Museum Herpetology Collection, Sydney, New South Wales, Australia, specimen number R.157114 collected from Kingsgate Road, Red Range, (east of Glen Innes), New South Wales, Australia, Latitude -29.80166 S., Longitude 151.98249 E.

This government-owned facility allows access to its holdings.

Paratypes: Two preserved specimen at the Australian Museum Herpetology Collection, Sydney, New South Wales, Australia, specimen numbers R.157265 and R.157267, collected on the Kingsgate Road, Red Range, (east of Glen Innes), New South Wales, Australia, Latitude -29.79916 S., Longitude 151.95611 E.

Diagnosis: Without exception, all publishing authors within the last 100 years have treated the species "Anilios nigrescens Gray, 1845" as a single wideranging taxon, occurring from the east coast of Queensland and hilly hinterland, south along the nearby coast and ranges to central and western

inland Victoria.

The phylogenies of Marin et al. (2012, 2013) indicated five or six species, with a conservative total of five recognized herein. The type form for "Anilios nigrescens Gray, 1845", being the type species for the genus Sivadictus Wells and Wellington, 1985, has a type locality of Parramatta (Sydney) and includes populations from the coast and near ranges of New South Wales, south of the Hunter Valley to the New South Wales south coast, just north of the Victorian border.

S. reginae (Boulenger, 1889) is the form from Brisbane and most areas north in Queensland. extending south to the far north coast of New South Wales, and adjacent ranges and nearby slopes to about Tenterfield in far northern New South Wales. The species S. greatstinkofaustralia sp. nov. is found generally west of the Great Dividing Range in a zone including the slopes and nearby plains from north and central Victoria, extending along the west of the Great Dividing Range to far north New South Wales to Tenterfield, where it appears to be sympatric with S. reginae.

S. graysoni sp. nov. is a taxon restricted to the upper New England Tableland Region of north New South Wales, generally around Glen Innes in New South Wales.

S. altmani sp. nov. is a taxon from the lower New England region of New South Wales, found in the Guyra to Walcha area and presumably further afield within the lower New England region of New South Wales.

The five species are separated from one another as follows:

S. nigrescens is a pinkish to purple coloured snake on top with a white venter. On the lower flanks the demarcation from dark to light is not boldly defined but rather is formed by scales on the lower flank being dark centred rather than dark all over like above. The rostral is horseshoe shaped and the top well touches the extremely large prefrontal. Frontal is either tiny, or not different in size and shape to the rows of scales posterior.

S. altmani sp. nov., which is the closest relative of S. nigrescens is readily separated from that species by the demarcation of dark and light on the lower flank. This is well-defined in that the scales are either dark or light, generally running along the demarcation edge. There are some infusions up or down of light or dark scales, but again these scales are either dark or light. There are no light scales with dark centres on the lower flank as seen in S. nigrescens. The nasal scale of S. altmani sp. nov. is almost rectangular in shape, versus obviously triangular in S. nigrescens. The eye spot is placed slightly above centre and slightly posterior to centre in the ocular scale. S. greatstinkofaustralia sp. nov. is most similar in colour, including that of the flanks, to S. nigrescens,

but the change from dark above to light below is more sudden in that there is only one row of light scales with dark centres, below the final row of dark scales. The rostral is tending to be more rectangular than horseshoe shaped and the nasal scale is more-orless triangular in shape but curved in and narrow at the top and bulbous towards the labials and lip. The black eye spot is slightly higher than centre of the ocular scale but otherwise placed centrally.

S. reginae is starkly different to the preceding species in that it is an obviously brownish coloured snake on top and the scales of the snout have heavy yellow or cream etching, versus thin white or pale etching on the snout in the three preceding species. The eye spot is set slightly back of centre in the ocular scale. The demarcation on the lower flank of the top upper body and light under side is well-defined by a jagged line caused by the interface of dark and light scales. The light scales below do have dark centres that are pale in colour. There are no dark or light infusions above or below this line.

The rostral, while curved at the top, is otherwise rectangular in shape and much longer than wide. S. graysoni sp. nov. is similar in most respects to S. reginae, (as compared to the three guite different species, S. nigrescens, S. altmani sp. nov. and S. greatstinkofaustralia sp. nov.) but is readily separated from that species by the fact that the heavily yellow etched scales of the snout extend back to include the scales well behind the eye spots, and on the flanks of the body there are numerous white infusions upwards from the venter. The lower scales of the flanks and venter are ivory white and without any dark centres. The eye spot is set in the centre of the ocular scale. The rostral, is barely curved at the top, is very wide and while rectangular in shape is roughly as wide as long.

Noting how different the five preceding species are from one another, I find it astounding that no one had considered the prospect of them being different taxa until now.

The five preceding species, being S. nigrescens, S. reginae, S. altmani sp. nov., S. graysoni sp. nov. and S. greatstinkofaustralia sp. nov., comprise the entirety of the genus Sivadictus Wells and Wellington, 1985. Sivadictus as a genus is separated from all other Blind Snakes by the following suite of characters: Purplish pink-brown to nearly black above, cream, yellow or pinkish below. Snout is rounded from above and in profile. Nasal cleft is long, joining the second supralabial or the suture between the first and second labials, projecting forward and upwards to partially divide the nasal, visible from above. Rostral is large, oval or elliptical, sometimes horse-shoe shaped, sometimes almost rectangular and if so, with a curved upper edge, usually much longer than broad. 22 mid body scale rows. Body diameter is 35-60 times in its length; the tail terminates in a spine.

The genus *Sivadictus* is separated from the genus Ackytyphlops Hoser, 2013 by the fact that the nasal cleft does not completely divide the nasal scale, extending from near the rostral scale to the first upper labial scale; as opposed to the second upper labial scale or suture between the first and second in genus Ackytyphlops Hoser, 2013. Adults of the genus Sivadictus are pinkish, pinkish-purple, or purplish brown as opposed to greyish brown in Ackytyphlops Hoser, 2013. In the genus Sivadictus the ventral surfaces are pinkish white with a weak ragged junction between the upper and lower colours or otherwise defined by lighter scales with dark centres as opposed to an evenly merging darker upper and lighter lower colouration in Ackytyphlops Hoser, 2013. S. nigrescens in life is depicted in Hoser (1989) on page 123 at top right, specimen from Cottage Point, New South Wales, Australia, Cogger (2014) on page 807, top right, specimen from Sydney, New South Wales, Australia, Swan et al. (2022) on page 231 at top from Helensburgh, New South Wales and online at:

https://www.inaturalist.org/observations/103229876 from near Hornsby, New South Wales, Australia, photographed by Liz Noble, and https://www.flickr.com/photos/159249812@ N05/32543351238/

from Top Hill, New South Wales, Australia, photographed by Adam Parsons, and https://www.inaturalist.org/observations/267037826

- from West Head, New South Wales, Australia,
- photographed by "George EV" and,

https://www.inaturalist.org/observations/186523959

from north Turramurra, New South Wales, Australia, photographed by Liz Noble.

S. reginae is depicted in life in Wilson and Swan

at page 537 middle left, specimen from Canungra, Queensland and online at:

https://www.flickr.com/photos/

ryanfrancis/9795599835/

from Boondall Wetlands, Brisbane, Queensland,

- Australia, photographed by Ryan Francis, and
- https://www.flickr.com/photos/zimny_

anders/37045369970/

- from the D'aguilar Range National Park, Queensland, Australia, photographed by Anders Zimny, and
- https://www.flickr.com/photos/
- julesfarquhar/25044930835/

from the Lamington Plateau, Queensland, Australia, photographed by taxonomic vandal Jules Farquhar, and

https://www.flickr.com/photos/

euprepiosaur/8479622707/

- from D'Aguilar Range, Queensland, Australia,
- photographed by Stephen Zozaya, and
- https://www.flickr.com/photos/194274402@N06/
- from Mount Glorious, Queensland, Australia,

photographed by Melissa Bruton.

S. graysoni sp. nov. is depicted in life online at: https://www.inaturalist.org/observations/105549334 from Glen Elgin, New South Wales, Australia, photographed by Darren Fielder. *S. altmani sp. nov.* is depicted in life online at:

https://www.inaturalist.org/observations/129790702 from Rocky River, New South Wales, Australia, photographed by Max Tibby, and

https://www.inaturalist.org/observations/260241580 from near Armidale, New South Wales, Australia, photographed by "Sockrosma", and https://www.inaturalist.org/observations/253363355

from near Armidale, New South Wales, Australia, photographed by "Casey".

S. greatstinkofaustralia sp. nov. is depicted in life online at:

https://x.com/therealsnakeman/ status/1913243800065151250

from 2.5 km west of Beechworth, Victoria, photographed by Raymond Hoser.

The phylogenies of Marin *et al.* (2012, 2013) indicated that *S. greatstinkofaustralia sp. nov.* diverged from nearest relatives *S. nigrescens* and *S. altmani sp. nov.* over 3 MYA and from *S. reginae* and *S. graysoni sp. nov.* about 5 MYA supporting the concept of the five relevant morphologically diagnosable species.

Distribution: *S. graysoni sp. nov.* is a taxon restricted to the upper New England Tableland Region of north New South Wales, generally near Glen Innes, NSW.

Etymology: The species *S. graysoni sp. nov.* is named in honour of Grayson O'Connor of Box Hill, Victoria, Australia for services to herpetology. He also gets cravings to eat tins of baked beans, which he eats in large quantities when hiking in the bush. He therefore has a habit of passing extremely pungent smells from his rear, not unlike this species of snake when caught and handled.

GENUS ANILIOS GRAY, 1845

Type Species: Anilios australis Gray, 1845.

Diagnosis: Anilios (identified by Hoser 2013 as Adelynhosertyphlops and herein as a subjective junior synonym) are separated from all other *Libertadictus* by the following suite of characters: Brownish-black or reddish-brown above, whitish to cream below. Snout weakly to strongly trilobed from above, although when weakly trilobed this is sometimes only seen on very close inspection, meaning it is sometimes viewed mistakenly as being smoothly rounded. The snout is angular and with a slightly recurved 'beak' when look at in profile. Nasal cleft usually contacting the second labial and extending to the nostril, coming either slightly before it or after it, but not visible from above, sometimes not completely dividing the nasal. Rostral is large, oval and longer than wide, sometimes broader anteriorly. 20-22 Midbody scale rows. Body diameter is 40-80 times its length. Averages about 25

cm as adults and rarely exceeds 40 cm.

Distribution: Most drier parts of continental Australia. **Etymology:** The genus name *Anilios* is derived from the Greek words "an" (meaning "not") and "helios" (meaning "sun"), likely referring to the fossorial or subterranean lifestyle of these snakes, implying they are "without sun".

Adelynhosertyphlops was named in honour of my daughter Adelyn (Adder-Lyn) Hoser in recognition of over twelve years of valuable work in wildlife conservation, research and education.

That genus name is a subjective junior synonym of the earlier created *Anilios* and should as of now, not be used as correct.

Content: Anilios australis (Gray, 1845) (type species); A. adept sp. nov. (this paper), A. bulliardi sp. nov. (this paper), A. centralis (Storr, 1984), A. crypticspecies sp. nov. (this paper), A. endoterus (Waite, 1918), A. goodcatch sp. nov. (this paper), A. greatfind sp. nov. (this paper), A A. hamatus (Storr, 1981), A. judyfergusonae sp. nov. (this paper), A. mazing sp. nov. (this paper), A. mirlirrtjarra sp. nov. (this paper), A. nottobeignored sp. nov. (this paper), A. ok sp. nov. (this paper), A. pilbarensis (Aplin and Donnellan, 1993), A. preissi (Jan, 1864), A. waitii (Boulenger, 1895), A. ye sp. nov. (this paper).

GENUS *LIBERTADICTUS* WELLS AND WELLINGTON, 1984

Type species: *Onychocephalus bituberculatus* Peters, 1863.

Diagnosis: The genus Libertadictus as defined here is confined to species of Blind Snakes with the following suite of characters: A moderately dark, small, slender long-snouted Blind Snake up to 35 cm long with 20 or rarely 18, mid body scale rows and a nasal cleft proceeding from the second labial; snout strongly or moderately strongly trilobed as seen from above and slightly angular in profile. Tail is 1.5-3.3 percent of the total length, 414-485 ventrals, 11-18 subcaudals. From above the rostral is very much longer than wide and almost two thirds as wide as the head. The nostril is inferior, markedly swollen, much nearer to the rostral than the preocular. The nasal cleft extends obliquely upwards and forwards from the nostril to about midway between the nostril and the rostral. The upper surface is pinkish grey, bluish purple or a dark purplish brown, gradually merging with the whitish lower surface.

Distribution: Dry parts of southern Australia only. **Etymology:** See Wells and Wellington, 1984.

Content: *Libertadictus bituberculatus* (Peters, 1863) (Type species), *L. britishbombedhere sp. nov.* (this paper), *L. dishonestpoliceorum sp. nov.* (this paper), *L. fasciststateorum sp. nov.* (this paper), *L. ick sp. nov.* (this paper), *L. margaretae* (Storr, 1981), *L. radiationzone sp. nov.* (this paper), *L. snakebustersorum sp. nov.* (this paper), *L. wellsandwellingtonorum sp. nov.* (this paper).

GENUS SUEWITTTYPLOPS HOSER, 2013 LSIDurn:Isid:zoobank.org:act:CE0616BF-D673-4626-A8A7-56E5B3E08AB6

Type species: Typhlops ligatus Peters, 1879. Diagnosis: Suewitttyphlops Hoser, 2013 species are defined by the following suite of characters: The nasal cleft is joining the first or second supralabial or preocular and smoothly rounded from above and in profile. It is visible from above, almost dividing the nasal and contacting the first or second labial below and in some cases completely dividing the nasal. The rostral is narrow and elongate from above, being longer than broad (as in about 2 times), sometimes distinctly broader anteriorly. 22-24 mid-body rows; body diameter 20-70 times in its length and with a maximum length of about 50 cm. The colour is brown above and whitish or creamish white below, with or without slight paling in colour on the snout tip and/or the tail tip.

Distribution: Northern half of continental Australia. **Etymology:** Named in honour of Sue Witt breeder of Great Dane dogs from Heathcote, Victoria, Australia. Refer to Hoser (2013a) for details.

Content: Suewitttyphlops ligatus (Peters, 1879) (type species), S. crottyi sp. nov. (this paper), S. euanedwardsi sp. nov. (this paper), S. ganei (Aplin, 1998), S. kimberleyensis (Storr, 1981), S. mileii sp. nov. (this paper), S. okara sp. nov. (this paper), S. outofsight sp. nov. (this paper), S. overlookedit sp. nov. (this paper), S. oxyi sp. nov. (this paper), S. paulwoolfi sp. nov. (this paper), S. romani sp. nov. (this paper), S. sloppi Hoser, 2013, S. troglodytes (Storr, 1981), S. vagurima Ellis, 2019.

GENUS ROBINWITTTYPHLOPS HOSER, 2013 LSIDurn:Isid:zoobank.org:act:BCBD56A3-6C41-4B5A-BA61-89FF338BB640

Type Species: *Typhlops* (*Onychocephalus*) *unguirostris* Peters, 1867

Diagnosis: The genus *Robinwitttyphlops* Hoser, 2013 are readily separated from all other Australian Blind Snakes by the following suite of characters: Brownish above, creamish-white below. The snout is slightly trilobed from above, sharply angular in profile. The nasal cleft is not, or scarcely visible from above, contacting the first labial below and sometimes completely dividing the nasal. Rostral is oval from above and longer than broad (about 1.5 times). Scales are 24 rows at mid body. Body diameter is 40-70 times in its length.

There is more than one species included within the putative species *R. unguirostris* Peters, 1867 as recognized by most herpetologists at the current time. Included in the genus *Robinwitttyphlops* Hoser, 2013 is the species *R. jackyhoserae* Hoser, 2013 and the other species described herein.

Also, the species originally described as *Typhlops yirrikalae* Kinghorn, 1942 was erroneously placed in the genus *Suewitttyphlops* Hoser, 2013 by Hoser



Habitat of *Libertadictus britishbombedhere sp. nov.* that occurs in the area of the Stuart Range, west of Lake Eyre in South Australia.

(2013a) and conforms to the diagnosis for this genus (amended from Hoser 2013) as given herein.

Distribution: Known from scattered locations across Eastern and Northern Australia.

Etymology: Named in honour of Robin Witt breeder of Great Dane dogs from Heathcote, Victoria, Australia. Refer to Hoser (2013a) for details.

Content: Robinwitttyphlops unguirostris (Peters, 1867) (type species), *R. anothersp sp. nov.* (this paper), *R. datstink sp. nov.* (this paper), *R. fukdat sp. nov.* (this paper), *R. jackyhoserae* Hoser, 2013 (this paper), *R. stinkey sp. nov.* (this paper), *R. yirrikalae* (Kinghorn, 1942).

GENUS PATTERSONTYPHLOPS HOSER, 2013 LSIDurn:lsid:zoobank.org:act:064FCC17-D76E-43F6-AE5D-57138A762FDF

Type Species: *Typhlops wiedii* Peters, 1867. **Diagnosis:** *Pattersontyphlops* Hoser, 2013 are separated from all other Australian Blind Snakes by the following unique suite of characters: Blackishbrown or brown dorsally, sometimes with slight lightening at the snout or alternatively a dark streak on the snout, creamish-white or yellowish cream below, sometimes with a pinkish hue. Dorsally there are sometimes 16-18 narrow dark stripes and occasionally blackening of the tail. The snout is bluntly rounded from above and in profile, or bluntly angular. The nasal cleft does not divide the nasal, which may or not be visible from above and joins the second labial below. The rostral is either broadly oval to nearly circular from above. 18-20 midbody scale rows. Body diameter is 30-80 times in its length and doesn't exceed 30 cm maximum, usually attaining about two thirds this as adults.

Distribution: Northern two thirds of continental Australia, except for the driest parts, including most of the relevant parts of the Western Australia, Northern Territory and South Australia.

Etymology: Named in honour of Sandee Patterson of near Brisbane, Queensland, Australia in recognition of her contributions to herpetology. Refer to Hoser (2013a) for details.

Content: *Pattersontyphlops wiedii* (Peters, 1867) (Type species), *P. fossor* Shea, 2015, *P. kamilaroi sp. nov.* (this paper).

GENUS SLOPPTYPHLOPS HOSER, 2013 LSIDurn:Isid:zoobank.org:act:0EBA3EB0-229B-44D1-9C4C-2D5D37A10A27

Type Species: *Typhlops ammodytes* Montague, 1914.

Diagnosis: The genus Slopptyphlops Hoser, 2013 are separated from all other Australian Blind Snakes by the following suite of characters: Light brown, brown or blackish above, whitish below. The dark brown dorsal colour does not form into obvious or semi-distinct longitudinal streaks (in contrast to the related genus Aa gen. nov. where such longitudinal streaks are seen in adults). The snout is entirely rounded from above and in profile, ranging from being somewhat blunt to slightly angular. The nasal cleft which may or may not be visible from above (if it is, then only just), joins the preocular, continuing in front of the nostril and often dividing the nasal. The rostral is relatively narrow and constricted from above, versus oval in the genus Aa gen. nov. (this paper) being longer than broad and relatively narrow. 20 midbody scale rows. Body diameter 30-70 times in its length. Average adult maximum length is 25 cm and doesn't exceed 35 cm.

Distribution: Northern half of continental Australia, extending further south in the eastern third of Australia.

Etymology: Named in honor of our Great Dane dog, Slop (sometimes spelt Slopp), who for a total of 12 years (before he died in 2012) did a sterling job of protecting the Snakebusters reptile education facility from thieves and other undesirables and also entertaining children as needed.

It is fitting that animals that make up such an important part of the human world, should be a part of our heritage in terms of the nomenclature for our biodiversity.

Content: *Slopptyphlops ammodytes* (Montague, 1914) (type species), *S. antmuncha sp. nov.* (this paper), *S. cashcow sp. nov.* (this paper), *S. datsquirmy sp. nov.* (this paper), *S. dhuae sp. nov.* (this paper), *S. diversus* (Waite, 1894), *S. exy sp. nov.* (this paper), *S. faarkinelle sp. nov.* (this paper), *S. fidesi sp. nov.* (this paper), *S. faarkinelle sp. nov.* (this paper), *S. fidesi sp. nov.* (this paper), *S. hawkeswoodi sp. nov.* (this paper), *S. jarrodbinghami sp. nov.* (this paper), *S. johnpati sp. nov.* (this paper), *S. iancooki sp. nov.* (this paper), *S. wurderingpoliceorum sp. nov.* (this paper), *S. murraybrucei* (Hoser, 2013), *S. richardwellsi* (Hoser, 2013), *S. shittythingie sp. nov.* (this paper), *S. timhudsoni sp. nov.* (this paper).

GENUS MANTYPHLOPS HOSER, 2013 LSIDurn:Isid:zoobank.org:act:4DC3C2E6-1A31-450F-8BB6-84308DBCFB84

Type Species: *Typhlops* (*Onychocephalus*) *güntheri* Peters, 1865.

Diagnosis: Mantyphlops Hoser, 2013 are separated

from all other Australian Blind Snakes by the following suite of characters: Brown to almost black above, merging on the lower flanks with the pale brown to creamish venter. The tail is blackish, as is often the snout or head. The snout is bluntly rounded from above and in profile, sometimes slightly angular or truncate. The nasal cleft isn't visible from above, or if so, only just, contacting the second labial below. Rostral is subcircular from above, scarcely to much longer than broad. 18 midbody rows. Body diameter 40-90 times in its length. Adults average 25 cm and don't exceed 40 cm.

Separated from the morphologically similar genus *But gen. nov.* by having over 500 ventrals (versus usually 450-490 in *But gen. nov.*) and a black spot small eye, versus tiny and barely visible eye spot in *But gen. nov.*.

Distribution: Western Australia and adjoining parts of the Northern Territory, including Arnhem Land. **Etymology:** Named in honor of Daniel Man, of Mitcham, Victoria, Australia for services to accounting in Australia as well as unrecognized work in wildlife conservation by doing considerable "back office" work for the leading wildlife conservation business Snakebusters: Australia's best reptiles shows (including as previously known as "Death Adder Services"), for more than 20 years.

Content: Mantyphlops guentheri (Peters, 1865) (type species), M. donoteatit sp. nov. (this paper), M. wow sp. nov. (this paper), M. yes sp. nov. (this paper). GENUS JACKYHOSERTYPHLOPS HOSER, 2013 LSIDurn:Isid:zoobank.org:act:284D95B9-A369-4314-B397-8A8DF5896C25

Type Species: *Ramphotyphlops longissimus* Aplin, 1998

Diagnosis: Jackyhosertyphlops Hoser, 2013 and Zzzzz gen. nov. are separated from other Australian Blind Snakes by the following suite of characters: Elongate and slender build. Purplish-brown or pinkish brown above, grey-white below. The head and tail or just tail may have blackening. The snout is rounded and sometimes slightly trilobed from above, bluntly angular in profile, sometimes with a strongly hooked, recurved "beak" in profile. Nasal cleft completely divides the nasal, not visible from above, contacting the preocular, extending slightly beyond the nostril. The rostral is large and subcircular, about as long as wide, slightly longer than wide ranging up to being noticeably longer than broad. 16-18 midbody rows. Body diameter is 70-80 times in its length. Average adult length is about 25-30 cm and not exceeding 45 cm.

Jackyhosertyphlops are separated from Zzzzz gen. nov. by having a sharp transverse keel forming a distinct cutting edge to the snout, separating this genus from the morphologically similar genus Zzzzz gen. nov. which does not have this character or if so, is reduced. Zzzzz gen. nov. have more than 700

Habitat of *Mantyphlops donoteatit sp. nov.* which is a range-restricted endemic found mainly in the hillier parts of the Alligator Rivers drainage basin in the Northern Territory, Australia.



ventrals, versus less than 700 in *Jackyhosertyphlops* Hoser, 2013.

Distribution: Most parts of arid western and central Australia, mainly in the northern half and mainly in the Northern Territory and Western Australia with a preponderance for elevated areas and usually absent from expansive low-lying regions.

Etymology: Named in honour of my daughter Jacky Hoser in recognition of over ten years of valuable work in wildlife conservation, research and education (as of 2013), and now over 20 years as of 2025. **Content:** *Jackyhosertyphlops longissimus* (Aplin,

1998) (Type species), *J. adelynhoserae* Hoser, 2013, *J. gambellae sp. nov.* (this paper), *J. gregswedoshi sp. nov.* (this paper), *J. haydnmcphiei sp. nov.* (this paper), *J. lachlandundas sp. nov.* (this paper), *J. leavemealone sp. nov.* (this paper), *J. leptosomus* (Robb, 1972), *J. leverorum sp. nov.* (this paper), *J. mariolisi sp. nov.* (this paper), *J. migroterminatus* (Parker, 1931), *J. obtusifrons* Ellis and Doughty, 2017, *J. ohno sp. nov.* (this paper), *J. shitbomb sp. nov.* (this paper), *J. systenos* Ellis and Doughty, 2017, *J. timbukthree sp. nov.* (this paper), *J. toriswedoshae sp. nov.* (this paper), *J. tylertritti sp. nov.* (this paper), *J. yetanotherone sp. nov.* (this paper).

GENUS KERRTYPHLOPS HOSER, 2013 LSIDurn:Isid:zoobank.org:act:2977DBC4-45A9-494E-B91B-2683F8AB2071

Type Species: *Typhlops proximus* Waite, 1893. **Diagnosis:** *Kerrtyphlops* Hoser, 2013 **are s**eparated from all other Australian Blind Snakes by the following suite of characters: Rich dark brown above, fading to creamish-white below, sometimes with a small dark patch on either side of the vent. The snout is very bluntly tri-lobed from above, angular in profile. The nasal cleft is visible from above, joining the first labial below. Rostral is subcircular from above, about as long as broad. 20 mid body scale rows, body diameter is 20-40 times its length, with an average adult length of 50 cm, but known to attain nearly 75 cm on some occasions.

Kerrtyphlops Hoser, 2013 was monotypic for the type species until the publication of this paper.

Distribution: Eastern Australia, including north Queensland and Victoria.

Etymology: Named in honour of Robert (Bob) Kerr of Mirboo North, Victoria, Australia for his valuable work in exposing police and judicial corruption. Refer to Hoser (2013a) for details.

Content: *Kerrtyphlops proximus* (Waite, 1893) (type species), *K. corruptpoliceorum sp. nov*. (this paper).

GENUS BENNETTTYPHLOPS HOSER, 2013 LSIDurn:Isid:zoobank.org:act:1EB1B51A-2D2A-4963-B5B6-C46087188F10

Type Species: Typhlops pinguis Waite, 1897. Diagnosis: Bennetttyphlops Hoser, 2013 are separated from all other Australian Blind Snakes by the following suite of characters: Large, very stout build and dark in colour, usually purplish-grey, dark brown, brownish-grey or blackish, attaining up to 50 cm total length. The snout is very slightly angular in profile. There are 20-22 midbody scale rows and the nasal cleft proceeds from the second labial. The snout is subrectangular when viewed from above, weakly trilobed in appearance due to the slight swelling above the nostrils and it is short roundish and slightly angular in profile, sometimes with a distinct hook at the end. From above the rostral is slightly to much longer than wide and about half as wide as the head (species dependent). The nostril is inferior, slightly swollen and about midway between the rostral and preocular. Attains up to 50 cm in total length and the tail is 2.6-5.7 per cent of the total length. 278-377 ventrals, 10-19 subcaudals.

Distribution: Drier parts of southern Australia.

Etymology: Named in honour of Steve Bennett of Narre Warren South, Victoria, Australia, formerly of Newcastle, NSW and Rowville, Victoria, in recognition for valuable work and contributions to the hands-on conservation of reptiles in Australia and globally in the period spanning the late 1980's to the present (year 2025). Refer to Hoser (2013a) for more details.

Content: Bennetttyphlops pinguis (Waite, 1897) (type species), *B. bennetti sp. nov.* (this paper), *B. bicolor* (Jan, 1864), *B. donothandlewithtongs sp. nov.* (this paper), *B. preissi* (Jan, 1864), *B. splendidus* (Aplin, 1998).

GENUS SILVATYPHLOPS HOSER, 2013 LSIDurn:Isid:zoobank.org:act:777A957D-0E5B-4261-926E-CC70CA6D1752

Type Species: *Ramphotyphlops silvia* Ingram and Covacevich, 1993.

Diagnosis: Silvatyphlops Hoser, 2013 is separated from all other Australian Blind Snakes by the following suite of characters: 20 mid body scale rows: nasal cleft visible from above, the nasal cleft does not completely divide the nasal scale, extending from near the rostral scale to the second upper labial scale; snout is rounded from above and in profile. The snake is of very small size and slender build, being very thread like and perhaps Australia's smallest species, the genus being monotypic for the species taxon A. (Silvatyphlops) silvia. Colouration is shiny black above, white below, with jagged, very sharply delineated junction between upper and lower colours. In some specimens the lateral edges of the scales appear pale, creating 11 broad black stripes. Distribution: Known only from a narrow band of white coastal sands between Fraser Island and

Noosa in south-east Queensland. They are known to inhabit rainforests, woodlands, heaths, sheltering in sand under logs and leaf litter (Wilson, 2005).

Etymology: Named in honour of Tony Silva an expert in aviculture and parrots in particular in recognition for his largely unrecognized work in captive breeding birds and conservation in general. He did a long prison term after blowing the whistle on corruption within the USA government and sections of aviculture in the USA, having faced a series of trumped-up charges.

Content: *Silvatyphlops silvia* (Ingram and Covacevich, 1993) (monotypic).

GENUS BUCKLEYTYPHLOPS HOSER, 2013 LSIDurn:lsid:zoobank.org:act:E40D2449-1D12-4A08-A252-12809B3798F2

Type species: *Ramphotyphlops aspina* Couper, Covacevich and Wilson, 1998.

Diagnosis: Buckleytyphlops Hoser, 2013 is readily separated from all other Australian Blind Snakes by the following suite of characters: Most notably a lack of a caudal spine. It is further distinguished from other Australian Blind Snakes by the following characters combined: 18 midbody scale rows; 403-437 ventrals; the snout is bluntly rounded from above, rounded and flattened laterally; rostral elongate from above; nasal not completely divided by nasal cleft, clearly visible from above and joining second supralabial below. Distribution: Only three specimens are recorded, two from near Barcaldine in central Queensland, Australia on the boundary of open forest on heavy red soils of desert uplands and treeless grasslands of Mitchell Grass downs (B. aspina) and near Julia Creek, north central Queensland on rocky grassland (B. sincerus

Étymology: Named in honour of Robert (Bob) Buckley a well-known herpetologist of Herberton in North Queensland, who was one of the first people in Australia to breed large numbers of Green Pythons (*Chondropython viridis*). Refer to Hoser (2013a) and Hoser (1996) for extensive details.

Content: *Buckleytyphlops aspina* (Couper, Covacevich and Wilson, 1998) (type species); *B. sincerus sp. nov.* (this paper).

GENUS SHEATYPHLOPS HOSER, 2013 LSIDurn:Isid:zoobank.org:act:655C2AD1-D72D-4482-BC3A-074803C7A7DB

Type species: *Typhlops batillus* Waite, 1894. **Diagnosis:** *Sheatyphlops* Hoser, 2013 is separated from all other Australian Blind Snakes by the following suite of characters: 24 midbody scale rows, with a bullet-shaped head, the nasal cleft is contacting the second labial.

The genus is monotypic for the species *Anilios* (*Sheatyphlops*) *batillus* Waite, 1894.

Distribution: Known only from the holotype of the type species, ostensibly collected at Wagga Wagga,

sp. nov.).



Selwyn Ranges district habitat for *Suewitttyphlops romani sp. nov.* and other endemic species in north-west Queensland, Australia.



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New South Wales in the 1800's, since registered at the Australian Museum, Sydney, Australia with the specimen number R42756.

Comment: There is a possibility the taxon may be extinct, due to the intense habitat degradation in the area over the past 200 years. There is a possibility that the specimen is not even from Wagga Wagga in New South Wales, Australia.

While I would recommend that the New South Wales National Parks and Wildlife Service (NPWS), do an audit of the region in order to find any specimens, I note that as an entity, this incredibly corrupt and self-serving government department has no interest in wildlife conservation whatsoever and so, the conservation status of the taxon is likely to remain unknown for the foreseeable future!

In fact if the department were abolished, private individuals may take up the search for the species, which is something no one will attempt at present for fear of prosecution or jail for the heinous crime of "interfere with wildlife".

This is a serious and jailable criminal charge only ever laid in Australia on people with a genuine interest in wildlife and who conduct valuable research, rather than being enforced on the ratbag individuals who go out and kill wildlife in cold blood.

Etymology: *Sheatyphlops* Hoser, 2013 is named in honour of Glenn Shea of Sydney, New South Wales, Australia, the final editor of the reptile journal *Herpetofauna* in recognition of his lifelong interest in reptiles, most notably skinks of the genus *Tiliqua*. Refer to Hoser (2013a) for details.

Unfortunately Shea has also engaged in multiple egregious acts of taxonomic vandalism over some decades (details in Hoser 2023, 2024b).

He was also one of the leaders trying to have the names of Wells and Wellington (1984, 1985) formally erased from the scientific record in 1987 (Shea 1987).

That attempt, via an application to the International Commission of Zoological Nomenclature (ICZN) (via Shea 1987) failed in 1991 (ICZN 1991).

GENUS SIVADICTUS WELLS AND WELLINGTON, 1984

Type species: Anilios nigrescens Gray, 1845.

Diagnosis: The five species, being *S. nigrescens*, *S. reginae*, *S. altmani sp. nov.*, *S. graysoni sp. nov.* and *S. greatstinkofaustralia sp. nov.*, comprise the entirety of the genus *Sivadictus* Wells and Wellington, 1985. *Sivadictus* as a genus is separated from all other Blind Snakes by the following suite of characters: Purplish pink brown to nearly black above, cream, yellow or pinkish below. Snout is rounded from above and in profile. Nasal cleft is long, joining the second supralabial or the suture between the first and second labials, projecting forward and upwards to partially divide the nasal, visible from above. Rostral is large, oval or elliptical, sometimes horseshoe shaped, sometimes almost rectangular and if so, with a curved

upper edge, usually much longer than broad. 22 mid body scale rows. Body diameter is 35-60 times in its length; the tail terminates in a spine.

The genus *Sivadictus* is separated from the genus *Ackytyphlops* Hoser, 2013 by the fact that the nasal cleft does not completely divide the nasal scale, extending from near the rostral scale to the first upper labial scale; as opposed to the second upper labial scale or suture between the first and second in genus *Ackytyphlops* Hoser, 2013. Adults of the genus *Sivadictus* are pinkish, pinkish-purple, or purplish brown as opposed to greyish brown in *Ackytyphlops* Hoser, 2013.

In the genus *Sivadictus* the ventral surfaces are pinkish white with a weak ragged junction between the upper and lower colours or otherwise defined by lighter scales with dark centres as opposed to an evenly merging darker upper and lighter lower colouration in *Ackytyphlops* Hoser, 2013.

Distribution: Coast, ranges, nearby slopes and adjacent plains of eastern Australia, south of the tropic of Capricorn and not including Tasmania and South Australia.

Etymology: From Wells and Wellington (1984):

"The name Sivadictus means devoted to destruction and restoration."

This information was inadvertently omitted from Hoser (2013a).

Content: *Sivadictus nigrescens* (Gray, 1845) (type species), *S. reginae* (Boulenger, 1889), *S. altmani sp. nov.*, *S. graysoni sp. nov.* and *S. greatstinkofaustralia sp. nov.*.

GENUS ACKYTYPHLOPS HOSER, 2013 LSIDurn:Isid:zoobank.org:act:CA41F291-BEEE-4549-8C7D-B73D3E029279

Type species: *Typhlops polygrammicus* Schlegel, 1839.

Diagnosis: The five species, being S. nigrescens, S. reginae, S. altmani sp. nov., S. graysoni sp. nov. and S. greatstinkofaustralia sp. nov., comprise the entirety of the genus Sivadictus Wells and Wellington, 1985. Sivadictus as a genus is separated from all other Blind Snakes by the following suite of characters: Purplish pink-brown to nearly black above, cream, yellow or pinkish below. Snout is rounded from above and in profile. Nasal cleft is long, joining the second supralabial or the suture between the first and second labials, projecting forward and upwards to partially divide the nasal, visible from above. Rostral is large, oval or elliptical, sometimes horseshoe shaped, sometimes almost rectangular and if so, with a curved upper edge, usually much longer than broad. 22 mid body scale rows. Body diameter is 35-60 times in its length; the tail terminates in a spine.

The genus *Sivadictus* is separated from the genus *Ackytyphlops* Hoser, 2013 by the fact that the nasal cleft does not completely divide the nasal scale, extending from near the rostral scale to the first

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upper labial scale; as opposed to the second upper labial scale or suture between the first and second in genus *Ackytyphlops* Hoser, 2013. Adults of the genus *Sivadictus* are pinkish, pinkish-purple, or purplish brown as opposed to greyish brown in *Ackytyphlops* Hoser, 2013. In the genus *Sivadictus* the ventral surfaces are pinkish white with a weak ragged junction between the upper and lower colours or otherwise defined by lighter scales with dark centres as opposed to an evenly merging darker upper and lighter lower colouration in *Ackytyphlops* Hoser, 2013.

Comment: The name *Pseudotyphlops* Fitzinger, 1843 as a genus name for the taxon *polygrammicus* is not available as it was pre-occupied for another taxon in the family Uropeltidae, namely *Pseudotyphlops philippinus* Müller, 1832, the genus name first proposed by Schlegel in 1839.

The illegally coined name *Sundatyphlops* Hedges *et al.* 2014 is a junior objective synonym for *Ackytyphlops* Hoser, 2013 and therefore should never be used as correct.

Peter Uetz, controlled as a sidekick of Wolfgang Wüster has been aware of this fact since 2013 and 2014 and yet as of 2025 persists in falsely claiming on his website "The Reptile Database" that *Sundatyphlops* Hedges *et al.* 2014 is the first and only available ICZN name for the *Typhlops polygrammicus* Schlegel, 1839, species group.

Peter Uetz is notorious for running false narratives on his website.

He recently deleted over 1,000 names and papers of Russian authors from his "The Reptile Database" in protest over the Ukraine war. His "The Reptile Database" is explicitly not ICZN

Code compliant and he has published material on "The Reptile Database" explicitly calling for the destruction of the ICZN and the governing code of the *International Code of Zoological Nomenclature* (Ride *et al.* 1999).

His "The Reptile Database" has been set up for and is run as, a vehicle to usurp the role and authority of the International Commission of Zoological Nomenclature (ICZN).

Etymology: *Ackytyphlops* Hoser, 2013 was named in honour of a family pet dog, an Akita, named *Acanthophis* (in recognition of the elapid snake), whom we called Acky for short. The dog successfully guarded the Snakebusters facility for about two years before an illegal theft by officers of Manningham Council, who unlawfully entered our locked property, where they then kidnapped the dog in 2004. This theft of the dog in revenge for their dog control and bylaws officer, Mike Clark being named as corrupt in the book *Victoria Police Corruption-2*, (Hoser, 2009), in a case where he committed perjury in legal proceedings in 1994, where he made a written statement in the form of a sworn court document, later proven to be false by the Optus Phone company. It should be noted also, that I had never had prior adverse dealings with this man, Mike Clark and had merely detailed his dishonesty and corruption in the book in the public interest.

At the Manningham Council dog pound and works depot in Blackburn Road North, corrupt council officers, under the direction of the notorious Chief Executive Officer (CEO) John Bennie had the dog tied to a pole and then bashed with another metal pole, resulting in permanent and irreparable head and brain damage as well as injuries on most other parts of the dog's body.

A council officer outraged at the extreme act of cruelty contacted our family and advised us that the dog had been kidnapped by council officers and after a series of denials by the officers that they had illegally taken the dog or even had the dog, the council officers admitted that they had taken the dog and injured it. The injuries to the dog were so severe that the dog did not recover and so had to be euthanized. I make no apologies for naming a reptile subgenus in

honour of a loyal animal.

See also for the etymology of *Sloppytyphlops iancooki sp. nov.* in this paper.

Content: Ackytyphlops polygrammicus (Schlegel, 1839) (type species), *A. brongersmai* (Hahn, 1980), *A. elberti* (Roux, 1911), *A. erycinus* (Werner, 1901), *A. florensis* (Boulenger, 1887), *A gedyei sp. nov.* (this paper), *A. robertsi* (Couper, Covacevich and Wilson, 1998), *A. torresianus* (Boulenger, 1889), *A. undecimlineatus* (Hahn, 1980).

GENUS MAXHOSERUS HOSER, 2012

Type species: *Eryx braminus* Daudin, 1803 (Known in most contemporary texts as *Ramphotyphlops braminus* or *Typlops braminus*).

Diagnosis: Maxhoserus gen. nov. is separated from all other Blind Snakes by the following suite of characters: Rostral narrow, the upper portion one third the width of the head, not extending quite to the level of the eyes; nostril between two nasals, the anterior (lower) of which extends to the upper surface of the head and is in contact inferiorly with the preocular; prefrontal nearly as large as the ocular, in contact with the second and third labials; eyes distinct; upper head scales are a little larger than the scales on the body; four upper labials; diameter of body is 35-55 times in the total length; tail is as long as or a little longer than broad, ending in a spine. 20 rows of scales around the body. Brown to blackish above, lighter inferiorly; the snout, anal region and the tail is usually whitish. Distribution: Boulenger 1893, reported the species "braminus" as being native to South Asia, the Islands of the Indian Ocean and Africa south of the Equator. However more recent records give the species a global range including Australia. Maxhoserus braminus is the only species of snake known to be pathenogenetic. The other species in this genus believed to be most closely related to Maxhoserus

braminus is *M. pammeces* Günther, 1864 and it is native to India, giving a good indication of the geographical origins of the genus.

Comment: *Indotyphlops* Hedges *et al.*, 2014, with type species: *Typhlops pammeces* Günther 1864 is an illegally coined junior synonym of *Maxhoserus* Hoser, 2012 and should not be used as correct.

Likewise, *Virgotyphlops* Wallach 2020 and 2021 is yet another illegally coined junior objective synonym of *Maxhoserus* Hoser, 2012, so if a dual nomenclature won't screw things up, a three way one will!

Refer to earlier comments about the Wolfgang Wüster / Adam Britton criminal gang and their war against the International Commission of Zoological Nomenclature (ICZN) earlier in this paper.

Etymology: Named in honour of my cousin Max Hoser of Liverpool and Campbelltown, New South Wales, Australia for various contributions to herpetology in the 1970's and 1980's.

Content: *Maxhoserus braminus* (Daudin, 1803), *M. conradi* (Peters, 1874), *M. jerdoni* (Boulenger, 1890), *M. khoratensis* (Taylor, 1962), *M. lankaensis* (Taylor, 1947), *M. leucomelas* (Boulenger, 1890), *M. malcolmi* (Taylor, 1947), *M. pammeces* (Günther, 1864), *M. tenebrarum* (Taylor, 1947), *M. veddae* (Taylor, 1947) and *M. violaceus* (Taylor, 1947).

CLARIFICATIONS AND CORRECTIONS TO SPELLINGS OF PREVIOUS BLINDSNAKE NAMES AND ZOOBANK REGISTRATIONS

In the paper Hoser (2012d), the genus name *Crottytyphlops* Hoser, 2012 is spelt correctly 15 times, including in the Abstract keywords and the title for the new genus at the description.

Within the description itself the spelling "*Crottyphlops*" is used once.

That was a typographical error.

As first reviser (this paper) I confirm that the correct genus name is *Crottytyphlops.*

As of now (end April 2025), the Zoobank listing carries the correct name and spelling of "*Crottytyphlops* Hoser, 2012"

Also in the paper Hoser (2012d), the genus name *Freudtyphlops* Hoser, 2012 is spelt correctly 10 times, including in the Abstract keywords and the title for the new genus at the description.

Within the description itself the spelling *Fredutyphlops*" is used once.

That was a typographical error.

As first reviser (this paper) I confirm that the correct genus name is *Freudtyphlops*.

As of now (end April 2025), the Zoobank listing carries the name and spelling of "*Freudtyphlops* Hoser, 2012".

To make it 100 percent clear, the correct genus names are as follows:

Crottytyphlops Hoser, 2012 and

Freudtyphlops Hoser, 2012.

The tribe Maxhoserini Hoser, 2012, was inadvertently listed in Zoobank as a genus.

That error was also corrected in 2025. In the paper of Hoser (2012d) it was correctly listed as a tribe.

I thank Keith Edkins, an entomologist from the UK, for his drawing these errors to my attention (typographical and Zoobank listings) on 7 March 2025 enabling them to be corrected either prior to the publication of this paper and/or by virtue of the publication of this paper.

Richard Pyle and Thomas Pape at the ICZN (in one capacity or other) are also thanked for confirming the best way to deal with the preceding issue.

ILLEGALLY COINED GENUS BLINDSNAKE NAMES BY WOLFGANG WÜSTER AND HIS GANG OF THIEVES.

A criminal gang, led by the notorious Wolfgang Wüster of Wales, masquerading as scientists have for some decades been in a state of war with the International Commission for Zoological Nomenclature (ICZN).

Their published aim is the destruction of the ICZN via themselves disobeying the rules of science and the *International Code of Zoological Nomenclature* (Ride *et al.* 1999) a rule book that governs scientific communications and naming of organisms.

They do this by illegally renaming species, genera and families of reptiles and other animals in breach of the code and copyright laws. They then hack and sabotage worldwide databases and the like to get others to use their names as "correct" ICZN names, while the Wüster gang are fully aware that their illegally coined names are not correct.

As of 2025, over 130 entities have had illegally coined synonyms created by the Wüster gang and peddled globally as correct.

Over 400 members of the Wüster gang are listed by name in the Wüster gang terrorism memo, available online in their "paper" Wüster *et al.* (2021).

When not engaging in egregious taxonomic vandalism the Wüster gang are engaged in hard core criminal acts.

The examples are too numerous to publish here and are so outrageous as to be generally described as "unbelievable".

This unbelievability of what they do is one of the reasons why that as a group, they continue to get away with it.

These unbelievable acts include Don Broadley and Bill Branch kidnapping young black boys in Africa for anal sex. As if that is not bad enough, another highprofile member of the Wüster gang is Adam Britton. In 2023 he pled guilty to anally raping people's pet dogs that he kidnapped.

He posted his crimes to others in the Wüster gang on the dark web. Britton is now in jail till at least 2028

and was only arrested and charged after falling foul of a more powerful member of the same Wüster gang whom he operated with as a partner for many years. Another member of the gang in Australia whose name has been suppressed by the courts was found in civil courts to have raped multiple women over 1,000 times, engaged in acts of animal abuse and cruelty and other serious crimes against very young children. As he is an ex-police officer, the police have not followed the instructions of the County Court judge and charged the man, so he remains free and has come to the attention of the courts again for alleged crimes against women, who have successfully got restraining orders against him.

Of course those court orders have been disobeyed! Another serial trademark infringer in the group pled guilty to shooting aboriginals, which is itself unusual in Australia. Usually people who shoot and kill aboriginals get bravery awards.

See for example the etymologies in this paper for *Sloppytyphlops fildesi sp. nov.*, *S. dhuae sp. nov.*, *S. johnpati sp. nov.* and *S. murderingpoliceorum sp. nov.* in this paper.

Meanwhile another member of the Wüster gang, Jamie Benbow, of Bendigo, Victoria, has done stints in jail after being found guilty in the courts of crimes of violence, stalking, harassment and similar as well as dealing in commercial quantities of illegal drugs. In case it was missed, Benbow also ran over someone while high on Ice (a toxic illicit drug).

Better known illegally coined synonym names by the Wolfgang Wüster gang are *Malayopython* Reynolds, Niemiller and Revell, 2013 which is an illegal duplicate for *Broghammerus* Hoser, 2004, *Leiopython meridionalis* Schleip, 2014 as an illegal duplicate for *Leiopython hoserae* Hoser, 2000 and *Afronaja* Wallach Wüster and Broadley, 2009 which is an illegal duplicate for *Spracklandus* Hoser, 2009. As this paper is about Blind Snakes, it is relevant that

As this paper is about Blind Snakes, it is relevant that the illegally coined Blindsnake names be presented here for readers so that they know the correct ICZN names for the relevant entities and avoid using the illegally coined ones.

These illegally coined Blind Snake genus names are as follows:

Amerotyphlops Hedges *et al.*, 2014 is an illegally coined junior synonym of *Altmantyphlops* Hoser, 2012.

Antillotyphlops Hedges *et al.*, 2014 is an illegally coined junior synonym of *Mosestyphlops* Hoser, 2012.

Asiatyphylops Hedges et al., 2014 is an illegally coined junior synonym of Argyrophis Gray, 1845. Indotyphlops Hedges et al., 2014 is an illegally coined junior synonym of Maxhoserus Hoser, 2012.

Virgotyphlops Wallach 2020 and 2021 is yet another illegally coined junior synonym of *Maxhoserus* Hoser, 2012, so if a dual nomenclature won't screw things up, a three way one will!

Madatyphlops Hedges *et al.*, 2014 is an illegally coined junior synonym of *Ronhoserus* Hoser, 2012.

Malayotyphlops Hedges *et al.*, 2014 is an illegally coined junior synonym of *Katrinahosertyphlops* Hoser, 2012.

Sundatyphlops Hedges *et al.*, 2014 is an illegally coined junior synonym of *Ackytyphlops* Hoser, 2012.

Xerotyphlops Hedges *et al.*, 2014 is an illegally coined junior synonym of *Lenhosertyphlops* Hoser, 2012.

The names of Gray and Hoser should be used as the correct ICZN scientific names.

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