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## Australasian Journal of Herpetology

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**Bulls-eye for Bog-Eye taxonomy. There are four species of extant Shingleback Lizards and two are finally getting formally named!**

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**ABSTRACT**

The iconic Australian Shingleback Lizard, *Trachydosaurus rugosus* Gray, 1825, type locality of King George's Sound, south-west Western Australia also locally known as the "Bog Eye" has been treated by most herpetologists as a single wide-ranging Australian taxon.

Found across drier parts of the southern third of the continent, extending north in the far east and far west, these lizards vary significantly in colour and form by locality.

In addition to the type form, scientific names have been coined for three other variants, which have variously been treated by herpetologists as either conspecific (e.g. Hoser 1989), with up to 4 subspecies (e.g. Cogger 2014 and Brown 2014), or as a number of full species (e.g. Wells and Wellington, 1985).

A recent molecular study of Ansari *et al.* (2019), effectively repeated by Brown *et al.* (2023) has confirmed that putative *Trachydosaurus rugosus* Gray, 1825 across Australia are in fact a complex of four species.

Unfortunately, only one of these, *Trachydosaurus asper* Gray, 1845, with a type locality of Adelaide, South Australia conforms to a population of a different species to *Trachydosaurus rugosus* Gray, 1825.

Two other putative taxa carry names, being *Tiliqua rugosus konowi* Mertens, 1958 from Rottnest Island, Western Australia and *Tiliqua rugosus palarra* Shea, 2000, with a type locality of Amala Station rubbish tip, Shark Bay area, Western Australia.

However, based on the molecular studies of both Ansari *et al.* (2019) and Brown *et al.* (2023) these are in effect synonyms of *Trachydosaurus rugosus*.

They are not even sufficiently divergent to warrant being recognised as subspecies.

The two divergent forms that are divergent at the species level and until now are unnamed are the distinctive west Victorian / south-east South Australian form herein formally named as *Trachydosaurus adelynhoserae* sp. nov. and the unusual form from the Nullarbor Plain near the coast around the South Australian and Western Australian border, herein formally named as *Trachydosaurus jackyhoserae* sp. nov..

With Shingleback lizards extremely popular in the pet trade and regularly unlawfully smuggled outside of Australia on a large scale (Hoser 1993, 1996) it is important that the forms be properly recognised to aid scientific inquiries, conservation and law enforcement actions for the reasons given in Hoser (2007, 2019a-b).

**Keywords:** Lizards; Shingleback; Bog Eye; Stumpy tail; *Trachydosaurus*; *Tiliqua*; *rugosus*; *aspera*; *konowi*; *palarra*; taxonomy; Australia; nomenclature; synonyms; reclassification; new species; *adelynhoserae*; *jackyhoserae*.

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## INTRODUCTION

The iconic Australian Shingleback Lizard, *Trachydosaurus rugosus* Gray, 1825, type locality of King George's Sound, south-west Western Australia also locally known as the "Bog Eye" or "stumpy tail" has been treated by most herpetologists as a single wide-ranging Australian taxon.

They are found across drier parts of the southern third of the continent, extending north in the far east and far west.

These lizards vary significantly in colour and form by locality.

Most Australian herpetologists are very familiar with these lizards and what they look like.

Readers unfamiliar with these common and widespread lizards may simply consult photo sharing websites like

<http://www.flickr.com>

or

<https://www.inaturalist.org>

and view the hundreds of available photos from all parts of the Australian distribution.

In addition to the type form from with a type locality of King George's Sound, south-west Western Australia, scientific names have been coined for three other variants, which have variously been treated by herpetologists as either conspecific (e.g. Hoser 1989), with up to 4 subspecies (e.g. Cogger 2014 and Brown 2014), or as a number of full species (e.g. Wells and Wellington, 1985).

The most common classifications treat the putative species as one, but with four widely recognized subspecies (e.g. Cogger 2014 and Brown 2014).

There have been a number of recently published molecular studies involving these lizards, including that of Ansari *et al.* (2019), which was essentially duplicated by Brown *et al.* (2013).

That study in particular confirmed the following important facts.

That is, that putative *Trachydosaurus rugosus* Gray, 1825, with a type locality of King George's Sound in Western Australia, and occurring across Australia as currently recognised is in fact a complex of four species.

Unfortunately, only one of these, *Trachydosaurus asper* Gray, 1845, with a type locality of Adelaide, South Australia conforms to a population of a different species to *Trachydosaurus rugosus* Gray, 1825.

The other two putative taxa that carry names, namely *Tiliqua rugosus konowi* Mertens, 1958 from Rottnest Island, Western Australia and *Tiliqua rugosus palarra* Shea, 2000, with a type locality of Amala Station rubbish tip, Shark Bay area, Western Australia are both in effect synonyms of *Trachydosaurus rugosus* and not even sufficiently divergent to warrant being recognised as subspecies.

They are best described as colour variants in a widespread species noted for having locally differently coloured lizards.

Most of the distribution of Shingleback lizards is occupied by the ranges of a so-called western form as in *T. rugosus* that is found south and west of the major deserts in Western Australia, extending east to near the Western Australia and South Australian border and *T. asper* which occupies most of the range in South Australia from the Nullarbor in the west, across the State, into New South Wales and southern Queensland.

East of the southern Flinders Ranges and Adelaide Hills, and in an area extending into Victoria and south of the Murray River is a distinctive form, divergent at the species level and to date unnamed. On the Nullarbor, near the Western Australian / South Australian border and extending a short distance either side (just over 150 km each way from the border), is another distinctive and divergent form, also to date unnamed.

Ansari *et al.* (2019) found putative *T. rugosus* and *T. asper* to have diverged from each other about 2.7 MYA.

Within each of the following, Ansari *et al.* (2019) found that the Nullarbor form diverged from type *T. rugosus* about 1.5 MYA and likewise for the Victorian form from the type of *T. asper*.

A 1.5 MYA divergence for a lizard is usually treated as species-level divergence and I have no issue at all with this.

Inspection of numerous lizards from across the range of putative *T. rugosus* confirms that the Victorian and Nullarbor forms are diagnostically different to the other two taxa and so the purpose of this paper is to name them as new species.

These are formally named as follows:

The distinctive west Victorian / south-east South Australian form is

herein formally named as *Trachydosaurus adelynhoserae* sp. nov..

The unusual form from the Nullarbor Plain near the coast around the South Australian and Western Australian border, is herein formally named as *Trachydosaurus jackyhoserae* sp. nov..

With Shingleback lizards extremely popular in the pet trade and regularly unlawfully smuggled outside of Australia on a large scale (Hoser 1993, 1996) it is important that the forms be properly recognised to aid scientific inquiries, conservation and law enforcement actions for the reasons given in Hoser (2007, 2019a-b).

## MATERIALS, METHODS AND RESULTS

All the relevant named forms and unnamed forms were very familiar to me as I had been dealing with these lizards for over 50 years and kept many in captivity for decades.

For the purposes of this paper and the formal exercise of naming the two unnamed species, I embarked on a sweep of available specimens of the two relevant forms, combined with an overview look at numerous specimens of the nominate taxa *T. rugosus* and *T. asper*.

The purpose of this was to identify consistent differences between the forms allowing them to be diagnosed as separate taxa.

Given a 1.5 MYA divergence established by Ansari *et al.* (2019), the decision to describe the relevant taxa as full species was effectively already made up and would only be changed if compelling evidence to the contrary emerged, which did not happen.

Obviously, I made inquiries as to pre-existing names, as in synonyms, to make sure that neither form had been previously named, including by reviewing the important publications of Cogger *et al.* (1983) and Wells and Wellington (1984, 1985).

As already mentioned, besides, *T. rugosus* and *T. asper*, the only other available names for Shinglebacks, applied exclusively to far west Australian specimens and so could not be used as identifiers for the hitherto unnamed forms.

Relevant literature was consulted, including the following: Ansari *et al.* (2019), Brennan *et al.* (2024), Brown (2014), Brown *et al.* (2023), Cogger (2014), Cogger *et al.* (1983), Duméril and Bibron (1839), Gardner *et al.* (2007), Gray (1825, 1826, 1839, 1845), Haacke (1885), Hallermann (2020), Hoser (1989), ICZN (2012), Lucas and Frost (1894), Maryan *et al.* (2024), Mertens (1958), Mitchell (1950), Ride *et al.* (1999), Sare *et al.* (1990), Shea (1990, 2000), Smith (1834), Storr, Smith and Johnstone (1999), Swan *et al.* (2017), Switak (1997), Thorn *et al.* (2019, 2023), Wagler (1830, 1833), While *et al.* (2015), Wilson and Swan (2010) and sources cited therein.

The result herein is the decision to formally name the two species of Shingleback lizard as already indicated.

The Victorian / Southeast South Australian form is herein formally named as *Trachydosaurus adelynhoserae* sp. nov. and the central south Nullarbor form is herein formally named as *Trachydosaurus jackyhoserae* sp. nov..

Brown (2014) on pages 469 and 470 has photos of specimens of all four previously formally named forms, identified by the relevant names as well as the form herein identified as *Trachydosaurus adelynhoserae* sp. nov. which he identified on page 469 as "*Tiliqua rugosus aspera*".

Photos of *Trachydosaurus jackyhoserae* sp. nov. are available for download on "Inaturalist" at <https://www.inaturalist.org> (listed as "*Tiliqua rugosus*").

*T. jackyhoserae* sp. nov. is depicted in life online at: <https://www.inaturalist.org/observations/103334206>

from Nullarbor, South Australia, Australia, photographed by Scott Rolph, and <https://www.inaturalist.org/observations/177625624>

from Nullarbor, South Australia, Australia, photographed by Steve Paradox, and <https://www.inaturalist.org/observations/186834480>

from Unincorp, South Australia, Australia, photographed by "beneficiallime", and

<https://www.inaturalist.org/observations/201887621>

being a deceased juvenile specimen from Bunda View Campground, Nullarbor Plain, South Australia, Australia, photographed by Mike and Cathy Beamish.

## 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 21 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 male 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 lizards not including pre-sloughing animals, 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 (in all four species), that is females usually have a longer body and a proportionately smaller head as well as other quantifiable differences.

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.

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.

Because of the depth of knowledge about these relatively common lizards both generally and in the herpetological literature, as well as numerous detailed studies of various populations, the descriptions herein are published without such superfluous information.

Other herpetologists will not have issues separating out the four relevant species on the basis of the information within this paper. However, what is most important is that they are properly identified from here onwards, as it is self-evident that they will have different ecologies and conservation requirements.

Hence a study on one particular species may not be able to have the results simply transposed to another as may have been inadvertently done prior.

Older studies on given populations should have their results read only in the context of the relevant species involved and not necessarily all four species as identified within this paper.

#### **TRACHYDOSAURUS ADELYNHOSERAE SP. NOV.**

**LSID**Durn:lsid:zoobank.org:act:B7A028D3-3658-4BE3-852B-5918E32C7CAB

**Holotype:** A preserved specimen at the South Australian Museum, Adelaide, South Australia, Australia, specimen number R22772 collected from Bucks Lake Game Reserve, South Australia, Australia, Latitude -37.92 S., Longitude 130.4 E.

This government-owned facility allows access to its holdings.

**Paratypes:** Two preserved specimens at the South Australian Museum, Adelaide, South Australia, Australia, being specimen number R22773 collected from Bucks Lake Game Reserve, South Australia, Australia, Latitude -37.92 S., Longitude 130.4 E., and specimen number R21484 collected from Tea Tree Crossing, Coorong National Park, South Australia, Australia, Latitude -36.18 S., Longitude 139.65 E.

**Diagnosis:** The Shingleback lizards of Australia form within two main clades.

These are the western one including *Trachydosaurus rugosus* Gray, 1825, with a type locality of King George's Sound in Western Australia and occupying most of the southern third of that State and *T. jackyhoseræ* sp. nov. occurring on the southern coastal strip of the Nullarbor to about 150 km either side of the Western Australia / South

Australia State border.

The so called eastern clade includes *Trachydosaurus asper* Gray, 1845, with a type locality of Adelaide, South Australia and found from the eastern Nullarbor in South Australia, throughout the southern half of the state of South Australia, extending into New South Wales, to occupy most parts of that state except for the wetter eastern section, generally east of the Great Dividing Range, and also into most parts of southern Queensland, except the wetter coastal regions. Also within this eastern clade is *T. adelynhoseræ* sp. nov. which is essentially found south of the Murray River in Victoria and nearby South Australia. It is found north and west of the Murray River near the lower reaches, where it is separated from *T. asper* by the Adelaide Hills. The distribution of both *T. asper* and *T. adelynhoseræ* sp. nov. appears to meet on the east side of the lower Flinders Ranges but are otherwise separated by the Murray River floodplains in Victoria and adjacent parts of the Riverland in South Australia.

The four preceding species are separated from one another by the following unique combinations of characters:

*T. rugosus* including the putative subspecies *Tiliqua rugosus konowi* Mertens, 1958 from Rottnest Island, Western Australia and *Tiliqua rugosus palarra* Shea, 2000, with a type locality of Amala Station rubbish tip, Shark Bay area, Western Australia is separated from the other three species by having a large ear opening, irregular pale bands that widen on the flanks and a pale head, flushed with white, yellow, orange or red. While banding is reduced in the two putative subspecies, in particular putative *Tiliqua rugosus palarra* Shea, 2000, it remains present and obviously widening at the flanks.

*T. asper* is separated from the other three species by having a relatively small ear opening, a very robust build (significantly more robust than *T. rugosus*), a short thick and bulbous tail (versus quite elongate in *T. rugosus*), wrinkled scales and not having a pale head. That is the head is of the same colour as the body. Light markings on the upper body is not in the form of bands.

*T. jackyhoseræ* sp. nov. is superficially similar to *T. asper* in that it is stocky in build like that taxon and similar in colour dorsally. *T. jackyhoseræ* sp. nov. does have a large ear opening (in contrast to the smaller one in *T. asper* and *T. adelynhoseræ* sp. nov.), a smaller head size (for both sexes) than seen in *T. asper* (and *T. adelynhoseræ* sp. nov.) and a tail intermediate in shape and length between both *T. asper* and *T. rugosus* but not at all bulbous as seen in *T. asper* or *T. adelynhoseræ* sp. nov.. The tail is not as obviously flattened as in the other three species.

The dorsal colouration of *T. jackyhoseræ* sp. nov. is brown or greyish brown all over, but every scale is tipped with, or infused with whitish or yellow colour, giving the lizard a distinctive appearance of being like brown dirt with white gravel scattered on the surface. There is no indication of the crossbands as seen in *T. rugosus*. The head of *T. jackyhoseræ* sp. nov. is the same colour as the body, or even slightly darker in colour (in contrast to *T. rugosus*), this effect being due to the lower amount of white or yellow on the scales of the upper surfaces of the head.

There is increasing amounts of whitish yellow on the scales of the lower flanks, but no indication of cross-bands on the lizard.

*T. adelynhoseræ* sp. nov. is separated from the three preceding species by its relatively small ear hole (in common with *T. aspera*), a bulbous tail like seen in *T. aspera*, but one that is more noticeably flattened in shape, versus not so much in *T. aspera*, this being more noticeable in males, a head that is usually much darker than the body (versus similar colour or sometimes lighter in *T. rugosus*), a dorsal colouration usually consisting of reasonably well-defined bands, except in aged specimens (which retain traces of them, or have them very faded), the lighter cross bands not obviously widening on the lower flanks (in contrast to both *T. rugosus* or *T. jackyhoseræ* sp. nov. the latter that also has more light on the lower flanks).

The four preceding species are all so-called Shinglebacks and the entirety of the genus

*Trachydosaurus* Gray, 1825, type species *Trachydosaurus rugosus* Gray, 1825.

They are instantly recognised as distinct from all other species of Australian skink by their pine-cone like scales, especially on the tail and general appearance, caused by grossly enlarged bluntly rugose dorsal scales, a very short blunt ended tail, that may be slightly to very flattened in appearance (depending also on species, gender within species and amount of fat stored in it at the time), being only 20-25 per cent of the body length, head shields fragmented with

little obvious symmetry, except for the rostral, labials and the large interparietal shield that separates the interparietals. There are no anterior lobules in the ear; third and fourth toes are subequal in length or the third is slightly longer; subdigital lamellae that are divided or at least divided basally.

Photos of all relevant species and putative subspecies are depicted in Brown (2014) on pages 469 and 470, excluding for *T. jackyhoseræ* sp. nov..

*T. adelynhoseræ* sp. nov. is depicted in life online at:

<https://www.flickr.com/photos/91908502@N03/>

from Edenhope Victoria, Australia, photographed by "Spiranthes2013" and,

<https://www.flickr.com/photos/88708273@N03/22172408423/>

from Murray Sunset Region, north-western Victoria, Australia, photographed by Matt Clancy, and

<https://www.flickr.com/photos/88708273@N03/51338439961/>

from the north-west Mallee, north-western Victoria, Australia, photographed by Matt Clancy, and

<https://www.flickr.com/photos/88708273@N03/11022355863/>

from Nhill, Victoria, Australia, photographed by Matt Clancy, and

<https://www.flickr.com/photos/88708273@N03/9107527236/>

from Bendigo, Victoria, Australia, photographed by Matt Clancy, and

<https://www.flickr.com/photos/45437563@N07/42966244900/>

from Maldon, Victoria, Australia, photographed by Albert Wright, and

<https://www.flickr.com/photos/nikborrow/24243194098/>

from Little Desert, Victoria, Australia, photographed by Nik Borrow

<https://www.flickr.com/photos/euprepiosaur/50628199057/>

and

<https://www.flickr.com/photos/euprepiosaur/50628102121/>

all from Millicent, South Australia, Australia photographed by Stephen Zozaya, and

<https://www.flickr.com/photos/paulthrelfall/31778695855/>

from just below Chatauqua Peak, near Halls Gap, Victoria, Australia, photographed by Paul Threlfall, and

<https://www.flickr.com/photos/127392361@N04/25718996546/>

from Flora Hill, Bendigo, Victoria, Australia, photographed by Nick Gale, and

<https://www.flickr.com/photos/dhobern/32284540730/>

from Wyperfeld National Park, Victoria, Australia, photographed by Donald Hobern, and

<https://www.inaturalist.org/observations/154350528>

from North Ward, Yanac, Victoria, Australia, photographed by Mia Hoskin, and

<https://www.facebook.com/snakebusters/photos/pb.100057667771163.-2207520000/86979933112731/?type=3>

being an aged adult male from Sea Lake, Victoria.

*T. jackyhoseræ* sp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/103334206>

from Nullarbor, South Australia, Australia, photographed by Scott Rolph, and

<https://www.inaturalist.org/observations/177625624>

from Nullarbor, South Australia, Australia, photographed by Steve Paradox, and

<https://www.inaturalist.org/observations/186834480>

from Unincorp, South Australia, Australia, photographed by "beneficiallime", and

<https://www.inaturalist.org/observations/201887621>

being a deceased juvenile specimen from Bunda View Campground, Nullarbor Plain, South Australia, Australia, photographed by Mike and Cathy Beamish.

*T. asper* is depicted in life in Hoser (1989) on page 112 bottom and online at:

<https://www.facebook.com/snakebusters/photos/pb.100057667771163.-2207520000/86979933112727/?type=3>

and

<https://www.facebook.com/snakebusters/photos/pb.100057667771163.-2207520000/681315318627801/?type=3>

female from Morgan, South Australia.

*T. rugosus* is depicted in life online at:

[https://www.flickr.com/photos/colonel\\_007/52978411985/](https://www.flickr.com/photos/colonel_007/52978411985/)

from Cheynes Beach, Western Australia, Australia, photographed by Mark Sanders, and

[https://www.flickr.com/photos/chris\\_chafer/38823032255/](https://www.flickr.com/photos/chris_chafer/38823032255/)

from Dryandra, Western Australia, Australia, photographed by Chris Chaffer.

Putative *T. rugosus konowi* Mertens, 1958 from Rottnest Island, Western Australia, herein treated as the same taxon as nominate *T. rugosus* is depicted online at:

[https://www.flickr.com/photos/colonel\\_007/53048393531/](https://www.flickr.com/photos/colonel_007/53048393531/)

photographed by Mark Sanders.

Putative *T. rugosus palarra* Shea, 2000 from the Shark Bay area of Western Australia, herein treated as the same taxon as nominate *T. rugosus* is depicted online at:

[https://www.flickr.com/photos/gazs\\_pics/52395875116/](https://www.flickr.com/photos/gazs_pics/52395875116/)

from Shark Bay area, Western Australia, Australia, photographed by Gary Stephenson, and

<https://www.flickr.com/photos/127392361@N04/54014223161/>

from Edel Land Peninsula, Western Australia, Australia, photographed by Nick Gale, and

<https://www.flickr.com/photos/114192916@N07/54098742926/>

from Edel Land Peninsula, Western Australia, Australia, photographed by Justin Wright.

The molecular results of Ansari *et al.* (2019), effectively repeated by Brown *et al.* (2013) estimated a divergence of 1.5 MYA for *T. jackyhoseræ* sp. nov. from its nearest relative, being *T. rugosus*, and a similar 1.5 MYA divergence for *T. adelynhoseræ* sp. nov. from its nearest relative, being *T. aspera*.

**Distribution:** *T. adelynhoseræ* sp. nov. is essentially found south of the Murray River in Victoria and nearby South Australia. It is found north and west of the Murray River near the lower reaches, where it is separated from *T. asper* by the Adelaide Hills. The distribution of both *T. asper* and *T. adelynhoseræ* sp. nov. appears to meet on the east side of the lower Flinders Ranges but are otherwise separated by the Murray River floodplains in Victoria and adjacent parts of the Riverland in South Australia.

**Etymology:** *T. adelynhoseræ* sp. nov. is named in honour of my eldest daughter, Adelyn Kimberley Hoser, who as of 2025 has spent the past quarter century making significant contributions to wildlife science, conservation and education globally. Significantly both Adelyn and Jacky Indigo Hoser (my younger daughter) both asked to have the two new species of Shingleback named in their honour as they have worked with them extensively all their lives.

**TRACHYDOSAURUS JACKYHOSERAE SP. NOV.**  
**LSID**Durn:lsid:zoobank.org:act:2DC5CF91-B3A8-4D69-AEB9-B792A0CC99FF  
**Holotype:** A preserved specimen at the South Australian Museum, Adelaide, South Australia, Australia, specimen number R23074 collected from 20 km west of the Nullarbor Homestead, South Australia, Australia, Latitude -31.43 S., Longitude 130.7 E. This government-owned facility allows access to its holdings.

**Paratype:** A preserved male specimen at the South Australian Museum, Adelaide, South Australia, Australia, specimen number R23075 collected from 31 km west of Madura, Western Australia, Australia, Latitude -31.92 S., Longitude 127.32 E.

**Diagnosis:** The Shingleback lizards of Australia form within two main clades. These are the western one including *Trachydosaurus rugosus* Gray, 1825, with a type locality of King George's Sound in Western Australia and occupying most of the southern third of that State and *T. jackyhoseræ* sp. nov. occurring on the southern coastal strip of the Nullarbor to about 150 km either side of the Western Australia / South Australia State border.

The so called eastern clade includes *Trachydosaurus asper* Gray, 1845, with a type locality of Adelaide, South Australia and found from the eastern Nullarbor in South Australia, throughout the southern half of the state, extending into New South Wales, to occupy most parts of the state except for the wetter eastern section, generally east of the Great Dividing Range, and also into most parts of southern Queensland, except the wetter coastal regions. Also within this eastern clade is *T. adelynhoseræ* sp. nov. which is essentially found south of the Murray River in Victoria and nearby South Australia. It is found north and west of the Murray River near the lower reaches, where it is separated from *T. asper* by the Adelaide Hills. The distribution of both *T. asper* and *T. adelynhoseræ* sp. nov. appears to meet on the east side of the lower Flinders Ranges but are otherwise

separated by the Murray River floodplains in Victoria and adjacent parts of the Riverland in South Australia.

The four preceding species are separated from one another by the following unique combinations of characters:

*T. rugosus* including the putative subspecies *Tiliqua rugosus konowi* Mertens, 1958 from Rottnest Island, Western Australia and *Tiliqua rugosus palarra* Shea, 2000, with a type locality of Amala Station rubbish tip, Shark Bay area, Western Australia is separated from the other three species by having a large ear opening, irregular pale bands that widen on the flanks and a pale head, flushed with white, yellow, orange or red. While banding is reduced in the two putative subspecies, in particular putative *Tiliqua rugosus palarra* Shea, 2000, it remains present and obviously widening at the flanks.

*T. asper* is separated from the other three species by having a relatively small ear opening, a very robust build (significantly more robust than *T. rugosus*), a short thick and bulbous tail (versus quite elongate in *T. rugosus*), wrinkled scales and not having a pale head. That is head of the same colour as the body. Light markings on the upper body is not in the form of bands.

*T. jackyhoserae* sp. nov. is superficially similar to *T. asper* in that it is stocky in build like that taxon and similar in colour dorsally. *T. jackyhoserae* sp. nov. does have a large ear opening (in contrast to the smaller one in *T. asper* and *T. adelynhoserae* sp. nov.), a smaller head size (for both sexes) than seen in *T. asper* (and *T. adelynhoserae* sp. nov.) and a tail intermediate in shape and length between both *T. asper* and *T. rugosus* but not at all bulbous as seen in *T. asper* or *T. adelynhoserae* sp. nov.. The tail is not as obviously flattened as in the other taxa.

The dorsal colouration of *T. jackyhoserae* sp. nov. is brown or greyish brown all over, but every scale is tipped with, or infused with whitish or yellow colour, giving the lizard a distinctive appearance of being like brown dirt with white gravel scattered on the surface. There is no indication of the crossbands as seen in *T. rugosus*. The head of *T. jackyhoserae* sp. nov. is the same colour as the body, or even slightly darker in colour (in contrast to *T. rugosus*), this effect being due to the lower amount of white or yellow on the scales of the upper surfaces of the head.

There is increasing amounts of whitish yellow on the scales of the lower flanks, but no indication of cross-bands on the lizard.

*T. adelynhoserae* sp. nov. is separated from the three preceding species by its relatively small ear hole (in common with *T. aspera*), a bulbous tail like seen in *T. aspera*, but one that is more noticeably flattened in shape, versus not so in *T. aspera*, this being more noticeable in males, a head that is usually much darker than the body (versus lighter in *T. rugosus* or a similar colour in the other species), a dorsal colouration usually consisting of reasonably well-defined bands, except in aged specimens (which retain traces of them, or have them very faded), the lighter cross bands not obviously widening on the lower flanks (in contrast to both *T. rugosus* and *T. jackyhoserae* sp. nov. which has more light on the lower flanks as opposed to obvious bands).

The four preceding species are all so-called Shinglebacks and the entirety of the genus

*Trachydosaurus* Gray, 1825, type species *Trachydosaurus rugosus* Gray, 1825.

They are instantly recognised as distinct from all other species of Australian skink by their pine-cone like scales, especially on the tail and general appearance, caused by grossly enlarged bluntly rugose dorsal scales, a very short blunt ended tail, that may be slightly to very flattened in appearance (depending also on species, gender within species and amount of fat stored in it at the time), being only 20-25 per cent of the body length, head shields fragmented with little symmetry, except for the rostral, labials and the large interparietal shield that separates the interparietals. There are no anterior lobules in the ear; third and fourth toes are subequal in length or the third is slightly longer; subdigital lamellae that are divided or at least divided basally.

Photos of all relevant species and putative subspecies are depicted in Brown (2014) on pages 469 and 470, excluding for *T. jackyhoserae* sp. nov..

*T. adelynhoserae* sp. nov. is depicted in life online at: <https://www.facebook.com/snakebusters/photos/pb.100057667771163.-2207520000/86979933112731/?type=3> being an aged adult male from Sea Lake, Victoria, and <https://www.flickr.com/photos/91908502@N03/>

from Edenhope Victoria, Australia, photographed by "Spiranthes2013" and, <https://www.flickr.com/photos/88708273@N03/22172408423/> from Murray Sunset Region, north-western Victoria, Australia, photographed by Matt Clancy, and

and <https://www.flickr.com/photos/88708273@N03/51338439961/> from the north-west Mallee, north-western Victoria, Australia, photographed by Matt Clancy, and <https://www.flickr.com/photos/88708273@N03/11022355863/> from Nhill, Victoria, Australia, photographed by Matt Clancy, and <https://www.flickr.com/photos/88708273@N03/9107527236/> from Bendigo, Victoria, Australia, photographed by Matt Clancy, and <https://www.flickr.com/photos/45437563@N07/42966244900/> from Maldon, Victoria, Australia, photographed by Albert Wright, and <https://www.flickr.com/photos/nikborrow/24243194098/> from Little Desert, Victoria, Australia, photographed by Nik Borrow <https://www.flickr.com/photos/euprepiosaur/50628199057/> and

<https://www.flickr.com/photos/euprepiosaur/50628102121/> all from Millicent, South Australia, Australia photographed by Stephen Zozaya, and

<https://www.flickr.com/photos/paulthrealfall/31778695855/> from just below Chataqua Peak, near Halls Gap, Victoria, Australia, photographed by Paul Threalfall, and

<https://www.flickr.com/photos/127392361@N04/25718996546/> from Flora Hill, Bendigo, Victoria, Australia, photographed by Nick Gale, and

<https://www.flickr.com/photos/dhobern/32284540730/> from Wyperfeld National Park, Victoria, Australia, photographed by Donald Hobern, and

<https://www.inaturalist.org/observations/154350528> from North Ward, Yanac, Victoria, Australia, photographed by Mia Hoskin.

*T. jackyhoserae* sp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/103334206>

from Nullarbor, South Australia, Australia, photographed by Scott Rolph, and

<https://www.inaturalist.org/observations/177625624>

from Nullarbor, South Australia, Australia, photographed by Steve Paradox, and

<https://www.inaturalist.org/observations/186834480>

from Unincorp, South Australia, Australia, photographed by "beneficiallime", and

<https://www.inaturalist.org/observations/201887621>

being a deceased juvenile specimen from Bunda View Campground, Nullarbor Plain, South Australia, Australia, photographed by Mike and Cathy Beamish.

*T. asper* is depicted in life in Hoser (1989) on page 112 bottom and online at:

<https://www.facebook.com/snakebusters/photos/pb.100057667771163.-2207520000/869799373112727/?type=3> and

<https://www.facebook.com/snakebusters/photos/pb.100057667771163.-2207520000/681315318627801/?type=3> both images being an adult female from Morgan, South Australia.

*T. rugosus* is depicted in life online at:

[https://www.flickr.com/photos/colonel\\_007/52978411985/](https://www.flickr.com/photos/colonel_007/52978411985/)

from Cheynes Beach, Western Australia, Australia, photographed by Mark Sanders, and

[https://www.flickr.com/photos/chris\\_chafer/38823032255/](https://www.flickr.com/photos/chris_chafer/38823032255/)

from Dryandra, Western Australia, Australia, photographed by Chris Chaffer.

Putative *T. rugosus konowi* Mertens, 1958 from Rottnest Island, Western Australia, herein treated as the same taxon as nominate *T. rugosus* is depicted online at:

[https://www.flickr.com/photos/colonel\\_007/53048393531/](https://www.flickr.com/photos/colonel_007/53048393531/)

photographed by Mark Sanders.

Putative *T. rugosus palarra* Shea, 2000 from the Shark Bay area of Western Australia, herein treated as the same taxon as nominate *T. rugosus* is depicted online at:

[https://www.flickr.com/photos/gazs\\_pics/52395875116/](https://www.flickr.com/photos/gazs_pics/52395875116/)



from Shark Bay area, Western Australia, Australia, photographed by Gary Stephenson, and

<https://www.flickr.com/photos/127392361@N04/54014223161/>

from Edel Land Peninsula, Western Australia, Australia, photographed by Nick Gale, and

<https://www.flickr.com/photos/114192916@N07/54098742926/>

from Edel Land Peninsula, Western Australia, Australia, photographed by Justin Wright.

The molecular results of Ansari *et al.* (2019), effectively repeated by Brown *et al.* (2013) estimated a divergence of 1.5 MYA for *T. jackyhoserae* sp. nov. from its nearest relative, being *T. rugosus*, and a similar 1.5 MYA divergence for *T. adelynhoserae* sp. nov. from its nearest relative, being *T. aspera*.

**Distribution:** *T. jackyhoserae* sp. nov. is only known from a relatively small area being on the southern coastal strip of the Nullarbor to about 150 km either side of the Western Australia / South Australia State border. How far inland populations go is uncertain.

If the population is solid for 20 km inland (and it may go much further), the range would be at least 3,000 square km.

Due to the remote location, the population is probably secure.

**Etymology:** *T. jackyhoserae* sp. nov. is named in honour of my youngest daughter, Jacky Indigo Hoser, who as of 2025 has spent more than 20 years making significant contributions to wildlife science, conservation and education globally.

Significantly both Jacky and Adelyn Kimberley Hoser (my eldest daughter) both asked to have the two new species of Shingleback named in their honour as they have worked with them extensively all their lives.

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**CONFLICT OF INTEREST - NONE**



**Coming out of hiding ... A long overdue five-way split of the Australian skink genus *Cyclodomorphus* Fitzinger, 1843, with two genera named for the first time as well as the formal description of nine new species.**

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#### **ABSTRACT**

The Australian skink genus *Cyclodomorphus* Fitzinger, 1843 has been subject of considerable scrutiny by prominent Australian herpetologists.

In the last 60 years, Glen Storr of Western Australia (1976), Glenn Shea of New South Wales (1995 and Shea and Miller, 1995) and Richard Wells of New South Wales (Wells 2007) have all done major revisionary works on the genus which in turn has ultimately led to a seriously debased opinion of the genus in Cogger (2014) which is mirrored in other contemporary texts.

There is an unscientific cohort including child sex offenders, drug traffickers, animal abusers, wildlife smugglers, killers and fake scientists, known as the Wolfgang Wüster gang.

This gang includes notorious individuals like Adam Britton (now jailed for bestiality and child sex offences in the Northern Territory in 2024), Caleb Ott (likely to be charged with similar offences in Queensland in 2024), David John Williams (convicted of wildlife trafficking and animal cruelty in Queensland, Australia), Jamie Benbow (convicted of commercial drug trafficking and violence related crimes), Don Broadley and Bill Branch who procured young black boys in Africa for anal sex and others in the same cohort as listed by name in Wüster *et al.* (2021).

This gang have unlawfully threatened, attacked and harassed numerous publishing herpetologists including Harold Cogger to make them refuse to recognise taxonomic and nomenclatural reality as published by Wells (2007), which has been by far the best taxonomy of the group published prior to end 2024.

Notwithstanding this, various more recently published studies in the previous decade, post-dating Wells (2007) have flagged that the putative genus as presently recognized in Cogger (2014) should be further split (beyond that of Wells 2007) based on phylogeny and morphological divergences.

Furthermore, recognized putative species within the group that have allopatric distributions across well-known biogeographic barriers are genetically and morphologically divergent and should also be recognized as separate taxa.

As a result of the preceding, and in the face of ongoing unlawful ongoing threats from the Wolfgang Wüster gang, *Cyclodomorphus* Fitzinger, 1843 is split five ways, with two genera formally named as new for the first time according to the rules of the *International Code of Zoological Nomenclature* (Ride *et al.* 1999).

In addition, nine new species are also formally named for the first time.

This is a critically important first step towards the management and conservation of these taxa and it is important that illegal unscientific edicts of the Wolfgang Wüster gang not be allowed to impede wildlife conservation.

**Keywords:** Australia; skink; taxonomy; nomenclature; *Cyclodomorphus*; *Zeusius*; *Omolepida*; *Hemisphaeriodon*; new genus; *Scored*; *Obscurescincus*; new species; *hoserae*; *wellingtoni*; *lit*; *cashcow*; *wellsi*; *one*; *another*; *yetanother*; *aniceone*.

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## INTRODUCTION

The iconic Australian burrowing skinks of the genus *Cyclodomorphus* Fitzinger, 1843 *sensu lato* type species *Cyclodus casuarinae* Duméril and Bibron, 1839 are familiar to herpetologists in Australia.

Species are found within or close to the environs of most of the major population centres in Australia (Sydney, Melbourne, Hobart, Adelaide, Perth, Brisbane) and are regularly caught by herpetologists searching in the field for specimens.

In cooler weather they gravitate to sheets of tin and other man-made litter.

These potential hiding spots are targeted by herpetologists and are regularly inspected by reptile collectors.

Throughout much of mainland Australia, they are regularly caught in pit-fall traps laid by wildlife surveyors. These surveys are being done in increasing numbers as part of the mandatory legal requirements (so called "Green Tape") before the construction of major infrastructure projects across Australia.

In other words, *Cyclodomorphus* species are well-known here in Australia.

Storr (1976) published a major revision of the Western Australian members of the putative genus, describing a number of widespread and relevant forms that had until then been overlooked.

He used the genus name *Orolepida* Gray, 1845 type species *Cyclodus casuarinae* Duméril and Bibron, 1839 by original designation for the group, but more recent publishing authors have tended to place all relevant species within the genus *Cyclodomorphus* Fitzinger, 1843 with the same type species.

Under the *International Code of Zoological Nomenclature* (Ride *et al.* 1999) as amended (ICZN 2012) the earlier name has priority and this rule underpins scientific nomenclature.

Wells and Wellington (1985) in their monumental work on Australian reptiles, deferred doing any major changes to the group pending work by Glenn Shea and Shea's own impending publications on the genus. A decade later Shea (1995) and Shea and Miller (1995) did a detailed review of the group and named further forms.

Wells (2007) picked up where the other authors including Shea in both papers, had left off and named further species and subspecies and divided the genus *Cyclodomorphus* three ways.

This they did by confining *Cyclodomorphus* type species *Cyclodus casuarinae* Duméril and Bibron, 1839 to a cohort of south-east Australian species, being the so-called Sheoak skinks.

They removed the quite divergent and significantly larger Pink Tongued Skinks from the genus and used the available name *Hemisphaeridon* Peters, 1867 with the type species of *Hinulia gerrardii* Gray, 1845.

In a first ever move, Wells put the rest into the genus: "*Zeusius* gen. nov. [Type Species: *Orolepida maxima* Storr, 1976 - *Rec. West. Aust. Mus.*, 4: 163-170]."

The taxonomic actions of Wells (2007) were largely based on the earlier cited works and were logical and obvious extensions of those works and the taxonomy within.

In terms of the thrust of the paper, there was absolutely nothing wrong at all with the detailed taxonomic work of Wells (2007) and his underlying taxonomic position.

Notwithstanding the statements of the obvious by Wells (2007), Wüster (2012), later rebadged as Kaiser *et al.* (2013) was used as a weapon against other publishing herpetologists to not adopt or use the eminently sensible taxonomic proposals made by Wells (2007). Kaiser *et al.* (2013) was an anti-science rant by an unscientific cohort including child sex offenders, drug traffickers, animal abusers and pseudoscientists known as the Wolfgang Wüster gang.

This group includes notorious individuals like Adam Britton (now jailed for bestiality and child sex offences in the Northern Territory in 2024), Caleb Ott (likely to be charged with similar offences in Queensland in 2024), David John Williams (convicted of wildlife trafficking and animal cruelty in Queensland, Australia), Jamie Benbow (convicted of commercial drug trafficking and violence related crimes), Don Broadley and Bill Branch who procured young black boys in Africa for anal sex and others in the same cohort as listed by name in Wüster *et al.* (2021).

They have aggressively harassed publishing herpetologists, including Harrold G. Cogger to refuse to recognise taxonomic and nomenclatural reality as published by Wells (2007), which has been the best taxonomy of the group published to date.

Significantly and relevant to the ultimate taxonomy and nomenclature adopted and used in this paper, the taxonomy of Wells (2007) was explicitly supported by the data in the paper of Brennan *et al.* (2024) and so is agreed as correct herein, save for the differences outlined herein.

In short, the recognition of the species recognized by Wells (2007) is taken as correct.

Only at issue is whether or not some or all of his described subspecies should be treated as subspecies or species, noting that Wells (2007) made determinations for each form recognized and based on his prior taxonomic determinations on Australian reptiles is probably correct on all.

If I were to deviate from his conclusions, it would probably be that some of his named subspecies should be treated as full species.

I have only deferred from making the amendments to the status of those particular taxa on the basis that molecular data is likely within a few short years.

That should settle whether or not those named forms should be treated as subspecies or species.

The relevant name to be used was already settled by Wells (2007), who has properly spelt out, which names are available for what.

Wells (2007) clearly missed some taxa worthy of formal recognition, including two species within *Cyclodomorphus* from Victoria and others from other states which are formally named herein.

In terms of the Wells (2007) genus *Zeusius* the molecular phylogeny of Brennan *et al.* (2024) (at Supplementary Fig. 2) shows a 15.65 MYA divergence from the *Cyclodomorphus* Fitzinger, 1843 type species and associated south-east Australian taxa.

Brennan *et al.* (2024) (at Supplementary Fig. 2) showed a 9.8 MYA divergence of *Hemisphaeridon gerrardii* (Gray, 1845) from the *Cyclodomorphus* type species and associated south-east Australian taxa, which is also sufficient grounds to recognize this morphologically divergent group as a separate genus.

The three putative species *H. gerrardi* (Gray, 1845), *H. picta* (Macleay, 1885) and *H. longicauda* (De Vis, 1888) are all recognized herein as valid, which is a contrasting position to many authors who only recognize the single species *H. gerrardi*.

In case it has been missed previously, the holotype of Gray (1845) is of the southernmost (Sydney and/or south of Hunter Valley form) of the genus.

Brennan *et al.* (2024) (at Supplementary Fig. 2) also showed significant divergences between the *Cyclodomorphus* type species and associated south-east Australian taxa as opposed to three obvious species groups within putative *Zeusius*.

With divergences of 16 MYA (group 1 versus groups 2-3) and 14.9 MYA (group 2 versus group 3) between the three groups, it is self-evident that on divergence alone, three genera need to be formally recognized.

Two new genera are formally named for the first time according to the rules of the *International Code of Zoological Nomenclature* (Ride *et al.* 1999) based on divergence and consistent morphological differences.

These are *Scored* gen. nov. and *Obscurescincus* gen. nov..

Nine new species overlooked by earlier authors are also identified and named for the first time.

## MATERIALS AND METHODS

Specimens of all species within the putative genus *Cyclodomorphus* Fitzinger, 1843 *sensu lato* as recognised by Cogger (2014) and Wilson and Swan (2021) were inspected from all parts of their known distributions. They were checked for morphological divergences and/or obvious biogeographical barriers separating the populations, including those flagged in papers such as those listed above and below.

Specimens inspected included dead and live specimens as well as images with good locality data.

To make it clear, many specimens were inspected in the field, as in *in situ* by me when conducting fieldwork throughout the relevant areas of distribution of the genus and over more than 50 years.

Molecular studies involving species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* and other similarly distributed reptiles and frogs from across continental Australia were also reviewed to flag likely speciation points for wider-ranging putative taxa.

Published references and taxonomic treatments relevant to the preceding taxa were reviewed and those relevant to the taxonomic



and nomenclatural conclusions in this paper included Abraham (1980), Boulenger (1885, 1898), Brennan *et al.* (2014), Cogger (2014), Cogger, *et al.* (1983), De Vis (1888), Dubois *et al.* (2019), Duméril and Bibron (1839), Fitzinger, (1843), Ford (1963), Frost and Lucas (1894), Glauert (1960), Gomard (2015), Gray (1845, 1867), Günther (1867), Hauschild (1988), Hawkeswood (2021), Herrmann (1997), Horner (1991), Hoser (1989, 2000, 2007, 2017, 2018, 2019a-b, 2020a-b, 2021a-b, 2022, 2024a-b), ICZN (1991, 2001, 2012, 2021), Longley (1938), Longman (1915), Lucas and Frost (1896), Macleay (1885), Maryan *et al.* (2024), Matz (1973), Mebs (1974), Mitchell (1950), Murphy (1994), Oudemans (1984), Osborne and Green (1995), Pepper *et al.* (2018), Peters (1867, 1874, 1878), Procter (1923), Pyron *et al.* (2013), Rankin (1973), Rawlinson (1969), Ride *et al.* (1999), Shea (1982, 1990, 1995), Shea and Miller (1995), Shea and Sadlier (1999), Shea and Wells (1984), Skinner *et al.* (2013), Smith (1937), Stark (2022), Sternfeld (1919, 1925), Storr (1976), Storr, Smith and Johnstone (1999), Sumner *et al.* (2021), Swan *et al.* (2017, 2022), Timms (1977), Wells (2007), Wells and Wellington (1984, 1985), Werner (1910), Wilhoft (1960), Wilson (2015, 2022), Wilson and Booth (1998), Wilson and Knowles (2018), Wilson and Swan (2017, 2021) and sources cited therein.

## RESULTS

The molecular results of Brennan *et al.* (2014) laid out quite clearly the likely taxonomy of the *Cyclodomorphus* Fitzinger, 1843 *sensu lato* group of species giving rise to the new genus-level taxonomy flagged herein already.

In spite of this, the paper of Brennan *et al.* (2014), being the most recent full treatise of the group at the genus-level failed to act on the results obtained.

It appears that in line with the previous practice of the group of authors, being associated with the Wolfgang Wüster gang of thieves (identified by name in Wüster *et al.* 2021), they did not want to use any taxonomy or nomenclature that forced them to recognise the findings, works and names of Wells and Wellington (1984, 1985) or Wells (2007), in any way, as per the doctrine of Wüster (2012), rebadged as Kaiser *et al.* (2013), Rhodin *et al.* (2015), Wüster *et al.* (2021) and later incarnations of the same mantra (see below).

By way of example, in spite of confirmation that the putative genus *Zeusius* Wells (2007) had a 15.65 MYA divergence from the *Cyclodomorphus* type species and associated south-east Australian taxa, Brennan *et al.* (2014) ignored this wholly.

In breach of the Australian Copyright Act 1968, Section 195, as well as relevant provisions of the *International Code of Zoological Nomenclature* (Ride *et al.* 1999), Brennan *et al.* (2014) did not even cite any works of Wells or the relevant works of Wells and Wellington (1984, 1985) at all!

In terms of divergences of putative species analysed by Brennan *et al.* (2014), most were separated from one another by several millions of years, indicating likelihood of further forms not sampled being separate species.

This fact of deep divergences, in effect corroborated the taxonomy and nomenclature of Wells (2007), explaining why it is largely adopted herein as correct.

Another recent paper, being that of Sumner *et al.* (2021) wrote in relation to putative *Cyclodomorphus praealtus* that: "Populations of *C. praealtus* in NSW and Victoria are reciprocally monophyletic at the mtDNA ND4 loci, with a 4.28% net sequence divergence between regions, and it was recommended that they be treated as separate evolutionarily significant units (Koumoundouros *et al.*, 2009)."

These populations are also morphologically divergent and therefore in line with an estimated separation of over 2 MYA based on the "4.28% net sequence divergence" the previously unnamed Victorian form is herein formally named as *C. hoserae* sp. nov..

Wells and Wellington (1985) recognized the population of putative *C. casuarinae* (Duméril and Bibron, 1839) from far north-east Victoria and far south-east New South Wales as a species distinct from their *C. michaeli* Wells and Wellington, 1984 and *C. casuarinae* referring it to the putative species *C. nigricans* (Peters, 1874).

However, Shea (1995) correctly confirmed that the holotype of *C. nigricans* was a Tasmanian animal and therefore the name *C. nigricans* was not available for the taxon identified as distinct by Wells and Wellington (1985).

In spite of this correction by Shea in 1995, all publishing authors have since treated the relevant population erroneously as *C. michaeli*

Wells and Wellington, 1984 a taxon geographically separated and with a type locality of Mount Victoria, being about 118 km by road west of the Sydney CBD.

The population of putative *C. casuarinae* (Duméril and Bibron, 1839), more recently assigned to *C. michaeli* Wells and Wellington, 1984 by more recent authors, including Shea (1995) of north-east Victoria and far south-east New South Wales is herein formally named as a new species *C. wellingtoni*.

Two divergent and little-known New England Tableland populations, also until now treated as populations of *C. michaeli* Wells and Wellington, 1984 are also formally named as new species being *Cyclodomorphus lit* sp. nov. and *C. cashcow* sp. nov..

In terms of *Zeusius* Wells, 2007, the following is noted:

"*Zeusius* gen. nov. [Type Species: *Omorepida maxima* Storr, 1976 - *Rec. West. Aust. Mus.*, 4: 163-170]."

as defined by Wells 2007 is retained for that species group only, being only putative *Z. maxima* and a newly named species, *Z. wellsii* sp. nov. from the same general region in north-west Western Australia.

*Scored* gen. nov. type species *Scored one* sp. nov. has a 14.9 MYA divergence from the two genera *Zeusius* and *Cyclodomorphus*.

Within this genus are included the better-known species until now generally known as "*Cyclodomorphus celatus* Shea and Miller, 1995", "*C. venustus* Shea and Miller, 1995", "*C. melanops* (Stirling and Zietz, 1893)", "*Zeusius. sternfeldi* Wells, 2007" and other lesser-known taxa including *Scored one* sp. nov. (type species), *S. another* sp. nov., *S. yetanother* sp. nov., "*Cyclodomorphus melanops elongatus* (Werner, 1910)" and "*Cyclodomorphus melanops siticulosus* (Shea and Miller, 1995)" the latter two as a full species based on the phylogeny of Brennan *et al.* (2024).

Various subspecies formally named by Wells (2007), not listed herein, may ultimately prove to be best regarded as full species after their genetics are properly studied.

They all represent discrete local populations and based on the site fidelity of specimens in the genus, it is a safe bet that those named as subspecies will ultimately be recognized as full species based on molecular divergence.

The relevant taxa identified by Wells (2007) are *Zeusius melanops gillami* Wells, 2007, *Zeusius melanops swani* Wells, 2007, *Zeusius melanops gastrostigma* (Boulenger, 1898), *Zeusius melanops petersi* (Sternfeld, 1919) and *Zeusius melanops woodjonesii* (Procter, 1923). Based on his own extensive field and lab work on the relevant taxa spanning more than 50 years, it is prudent to accept the relevant five subspecies designations as such until proven otherwise.

One population of putative *Z. melanops* missed by all previous describing authors and that is very divergent is that from southwest New South Wales and the adjacent parts of Murrayland, South Australia..

It is separated from major populations west in most of South Australia, central and western Australia by being to the east of the biological barrier formed by the lower Flinders Ranges in South Australia, including foothills, which are in effect combined as a biogeographic barrier with the Barrier and Grey Ranges in far west New South Wales.

Evidence cited by Hoser (2020b) for the Mallee Dragon Complex *Ctenophorus (Phthanodon) fordii* (Storr, 1965) *sensu lato*, splitting that species group into two species (both previously named) and naming four subspecies for the first time, indicated a divergence of 1.75 MYA for the relevant east and west populations.

These were constrained by the same habitat requirements as *Z. melanops sensu lato*, meaning that the relevant unnamed population of *Z. melanops sensu lato* is also a separate species based on divergence caused by the same environmental changes in the relevant part of Australia over the past 2 Million years.

This taxon is formally named herein as *Scored aniceone* sp. nov..

*Scored one* sp. nov. (type species for the genus) and *S. another* sp. nov. have until now been treated as northern populations of putative "*Cyclodomorphus celatus* Shea and Miller, 1995".

*S. yetanother* sp. nov. has until now been treated as a central South Australian population of "*C. venustus* Shea and Miller, 1995".

"*Zeusius. sternfeldi* Wells, 2007" (type locality of Chunky Creek near Tiboburra, far northwest New South Wales), formerly and until now treated as a northern population of "*C. venustus* Shea and Miller, 1995", with a type locality of Port Germain, South Australia, by all publishing authors to date is both an indictment of Australian

herpetology and science as well as a show of strength for the evil and nefarious Wolfgang Wüster gang.

Even a cursory look by an untrained 5-year-old child of average intellect will probably recognize that "*Zeusius sternfeldi* Wells, 2007" and "*C. venustus* Shea and Miller, 1995" are radically different in all materially relevant ways and cannot be of one and the same species! See for example the comparative photos in Cogger (2014) at page 537 at top left and right, both as "*C. venustus*".

Alternatively, photo sharing websites like "iNaturalist" and "Flickr" have dozens of images of the relevant taxa for free viewing (currently, end 2024 all listed and identified foolishly as *C. venustus*).

*Obscurecincus* gen. nov. type species *Hinulia branchialis* Günther, 1867 is for the various species and/or subspecies associated with that taxon (alive and/or extinct), which according to Brennan *et al.* (2014) diverged from all other putative *Cyclodomorphus* and *Zeusius* 16 MYA. It is treated herein as monotypic and range restricted in south-west Western Australia.

#### 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 3 January 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 male 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. Note that there is ordinarily some sexual dimorphism between adults of species within the relevant genera.

References to tails are of original ones unless otherwise stated.

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.

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

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.

Spellings of scientific names herein is intentional should not be altered unless mandatory under relevant rules of zoological nomenclature.

Some names are unusual or provocative and I make no apologies for this. The relevant species are innocuous and "boring" and so unusual names may draw attention to them and their long-term conservation needs.

#### CONSERVATION

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 Wolfgang Wüster gang via 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 Wüster gang against this paper and the descriptions

herein will no doubt be no different to those the gang have made previously (see for example Shine 1987), all of which were discredited long ago as outlined by Ceriaco *et al.* (2023), Cogger (2014), Cotton (2014), Dubois *et al.* (2019), Hawkeswood (2021), Holyński (1994, 2020), Hoser, (2001a, 2007a-b, 2009, 2012a-b, 2013, 2015a-f, 2019a, 2019b, 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.

If the Australian government persists with its "Big Australia Policy", (see for example Saunders 2019 or Zaczek 2019), that being a long-term aim to increase the human population in Australia to over 100 million people by year 2150 (from the 25 million as of 2019), all sorts of unforeseen threats to the survival of these species may emerge. 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 2001a for details).

Claims by Shea and Sadlier (1999) and similar elsewhere to the effect that Wells and Wellington (1984, 1985) or Wells names published more recently (post year 2000) are unavailable for zoological nomenclature are patently false and the making of these false claims is seriously counter to wildlife conservation (Hoser, 2007 2019a, 2019b, Ceriaco *et al.* 2023, Cogger 2014, Cotton 2014, and so on).

#### CYCLODOMORPHUS HOSERAE SP. NOV.

LSIDurn:lsid:zoobank.org:act:A224F766-A95E-4EA6-AC4C-EA271AEF6A24

**Holotype:** A preserved adult female specimen at the Museums Victoria Herpetology Collection, Melbourne, Victoria, Australia, specimen number D39194 collected from Mount Hotham, Victoria, Australia, Latitude -36.98 S., Longitude 147.13 E.

This government-owned facility allows access to its holdings.

**Paratypes:** Three preserved specimens at the Museums Victoria Herpetology Collection, Melbourne, Victoria, Australia, specimen number D8937, D39195 and D56467 all collected from the Mount Hotham Ski Resort area, Victoria, Australia, Latitude -36.98 S., Longitude 147.13 E.

**Diagnosis:** Until now, *Cyclodomorphus hoserae* sp. nov. a taxon effectively confined to the region of the Bogong High Plains in Victoria, has been treated as a southern population of *C. praealtus* Shea, 1995, type locality Kiandra, NSW, a taxon herein confined to the Snowy Mountains of far south New South Wales.

These inhabitants of alpine meadow habitat are separated from one another by low lying areas in the upper Murray basin.

Sumner *et al.* (2021) and Koumoundouros *et al.* (2009), both papers available online, found much the same, when the latter authors said: "*that Populations of C. praealtus in NSW and Victoria are reciprocally monophyletic at the mtDNA ND4 loci, with a 4.28% net sequence divergence between regions, and it was recommended that they be treated as separate evolutionarily significant units*".

Using the conventional vertebrate mtDNA clock calibration of 2% sequence divergence per million years (Avice, 2004), this suggests divergence between the two populations herein is estimated at more than 2 MYA and without known introgression.

While adult female *C. hoserae* sp. nov. are morphologically similar to adult female *C. praealtus*, adult female *C. hoserae* sp. nov. are separated from adult female *C. praealtus* by having a strongly orange-brown dorsum, versus weakly orange, to grey-brown on the dorsum in *C. praealtus*, as well as having side flecks of white and black in combination, where the white areas are larger than black, versus the reverse in *C. praealtus*.

Adult female *C. hoserae* sp. nov. have reasonably well-defined whitish-grey longitudinal lines running down the original tail, versus poorly defined and darker in colour in *C. praealtus*.

Both *C. hoserae* sp. nov. and *C. praealtus* are separated from all other species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* (as defined in Cogger 2024) by not having a post narial groove, two



infralabial scales contacting the postmental scale on each side and less than 65 subcaudal scales on the original tail, meaning they have relatively shorter tails than other species in the same genus (*sensu lato* as per next paragraph).

Species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* as defined by Cogger (2014), including the genera *Obscurescincus* gen. nov., *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored* gen. nov. are separated from all other Australian skinks by the following unique combination of characters:

Medium-sized smooth-scaled skinks, with slender heads, necks and bodies, generally elongate in form. Anterior ear lobules usually present; subequal scales; no supranasals or divided nasal scales; a scaly movable lower eyelid; parietal scales not in contact behind the third interparietal; third and fourth toes not equal or the third toe at least slightly longer than the fourth; undivided subdigital lamellae; original tail long and slender and usually at least as long as the body. Live bearing. Strongly crepuscular unless forced to move by day due to excess heat on or in their resting place (modified from Cogger, 2014).

*C. hoserae* sp. nov. is depicted in life online at:

<https://www.flickr.com/photos/88708273@N03/52663827701/> and

<https://www.flickr.com/photos/julesfarquhar/51247027252/>

*C. praealtus* is depicted in life in Swan, Sadlier and Shea (2022) on page 152, and online at:

<https://www.flickr.com/photos/199464355@N06/54161326017/> and

<https://www.flickr.com/photos/88708273@N03/52836153545/> and

<https://www.flickr.com/photos/171250498@N08/54126619781/>

It is important to note that donating money to the dysfunctional government-owned business "Zoos Victoria" as per their website at: <https://www.zoo.org.au/donate/donate-today/> will NOT do anything useful for the conservation of this particular species as alleged by them.

**Distribution:** *Cyclodomorphus hoserae* sp. nov. is a taxon effectively confined to the region of the Bogong High Plains in Victoria and immediately adjacent similar habitat in far northeast Victoria and is best known from the ski resorts of Mount Hotham and Falls creek, where they have a liking for hiding under man-made hard rubbish on the ground.

It is separated from *C. praealtus* Shea, 1995, type locality Kiandra, NSW, a taxon herein confined to the Snowy Mountains of far south New South Wales by the lowlands of the upper Murray River basin.

**Etymology:** *Cyclodomorphus hoserae* sp. nov. is named in honour of my long-suffering wife, Shireen Hoser, now of Park Orchards, Melbourne, Victoria in recognition of her many contributions to herpetology in Australia and elsewhere as well and specifically with reference to services to herpetological fieldwork by myself and my children in the Mount Hotham and Falls Creek areas over more than a decade.

**CYCLODOMORPHUS WELLINGTONI SP. NOV.**

LSIDurn:lsid:zoobank.org:act:288110D2-6D2C-48EE-B94A-B544AE36192B

**Holotype:** A preserved specimen at the Museums Victoria Herpetology Collection, Melbourne, Victoria, Australia, specimen number D33721 collected from Wrotham, Victoria, Australia, Latitude -37.35 S., Longitude 149.48 E.

This government-owned facility allows access to its holdings.

**Paratypes:** Nine preserved specimens at the Museums Victoria Herpetology Collection, Melbourne, Victoria, Australia, being specimen numbers D33722 and D33723 both collected from Wrotham, Victoria, Australia, Latitude -37.35 S., Longitude 149.48 E., specimen numbers D39129 and D39127 both collected from Genoa, Victoria, Australia, Latitude -37.47 S., Longitude 149.6 E., Specimen number D70974, collected from Shipwreck Creek, Victoria, Australia, Latitude -37.58 S., Longitude 149.67 E., specimen number D57447 collected from 10.5 km south southwest of Wangarabell, Victoria, Australia, Latitude -37.58 S., Longitude 149.67 E., specimen number D39146 collected from Gypsy Point, Victoria, Australia, Latitude -37.48 S., Longitude 149.68 E., specimen number D66126 collected from Stony Creek track, 1 km East of Nash Camp Track, East Gippsland, Victoria, Australia, Latitude -37.4502 S., Longitude 149.6 E., specimen number D57466 collected from 21.8 km East of Mount

Kaye, Victoria, Australia, Latitude -37.4005 S., Longitude 149.489 E.

**Diagnosis:** Until now, *Cyclodomorphus lit* sp. nov., *C. cashcow* sp. nov. and *C. wellingtoni* sp. nov. have been treated as divergent populations of *C. michaeli* Wells and Wellington, 1984, with a type locality of Mount Victoria, New South Wales.

*C. michaeli* is herein regarded as a taxon of the central coast region of New South Wales only in an area generally from Newcastle to Nowra and the nearby hilly hinterland, south of the Hunter Valley, including the New South Wales Southern Highlands and the Blue Mountains.

The divergent taxon *C. cashcow* sp. nov. is known only from the Barrington Tops area of the coastal ranges, north of the Hunter Valley in New South Wales.

*C. lit* sp. nov. is only known from the upper New England Tablelands Region of New South Wales, around the town of Ben Lomond, New South Wales (the type locality).

*C. cashcow* sp. nov. and *C. lit* sp. nov. are exclusively high-altitude species.

*C. wellingtoni* sp. nov. is found only in far north-east Victoria and immediately adjacent south-east New South Wales, generally at low altitude, in a relatively confined region, but where it is abundant and easily found by collectors.

In line with congeners, specimens are commonly found in numbers under sheets of metal around human habitation.

In November 1996 (Melbourne Cup weekend), Rob Valentic and myself found several specimens hiding under sheets of tin on a property at Genoa, immediately next to the flooded Genoa River on a relatively cold and rainy, overcast day.

*C. wellingtoni* sp. nov. is separated from *C. michaeli*, *C. lit* sp. nov. and *C. cashcow* sp. nov. by having an adult ground colour that is olive-brown on the dorsum rather than brownish orange on the dorsum in *C. michaeli* or greyish dorsally in *C. lit* sp. nov. and *C. cashcow* sp. nov.

In turn *C. lit* sp. nov. and *C. cashcow* sp. nov. are separated from both *C. michaeli* and *C. wellingtoni* sp. nov. by having a dorsum in adults where the black markings not only coalesce to form semi-distinct longitudinal lines, but also as semi-distinct crossbands, especially anteriorly.

This is sometimes called the "gill-like" markings.

Both *C. lit* sp. nov. and *C. cashcow* sp. nov. tend to be greyish dorsally, rather than brownish dorsally in both *C. michaeli* (orange brown) and *C. wellingtoni* sp. nov. (olive brown).

*C. lit* sp. nov. has a subcaudal count (on original tails) below 85, versus over 92 for each of *C. cashcow* sp. nov., *C. michaeli* and *C. wellingtoni* sp. nov..

*C. lit* sp. nov. and *C. cashcow* sp. nov. average 2.6 nuchal scales and 8 infralabials as a rule, versus 3.2 and 7 in *C. michaeli*, versus 6 or 7 infralabials in *C. wellingtoni* sp. nov..

The four species *C. michaeli*, *C. wellingtoni* sp. nov., *C. cashcow* sp. nov. and *C. lit* sp. nov. are separated from all other species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* (as defined in Cogger 2024), including the genera *Obscurescincus* gen. nov., *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored* gen. nov. by not having a post narial groove, two infralabial scales contacting the postmental scale on each side, more than 65 subcaudal scales on the original tail and a dorsum that is not greyish in general colour with a complex pattern of brown, black, grey and white and having flanks with thin black bars and sometimes white interspaces as is seen in adult *C. casuarinae* (Duméril and Bibron, 1839).

Species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* as defined by Cogger (2014), including the genera *Obscurescincus* gen. nov., *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored* gen. nov. are separated from all other Australian skinks by the following unique combination of characters:

Medium-sized smooth-scaled skinks, with slender heads, necks and bodies, generally elongate in form. Anterior ear lobules usually present; subequal scales; no supranasals or divided nasal scales; a scaly movable lower eyelid; parietal scales not in contact behind the third interparietal; third and fourth toes not equal or the third toe at least slightly longer than the fourth; undivided subdigital lamellae; original tail long and slender and usually at least as long as the body. Live bearing. Strongly crepuscular unless forced to move by day due to excess heat on resting place (modified from Cogger, 2014).

*C. michaeli* is depicted in life in Hoser (1989) on page 107 at top right, Swan, Sadlier and Shea (2022) on page 151 both images and

online at:

<https://www.flickr.com/photos/mattsummerville/16923057122/>

*C. wellingtoni* sp. nov. is depicted in life online at:

<https://www.flickr.com/photos/88708273@N03/8397228981/>

and

<https://www.inaturalist.org/observations/60174058>

and

<https://www.inaturalist.org/observations/42556271>

and

<https://www.inaturalist.org/observations/18534072>

*C. cashcow* sp. nov. is depicted in life online at:

<https://www.flickr.com/photos/shaneblackfnq/29846456055/>

The type form of *C. casuarinae* is depicted in life online at:

<https://www.flickr.com/photos/akashsherping/54163133578/>

and

<https://www.flickr.com/photos/ryanfrancis/31688785195/>

and

<https://www.flickr.com/photos/93733769@N03/9299532013/>

**Distribution:** *C. wellingtoni* sp. nov. is found only in far north-east Victoria and immediately adjacent south-east New South Wales, in a relatively confined near coastal region of low altitude, but where it is abundant and easily found by collectors.

**Etymology:** *C. wellingtoni* sp. nov. is named in honour of one of Australia's leading herpetologists, Cliff Ross Wellington, AKA Ross Wellington, currently of Ramornie in northern New South Wales, Australia, in recognition of a lifetime's achievements in herpetology.

#### CYCLODOMORPHUS CASHCOW SP. NOV.

**LSID**Durn:lsid:zoobank.org:act:7D4E683B-1DB9-4526-BE75-D8B0803DF93B

**Holotype:** A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.16085 collected from Barrington Tops, New South Wales, Australia, Latitude -32.033 S., Longitude 151.4 E.

**Paratypes:** 1/ Two preserved specimens at the Australian Museum, Sydney, New South Wales, Australia, specimen numbers R.139127 and R.146088 collected from East of Mount Allyn on Mount Allyn Road, Chichester State Forest, New South Wales, Australia, Latitude -32.12693 S., Longitude 151.43416 E., 2/ A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.18961 collected from Upper Allyn River, Barrington Tops, New South Wales, Australia, Latitude -32.133 S., Longitude 151.466 S.

**Diagnosis:** Until now, *Cyclodomorphus lit* sp. nov., *C. cashcow* sp. nov. and *C. wellingtoni* sp. nov. have been treated as divergent populations of *C. michaeli* Wells and Wellington, 1984, with a type locality of Mount Victoria, New South Wales.

*C. michaeli* is herein regarded as a taxon of the central coast region of New South Wales only in an area generally from Newcastle to Nowra and the nearby hilly hinterland, south of the Hunter Valley, including the New South Wales Southern Highlands and the Blue Mountains.

The divergent taxon *C. cashcow* sp. nov. is known only from the Barrington Tops area of the coastal ranges, north of the Hunter Valley in New South Wales.

*C. lit* sp. nov. is only known from the upper New England Tablelands Region of New South Wales, around the town of Ben Lomond, New South Wales (the type locality).

*C. cashcow* sp. nov. and *C. lit* sp. nov. are exclusively high-altitude species.

*C. wellingtoni* sp. nov. is found only in far north-east Victoria and immediately adjacent south-east New South Wales, generally at low altitude, in a relatively confined region, but where it is abundant and easily found by collectors.

*C. wellingtoni* sp. nov. is separated from *C. michaeli*, *C. lit* sp. nov. and *C. cashcow* sp. nov. by having an adult ground colour that is olive-brown on the dorsum rather than brownish orange on the dorsum in *C. michaeli* or greyish dorsally in *C. lit* sp. nov. and *C. cashcow* sp. nov.

In turn *C. lit* sp. nov. and *C. cashcow* sp. nov. are separated from both *C. michaeli* and *C. wellingtoni* sp. nov. by having a dorsum in adults where the black markings not only coalesce to form semi-distinct longitudinal lines, but also as semi-distinct crossbands, especially anteriorly.

This is sometimes called the "gill-like" markings.

Both *C. lit* sp. nov. and *C. cashcow* sp. nov. tend to be greyish dorsally, rather than brownish dorsally in both *C. michaeli* (orange brown) and *C. wellingtoni* sp. nov. (olive brown).

*C. lit* sp. nov. has a subcaudal count (on original tails) below 85, versus over 92 for each of *C. cashcow* sp. nov., *C. michaeli* and *C. wellingtoni* sp. nov.

*C. lit* sp. nov. and *C. cashcow* sp. nov. average 2.6 nuchal scales and 8 infralabials as a rule, versus 3.2 and 7 in *C. michaeli*, versus 6 or 7 infralabials in *C. wellingtoni* sp. nov.

The four species *C. michaeli*, *C. wellingtoni* sp. nov., *C. cashcow* sp. nov. and *C. lit* sp. nov. are separated from all other species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* (as defined in Cogger 2024), including the genera *Obscurescincus* gen. nov., *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored* gen. nov. by not having a post narial groove, two infralabial scales contacting the postmental scale on each side, more than 65 subcaudal scales on the original tail and a dorsum that is not greyish in general colour with a complex pattern of brown, black, grey and white and having flanks with thin black bars and sometimes white interspaces as is seen in adult *C. casuarinae* (Duméril and Bibron, 1839).

Species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* as defined by Cogger (2014), including the genera *Obscurescincus* gen. nov., *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored* gen. nov. are separated from all other Australian skinks by the following unique combination of characters:

Medium-sized smooth-scaled skinks, with slender heads, necks and bodies, generally elongate in form. Anterior ear lobules usually present; subequal scales; no supranasals or divided nasal scales; a scaly movable lower eyelid; parietal scales not in contact behind the third interparietal; third and fourth toes not equal or the third toe at least slightly longer than the fourth; undivided subdigital lamellae; original tail long and slender and usually at least as long as the body. Live bearing. Strongly crepuscular unless forced to move by day due to excess heat on or in their daytime resting place (modified from Cogger, 2014).

*C. michaeli* is depicted in life in Hoser (1989) on page 107 at top right, Swan, Sadlier and Shea (2022) on page 151 both images and online at:

<https://www.flickr.com/photos/mattsummerville/16923057122/>

*C. wellingtoni* sp. nov. is depicted in life online at:

<https://www.flickr.com/photos/88708273@N03/8397228981/>

and

<https://www.inaturalist.org/observations/60174058>

and

<https://www.inaturalist.org/observations/42556271>

and

<https://www.inaturalist.org/observations/18534072>

*C. cashcow* sp. nov. is depicted in life online at:

<https://www.flickr.com/photos/shaneblackfnq/29846456055/>

The type form of *C. casuarinae* is depicted in life online at:

<https://www.flickr.com/photos/akashsherping/54163133578/>

and

<https://www.flickr.com/photos/ryanfrancis/31688785195/>

and

<https://www.flickr.com/photos/93733769@N03/9299532013/>

**Distribution:** The divergent taxon *C. cashcow* sp. nov. is a high-altitude species known only from the Barrington Tops area of the coastal ranges, north of the Hunter Valley in New South Wales, Australia in an area with a maximum elevation of about 1,586 meters. There are less than 20 specimens currently lodged with Australian Museums, and none are known to be in captivity as of early 2025. It should be listed as a vulnerable or threatened species pending a more detailed and proper assessment (see etymology below).

**Etymology:** In Australia relatively rare and endangered species often become an excuse for unscrupulous operators to make money from them.

Dysfunctional and corrupt government-owned zoos and their staff use them for "captive breeding and recovery programs" with the aim to be not to breed the species.

The idea is to monopolize the species as an endangered one that needs money to survive and to keep scamming grants to "breed the animals" out of endangerment.

Of course that is an outcome that cannot be allowed to happen, as if a zoo has to offload excess stock to another zoo, or worse still a



non-government entity or person, then they lose their monopoly on the species and the ability to use it as a so-called cash cow to make money out of it.

Whether it is to scam grants to breed the animals (or pretend to, by grabbing gravid specimens from the bush), money for cage building projects, allowing of course much of the cash to be siphoned off for personal gain via contactors, kick-backs, consulting fees and the like, or even just to monopolize photographic and filming rights, rare species in Australia are always a so called cash cow.

With species within the genus *Cyclodomorphus sensu stricto* perceived as rare, localized, in potential decline and ruthlessly banned from private herpetoculture in any way, all named species have already been turned into cash cows by dysfunctional government-owned zoos (e.g. Zoos Victoria), wildlife bureaucrats and their closest mates who have invariably moved from the public service bureaucracy into the so-called "private sector".

As already inferred, these mates are invariably usually ex-employees of the very same government departments who splash cash to supposedly "save" and "protect" the relevant species.

These rare and endangered species only linger on in spite of government policies and actions and not as a result of any benefit derived from them.

In Victoria, New South Wales and Federally, billions of dollars of taxpayer's funds are spent on "species recovery plans" and similar fake conservation programs.

The so-called "species recovery plans" are jumbled up fake woke nonsense, full of gratuitous statements about aboriginal collaboration and culture.

For native Australian Aboriginals, the daily reality is about being robbed and bashed by the British invaders and their militarized police.

They are forcibly barred from their so-called traditional lands, that the fake woke nonsense describes them as custodians of.

In terms of the area that *C. hoserae* sp. nov. occurs, it is a strictly contained area with police at all entry points, numerous CCTV cameras filming all who come and go and everyone entering these "resort" areas are charged an entry fee of about \$100 per car per day (average), which is a fee way too prohibitive for any native Australian Aboriginals to ever afford.

Seriously, when did anyone see a native Australian Aboriginal paying \$200 a day for a ski lift ticket (the approximate cost in 2024-2025) and doing laps on the ski runs at Hotham?

So, to masquerade a fake narrative that native Australian Aboriginals are in the present day and age doing anything in terms of studying or "managing" an obscure small skink in an area they were expelled from more than 200 years ago is complete and utter nonsense!

Wildlife bureaucrats in Australia use the words "collaborate", "stakeholders" and "citizen science" a lot in their propaganda.

But the reality is that as a group, government bureaucrats in Australia would never collaborate with anyone bar themselves!

As a rule, they are wholly dishonest and corrupt.

"Citizen scientists" AKA anyone not on the government's public service payroll, are the government bureaucrats enemy, as God forbid if they actually discover anything, then the government bureaucrats look like idiots for not doing so earlier!

The Australian government bureaucrats do as a rule, act like fascists and terrorists of the worst possible kind!

In terms of the animals themselves the "species recovery plans" and "action plans" are more in the form of a false narrative designed to extract money from government and business to be funnelled to those who have appointed themselves as gatekeepers for the cash cow animals.

These are the self-appointed "experts" on the relevant species and who control where the taxpayer funds are diverted to.

The very expensive to produce, Australian Federal Government document cited below exactly fits the profile just given.

Titled as follows:

"Australian Government

Department of Climate Change, Energy, the Environment and Water  
Conservation Advice for *Cyclodomorphus praealtus* (alpine she-oak skink)

In effect under the Environment Protection and Biodiversity  
Conservation Act 1999 from 20 August 2024.

This document guides conservation action and planning."

The document can be found at:

<https://www.environment.gov.au/biodiversity/threatened/species/pubs/64721-conservation-advice-20082024.pdf>

Significantly it has a lovely image of *C. hoserae* sp. nov. on the front cover misidentified as *C. praealtus*, even though there are 2 million years of reasons to question why that species (*C. hoserae* sp. nov.) was not formally named prior to this paper being published in year 2025!

So that no one gets misled about what "important" information is in this expensively produced government document ostensibly about the conservation of the relevant lizard species, I quote the main part of it unedited:

"Cultural and community significance

The cultural, customary and spiritual significance of animals, plants and ecological communities are diverse and varied for Indigenous Australians and their stewardship of Country. This section describes some examples of this significance but is not intended to be comprehensive or applicable to, or speak for, Indigenous Australians. Such knowledge may be held by Indigenous Australians who are the custodians of this knowledge and have the rights to decide how this knowledge is shared and used.

It is evident that lizards, including skinks, hold immense significance to Indigenous Australians through their prominent role in ceremony, lore, mythology, totems, art, and kinship. They are deeply tied to the Dreaming as totemic Creation beings that have shaped Country over millennia.

Lizards are often represented as guardians and teachers, and their Creation stories offer arnings or lessons about lore, morals, and kinship. These reptiles are inherently linked to the Indigenous stewardship of Country, in particular fire management practices. Lizards are also a critically important food and medicine source to many Indigenous Australians.

Significance specific to the alpine she-oak skink

The geographic range of the alpine she-oak skink is known to occur on the Traditional lands of many Indigenous groups and encompasses areas that have local Cultural Knowledge custodians and land rights holders. These Indigenous groups (and organisations) include:

- Traditional Cultural and Language groups:

o Bidawal, Bidwell, Dhudhuroa, Gunaikurnai, Jaithmathang, Kurnai, Mitambuta, Monero-Ngarigo, Ngarigu-Currawong, Taungurung, Waywurru, Wurundjeri and Yuin.

- NSW Local Aboriginal Land Councils:

o Bega, Brungle/Tumut, Eden, Merimans, and Wagonga.

- Registered Native Title Determinations and Prescribed Bodies Corporate: Gunaikurnai.

- Indigenous Land Use Agreements with Native Title Claimants:

o Gunaikurnai and Taungurung

While there is limited publicly available information on the cultural significance of alpine sheoak skinks to Indigenous Australians, areas within the species' geographical range are culturally significant.

For example, generations of Indigenous Australians have visited "Kunama Namadgi" (Mount Kosciuszko), reflected in the area's extensive system of archaeological sites and artefacts

(Environment and Recreation 2007). 'Ku' means 'snow', '-nama' means 'making and having the quality of snow', 'Nama' means 'breasts', and '-dgi' means 'having' (Troy 2020). Many Indigenous

Australians used to travel to the mountains surrounding "Kunama Namadgi" to roast and feast on the millions of *Agrotis infusa* (Bogong moth) that annually migrate to the mountains (NSW National Parks and Wildlife Service 2006).

Members of the Kosciuszko Aboriginal Working Group describe Kosciuszko National Park as "our Mother.

She is our beginning, giving us our identity and culture. The mountains are very old, and an ongoing life force that strengthens the ancestral link of our people. We have a living, spiritual connection with the mountains. We retain family stories and memories of the mountains, which makes them spiritually and culturally significant to us.

Our Traditional Knowledge and cultural practices still exist and need to be maintained. There are places of spiritual and physical significance to our people, and we are committed to working in partnership with others to protect, maintain, and manage these places" (NSW National Parks and Wildlife Service 2006).

Throughout the year, though especially during spring and summer, Traditional Owner groups would come to the Victorian section of the Australian Alps to meet with the tribes of the mountains for intertribal ceremonies and feast on bogong moths. Of this, Aboriginal historian Eddie Kneebone said 'Many ceremonies would have taken place, initiations, marriages, trading, settling of disputes, renewing alliances and friendships... When this was over one last ceremony had to take place before the trek to the alps and the Bogong Moth Feast would begin.

This ceremony was receiving of permission to travel over someone else's territory. As mentioned, the Yiatmathong controlled the Kiewa and Mitta Mitta Valleys, they also had control of the Alpine region on the Vic side.

Their southernmost boundary extended to Hotham and ran along the highest ridge line of the Alps in an east-west direction.' (Kneebone 2004).

The Jaimathang people are involved in the conservation of alpine she-oak skink. Herpetologists working to research and conserve the species have liaised with the Jaimathang people, have been invited by them to work on their Country (known as 'Bimble' in Jaimathang), and have shown them sites and the species (N Clemann 2023. pers comm 30 Jan - 2 March)."

and

"The Australian Government acting through Department of Climate Change, Energy, the Environment and Water has exercised due care and skill in preparing and compiling the information and data in this publication. Notwithstanding, the Department of Climate Change, Energy, the Environment and Water, its employees and advisers disclaim all liability, including liability for negligence and for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying on any of the information or data in this publication to the maximum extent permitted by law."

and

"Stakeholder engagement/community engagement • Support programs that engage Traditional Custodians in management, including knowledge sharing and the implementation of survey, research, monitoring and management actions. • Identify and engage all managers and Traditional Custodians to ensure they support the long-term, ongoing and effective monitoring programs for the **Guthega skink** and its threats across the species' range."

Guthega skink?

Oops!

That is a completely different species!

So, what we are getting for all our taxes paid is a bunch of scammers in government and their mates in so-called private enterprise, getting these cashed up jobs by way of nepotism.

They are then cutting and pasting the text from the last "Conservation Advice" they wrote on another "cash cow" species (the **Guthega skink**) and without even bothering to fix the text to match the new species when publishing the next "conservation advice".

Obviously it is a "one size fits all" caper!

Maybe they should try using a global "word change" on their word processor next time to do a better "cut and paste job" to scam the cash for their next private real estate investment property!

Yes, these government-employed and contracted scammers are being paid to create another rambling fake woke text and collecting the cash for doing so!

And how much does each of these useless "Conservation Advice" rambles cost to produce?

As of 2023, more than \$80 million each!

We know this from the annual reports published from the Victorian Government, New South Wales Government and Federal Government wildlife departments.

Now that is one heck of a cash cow!

And hence the etymology for this species.

PS – No disrespect to Aboriginals, but none of this taxpayer funded fake woke rubbish is of any benefit to any Aboriginals in Australia. It has not stopped corrupt police from bashing up and killing countless aboriginals in an ongoing war against them.

Nor has it stopped the cocaine addicted judges and magistrates from incarcerating them as a first option when instructed to do so by the racist police. See for example Hoser (2020c) at page 45.

This fake woke rubbish will NOT save a single species either!

# **CYCLODOMORPHUS LIT SP. NOV.**

LSIDurn:lsid:zoobank.org:act:41253E8E-2B5C-43AC-972A-A84E1F431472

**Holotype:** A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.51692 collected from 6 miles north-west of Ben Lomond, New South Wales, Australia, Latitude -29.966 S., Longitude 151.633 E.

This government-owned facility allows access to its holdings.

**Diagnosis:** Until now, *Cyclodomorphus lit sp. nov.*, *C. cashcow sp. nov.* and *C. wellingtoni sp. nov.* have been treated as divergent populations of *C. michaeli* Wells and Wellington, 1984, with a type locality of Mount Victoria, New South Wales.

*C. michaeli* is herein regarded as a taxon of the central coast region of New South Wales only in an area generally from Newcastle to Nowra and the nearby hilly hinterland, south of the Hunter Valley, including the New South Wales Southern Highlands and the Blue Mountains.

The divergent taxon *C. cashcow sp. nov.* is known only from the Barrington Tops area of the coastal ranges, north of the Hunter Valley in New South Wales in high altitude areas.

*C. lit sp. nov.* is only known from the upper New England Tablelands Region of New South Wales, around the town of Ben Lomond, New South Wales (the type locality).

*C. cashcow sp. nov.* and *C. lit sp. nov.* are exclusively high-altitude species.

*C. wellingtoni sp. nov.* is found only in far north-east Victoria and immediately adjacent south-east New South Wales, generally at low altitude, in a relatively confined region, but where it is abundant and easily found by collectors.

*C. wellingtoni sp. nov.* is separated from *C. michaeli*, *C. lit sp. nov.* and *C. cashcow sp. nov.* by having an adult ground colour that is olive-brown on the dorsum rather than brownish orange on the dorsum in *C. michaeli* or greyish dorsally in *C. lit sp. nov.* and *C. cashcow sp. nov.*

In turn *C. lit sp. nov.* and *C. cashcow sp. nov.* are separated from both *C. michaeli* and *C. wellingtoni sp. nov.* by having a dorsum in adults where the black markings not only coalesce to form semi-distinct longitudinal lines, but also as semi-distinct crossbands, especially anteriorly.

This is sometimes called the "gill-like" markings.

Both *C. lit sp. nov.* and *C. cashcow sp. nov.* tend to be greyish dorsally, rather than brownish dorsally in both *C. michaeli* (orange brown) and *C. wellingtoni sp. nov.* (olive brown).

*C. lit sp. nov.* has a subcaudal count (on original tails) below 85, versus over 92 for each of *C. cashcow sp. nov.*, *C. michaeli* and *C. wellingtoni sp. nov.*

*C. lit sp. nov.* and *C. cashcow sp. nov.* average 2.6 nuchal scales and 8 infralabials as a rule, versus 3.2 and 7 in *C. michaeli*, versus 6 or 7 infralabials in *C. wellingtoni sp. nov.*

The four species *C. michaeli*, *C. wellingtoni sp. nov.*, *C. cashcow sp. nov.* and *C. lit sp. nov.* are separated from all other species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* (as defined in Cogger 2024), including the genera *Obscurescincus gen. nov.*, *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored gen. nov.* by not having a post narial groove, two infralabial scales contacting the postmental scale on each side, more than 65 subcaudal scales on the original tail and a dorsum that is not greyish in general colour with a complex pattern of brown, black, grey and white and having flanks with thin black bars and sometimes white interspaces as is seen in adult *C. casuarinae* (Duméril and Bibron, 1839).

Species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* as defined by Cogger (2014), including the genera *Obscurescincus gen. nov.*, *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored gen. nov.* are separated from all other Australian skinks by the following unique combination of characters:

Medium-sized smooth-scaled skinks, with slender heads, necks and bodies, generally elongate in form. Anterior ear lobules usually present; subequal scales; no supranasals or divided nasal scales; a scaly movable lower eyelid; parietal scales not in contact behind the third interparietal; third and fourth toes not equal or the third toe at least slightly longer than the fourth; undivided subdigital lamellae; original tail long and slender and usually at least as long as the body. Live bearing. Strongly crepuscular unless forced to move by day due to excess heat on resting place (modified from Cogger, 2014).

*C. michaeli* is depicted in life in Hoser (1989) on page 107 at top



right, Swan, Sadler and Shea (2022) on page 151 both images and online at:

<https://www.flickr.com/photos/mattsummerville/16923057122/>

*C. wellingtoni* sp. nov. is depicted in life online at:

<https://www.flickr.com/photos/88708273@N03/8397228981/>

and

<https://www.inaturalist.org/observations/60174058>

and

<https://www.inaturalist.org/observations/42556271>

and

<https://www.inaturalist.org/observations/18534072>

*C. cashcow* sp. nov. is depicted in life online at:

<https://www.flickr.com/photos/shaneblackfnq/29846456055/>

The type form of *C. casuarinae* is depicted in life online at:

<https://www.flickr.com/photos/akashsherp/54163133578/>

and

<https://www.flickr.com/photos/ryanfrancis/31688785195/>

and

<https://www.flickr.com/photos/93733769@N03/9299532013/>

**Distribution:** *C. lit* sp. nov. is only known from the New England Tablelands Region of New South Wales, from the type locality of Ben Lomond, New South Wales. It should be listed as a vulnerable or threatened species, pending an urgent assessment of population/s of the taxon (but see the etymology for *C. cashcow* sp. nov.).

**Etymology:** In Australia in year 2024, the word “lit” means “something is exciting, intense, or fun”. E.g. Finding a new species is “lit”.

Hence the etymology for the species.

#### **ZEUSIUS WELLSI SP. NOV.**

**LSIDurn:lsid:zoobank.org:act:6D1AA495-0F0A-4FE4-B083-550E2E4AEED2**

**Holotype:** A preserved specimen at the Western Australian Museum, Perth, Western Australia, Australia, specimen number R145141 collected from beneath a sandstone rock at Mount Bomford, Kimberley District, Western Australia, Australia, Latitude -15.755 S., Longitude -15.755 E.

This government-owned facility allows access to its holdings.

**Diagnosis:** Until now, *Zeusius wellsi* sp. nov. has been treated as a divergent southern population of *Z. maxima* (Storr, 1976) by all other publishing authors.

*Zeusius wellsi* sp. nov. appears to be restricted to the general area around Barnett River and nearby Mount Bomford in the Kimberley District of Western Australia.

*Z. maxima* with a type locality of Kalumburu, Western Australia, Australia, Latitude -14.18 S. Longitude 126.38 E. is a north Kimberley endemic.

Specimens from the coastal West Kimberley are also tentatively assigned to *Z. maxima* on the basis of similar adult colouration and scalation.

*Z. wellsi* sp. nov. is most easily separated from *Z. maxima* in life by colouration.

*Z. wellsi* sp. nov. is a dark grey brown with purple tinge above and with unmarked bluey-grey on the flanks of the body. Tail is slightly lighter above but consists of a semi distinct pattern of light bluish grey alternating with darker purple brown.

By contrast *Z. maxima* is an obviously yellowish-orange-brown lizard above and on the flanks. The colour change from dorsum to flank, just below the lateral edge is not abrupt in *Z. maxima*, but is in *Z. wellsi* sp. nov..

The whitish spotting on the posterior half of the dorsum and anterior upper tail is invariably distinct and well defined in adult *Z. wellsi* sp. nov. but not always so in *Z. maxima* where the spotting is dull yellow or orangish as opposed to white or whitish grey in *Z. wellsi* sp. nov.. Shea and Miller (1995) also noted that specimens herein assigned to *Z. wellsi* sp. nov. are further separated from *Z. maxima* by having: “significantly fewer lower palpebrals ( $x's = 10.3$  vs  $11.6$ ,  $t_{14} = 3.16$ ), paravertebral scales ( $x's = 63.0$  vs  $65.3$ ,  $t_{17} = 3.58$ ) and subdigital lamellae ( $x's = 14.5$  vs  $15.9$ ,  $t_{32} = 4.86$ ), and a higher proportion of parietals contacting caudal to the interparietal (7:0 vs 2:8; Fisher Exact Probability Test,  $p < 0.05$ )” than in *Z. maxima*.

Both *Z. wellsi* sp. nov. and *Z. maxima*, herein now defined as the entirety of the genus *Zeusius* Wells, 2007 are separated from all other species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato*

(as defined in Cogger 2024) including the genera *Obscurescincus* gen. nov., *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored* gen. nov. by the following unique suite of characters:

Post narial groove is present; other than spotting (small to tiny spots that are numerous) on the rear of the dorsum and anterior upper surface of tail, there is no body pattern on the sides of the neck and the body is more-or less uniform in colour, save for a moderately or poorly defined colour change just below the dorsolateral edge of the body; maximum snout-vent length is above 20 cm.

Species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* as defined by Cogger (2014), including the genera *Obscurescincus* gen. nov., *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored* gen. nov. are separated from all other Australian skinks by the following unique combination of characters:

Medium-sized smooth-scaled skinks, with slender heads, necks and bodies, generally elongate in form. Anterior ear lobules usually present; subequal scales; no supranasals or divided nasal scales; a scaly movable lower eyelid; parietal scales not in contact behind the third interparietal; third and fourth toes not equal or the third toe at least slightly longer than the fourth; undivided subdigital lamellae; original tail long and slender and usually at least as long as the body. Live bearing. Strongly crepuscular unless forced to move by day due to excess heat on or in their daytime resting place (modified from Cogger, 2014).

*Z. wellsi* sp. nov. is depicted in life in Cogger (2014) on page 534 at top right.

*Z. maxima* is depicted in life in Wilson and Knowles (1988) on page 297 in image 431 and online at:

<https://www.flickr.com/photos/reptileshots/49564796397/>

and

<https://www.flickr.com/photos/54876436@N08/30409608556/>

and

<https://www.flickr.com/photos/reptileshots/52145412441/>

and

<https://www.flickr.com/photos/reptileshots/27354695522/>

**Distribution:** *Zeusius wellsi* sp. nov. appears to be restricted to the general area around Barnett River and nearby Mount Bomford in the Kimberley District of Western Australia.

**Etymology:** *C. wellsi* sp. nov. is named in honour of one of Australia's leading herpetologists, Richard Walter Wells, currently of Drake in northern New South Wales, Australia, in recognition of a lifetime's achievements in herpetology.

As one who punched well above his weight from an early age, others in positions of power have been in a state of war against him to metaphorically shoot him down. This has been to attempt to limit his achievements in the hope this may further their own so-called careers in herpetology.

That is to remove a person they see as a competitor.

This ongoing war has spanned more than 4 decades and is wholly the fault of those who have improperly attacked Richard Wells.

It has had seriously negative wildlife conservation impacts (see Hoser 2007, 2019a, 2019b for details).

#### **SCORED GEN. NOV.**

**LSIDurn:lsid:zoobank.org:act:92619079-C5C1-470F-A019-2BFEBED605F0**

**Type species:** *Scored one* sp. nov. (this paper).

**Diagnosis:** Until now *Scored* gen. nov. included a group of species placed by most publishing herpetologists within the genus *Cyclodomorphus* Fitzinger, 1843, *sensu* Cogger (2014).

Exceptional to this has been Wells (2007) who erected the genus *Zeusius* type species *Orolepida maxima* Storr, 1976 for all but the *Cyclodus casuarinae* Duméril and Bibron, 1839 species group, which remained in *Cyclodomorphus*.

While the action of Wells (2007) made sense, including his resurrection of the genus *Hemisphaeriodon* Peters, 1867 for the *Hinulia gerrardii* Gray, 1845 group of species, the phylogeny produced by Brennan *et al.* (2024) showed that two divergent species groups within *Cyclodomorphus* Fitzinger, 1843, *sensu* Cogger (2014) remained unnamed.

One of these unnamed species groups is *Scored* gen. nov. and the other is *Obscurescincus* gen. nov..

Species within *Scored* gen. nov. are separated from all other species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* as defined by Cogger (2014), including the genera *Obscurescincus* gen. nov.,

*Zeusius* Wells, 2007 and *Hemisphaeriodon* Peters, 1867 by the following unique combination of characters:

Post narial groove present; and one or other of the following two-character combinations:

1/ Distinctive black patches or bars on the side of the neck and/or shoulder region, less than 55 subcaudals on the original tail; an agglomeration of black scales on the side of the neck extending over the shoulder region, sometimes halfway along the body and sometimes being concentrated as irregular vertical patches or bars, or:

2/ Body pattern including sides of neck and forebody uniform or more-or-less uniform in colour, except possibly in some juveniles; snout vent length maximum is under 15 cm.

The preceding diagnosis is modified from Cogger (2014).

Species within the other newly named genus *Obscurescincus* gen. nov. type species *Hinulia branchialis* Günther, 1867 are separated from all other species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* as defined by Cogger (2014), including the genera *Scored* gen. nov., *Zeusius* Wells, 2007 and *Hemisphaeriodon* Peters, 1867 by the following unique combination of characters:

Post narial groove present; distinctive black patches or bars on the side of the neck and/or shoulder region, more than 55 subcaudals on the original tail; three large patches of large vertical black patches on either side of the neck and shoulder region (modified from Cogger 2014).

**Distribution:** Species within *Scored* gen. nov. occur within most of the western two thirds of the Australian mainland, except for the wetter parts of the tropics and coolest parts of the south.

**Etymology:** When I became aware of yet another unnamed genus of Australian reptile, I told my wife I had scored another one, to which my wife replied, why not make that the etymology.

My kids wanted me to name another genus in honour of our dog, but I squashed that suggestion on the basis of previous complaints when I have done this previously (see for example Naish 2013 as amended).

In view of complaints by non-scientists and even scientists that scientific names are often difficult to pronounce, long in name, hard for lay people to pronounce, or generally difficult to remember (AKA "word monsters"), I thought the etymology for "scored" made sense!

**Content:** *Scored one* sp. nov. (type species); *S. aniceone* sp. nov.; *S. another* sp. nov.; *S. celatus* (Shea and Miller, 1995); *S. elongatus* (Werner, 1910); *S. melanops* (Stirling and Zeitz, 1893); *S. siticulosus* (Shea and Miller, 1995); *S. sternfeldi* (Wells, 2007); *S. venustus* Shea and Miller (1995); *S. yetanother* sp. nov..

#### SCORED ONE SP. NOV.

LSIDurn:lsid:zoobank.org:act:A7F94055-8CA3-4159-BE81-A2D84FDE18FB

**Holotype:** A preserved specimen at the Australian Museum in Sydney, New South Wales, Australia, specimen number R.134357 collected from 3 km north of Gnarloo Homestead, via Gnarloo Bay Track, Western Australia, Australia, Latitude -23.783 S., Longitude 113.516 E.

This government-owned facility allows access to its holdings.

**Paratypes:** 1/ Two preserved specimens at the Australian Museum in Sydney, New South Wales, Australia, specimen number R.134358 and R.134359 both collected from 3 km north of Gnarloo Homestead, via Gnarloo Bay Track, Western Australia, Australia, Latitude -23.783 S., Longitude 113.516 E.

2/ A preserved specimen at the Western Australian Museum, Perth, Western Australia, Australia, specimen number R76762 collected from 1 km south "Gnaraloo Homestead, Western Australia, Australia, Latitude -23.816667 S., Longitude 113.516667 E.

3/ A preserved specimen at the Western Australian Museum, Perth, Western Australia, Australia, specimen number R76888 collected from half a km south "Gnaraloo Homestead, Western Australia, Australia, Latitude -23.816667 S., Longitude 113.533333 E.

**Diagnosis:** Until now, both species *Scored one* sp. nov. from the Shark Bay area of coastal Western Australia and *Scored another* sp. nov. from the Yuna area of near coastal Western Australia (between Geraldton and Kalbarri), have been treated as northern populations of "*Cyclodomorphus celatus* Shea and Miller, 1995", now transferred to *Scored* gen. nov. with a type locality of Ledge Point, Western Australia and a taxon herein confined to the coastal plains from Perth and north of there to about Lancelin in Western Australia.

The three preceding species are all widely allopatric of one another

and are most readily separated from one another by colouration as detailed below:

The type form of *S. celatus* (Shea and Miller, 1995) is a light yellowish brownish orange colour above with numerous tiny rectangular dark grey flecks in the centre of numerous dorsal scales, particularly on the posterior parts of the upper body. On the tail these flecks become more faded and irregular in shape.

Juveniles are yellowish to red brown above with a darker grey-brown head, white spots on body and tail scales, vertical bars on sides of neck are weak and usually with dark streaks dorsally and laterally.

*S. one* sp. nov. by contrast have a darker dorsal ground colour and broader cream-edged dark streaks on top giving a darker and very mottled appearance. The flanks are whitish grey in colour with numerous scattered dark brown rectangular spots. Sides of neck may be strongly dark barred in adults, ranging down to pale with rows of dark brown spots. Juveniles are of similar colour to adults, but sometimes more faded in overall colour and pattern.

The venter is whitish to cream yellow with pale centres to many scales.

*S. another* sp. nov. is a distinctive grey to brown above, with reduced spotting or streaking on the upper surfaces making the lizard particularly plain in appearance.

The head, nape and throat lack markings of any sort. On the flanks, spotting is slightly more prominent than above but is still somewhat faded.

Juveniles of are mid brown dorsally and without dark flecking. There is a small white spot in the centre of each body scale. They have a distinctive dark grey head colour on the upper surface and bars of the same colour on the otherwise lighter sides of the neck.

The three species *Scored one* sp. nov., *S. another* sp. nov. and *S. celatus* are otherwise separated from all other species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* (as defined in Cogger 2024), including the genera *Obscurescincus* gen. nov., *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored* gen. nov. by the following unique combination of characters:

Post narial groove present; body pattern including sides of neck and forebody uniform or more-or-less uniform in colour, except possibly in some juveniles; maximum snout vent length is under 15 cm; eye opening is very small and slit like; 20-22 midbody scale rows.

Species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* as defined by Cogger (2014), including the genera *Obscurescincus* gen. nov., *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored* gen. nov. are separated from all other Australian skinks by the following unique combination of characters:

Medium-sized smooth-scaled skinks, with slender heads, necks and bodies, generally elongate in form. Anterior ear lobules usually present; subequal scales; no supranasals or divided nasal scales; a scaly movable lower eyelid; parietal scales not in contact behind the third interparietal; third and fourth toes not equal or the third toe at least slightly longer than the fourth; undivided subdigital lamellae; original tail long and slender and usually at least as long as the body. Live bearing. Strongly crepuscular unless forced to move by day due to excess heat on resting place (modified from Cogger, 2014).

*S. one* sp. nov. is depicted in life online at:

<https://www.flickr.com/photos/114192916@N07/54098741541/> and

<https://www.flickr.com/photos/127392361@N04/54014648645/>

*S. celatus* is depicted in life in Cogger (2014) on page 533 top right and online at:

<https://www.flickr.com/photos/128497936@N03/49113422333/> and

<https://www.flickr.com/photos/akashsherping/43223492042/> and

<https://www.flickr.com/photos/mattsummerville/45009491395/> and

<https://www.flickr.com/photos/jaricornelis/52461685522/> and

<https://www.flickr.com/photos/128203159@N06/45476395584>

**Distribution:** *Scored one* sp. nov. is a range-restricted taxon confined to the coastal part of the Shark Bay area of coastal Western Australia.

**Etymology:** After my kids became aware of the newly identified species, my eldest daughter exclaimed "scored one!" and hence the etymology.



**SCORED ANOTHER SP. NOV.**

LSIDurn:lsid:zoobank.org:act:41323D69-7A41-45E3-ACB2-C2115B920BE3

**Holotype:** A preserved specimen at the Australian Museum in Sydney, New South Wales, Australia, specimen number R.105626 collected from 23.7 km north-north-east by road of Yuna, Western Australia, Australia, Latitude -28.25 E., Longitude 115.25 S.

This government-owned facility allows access to its holdings.

**Paratypes:** Ten preserved specimens at the Western Australian Museum, Perth, Western Australia, Australia, specimen numbers R26496, R47524, R47526, R47535, R47536, R47537, R47538, R47539, R47542 and R47545 all collected from 32 km north-east of Yuna, Western Australia, Australia, Latitude -28.116667 E., Longitude 115.216667 E.

**Diagnosis:** Until now, both species *Scored one sp. nov.* from the Shark Bay area of coastal Western Australia and *Scored another sp. nov.* from the Yuna area of near coastal Western Australia, between Geraldton and Kalbarri (generally inland), have been treated as northern populations of "*Cyclodomorphus celatus* Shea and Miller, 1995", now transferred to *Scored gen. nov.* with a type locality of Ledge Point, Western Australia and a taxon herein confined to the coastal plains from Perth and north of there to about Lancelin in Western Australia.

The three preceding species are all widely allopatric of one another and are most readily separated from one another by colouration as detailed below:

The type form of *S. celatus* (Shea and Miller, 1995) is a light yellowish brownish orange colour above with numerous tiny rectangular dark grey flecks in the centre of numerous dorsal scales, particularly on the posterior parts of the upper body. On the tail these flecks become more faded and irregular in shape.

Juveniles are yellowish to red brown above with a darker grey-brown head, white spots on body and tail scales, vertical bars on sides of neck are weak and usually with dark streaks dorsally and laterally.

*S. one sp. nov.* by contrast have a darker dorsal ground colour and broader cream-edged dark streaks on top giving a darker and very mottled appearance.

The flanks are whitish grey in colour with numerous scattered dark brown rectangular spots. Sides of neck may be strongly dark barred in adults, ranging down to pale with rows of dark brown spots.

Juveniles are of similar colour to adults, but sometimes more faded in overall colour and pattern.

The venter is whitish to cream yellow with pale centres to many scales.

*S. another sp. nov.* is a distinctive grey to brown above, with reduced spotting or streaking on the upper surfaces making the lizard particularly plain in appearance.

The head, nape and throat lack markings of any sort. On the flanks, spotting is slightly more prominent than above but is still somewhat faded.

Juveniles of are mid brown dorsally and without dark flecking. There is a small white spot in the centre of each body scale. They have a distinctive dark grey head colour on the upper surface and bars of the same colour on the otherwise lighter sides of the neck.

The three species *Scored one sp. nov.*, *S. another sp. nov.* and *S. celatus* are otherwise separated from all other species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* (as defined in Cogger 2024), including the genera *Obscuresscincus gen. nov.*, *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored gen. nov.* by the following unique combination of characters:

Post narial groove present; body pattern including sides of neck and forebody uniform or more-or-less uniform in colour, except possibly in some juveniles; maximum snout vent length is under 15 cm; eye opening is very small, slit like and there are 20-22 midbody scale rows.

Species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* as defined by Cogger (2014), including the genera *Obscuresscincus gen. nov.*, *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored gen. nov.* are separated from all other Australian skinks by the following unique combination of characters:

Medium-sized smooth-scaled skinks, with slender heads, necks and bodies, generally elongate in form. Anterior ear lobules usually present; subequal scales; no supranasals or divided nasal scales; a scaly movable lower eyelid; parietal scales not in contact behind the third interparietal; third and fourth toes not equal or the third toe

at least slightly longer than the fourth; undivided subdigital lamellae; original tail long and slender and usually at least as long as the body. Live bearing. Strongly crepuscular unless forced to move by day due to excess heat on or in their resting place (modified from Cogger, 2014).

*S. one sp. nov.* is depicted in life online at:

<https://www.flickr.com/photos/114192916@N07/54098741541/> and

<https://www.flickr.com/photos/127392361@N04/54014648645/>

*S. celatus* is depicted in life in Cogger (2014) on page 533 top right and online at:

<https://www.flickr.com/photos/128497936@N03/49113422333/> and

<https://www.flickr.com/photos/akashsherp/43223492042/> and

<https://www.flickr.com/photos/mattsummerville/45009491395/> and

<https://www.flickr.com/photos/jaricornelis/52461685522/> and

<https://www.flickr.com/photos/128203159@N06/45476395584/>

**Distribution:** *Scored another sp. nov.* appears to be a range-restricted taxon confined to the Yuna area of near coastal Western Australia, between Geraldton and Kalbarri (generally inland).

**Etymology:** My kids became aware of another newly identified species, and my eldest daughter exclaimed "scored one" in relation to the taxon now carrying that name. In relation to this taxon, my younger daughter at the same time then said "scored another!" and hence the etymology for this taxon.

**SCORED YETANOTHER SP. NOV.**

LSIDurn:lsid:zoobank.org:act:9D4B334A-C6F5-4037-BE22-2C4A2F60F2B7

**Holotype:** A preserved specimen at the South Australian Museum herpetology collection, Adelaide, South Australia, Australia, specimen number R21024 collected from 28 km north of Billa Kalina, South Australia, Australia, Latitude - 29.9145 S., Longitude 136.3625 E.

This government-owned facility allows access to its holdings.

**Paratypes:** 1/ A preserved specimen at the South Australian Museum herpetology collection, Adelaide, South Australia, Australia, specimen number R24415 collected from Wilpena Pound, South Australia, Australia, Latitude -31.5590 S., Longitude: 138.5740 E. and:

2/ A preserved specimen at the South Australian Museum herpetology collection, Adelaide, South Australia, Australia, specimen number R24519 collected from Blinman, South Australia, Australia, Latitude -31.72 S., Longitude: 138.4122 E.

**Diagnosis:** Until now, most publishing Australian herpetologists have treated the concept of "*Cyclodomorphus venustus*" as originally proposed by Shea and Miller, 1995, with a type locality of Port Germein, South Australia, Australia, Lat. -33.01 S., Long. 138.00 E. That is a species found throughout south and east central Australia. Wells (2007) transferred the taxon to his newly erected genus *Zeusius* Wells, 2007 and split the putative northern population off as a new species, namely "*Z. sternfeldi* Wells, 2007" as foreshadowed by Shea and Miller (1995).

That was a population with a centre of distribution around the Channel Country of south-west Queensland and adjacent parts of northern New South Wales and far northeast South Australia.

These two and thitherto unnamed third species are herein transferred to the genus *Scored gen. nov.*

The type form from the Spencer Gulf and Eyre Peninsula region, remains as *Scored venustus*, while the disjunct and morphologically divergent population found in the central parts of South Australia are herein described as the new species *Scored yetanother sp. nov.*

The three species are readily separated from one another as follows: *S. venustus* is characterised by a strong orange colour on the dorsum and flanks, strongly flecked black and light grey above. The flanks have well developed black markings, etched white on the edges, giving the sides a distinctive gill-like pattern, that is prominent on the neck and forebody and usually extends quite prominently along the entire length of the flank on the body.

Old and faded specimens become brownish on top and orange on the sides and retain some form of gill type markings on the flanks, even if sometimes reduced to mainly white markings, instead of black etched with white.

By contrast *S. yetanother sp. nov.* is plain bright orange-red-brown

on top, with each scale lightly etched grey only and strongly reduced gill type markings, being reduced on the neck and around the axilla of the forelimb, but otherwise wholly absent from the flanks in any form. The scales that are whitish on the sides of *S. venustus* are in this species greatly reduced in number, so as to be very scattered at best as well as reduced in intensity so as to be barely differentiated from the surrounding orange scales.

*S. sternfeldi* is very different to the two preceding taxa in that the gill-type markings are reduced to be nothing more than a black smudge or patch generally above the axilla of the front leg, but not in a gill-type appearance as seen in particular in *S. venustus*.

Dorsally *S. sternfeldi* is a light yellowish brown coloured lizard as opposed to reddish brown or orange as seen in particular in *S. yetanother sp. nov.*

*S. venustus* is a much darker coloured lizard than *S. yetanother sp. nov.*

There are no black or white scales, or otherwise lighter scales at all on the flanks of *S. sternfeldi*.

*S. venustus* has extensive and heavy blackish spotting on the (original) tail, the individual spots being quite large and obvious but irregularly shaped and while arranged longitudinally does not give the appearance of caudal lines. *S. yetanother sp. nov.* has scattered tiny round, well-defined black spots on the (original) tail that are arranged longitudinally.

*S. sternfeldi* has no spotting on the (original) tail.

Shea and Miller (1995) give scalation and other differences between the three taxa described herein, those authors treating each as populations of *S. venustus*.

The three species *S. venustus*, *S. sternfeldi* and *S. yetanother sp. nov.* are otherwise separated from all other species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* (as defined in Cogger 2024), including the genera *Obscurescincus gen. nov.*, *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored gen. nov.* by the following unique combination of characters:

Post narial groove present; distinctive black patches or bars on the side of the neck and/or shoulder region; less than 55 subcaudals on the original tail; an agglomeration of black scales on the side of the neck extending over the shoulder region, sometimes halfway along the body and sometimes being concentrated as irregular vertical patches or bars.

Species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* as defined by Cogger (2014), including the genera *Obscurescincus gen. nov.*, *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored gen. nov.* are separated from all other Australian skinks by the following unique combination of characters:

Medium-sized smooth-scaled skinks, with slender heads, necks and bodies, generally elongate in form. Anterior ear lobules usually present; subequal scales; no supranasals or divided nasal scales; a scaly movable lower eyelid; parietal scales not in contact behind the third interparietal; third and fourth toes not equal or the third toe at least slightly longer than the fourth; undivided subdigital lamellae; original tail long and slender and usually at least as long as the body. Live bearing. Strongly crepuscular unless forced to move by day due to excess heat on resting place (modified from Cogger, 2014).

*S. yetanother sp. nov.* is depicted in life online at:

<https://www.flickr.com/photos/103027574@N04/11581598845>

The type form of *S. venustus* is depicted in life in Cogger (2014) on page 537 at top left and online at:

<https://www.flickr.com/photos/58349528@N02/32260993745/>

and

<https://www.flickr.com/photos/reptileshots/20456373806/>

and

<https://www.flickr.com/photos/127392361@N04/49220288462/>

and

<https://www.flickr.com/photos/127392361@N04/50704696053/>

and

<https://www.flickr.com/photos/gondwanareptileproductio ns/53350260598/>

*S. sternfeldi* is depicted in life in Cogger (2014) on page 537 at top right and online at:

<https://www.flickr.com/photos/euprepiosaur/10063237276/>

and

<https://www.flickr.com/photos/euprepiosaur/10063170794/>

and

<https://www.flickr.com/photos/euprepiosaur/10063171494/>

**Distribution:** *S. yetanother sp. nov.* is a taxon found in the central and northern parts of South Australia, mainly west of Lake Eyre.

**Etymology:** After my wife noted it was “yetanother” species needing to be named the relevant etymology stuck.

**SCORED ANICEONE SP. NOV.**

**LSIDurn:lsid:zoobank.org:act:9A1E8EE7-FC45-4F45-894E-6D4C4E540429**

**Holotype:** A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.161100 collected from Renmark, South Australia, Australia, Latitude -34.1754 S., Longitude 140.7455 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.130982 collected from 12.4 miles north of Coombah Roadhouse via Silver City Highway, New South Wales, Australia, Latitude -32.816 S., Longitude 141.616 E. 2/ A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.130983 collected from 8.4 miles north of Coombah Roadhouse via Silver City Highway, New South Wales, Australia, Latitude -32.883 S., Longitude 141.616 E. 3/ Two preserved specimens at the Australian Museum, Sydney, New South Wales, Australia, specimen numbers R.105443 and R.105446, both collected from 12.5 km north of “Coombah”, New South Wales, Australia, Latitude -32.866 S., Longitude 141.616 E. 4/ A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.121029 collected from 166 km north of Wentworth, New South Wales, Australia, Latitude -32.8 S., Longitude 141.616 E. 5/ A preserved specimen at the South Australian Museum, Adelaide, South Australia, Australia, specimen number R15988 collected from Dangalli Conservation Park, South Australia, Australia, Latitude -33.5 S., Longitude 140.7 E.

**Diagnosis:** The species *Scored aniceone sp. nov.*, has until now been treated as an East Australian population of the species *Scored melanops* (Stirling and Zeitz, 1893), better known as “*Cyclodomorphus melanops*” or alternatively as an eastern population of the subspecies *Cyclodomorphus melanops elongatus* (Werner, 1910). It is neither.

*Scored aniceone sp. nov.* is a taxon from south-west New South Wales and immediately adjacent south-east South Australia, generally near the lower Murray River basin.

It is readily separated from all other forms of putative *S. melanops* from other parts of Australia by the following unique combination of characters:

A complete absence of any barring or etching of the upper labials or if present so faint as to be barely noticeable. There is faint black etching between scales on the dorsum of the head, but otherwise the upper surface of the head is an immaculate brown in colour (not greyish in any way). Dorsum is a medium brown, becoming yellowish on the flanks or alternatively similar but chocolate or dark brown, each scale on the body dully etched darker on the posterior edge.

The light of the chin scales enters and includes most of the upper labials, which darken to the dorsal colour at the upper edge.

Iris is orange.

Immaculate venter and less than 75 subcaudals.

All other forms of *S. melanops* and associated species have obvious dark bars or dark etching on the upper labials, as well as prominent dark etching of the scales on the upper body and flanks, which are either similar on the tail or become black or dark spotting, and/or have a greyish upper surface of the head in contrast to the otherwise generally brown dorsal body colour.

See for example the images in Shea and Miller (1995) at Fig. 15 (and others to Fig. 32), on page 279 bottom left of Wilson and Knowles (1988), Cogger (2014) on page 535 bottom, Horner (1992) on page 77 at middle right or Wilson and Swan 2021 on page 311, bottom three images.

By contrast, images of *Scored aniceone sp. nov.* in life can be found in Swan *et al.* (2022) and online at:

<https://www.flickr.com/photos/gondwanareptileproductio ns/52543088929/>

and

<https://www.flickr.com/photos/julesfarquhar/33120940525/>

*Scored aniceone sp. nov.* and all other species and subspecies



in the *S. melanops* group (by subspecies names), as defined by Wells (2007) are separated from all other species *Cyclodomorphus* Fitzinger, 1843 *sensu lato* as defined by Cogger (2014), including the genera *Obscurescincus* *gen. nov.*, *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored* *gen. nov.* by the following unique combination of characters:

Postnarial groove present; paravertebral scales noticeably broader than adjoining lateral dorsal scales; snout-vent length up to 130 mm; interparietal only a little smaller than the frontal; side of neck without solid dark ovoid markings; 58-87 subcaudal scales; 24-29 midbody scale rows; ear open, usually with a single lobule on the rostral margin; sides of neck are immaculate or with scattered black spots (but not any streaks).

Species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* as defined by Cogger (2014), including the genera *Obscurescincus* *gen. nov.*, *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored* *gen. nov.* are separated from all other Australian skinks by the following unique combination of characters:

Medium-sized smooth-scaled skinks, with slender heads, necks and bodies, generally elongate in form. Anterior ear lobules usually present; subequal scales; no supranasals or divided nasal scales; a scaly movable lower eyelid; parietal scales not in contact behind the third interparietal; third and fourth toes not equal or the third toe at least slightly longer than the fourth; undivided subdigital lamellae; original tail long and slender and usually at least as long as the body. Live bearing. Strongly crepuscular unless forced to move by day due to excess heat on resting place (modified from Cogger, 2014).

**Distribution:** *Scored aniceone* *sp. nov.* is a taxon from south-west New South Wales and immediately adjacent south-east South Australia, generally near the lower Murray River basin.

**Etymology:** In 2010 when collecting specimens near the roadside outside Renmark in South Australia, I was intercepted at gunpoint by State police.

They were convinced I was some kind of anti-government terrorist. Their computer had flagged me as a terrorist and according to the South Australian Police, there was no way known their computer could have possibly got it wrong.

I produced my identification documents and relevant wildlife license documents to account for the car load of reptiles I had on board.

After some time convincing the police that I was not any serious threat to Australian civilization, they decided to follow me around the "tin spot" looking for reptiles to catch and photograph.

They even grabbed skinks for me, but stupidly knocked off their tails when grabbing them.

The police had decided that this was better entertainment than driving along deserted roads to harass stray motorists or shoot native Aboriginals.

One of the male police officers grabbed a specimen of a *Scored aniceone* *sp. nov.* hiding under a sheet of tin.

He was clearly pleased he hadn't amputated the tail when grabbing it. He showed me the lizard and with a smile on his face said "scored a nice one" and hence the etymology for the species.

#### **OBSCURESINCUS GEN. NOV.**

**LSIDurn:lsid:zoobank.org:act:5F6D47DF-8DD7-4A5C-8D5D-E951C3C9C2A0**

**Type species:** *Hinulia branchialis* Günther, 1867.

**Diagnosis:** The genus *Obscurescincus* *gen. nov.* monotypic for the type species, is separated from all other species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* as defined by Cogger (2014), including the genera *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored* *gen. nov.* are separated from all other Australian skinks by the following unique combination of characters: Post narial groove present; distinctive black patches or bars on the side of the neck and/or shoulder region; more than 55 subcaudals on original tails; three large black vertical patches on each side of the neck and shoulder region.

Species within *Cyclodomorphus* Fitzinger, 1843 *sensu lato* as defined by Cogger (2014), including the genera *Obscurescincus* *gen. nov.*, *Zeusius* Wells, 2007, *Hemisphaeriodon* Peters, 1867 and *Scored* *gen. nov.* are separated from all other Australian skinks by the following unique combination of characters:

Medium-sized smooth-scaled skinks, with slender heads, necks and bodies, generally elongate in form. Anterior ear lobules usually present; subequal scales; no supranasals or divided nasal scales;

a scaly movable lower eyelid; parietal scales not in contact behind the third interparietal; third and fourth toes not equal or the third toe at least slightly longer than the fourth; undivided subdigital lamellae; original tail long and slender and usually at least as long as the body. Live bearing. Strongly crepuscular unless forced to move by day due to excess heat on resting place (modified from Cogger, 2014).

The sole member of the genus *Obscurescincus* *gen. nov.* is depicted in life in Cogger (2014) on page 532 at bottom and online at:

<https://www.flickr.com/photos/27897324@N07/48917221762/>

and

<https://www.flickr.com/photos/129822827@N07/52394145012/>

and

[https://www.flickr.com/photos/brian\\_busho/14275717337/](https://www.flickr.com/photos/brian_busho/14275717337/)

**Distribution:** The sole species is found in a relatively restricted area in south-west Western Australia between the Murchison and Irwin Rivers.

**Etymology:** *Obscurescincus* is fitting for what is in the scheme of things an obscure but divergent genus of skinks.

**Content:** *Obscurescincus branchialis* (Günther, 1867) (monotypic).

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#### CONFLICTS OF INTEREST

None.



**Eleven who may disappear!**  
**From rare to rarer ... Species splits of rare Australian skinks, making**  
**rare skinks even rarer, with eleven new species formally described!**

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**ABSTRACT**

As part of an ongoing audit of Australian reptiles, further unnamed species of skink from eastern Australia were identified in the past 3 years.

Most have never been flagged in any way by other herpetologists besides myself, but all 11 described herein are morphologically divergent, allopatric to their closest relatives and separated from them by well-established biogeographical barriers of known antiquity.

Each species is believed to be at least 2 MYA divergent from their nearest relatives.

Molecular evidence suggesting these facts is also available for 6 of the 11 taxa.

All eleven species are formally named for the first time.

These are four new species within the genus *Harrisoniascincus* Wells and Wellington, 1985, one within the genus *Eroticoscincus* Wells and Wellington, 1985, three within the genus *Ndurascincus* Wells, 2002 and three within the genus *Anepischetosia* Wells and Wellington, 1985.

**Keywords:** Lizards; Australia; *Harrisoniascincus*; *Ndurascincus*; *Eroticoscincus*; *Anepischetosia*; *Lampropholis*; *zia*; *graciloides*; *adonis*; *couperi*; *maccoyi*; *sharmani*; *brindabellaensis*; *shireenhoserae*; *simonkortlangi*; taxonomy; Australia; nomenclature; new species; *notacartula*; *wildlifedepartmentscumorum*; *nswpolicearecrooks*; *wellsandwellingtonorum*; *sexy*; *timhudosni*; *caitlanhudsonae*; *merceicai*; *snakemansbogensis*; *splinter*; *grunt*.

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**INTRODUCTION**

As part of an ongoing audit of Australian reptiles, most major groups of Australian reptiles have been scrutinized by myself for obviously unnamed species to year 2025.

Other than a small number of legacy papers that have been delayed to 2025 due to peer review (notably including one on the *Cyclodomorphus* Fitzinger, 1843 *sensu lato* group of lizards and another on the Australian Blind Snakes, both published also in mid 2025), the vast bulk of Australia's reptiles and frogs have now been formally named.

Including the above-mentioned papers, this includes roughly 500 species as well as further subspecies I have formally named from Australia in the past 20 years.

This paper deals with 11 further unnamed species of skink from eastern Australia that were identified in the past 3 years and await formal description.

There is no reason to delay these descriptions as there can only be negative conservation implications in doing so as detailed by Hoser (2019a, 2019b).

Most of these 11 species have never been flagged in any way by other herpetologists besides myself, but all are morphologically divergent, allopatric to their closest relatives and separated from them by well-established biogeographical barriers of known antiquity. Each species is believed to be at least 2 MYA divergent from their nearest relatives making them clearly and obviously distinct species. Molecular evidence suggesting these facts is also available for 6 of the 11 taxa, although the authors of the relevant studies in every case failed to properly interpret their own results.

The relevant publications were those of Chapple *et al.* (2023) and Schembri *et al.* (2025).

All relevant eleven skink lizard species are formally named for the first time.

These are four new species within the genus *Harrisoniascincus* Wells and Wellington, 1985, one within the genus *Eroticoscincus* Wells and Wellington, 1985, three within the genus *Ndurascincus* Wells, 2002 and three within the genus *Anepischetosia* Wells and Wellington, 1985.

## MATERIALS AND METHODS

Relevant taxonomic literature relevant to the putative species and nearest relatives was reviewed. This included publications that may have flagged potential senior synonyms or otherwise for the relevant taxa believed to be new to science.

This included of course those of Chapple *et al.* (2023) which flagged new species within the genera *Harrisoniascincus*, *Erotoscincus* and *Ndurascincus* as well as that of Schembri *et al.* (2025) which was a mess of a paper, but in that mess managed to flag yet another three unnamed species within the genus *Anepischetosia* Wells and Wellington, 1985.

The six relevant flagged species all appeared to be divergent from nearest relative (usually the same putative species) 2 or more million years prior.

The other five named species in this paper are all also believed to be divergent from nearest relative by 2 MYA or more due to their allopatry across known biogeographical barriers that have split other similarly affected taxa for 2 or more million years.

Following from these above cited papers the literature relevant to each of the genera was reviewed as were relevant published synonyms lists, this notably including Cogger *et al.* (1983), Wells and Wellington (1984, 1985) and Wells (2002).

My frequent citing of Wells and Wellington's works in this paper is not out of any friendship or favour to them, but simply because of the inalienable fact that they have been at the centre of the relevant herpetological entities and their science for most of the last half century.

I note that in spite of the non-stop narrative against the two men, Richard Wells and Ross Wellington, the scientific record and evidence tends to validate them in the overwhelming majority of times their scientific conclusions are questioned or scrutinized.

I note that all four genera subject of this paper are "Wells and Wellington" or "Wells" ones, and also note that for 200 years prior lots of other herpetologists had the opportunity to name these same entities and chose not to.

In another 100 years the act of naming the relevant four genera will be derided by others as self-evident and obvious as part of a concerted campaign to deny Wells and Wellington any honour for their work and being "first".

Following the literature review, I then inspected thousands of specimens, live, dead and from quality photos of the relevant species from the relevant areas, including nearest related taxa.

So when a putative taxon was split, this included all populations of the relevant putative taxon.

For *Harrisoniascincus*, *Erotoscincus*, *Anepischetosia* most Australian herpetologists have treated the genera as monotypic, so in effect I inspected all available specimens of each putative species. The genus *Ndurascincus* Wells, 2002 is relatively confined in terms of number of species and all putative species from all parts of their known ranges (all exclusively in eastern Queensland) were inspected.

Literature relevant to the taxonomic and nomenclatural conclusions herein include Boulenger (1915), Cabrelli and Hughes (2015), Chapple *et al.* (2023), Cogger (2014), Cogger *et al.* (1983), Commonwealth of Australia (2023), Coventry (1970), Czechura (1981), Ehmann (1992), Fitzinger (1843), Greer (1974, 2017, 2025), Hoser (2022), Hutchinson (1979), Hutchinson *et al.* (1990), Ingram (1991), Ingram and Ehmann (1981), Lönnberg and Andersson (1913), Lucas and Frost (1894), Moussalli *et al.* (2005), Murphy (1995), Ride *et al.* (1985, actually published in 1987) and Ride *et al.* (1999), Sadlier (1990), Sadlier *et al.* (2006), Schembri *et al.* (2025), Schuster (1981), Shea and Sadlier (1999), Stoll *et al.* (1964), Swan *et al.* (2017, 2022), Torkkola *et al.* (2022), Wells (2002), Wells and Wellington (1984, 1985), Wilson (2005, 2022), Wilson and Knowles (1988), Wilson and Swan (2021) and sources cited therein.

## RESULTS

As already mentioned in the abstract and earlier in this paper, the final result is 11 newly identified and named species.

There remain (as of mid 2025) other unnamed species of skink in Australia not subject of this paper and in other genera.

These are four new species within the northeast New South Wales and southeast Queensland genus *Harrisoniascincus* Wells and Wellington, 1985, one new species within the genus *Erotoscincus* Wells and Wellington, 1985 from southeast Queensland, three new species within the genus *Ndurascincus* Wells, 2002 all from south-

east Queensland and three species within the genus *Anepischetosia* Wells and Wellington, 1985, all from south-east New South Wales and northeast Victoria.

## THE CONSERVATION STATUS OF THE RELEVANT TAXA

While none are believed to be endangered or threatened at the current time, all have relatively limited ranges as compared to other lizards of similar size that inhabit the east and southeast of Australia.

My own observations have seen significant shifts in species compositions of skinks in parts of south-east Australia.

The trend has been towards warm climate and open terrain specialists gaining advantage over others. This is not so much a manifestation of climate change and global warming, noting it is an easy culprit to blame, but rather the simple fact that human activity removes tree cover and makes the ground microhabitats considerably warmer for basking species like lizards.

By way of example the live-bearing cool climate skinks have been in serious decline for decades throughout most parts of the Dandenong Ranges east of Melbourne, an area of intense human activity in the form of housing, recreation and industrial-grade agriculture.

Egg-laying invasives have moved up now cleared valleys to higher elevations, where they occupy human habitation and lay eggs in places created by humans that are suitable for egg laying in an area otherwise too cool for eggs to hatch.

Such sites include concrete driveways, compost bins and the like.

Significant is that loose rock or boulders are rare in the Dandenong Ranges of rocks and boulders for driveways, walls, gardens and the like, effectively transforming a cold closed forest habitat into an open and by day warm habitat in which egg-laying lizards can live and breed in huge numbers.

While skinks of the genus *Anepischetosia* do not appear to be in decline in many areas, they are now virtually extinct in the type locality of Ringwood, Victoria, where the forests are mainly cleared for housing and invasive egg-laying skinks of the genera *Saproscincus* Wells and Wellington, 1984, *Lampropholis* Fitzinger, 1843 and *Allengeer* Hoser, 2009 have taken over.

Remaining areas of apparently untouched forests are in turn invaded by a veritable tidal wave of invasive egg-laying lizards from adjacent areas of human occupation and the surviving live-bearers tend to eventually expire.

This is a pattern I see being repeated across Australia wherever there is a significant human footprint.

With small skinks effectively under the radar for government wildlife departments, wildlife rescue organisations and herpetologists alike, it is entirely plausible that small species of lizard may go from common to rare and then extinct literally under the radar and unseen until it is too late.

This is exactly why it is important that the 11 newly identified species be formally named and why their populations should be assessed and monitored into the future.

## CONSERVATION AFTER THE PUBLICATION OF THESE DESCRIPTIONS

Human overpopulation and its consequences are without doubt the greatest long-term 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 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 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 Ceriaco *et al.* (2023), Cogger (2014), Cotton (2014), Dubois *et al.* (2019), Hawkeswood (2021), Holyński (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 2001a for details).

Claims by Shea and Sadler (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).

#### 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 21 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 male 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 lizards not including pre-sloughing animals, which are often significantly different to the usual coloration 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 in this genus.

References to tails are the original (unbroken and not regenerated) ones unless otherwise stated.

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.

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.

Spellings of scientific names herein is intentional should not be altered unless mandatory under relevant rules of zoological nomenclature.

Some names are unusual or provocative and I make no apologies for this.

The relevant species are innocuous and "boring" and so unusual names may draw attention to them and their long-term conservation needs.

#### *HARRISONIASCINCUS NOTACARTULA SP. NOV.*

LSIDurn:lsid:zoobank.org:act:E010C6D4-EE8C-4623-966A-9581B5B540C0

**Holotype:** A preserved specimen at the Australian Museum in Sydney, New South Wales, Australia, specimen number R.181968.001 collected from the Tooloona Falls Walk, Lamington National Park, Queensland, Australia, Latitude -28.2306S., Longitude 153.1361 S.

This government-owned facility allows access to its holdings.

**Paratype:** A preserved specimen at the Australian Museum in Sydney, New South Wales, Australia, specimen number R.181965.001 collected from the Tooloona Falls Walk, Lamington National Park, Queensland, Australia, Latitude -28.2306S., Longitude 153.1361 S.

**Diagnosis:** *Harrisoniascincus zia* (Ingram and Ehmann, 1981), was originally described as "*Leiolopisma zia*" and transferred to the monotypic genus *Harrisoniascincus* Wells and Wellington, 1985.

A molecular study of Chapple *et al.* (2023) found that this genus diverged from nearest relatives (*Erotiscoscincus* Wells and Wellington, 1984) 22 MYA.

As a pair, these two genera diverged from next nearest relative 32.6 MYA.

This confirms the judgment of Wells and Wellington (1984 and 1985) as correct, although it took other Australian herpetologists 38 years to get to the same place.

While no one else has suggested that *Harrisoniascincus zia* as defined by Ingram and Ehmann (1981) is any more than a single species (*sensu* Cogger 2014), my own detailed studies and observations of the putative species have given rise to compelling evidence of at least 5 species involved, each allopatric and evolving separately and having diverged from one another at least 2 MYA.

The time divergence is based on the timeline of unsuitable habitats developing between the relevant populations.

This has obviously coincided with the increased aridification of environments and intervening habitat between extant populations at the commencement of the Pleistocene.

*Harrisoniascincus zia* is herein confined to the "Main Range", upland region of the New South Wales / Queensland border area, generally around the type locality of Mount Superbus State Forest in South-east Queensland, Australia, Latitude -28.13 S., Longitude 152.26 E. The extent of the range of this taxon is from Mistake Mountains, South-east Queensland, Australia, Latitude -27.915075 S., Longitude 152.334415 E. as the north and westernmost area of the range and Old Bonalbo, New South Wales, Australia, Latitude -28.643042 S., Longitude 152.597103 E. and Woodenbong, New South Wales, Australia, Latitude -28.3889 S., Longitude 152.6126 E. as the south and south-east extremity in the range.

*H. notacartula sp. nov.* is effectively confined to the Lamington Plateau in the Lamington National Park, south-west of the Gold Coast, Queensland, bound in the southwest by Widgee Creek and the Oxley River.

*H. wildlifedepartmentscumorum sp. nov.* is effectively confined to the Border Ranges National Park in far north New South Wales and immediately adjacent Queensland, generally south and west of Widgee Creek and the Oxley River.

*H. nswpolicearecrooks sp. nov.* is a taxon found on the Dorrigo Plateau and adjacent New England National Park, generally south of Tyringham, New South Wales, Australia, Latitude -30.2354 S., Longitude 152.4990 E.

*H. wellsandwellingtonorum sp. nov.* is a taxon from around Mount Hyland in the south, extending northwest into the Guy Fawkes River National Park in New South Wales, Australia.

The five preceding species are separated from one another by the following combinations of characters.

*H. zia* is brown on the head and dorsum. Colour is slightly darker on top of the head and lighter on the tail, but of the same colour for the entire length of the tail. There is no obvious dark spotting on the upper surface of the head.

There are irregularly scattered pale and poorly defined spots on the back of head, neck, dorsum and tail. The spots are expanded and less distinct on the tail.

On the dorsum there is barely any lightening of colour towards the dorsolateral edge.

On the lateral edge it is black at the top, there being a line on the

interface with the dorsum.

Below this moderately well-defined line, most of the flank is a blackish grey to greyish-brown colour, extending in similar form to the lower flank, where it rapidly transforms to the whitish ventral colour, with scattered darker spots extending below the general line, which is neither straight nor well defined.

Side of head is brownish, except for the upper labials which are whitish and with poorly defined grey etchings of the scales.

Infralabials and chin shields have scattered small grey spots of moderate definition. These are well defined and at the centre of each otherwise whitish-cream scale under the throat. Belly and under tail have off-white scales with semi-distinct and scattered greyish spots, mainly on the sides and not central midline area.

The black mark on middle of the front of the snout only goes about halfway up the rostral scale.

*H. notacartula* sp. nov. is brown on the head and dorsum, with small, scattered irregular moderately well-defined irregularly shaped black spots or marks on head, neck and dorsum. There are widely scattered scales on the neck and dorsum that have lightened centres. Colour of head is same as that of the body, while the upper surfaces of the tail is a different and slightly darker shade of brown to that of the upper body.

The side of the dorsolateral edge is formed into a well-defined light reddish-yellow stripe, which extends onto the original tail and widens to form a broad and ill-defined orange stripe running along the anterior half of the tail.

Side of head is brownish, including most of the upper labials which generally have tiny white patches near the lower edge.

On the lateral edge it is black at the top, there being a line on the interface with the dorsum.

Below this moderately well-defined line, most of the flank is an even brown colour, this brown being slightly darker than that of the dorsum. It has numerous moderately well-defined evenly spaced whitish spots. This is effectively continuous to the latero-ventral edge, where the light whitish-cream ventral scales begin.

Infralabials and chin shields have well-defined greyish-black spots of high definition. These are well defined and at the centre of each otherwise white scale under the chin and throat. Belly and under tail have off-white scales with semi-distinct and scattered greyish spots, mainly on the sides and not the central midline area.

The black mark on the front of the snout only goes about two thirds of the way up the rostral scale.

*H. wildlifedepartmentscumorum* sp. nov. is readily separated from the two preceding species by having a strongly contrasting light brown colour on the dorsum and dark brownish black on the flanks. Upper surfaces of the limbs and most of the tail is reddish in colour with evenly spaced and well-defined whitish spots of moderate size. Both anterior and posterior of the head have well-defined irregularly spaced black flecks and spots of moderate size. The line at the dorsolateral edge is whitish in colour with a slight reddish or yellowish tinge. Upper labials are generally blackish or grey, except for some minor light etchings.

White spots are on the lower flanks only. They are well spaced and irregularly spaced and of moderate size and reasonably well defined.

Infralabials and chin shields have well-defined greyish-black spots of high definition. These are well defined and at the centre of each otherwise white scale under the chin and throat. Belly and under tail have off-white scales with semi-distinct and scattered greyish spots, mainly on the sides and not the central midline area.

The black mark on the front of the snout only goes about two thirds of the way up the rostral scale.

*H. nswpolicearecrooms* sp. nov. and *H. wellsandwellingtonorum* sp. nov. are both readily separated from the three preceding species by the fact that the black mark on the rostral extends to the top of the scale to touch the posterior scale.

*H. nswpolicearecrooms* sp. nov. is a lizard with a brown dorsum and numerous well-defined, moderately sized irregularly shaped, but mainly triangular, black spots. Flank is dark brownish-black and without any spots or light patches or alternatively in some specimens only scattered ill-defined, irregularly spaced light spots on the lower parts of the flank. The line on the dorsolateral edge of the dorsum is light brown, with reddish patches, extending onto the tail where it breaks up into reddish spots which also expand in size. Upper labials are light brown, not white and not with any white spots or white etching. The upper surfaces of the limbs are slightly russet.

Venter is a strong yellow colour in many specimens.

*H. wellsandwellingtonorum* sp. nov. is similar in most respects to *H. nswpolicearecrooms* sp. nov. but is separated from that species by having white marks on the lower parts of the upper labials, no russet on the upper surfaces of the limbs and dark as well as light spots on the lower flank.

The five preceding species are separated from all other Australian skinks by the following unique combination of characters: It is a rainforest dwelling, egg-laying smooth-scaled skink (50 mm snout vent length in adults 120 mm total length with original tail) with small and short limbs which fail to touch or overlap when adpressed, parietal shields in contact between the interparietal, transparent palpebral disc in a movable lower eyelid, a divided frontoparietal, supranasals absent, rostral-frontonasal suture wider than the frontal, 7-8 supraciliaries (rarely 6 or 9), 22-26 midbody scale rows, 14-17 rough and undivided lamellae under the fourth toe, a light or whitish edge to the dorsolateral edge from above, this being black when viewed from the side, dark spotting of the scales under the neck, whitish to bright yellow underneath, a dark vertical mid-rostral scale dash at the tip of the snout and mid-dorsals have 3-5 striations (modified from Ingram and Ehman, 1981, Cogger 2014 and altered somewhat).

The holotype of *H. zia* is depicted (dead and preserved) online at: <https://bie.ala.org.au/species/https://biodiversity.org.au/afd/taxa/b22acb07-c729-4841-868f-51b7361d11cf#gallery>

*H. notacartula* sp. nov. is depicted in life in Wilson (2022) on page 160 at bottom and online at:

[https://www.flickr.com/photos/zimny\\_anders/26235425018/](https://www.flickr.com/photos/zimny_anders/26235425018/) and

[https://www.flickr.com/photos/zimny\\_anders/26235421358/](https://www.flickr.com/photos/zimny_anders/26235421358/) from Lamington National Park, Queensland, Australia, both photographed by Anders Zimny, and

<https://www.flickr.com/photos/moloch05/46186788452/> from Lamington National Park, Queensland, Australia, photographed by David "Moloch05"

and

<https://images.ala.org.au/image/viewer?imageId=a618f58f-919f-41c4-92f6-9a6dd5f1879d>

from Lamington National Park, Queensland, Australia, photographed by Braden McDonald.

*H. wildlifedepartmentscumorum* sp. nov. is depicted in life in Swan *et al.* (2022) on page 170 and online at:

<https://www.flickr.com/photos/127392361@N04/50704237266/>

from the Border Ranges, New South Wales, Australia, photographed by Nick Gale, and

<https://www.flickr.com/photos/moloch05/51787377470/>

from the Border Ranges, New South Wales, Australia, photographed by David "Moloch05", and

<https://www.flickr.com/photos/152410663@N05/>

from the Border Ranges, New South Wales, Australia, photographed by Brenton von Takech, and

<https://www.flickr.com/photos/154630905@N06/26399127568/>

from the Border Ranges, New South Wales, Australia, photographed by Nic Gambold.

*H. nswpolicearecrooms* sp. nov. is depicted in life in Cogger (2014) on page 572 bottom, Wilson and Swan (2021) on page 339 bottom and online at:

<https://www.flickr.com/photos/127392361@N04/52588313555/>

from Dorrigo, New South Wales, Australia, photographed by Nick Gale

and

<https://www.flickr.com/photos/pokerchampdaniel/3067286785/>

from Dorrigo, New South Wales, Australia, photographed by Daniel O'Brien, and

<https://www.flickr.com/photos/ryanfrancis/25017572132/>

and

<https://www.flickr.com/photos/ryanfrancis/48840416382/>

from Dorrigo, New South Wales, Australia, both photographed by Ryan Francis, and

<https://www.inaturalist.org/observations/14704572>

from Dorrigo, New South Wales, Australia, photographed by Reiner Richter, and

<https://www.inaturalist.org/observations/260879613>



from Dorriggo, New South Wales, Australia, photographed by Alexander Dudley.

**Distribution:** *H. notacartula* sp. nov. is effectively confined to the Lamington Plateau in the Lamington National Park, south-west of the Gold Coast, Queensland, bound in the southwest by Widgee Creek and the Oxley River.

**Etymology:** Following the publication of the papers of Wells and Wellington (1984, 1985) in which the authors established the name *Harrisoniascincus* Wells and Wellington, 1985, Richard Shine and other would-be scientists decided to hatch a plan to steal legitimate "name authority" from Richard Wells and Ross Wellington. Shine, Glenn Shea and others, calling themselves the "Australian Society of Herpetologists" petitioned the International Commission of Zoological Nomenclature (ICZN) to formally erase the works of Wells and Wellington from the scientific record. This application was filed with the ICZN in 1987 and ultimately in 1991 the ICZN voted near unanimously in favour of Wells and Wellington to squash the audacious application.

In anticipation of the Wells and Wellington works being erased from the scientific record, associates of Shea and Shine, within the same cohort decided to effectively steal from the works of Wells and Wellington and rename taxa they had already properly identified and named in accordance with the relevant rules that bind all zoologists, this being the *International Code of Zoological Nomenclature* (second edition) (Stoll *et al.* 1964), being the relevant code in force at the time.

Note that Ride *et al.* 1985 was actually published in 1987 as detailed explicitly by Wilson (2023a-b).

This petition against Wells and Wellington effectively ran in the period from 1987 to 1991.

Hutchinson *et al.* (1990), the *et al.* consisting of a notorious group of liars, thieves, police-protected criminals and ego-driven pseudoscientists coined the objective junior synonym name *Cartula* for the same skinks.

They also lied by falsely claiming to have "discovered" the new genus and then peddled their name as the only available and correct ICZN name, which it never was.

This kind of action has since become to be known as taxonomic vandalism.

Besides breaching the established rules of the *International Code of Zoological Nomenclature* including editions including and post-dating edition 2, from 1964, being also edition 3 from 1987 and edition four from year 2000, taxonomic vandalism also breaches Moral Rights provisions of Copyright laws including the Australian Copyright Act, 1968 at Section 195.

While it is inappropriate to recognize Hutchinson or the "et al." for their unscientific acts of taxonomic vandalism, it is appropriate that this destructive force be made known to others and the historical record of events should not be whitewashed or ignored.

So, by naming the relevant species *H. notacartula* sp. nov. the name itself is a straight extrapolation of the words "Not a Cartula" and reminds people of the correct genus level placement of the species when reading of the etymology of the species.

The other three illegally coined genus names by the thieves Hutchinson *et al.* (1990) were *Bartleia*, *Bassiana* and *Niveoscincus* all of which are junior synonyms and should therefore never be used as correct.

Further detail of the relevant preceding events can be found in Wells and Wellington (1984, 1985), (see for example Shine 1987, Shea 1987, Shea and Sadlier 1999, being the earlier attempts to legitimize the attempt to overwrite the Wells and Wellington names), 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.

**HARRISONIASCINCUS WILDLIFEDEPARTMENTSCUMORUM SP. NOV.**

**LSID**Durn:lsid:zoobank.org:act:613E0CDF-3935-41EB-9B0F-1D034AC58F4C

**Holotype:** A preserved specimen at the Australian Museum in Sydney, New South Wales, Australia, specimen number R.151812.001 collected from the Tweed Valley Lookout, Border

Ranges National Park, New South Wales, Australia, Latitude -28.2226 S., Longitude 153.0549 E.

This government-owned facility allows access to its holdings.

**Paratypes:** Four preserved specimens at the Australian Museum in Sydney, New South Wales, Australia, being specimen numbers R.133479.001, R.133480.001, R.133481.001 and R.151813.001 all collected from the Tweed Valley Lookout, Border Ranges National Park, New South Wales, Australia, Latitude -28.2226 S., Longitude 153.0549 E.

**Diagnosis:** *Harrisoniascincus zia* (Ingram and Ehmann, 1981), was originally described as "*Leiopolisma zia*" and transferred to the monotypic genus *Harrisoniascincus* Wells and Wellington, 1985. A molecular study of Chapple *et al.* (2023) found that this genus diverged from nearest relatives (*Erotoscincus* Wells and Wellington, 1984) 22 MYA.

As a pair, these two genera diverged from next nearest relative 32.6 MYA.

This confirms the judgment of Wells and Wellington (1984 and 1985) as correct, although it took other Australian herpetologists 38 years to get to the same place.

While no one else has suggested that *Harrisoniascincus zia* as defined by Ingram and Ehmann (1981) is any more than a single species (*sensu* Cogger 2014), my own detailed studies and observations of the putative species have given rise to compelling evidence of at least 5 species involved, each allopatric and evolving separately and having diverged from one another at least 2 MYA.

The time divergence is based on the timeline of unsuitable habitats developing between the relevant populations.

This has obviously coincided with the increased aridification of environments and intervening habitat between extant populations at the commencement of the Pleistocene.

*Harrisoniascincus zia* is herein confined to the "Main Range", upland region of the New South Wales / Queensland border area, generally around the type locality of Mount Superbus State Forest in South-east Queensland, Australia, Latitude -28.13 S., Longitude 152.26 E. The extent of the range of this taxon is from Mistake Mountains, South-east Queensland, Australia, Latitude -27.915075 S., Longitude 152.334415 E. as the north and westernmost area of the range and Old Bonalbo, New South Wales, Australia, Latitude -28.643042 S., Longitude 152.597103 E. and Woodenbong, New South Wales, Australia, Latitude -28.3889 S., Longitude 152.6126 E. as the south and south-east extremity in the range.

*H. notacartula* sp. nov. is effectively confined to the Lamington Plateau in the Lamington National Park, south-west of the Gold Coast, Queensland, bound in the southwest by Widgee Creek and the Oxley River.

*H. wilddlifedepartmentscumorum* sp. nov. is effectively confined to the Border Ranges National Park in far north New South Wales and immediately adjacent Queensland, generally south and west of Widgee Creek and the Oxley River.

*H. nswpolicearecrooks* sp. nov. is a taxon found on the Dorriggo Plateau and adjacent New England National Park, generally south of Tyringham, New South Wales, Australia, Latitude -30.2354 S., Longitude 152.4990 E.

*H. wellsandwellingtonorum* sp. nov. is a taxon from around Mount Hyland in the south, extending northwest into the Guy Fawkes River National Park in New South Wales, Australia.

The five preceding species are separated from one another by the following combinations of characters.

*H. zia* is brown on the head and dorsum. Colour is slightly darker on top of the head and lighter on the tail, but of the same colour for the entire length of the tail. There is no obvious dark spotting on the upper surface of the head.

There are irregularly scattered pale and poorly defined spots on the back of head, neck, dorsum and tail. The spots are expanded and less distinct on the tail.

On the dorsum there is barely any lightening of colour towards the dorsolateral edge.

On the lateral edge it is black at the top, there being a line on the interface with the dorsum.

Below this moderately well-defined line, most of the flank is a blackish grey to greyish-brown colour, extending in similar form to the lower flank, where it rapidly transforms to the whitish ventral colour, with scattered darker spots extending below the general line, which is neither straight nor well defined.

Side of head is brownish, except for the upper labials which are whitish and with poorly defined grey etchings of the scales. Infralabials and chin shields have scattered small grey spots of moderate definition. These are well defined and at the centre of each otherwise whitish-cream scale under the throat. Belly and under tail have off-white scales with semi-distinct and scattered greyish spots, mainly on the sides and not central midline area.

The black mark on middle of the front of the snout only goes about halfway up the rostral scale.

*H. notacartula* sp. nov. is brown on the head and dorsum, with small, scattered irregular moderately well-defined irregularly shaped black spots or marks on head, neck and dorsum. There are widely scattered scales on the neck and dorsum that have lightened centres. Colour of head is same as that of the body, while the upper surfaces of the tail is a different and slightly darker shade of brown to that of the upper body.

The side of the dorsolateral edge is formed into a well-defined light reddish-yellow stripe, which extends onto the original tail and widens to form a broad and ill-defined orange stripe running along the anterior half of the tail.

Side of head is brownish, including most of the upper labials which generally have tiny white patches near the lower edge.

On the lateral edge it is black at the top, there being a line on the interface with the dorsum.

Below this moderately well-defined line, most of the flank is an even brown colour, this brown being slightly darker than that of the dorsum. It has numerous moderately well-defined evenly spaced whitish spots. This is effectively continuous to the latero-ventral edge, where the light whitish-cream ventral scales begin.

Infralabials and chin shields have well-defined greyish-black spots of high definition. These are well defined and at the centre of each otherwise white scale under the chin and throat. Belly and under tail have off-white scales with semi-distinct and scattered greyish spots, mainly on the sides and not the central midline area.

The black mark on the front of the snout only goes about two thirds of the way up the rostral scale.

*H. wildlivedepartmentscumorum* sp. nov. is readily separated from the two preceding species by having a strongly contrasting light brown colour on the dorsum and dark brownish black on the flanks. Upper surfaces of the limbs and most of the tail is reddish in colour with evenly spaced and well-defined whitish spots of moderate size.

Both anterior and posterior of the head have well-defined irregularly spaced black flecks and spots of moderate size. The line at the dorsolateral edge is whitish in colour with a slight reddish or yellowish tinge. Upper labials are generally blackish or grey, except for some minor light etchings.

White spots are on the lower flanks only. They are well spaced and irregularly spaced and of moderate size and reasonably well defined. Infralabials and chin shields have well-defined greyish-black spots of high definition. These are well defined and at the centre of each otherwise white scale under the chin and throat. Belly and under tail have off-white scales with semi-distinct and scattered greyish spots, mainly on the sides and not the central midline area.

The black mark on the front of the snout only goes about two thirds of the way up the rostral scale.

*H. nswpolicearecrooks* sp. nov. and *H. wellsandwellingtonorum* sp. nov. are both readily separated from the three preceding species by the fact that the black mark on the rostral extends to the top of the scale to touch the posterior scale.

*H. nswpolicearecrooks* sp. nov. is a lizard with a brown dorsum and numerous well-defined, moderately sized irregularly shaped, but mainly triangular, black spots. Flank is dark brownish-black and without any spots or light patches or alternatively in some specimens only scattered ill-defined, irregularly spaced light spots on the lower parts of the flank. The line on the dorsolateral edge of the dorsum is light brown, with reddish patches, extending onto the tail where it breaks up into reddish spots which also expand in size. Upper labials are light brown, not white and not with any white spots or white etching. The upper surfaces of the limbs are slightly russet.

Venter is a strong yellow colour in many specimens.

*H. wellsandwellingtonorum* sp. nov. is similar in most respects to *H. nswpolicearecrooks* sp. nov. but is separated from that species by having white marks on the lower parts of the upper labials, no russet on the upper surfaces of the limbs and dark as well as light spots on the lower flank.

The five preceding species are separated from all other Australian skinks by the following unique combination of characters: It is a rainforest dwelling, egg-laying smooth-scaled skink (50 mm snout vent length in adults 120 mm total length with original tail) with small and short limbs which fail to touch or overlap when adpressed, parietal shields in contact between the interparietal, transparent palpebral disc in a movable lower eyelid, a divided frontoparietal, supranasals absent, rostral-frontonasal suture wider than the frontal, 7-8 supraciliaries (rarely 6 or 9), 22-26 midbody scale rows, 14-17 rough and undivided lamellae under the fourth toe, a light or whitish edge to the dorsolateral edge from above, this being black when viewed from the side, dark spotting of the scales under the neck, whitish to bright yellow underneath, a dark vertical mid-rostral scale dash at the tip of the snout and mid-dorsals have 3-5 striations (modified from Ingram and Ehman, 1981, Cogger 2014 and altered somewhat).

The holotype of *H. zia* is depicted (dead and preserved) online at: <https://bie.ala.org.au/species/https://biodiversity.org.au/afd/taxa/b22acb07-c729-4841-868f-51b7361d11cf#gallery>

*H. notacartula* sp. nov. is depicted in life in Wilson (2022) on page 160 at bottom and online at:

[https://www.flickr.com/photos/zimny\\_anders/26235425018/](https://www.flickr.com/photos/zimny_anders/26235425018/) and

[https://www.flickr.com/photos/zimny\\_anders/26235421358/](https://www.flickr.com/photos/zimny_anders/26235421358/) from Lamington National Park, Queensland, Australia, both photographed by Anders Zimny, and

<https://www.flickr.com/photos/moloch05/46186788452/>

from Lamington National Park, Queensland, Australia, photographed by David "Moloch05"

and

<https://images.ala.org.au/image/viewer?imageId=a618f58f-919f-41c4-92f6-9a6dd5f1879d>

from Lamington National Park, Queensland, Australia, photographed by Braden McDonald.

*H. wildlivedepartmentscumorum* sp. nov. is depicted in life in Swan *et al.* (2022) on page 170 and online at:

<https://www.flickr.com/photos/127392361@N04/50704237266/>

from the Border Ranges, New South Wales, Australia, photographed by Nick Gale, and

<https://www.flickr.com/photos/moloch05/51787377470/>

from the Border Ranges, New South Wales, Australia, photographed by David "Moloch05", and

<https://www.flickr.com/photos/152410663@N05/>

from the Border Ranges, New South Wales, Australia, photographed by Brenton von Takech, and

<https://www.flickr.com/photos/154630905@N06/26399127568/>

from the Border Ranges, New South Wales, Australia, photographed by Nic Gambold.

*H. nswpolicearecrooks* sp. nov. is depicted in life in Cogger (2014) on page 572 bottom, Wilson and Swan (2021) on page 339 bottom and online at:

<https://www.flickr.com/photos/127392361@N04/52588313555/>

from Dorrigo, New South Wales, Australia, photographed by Nick Gale and

<https://www.flickr.com/photos/pokerchampdaniel/3067286785/>

from Dorrigo, New South Wales, Australia, photographed by Daniel O'Brien, and

<https://www.flickr.com/photos/ryanfrancis/25017572132/>

and

<https://www.flickr.com/photos/ryanfrancis/48840416382/>

from Dorrigo, New South Wales, Australia, both photographed by Ryan Francis, and

<https://www.inaturalist.org/observations/14704572>

from Dorrigo, New South Wales, Australia, photographed by Reiner Richter, and

<https://www.inaturalist.org/observations/260879613>

from Dorrigo, New South Wales, Australia, photographed by Alexander Dudley.

**Distribution:** *H. wildlivedepartmentscumorum* sp. nov. is effectively confined to the Border Ranges National Park in far north New South Wales and immediately adjacent Queensland, generally south and west of Widgee Creek and the Oxley River.



**Etymology:** *H. wildlifedepartmentscumorum* sp. nov. is named in recognition of evil, corrupt and dishonest wildlife department bureaucrats in Australia who have been actively working against wildlife conservation for decades.

The corrupt and dishonest self-serving bureaucrats in this department are colloquially referred to as "scum".

Further details are in Hoser (1989, 1991, 1993 and 1996), but I note here that as of year 2025, the corruption remains as entrenched as it has ever been (or was in the 1990's) and the negative conservation impacts, including extinctions also continue.

The etymology highlights this important public issue in the hope that at some stage the extremely serious public service corruption in terms of Australian wildlife departments is actually removed, although frankly I see this as highly unlikely as it is completely entrenched.

**HARRISONIASCINCUS NSWPOLICEARECROOKS SP. NOV.**  
**LSID**Durn:lsid:zoobank.org:act:CA17B7A5-235A-4511-ACF1-FF6E0138ECFB

**Holotype:** A preserved specimen at the Australian Museum in Sydney, New South Wales, Australia, specimen number R.130015.001 collected from The Glade at Dorrigo National Park, New South Wales, Australia, Latitude -30.37166 S., Longitude 152.72943 E.

This government owned facility allows access to its holdings.

**Paratypes:** Three preserved specimens at the Australian Museum in Sydney, New South Wales, Australia, specimen numbers R.130016.001, R.130017.001 and R.130046.001 all collected from The Glade at Dorrigo National Park, New South Wales, Australia, Latitude -30.37166 S., Longitude 152.72943 E.

This government owned facility allows access to its holdings.

**Diagnosis:** *Harrisoniascincus zia* (Ingram and Ehmann, 1981), was originally described as "*Leiopolis zia*" and transferred to the monotypic genus *Harrisoniascincus* Wells and Wellington, 1985. A molecular study of Chapple *et al.* (2023) found that this genus diverged from nearest relatives (*Erotoscincus* Wells and Wellington, 1984) 22 MYA.

As a pair, these two genera diverged from next nearest relative 32.6 MYA.

This confirms the judgment of Wells and Wellington (1984 and 1985) as correct, although it took other Australian herpetologists 38 years to get to the same place.

While no one else has suggested that *Harrisoniascincus zia* as defined by Ingram and Ehmann (1981) is any more than a single species (*sensu* Cogger 2014), my own detailed studies and observations of the putative species have given rise to compelling evidence of at least 5 species involved, each allopatric and evolving separately and having diverged from one another at least 2 MYA. The time divergence is based on the timeline of unsuitable habitats developing between the relevant populations.

This has obviously coincided with the increased aridification of environments and intervening habitat between extant populations at the commencement of the Pleistocene.

*Harrisoniascincus zia* is herein confined to the "Main Range", upland region of the New South Wales / Queensland border area, generally around the type locality of Mount Superbus State Forest in South-east Queensland, Australia, Latitude -28.13 S., Longitude 152.26 E. The extent of the range of this taxon is from Mistake Mountains, South-east Queensland, Australia, Latitude -27.915075 S., Longitude 152.334415 E. as the north and westernmost area of the range and Old Bonalbo, New South Wales, Australia, Latitude -28.643042 S., Longitude 152.597103 E. and Woodenbong, New South Wales, Australia, Latitude -28.3889 S., Longitude 152.6126 E. as the south and south-east extremity in the range.

*H. notacartula* sp. nov. is effectively confined to the Lamington Plateau in the Lamington National Park, south-west of the Gold Coast, Queensland, bound in the southwest by Widgee Creek and the Oxley River.

*H. wildlifedepartmentscumorum* sp. nov. is effectively confined to the Border Ranges National Park in far north New South Wales and immediately adjacent Queensland, generally south and west of Widgee Creek and the Oxley River.

*H. nswpolicearecrooks* sp. nov. is a taxon found on the Dorrigo Plateau and adjacent New England National Park, generally south of Tyringham, New South Wales, Australia, Latitude -30.2354 S., Longitude 152.4990 E.

*H. wellsandwellingtonorum* sp. nov. is a taxon from around Mount

Hyland in the south, extending northwest into the Guy Fawkes River National Park in New South Wales, Australia.

The five preceding species are separated from one another by the following combinations of characters.

*H. zia* is brown on the head and dorsum. Colour is slightly darker on top of the head and lighter on the tail, but of the same colour for the entire length of the tail. There is no obvious dark spotting on the upper surface of the head.

There are irregularly scattered pale and poorly defined spots on the back of head, neck, dorsum and tail. The spots are expanded and less distinct on the tail.

On the dorsum there is barely any lightening of colour towards the dorsolateral edge.

On the lateral edge it is black at the top, there being a line on the interface with the dorsum.

Below this moderately well-defined line, most of the flank is a blackish grey to greyish-brown colour, extending in similar form to the lower flank, where it rapidly transforms to the whitish ventral colour, with scattered darker spots extending below the general line, which is neither straight nor well defined.

Side of head is brownish, except for the upper labials which are whitish and with poorly defined grey etchings of the scales.

Infralabials and chin shields have scattered small grey spots of moderate definition. These are well defined and at the centre of each otherwise whitish-cream scale under the throat. Belly and under tail have off-white scales with semi-distinct and scattered greyish spots, mainly on the sides and not central midline area.

The black mark on middle of the front of the snout only goes about halfway up the rostral scale.

*H. notacartula* sp. nov. is brown on the head and dorsum, with small, scattered irregular moderately well-defined irregularly shaped black spots or marks on head, neck and dorsum. There are widely scattered scales on the neck and dorsum that have lightened centres. Colour of head is same as that of the body, while the upper surfaces of the tail is a different and slightly darker shade of brown to that of the upper body.

The side of the dorsolateral edge is formed into a well-defined light reddish-yellow stripe, which extends onto the original tail and widens to form a broad and ill-defined orange stripe running along the anterior half of the tail.

Side of head is brownish, including most of the upper labials which generally have tiny white patches near the lower edge.

On the lateral edge it is black at the top, there being a line on the interface with the dorsum.

Below this moderately well-defined line, most of the flank is an even brown colour, this brown being slightly darker than that of the dorsum. It has numerous moderately well-defined evenly spaced whitish spots. This is effectively continuous to the latero-ventral edge, where the light whitish-cream ventral scales begin.

Infralabials and chin shields have well-defined greyish-black spots of high definition. These are well defined and at the centre of each otherwise white scale under the chin and throat. Belly and under tail have off-white scales with semi-distinct and scattered greyish spots, mainly on the sides and not the central midline area.

The black mark on the front of the snout only goes about two thirds of the way up the rostral scale.

*H. wildlifedepartmentscumorum* sp. nov. is readily separated from the two preceding species by having a strongly contrasting light brown colour on the dorsum and dark brownish black on the flanks. Upper surfaces of the limbs and most of the tail is reddish in colour with evenly spaced and well-defined whitish spots of moderate size.

Both anterior and posterior of the head have well-defined irregularly spaced black flecks and spots of moderate size. The line at the dorsolateral edge is whitish in colour with a slight reddish or yellowish tinge. Upper labials are generally blackish or grey, except for some minor light etchings.

White spots are on the lower flanks only. They are well spaced and irregularly spaced and of moderate size and reasonably well defined.

Infralabials and chin shields have well-defined greyish-black spots of high definition. These are well defined and at the centre of each otherwise white scale under the chin and throat. Belly and under tail have off-white scales with semi-distinct and scattered greyish spots, mainly on the sides and not the central midline area.

The black mark on the front of the snout only goes about two thirds of

the way up the rostral scale.

*H. nswpolicearecrooks* sp. nov. and *H. wellsandwellingtonorum* sp. nov. are both readily separated from the three preceding species by the fact that the black mark on the rostral extends to the top of the scale to touch the posterior scale.

*H. nswpolicearecrooks* sp. nov. is a lizard with a brown dorsum and numerous well-defined, moderately sized irregularly shaped, but mainly triangular, black spots. Flank is dark brownish-black and without any spots or light patches or alternatively in some specimens only scattered ill-defined, irregularly spaced light spots on the lower parts of the flank. The line on the dorsolateral edge of the dorsum is light brown, with reddish patches, extending onto the tail where it breaks up into reddish spots which also expand in size. Upper labials are light brown, not white and not with any white spots or white etching. The upper surfaces of the limbs are slightly russet.

Venter is a strong yellow colour in many specimens.

*H. wellsandwellingtonorum* sp. nov. is similar in most respects to *H. nswpolicearecrooks* sp. nov. but is separated from that species by having white marks on the lower parts of the upper labials, no russet on the upper surfaces of the limbs and dark as well as light spots on the lower flank.

The five preceding species are separated from all other Australian skinks by the following unique combination of characters: It is a rainforest dwelling, egg-laying smooth-scaled skink (50 mm snout vent length in adults 120 mm total length with original tail) with small and short limbs which fail to touch or overlap when adpressed, parietal shields in contact between the interparietal, transparent palpebral disc in a movable lower eyelid, a divided frontoparietal, supranasals absent, rostral-frontonasal suture wider than the frontal, 7-8 supraciliaries (rarely 6 or 9), 22-26 midbody scale rows, 14-17 rough and undivided lamellae under the fourth toe, a light or whitish edge to the dorsolateral edge from above, this being black when viewed from the side, dark spotting of the scales under the neck, whitish to bright yellow underneath, a dark vertical mid-rostral scale dash at the tip of the snout and mid-dorsals have 3-5 striations (modified from Ingram and Ehman, 1981, Cogger 2014 and altered somewhat).

The holotype of *H. zia* is depicted (dead and preserved) online at: <https://bie.ala.org.au/species/https://biodiversity.org.au/afd/taxa/b22acb07-c729-4841-868f-51b7361d11c7#gallery>

*H. notacartula* sp. nov. is depicted in life in Wilson (2022) on page 160 at bottom and online at:

[https://www.flickr.com/photos/zimny\\_anders/26235425018/](https://www.flickr.com/photos/zimny_anders/26235425018/) and

[https://www.flickr.com/photos/zimny\\_anders/26235421358/](https://www.flickr.com/photos/zimny_anders/26235421358/) from Lamington National Park, Queensland, Australia, both photographed by Anders Zimny, and

<https://www.flickr.com/photos/moloch05/46186788452/> from Lamington National Park, Queensland, Australia, photographed by David "Moloch05" and

<https://images.ala.org.au/image/viewer?imageId=a618f58f-919f-41c4-92f6-9a6dd5f1879d> from Lamington National Park, Queensland, Australia, photographed by Braden McDonald.

*H. wildlifedepartmentscumorum* sp. nov. is depicted in life in Swan *et al.* (2022) on page 170 and online at:

<https://www.flickr.com/photos/127392361@N04/50704237266/> from the Border Ranges, New South Wales, Australia, photographed by Nick Gale, and

<https://www.flickr.com/photos/moloch05/51787377470/> from the Border Ranges, New South Wales, Australia, photographed by David "Moloch05", and

<https://www.flickr.com/photos/152410663@N05/> from the Border Ranges, New South Wales, Australia, photographed by Brenton von Takech, and

<https://www.flickr.com/photos/154630905@N06/26399127568/> from the Border Ranges, New South Wales, Australia, photographed by Nic Gambold.

*H. nswpolicearecrooks* sp. nov. is depicted in life in Cogger (2014) on page 572 bottom, Wilson and Swan (2021) on page 339 bottom and online at:

<https://www.flickr.com/photos/127392361@N04/52588313555/> from Dorrigo, New South Wales, Australia, photographed by Nick

Gale

and

<https://www.flickr.com/photos/pokerchampdaniel/3067286785/> from Dorrigo, New South Wales, Australia, photographed by Daniel O'Brien, and

<https://www.flickr.com/photos/ryanfrancis/25017572132/> and

<https://www.flickr.com/photos/ryanfrancis/48840416382/> from Dorrigo, New South Wales, Australia, both photographed by Ryan Francis, and

<https://www.inaturalist.org/observations/14704572>

from Dorrigo, New South Wales, Australia, photographed by Reiner Richter, and

<https://www.inaturalist.org/observations/260879613>

from Dorrigo, New South Wales, Australia, photographed by Alexander Dudley.

**Distribution:** *H. nswpolicearecrooks* sp. nov. is a taxon found on the Dorrigo Plateau and adjacent New England National Park, generally south of Tyringham, New South Wales, Australia, Latitude -30.2354 S., Longitude 152.4990 E.

**Etymology:** The species name *H. nswpolicearecrooks* sp. nov. pronounced "en-ses-double-ewe-police-are-crooks" is a direct account and recognition of the majority of police officers employed by the New South Wales Police force and has been the case for decades.

This is not just an academic statement of fact.

The crime and corruption run by these taxpayer funded thugs has devastating impacts on Australian society and in this case in New South Wales, where police corruption is even notorious by Australian standards!

Innocent people are bashed, robbed, raped and pillaged, while drug dealers, pedophiles, rapists and other low-life scum are actively protected by the same crooked police.

By way of example, notorious dog rapist Adam Britton, one of the notorious Wolfgang Wüster gang, was actively protected by corrupt police across Australia for decades.

They allowed him to kidnap people's pet dogs, anally rape them and put videos of his debased actions on the dark web for decades.

While Britton and the Wüster gang's actions have been public knowledge for decades, their corrupt police protection allowed them to evade ever getting arrested or charged.

Britton eventually got charged and jailed only because he fell out with other members of the Wüster gang over the division of millions of dollars scammed in government grants frauds.

This falling out between Britton and NAME DELETED was over money of course, with a claim he had taken several million from NAME DELETED who was another gang member.

I have NAME DELETED's full name and full details, but this is all suppressed by court order, for which a breach would be jail for an indefinite period.

This falling out led to the gang getting police to drop their protection and have Adam Britton charged with dozens of counts.

Britton pled guilty in court and was sentenced to 10 years and five months in prison in 2024, with an earliest possible release date of about 2028.

He is only one of over 400 other members of the Wolfgang Wüster gang who have publicly boasted of similar activity and continue to operate with protection of corrupt police in New South Wales, other Australian states and even in other countries.

By having an etymology of an otherwise insignificant reptile species making an important statement about police being law breaking crooks in New South Wales, it is hoped that by recognizing the problem of police corruption in New South Wales, that something may ultimately be done to fix this serious and life destroying problem. Further details can be found in Hoser (1993, 1994, 1996, 1999a-b, 2000a).

**HARRISONIASCINCUS WELLSANDWELLINGTONORUM SP. NOV.**

**LSID**Durn:lsid:zoobank.org:act:4AD11A1A-1C1C-4C04-A1D6-9051BE5A9723

**Holotype:** A preserved specimen at the Australian Museum in Sydney, New South Wales, Australia, specimen number R.54619 collected from Marengo State Forest, New South Wales, Australia, Latitude -30.116 S., Longitude 152.416 E.



This government owned facility allows access to its holdings.

**Diagnosis:** *Harrisoniascincus zia* (Ingram and Ehmann, 1981), was originally described as "*Leiopisma zia*" and transferred to the monotypic genus *Harrisoniascincus* Wells and Wellington, 1985. A molecular study of Chapple *et al.* (2023) found that this genus diverged from nearest relatives (*Erotoscincus* Wells and Wellington, 1984) 22 MYA.

As a pair, these two genera diverged from next nearest relative 32.6 MYA.

This confirms the judgment of Wells and Wellington (1984 and 1985) as correct, although it took other Australian herpetologists 38 years to get to the same place.

While no one else has suggested that *Harrisoniascincus zia* as defined by Ingram and Ehmann (1981) is any more than a single species (*sensu* Cogger 2014), my own detailed studies and observations of the putative species have given rise to compelling evidence of at least 5 species involved, each allopatric and evolving separately and having diverged from one another at least 2 MYA.

The time divergence is based on the timeline of unsuitable habitats developing between the relevant populations.

This has obviously coincided with the increased aridification of environments and intervening habitat between extant populations at the commencement of the Pleistocene.

*Harrisoniascincus zia* is herein confined to the "Main Range", upland region of the New South Wales / Queensland border area, generally around the type locality of Mount Superbus State Forest in South-east Queensland, Australia, Latitude -28.13 S., Longitude 152.26 E. The extent of the range of this taxon is from Mistake Mountains, South-east Queensland, Australia, Latitude -27.915075 S., Longitude 152.334415 E. as the north and westernmost area of the range and Old Bonalbo, New South Wales, Australia, Latitude -28.643042 S., Longitude 152.597103 E. and Woodenbong, New South Wales, Australia, Latitude -28.3889 S., Longitude 152.6126 E. as the south and south-east extremity in the range.

*H. notacartula* sp. nov. is effectively confined to the Lamington Plateau in the Lamington National Park, south-west of the Gold Coast, Queensland, bound in the southwest by Widgee Creek and the Oxley River.

*H. wildlivedepartmentscumorum* sp. nov. is effectively confined to the Border Ranges National Park in far north New South Wales and immediately adjacent Queensland, generally south and west of Widgee Creek and the Oxley River.

*H. nswpolicearecrooks* sp. nov. is a taxon found on the Dorrigo Plateau and adjacent New England National Park, generally south of Tyringham, New South Wales, Australia, Latitude -30.2354 S., Longitude 152.4990 E.

*H. wellsandwellingtonorum* sp. nov. is a taxon from around Mount Hyland in the south, extending northwest into the Guy Fawkes River National Park in New South Wales, Australia.

The five preceding species are separated from one another by the following combinations of characters.

*H. zia* is brown on the head and dorsum. Colour is slightly darker on top of the head and lighter on the tail, but of the same colour for the entire length of the tail. There is no obvious dark spotting on the upper surface of the head.

There are irregularly scattered pale and poorly defined spots on the back of head, neck, dorsum and tail. The spots are expanded and less distinct on the tail.

On the dorsum there is barely any lightening of colour towards the dorsolateral edge.

On the lateral edge it is black at the top, there being a line on the interface with the dorsum.

Below this moderately well-defined line, most of the flank is a blackish grey to greyish-brown colour, extending in similar form to the lower flank, where it rapidly transforms to the whitish ventral colour, with scattered darker spots extending below the general line, which is neither straight nor well defined.

Side of head is brownish, except for the upper labials which are whitish and with poorly defined grey etchings of the scales.

Infralabials and chin shields have scattered small grey spots of moderate definition. These are well defined and at the centre of each otherwise whitish-cream scale under the throat. Belly and under tail have off-white scales with semi-distinct and scattered greyish spots, mainly on the sides and not central midline area.

The black mark on middle of the front of the snout only goes about

halfway up the rostral scale.

*H. notacartula* sp. nov. is brown on the head and dorsum, with small, scattered irregular moderately well-defined irregularly shaped black spots or marks on head, neck and dorsum. There are widely scattered scales on the neck and dorsum that have lightened centres. Colour of head is same as that of the body, while the upper surfaces of the tail is a different and slightly darker shade of brown to that of the upper body.

The side of the dorsolateral edge is formed into a well-defined light reddish-yellow stripe, which extends onto the original tail and widens to form a broad and ill-defined orange stripe running along the anterior half of the tail.

Side of head is brownish, including most of the upper labials which generally have tiny white patches near the lower edge.

On the lateral edge it is black at the top, there being a line on the interface with the dorsum.

Below this moderately well-defined line, most of the flank is an even brown colour, this brown being slightly darker than that of the dorsum. It has numerous moderately well-defined evenly spaced whitish spots. This is effectively continuous to the latero-ventral edge, where the light whitish-cream ventral scales begin.

Infralabials and chin shields have well-defined greyish-black spots of high definition. These are well defined and at the centre of each otherwise white scale under the chin and throat. Belly and under tail have off-white scales with semi-distinct and scattered greyish spots, mainly on the sides and not the central midline area.

The black mark on the front of the snout only goes about two thirds of the way up the rostral scale.

*H. wildlivedepartmentscumorum* sp. nov. is readily separated from the two preceding species by having a strongly contrasting light brown colour on the dorsum and dark brownish black on the flanks. Upper surfaces of the limbs and most of the tail is reddish in colour with evenly spaced and well-defined whitish spots of moderate size.

Both anterior and posterior of the head have well-defined irregularly spaced black flecks and spots of moderate size. The line at the dorsolateral edge is whitish in colour with a slight reddish or yellowish tinge. Upper labials are generally blackish or grey, except for some minor light etchings.

White spots are on the lower flanks only. They are well spaced and irregularly spaced and of moderate size and reasonably well defined.

Infralabials and chin shields have well-defined greyish-black spots of high definition. These are well defined and at the centre of each otherwise white scale under the chin and throat. Belly and under tail have off-white scales with semi-distinct and scattered greyish spots, mainly on the sides and not the central midline area.

The black mark on the front of the snout only goes about two thirds of the way up the rostral scale.

*H. nswpolicearecrooks* sp. nov. and *H. wellsandwellingtonorum* sp. nov. are both readily separated from the three preceding species by the fact that the black mark on the rostral extends to the top of the scale to touch the posterior scale.

*H. nswpolicearecrooks* sp. nov. is a lizard with a brown dorsum and numerous well-defined, moderately sized irregularly shaped, but mainly triangular, black spots. Flank is dark brownish-black and without any spots or light patches or alternatively in some specimens only scattered ill-defined, irregularly spaced light spots on the lower parts of the flank. The line on the dorsolateral edge of the dorsum is light brown, with reddish patches, extending onto the tail where it breaks up into reddish spots which also expand in size. Upper labials are light brown, not white and not with any white spots or white etching. The upper surfaces of the limbs are slightly russet. Venter is a strong yellow colour in many specimens.

*H. wellsandwellingtonorum* sp. nov. is similar in most respects to *H. nswpolicearecrooks* sp. nov. but is separated from that species by having white marks on the lower parts of the upper labials, no russet on the upper surfaces of the limbs and dark as well as light spots on the lower flank.

The five preceding species are separated from all other Australian skinks by the following unique combination of characters: It is a rainforest dwelling, egg-laying smooth-scaled skink (50 mm snout vent length in adults 120 mm total length with original tail) with small and short limbs which fail to touch or overlap when adpressed, parietal shields in contact between the interparietal, transparent palpebral disc in a movable lower eyelid, a divided frontoparietal, supranasals absent, rostral-frontonasal suture wider than the frontal,

7-8 supraciliaries (rarely 6 or 9), 22-26 midbody scale rows, 14-17 rough and undivided lamellae under the fourth toe, a light or whitish edge to the dorsolateral edge from above, this being black when viewed from the side, dark spotting of the scales under the neck, whitish to bright yellow underneath, a dark vertical mid-rostral scale dash at the tip of the snout and mid-dorsals have 3-5 striations (modified from Ingram and Ehman, 1981, Cogger 2014 and altered somewhat).

The holotype of *H. zia* is depicted (dead and preserved) online at: <https://bie.ala.org.au/species/https://biodiversity.org.au/afd/taxal/b22acb07-c729-4841-868f-51b7361d11c#gallery>

*H. notacartula* sp. nov. is depicted in life in Wilson (2022) on page 160 at bottom and online at:

[https://www.flickr.com/photos/zimny\\_anders/26235425018/](https://www.flickr.com/photos/zimny_anders/26235425018/) and

[https://www.flickr.com/photos/zimny\\_anders/26235421358/](https://www.flickr.com/photos/zimny_anders/26235421358/)

from Lamington National Park, Queensland, Australia, both photographed by Anders Zimny, and

<https://www.flickr.com/photos/moloch05/46186788452/>

from Lamington National Park, Queensland, Australia, photographed by David "Moloch05"

and

<https://images.ala.org.au/image/viewer?imageId=a618f58f-919f-41c4-92f6-9a6dd5f1879d>

from Lamington National Park, Queensland, Australia, photographed by Braden McDonald.

*H. wildlifedepartmentscumorum* sp. nov. is depicted in life in Swan *et al.* (2022) on page 170 and online at:

<https://www.flickr.com/photos/127392361@N04/50704237266/>

from the Border Ranges, New South Wales, Australia, photographed by Nick Gale, and

<https://www.flickr.com/photos/moloch05/51787377470/>

from the Border Ranges, New South Wales, Australia, photographed by David "Moloch05", and

<https://www.flickr.com/photos/152410663@N05/>

from the Border Ranges, New South Wales, Australia, photographed by Brenton von Takech, and

<https://www.flickr.com/photos/154630905@N06/26399127568/>

from the Border Ranges, New South Wales, Australia, photographed by Nic Gambold.

*H. nswpolicearecrooks* sp. nov. is depicted in life in Cogger (2014) on page 572 bottom, Wilson and Swan (2021) on page 339 bottom and online at:

<https://www.flickr.com/photos/127392361@N04/52588313555/>

from Dorrigo, New South Wales, Australia, photographed by Nick Gale

and

<https://www.flickr.com/photos/pokerchampdaniel/3067286785/>

from Dorrigo, New South Wales, Australia, photographed by Daniel O'Brien, and

<https://www.flickr.com/photos/ryanfrancis/25017572132/>

and

<https://www.flickr.com/photos/ryanfrancis/48840416382/>

from Dorrigo, New South Wales, Australia, both photographed by Ryan Francis, and

<https://www.inaturalist.org/observations/14704572>

from Dorrigo, New South Wales, Australia, photographed by Reiner Richter, and

<https://www.inaturalist.org/observations/260879613>

from Dorrigo, New South Wales, Australia, photographed by Alexander Dudley.

**Distribution:** *H. wellsandwellingtonorum* sp. nov. is a taxon from around Mount Hyland in the south, extending northwest into the Guy Fawkes River National Park in New South Wales, Australia.

**Etymology:** *H. wellsandwellingtonorum* sp. nov. is named in honor of Richard Walter Wells and Cliff Ross Wellington, two eminent Australian herpetologists, originally from Sydney, New South Wales, but now living in northern New South Wales in recognition of their significant contributions to Australian herpetology. See Hoser (2007) for details.

### **EROTICOSCINCUS SEXY SP. NOV.**

LSIDurn:lsid:zoobank.org:act:FD3A2EA4-2236-4657-B4D1-8597308D9283

**Holotype:** A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J80524 collected from Cedars Road, South Bingera, Queensland, Australia, Latitude -24.986667 S., Longitude 152.200278 E.

This government owned facility allows access to its holdings.

**Paratypes:** Three preserved specimens at the Queensland Museum, Brisbane, Queensland, Australia, specimen numbers J74202, J74203 and J74204 all collected from 5.5 km southeast of One Tree Hill, Queensland, Australia, Latitude -25.283333 S., Longitude 151.916667 E.

**Diagnosis:** Until now the genus *Erotoscincus* Wells and Wellington, 1984 has been treated by all publishing authors as being of a single species, namely *E. graciloides* (Lönnberg and Andersson, 1913). This description effectively splits *E. graciloides* as currently known into two separate species.

*Erotoscincus sexy* sp. nov. being a taxon restricted to the Burnett River Valley in south-east Queensland (generally south-west of Bundaberg in Queensland) is readily separated from *E. graciloides* from the north side of the Brisbane River Valley to the Sunshine Coast, south-east Queensland by the following combination of characters:

*Erotoscincus sexy* sp. nov. is plain brown on top and without the characteristic tiny white spots on dorsum and flanks seen on *E. graciloides*.

*Erotoscincus sexy* sp. nov. dorsally has a dark brown snout at the front of the head before the eyes, is light reddish brown on the back of the head and anterior body, dark chocolate brown from the upper body to the base of the tail, where it then turns a yellowish-brown colour.

By contrast *E. graciloides* has a very dark, blackish brown head and neck and slightly lighter body and with a slightly russet tail.

*Erotoscincus sexy* sp. nov. has a neck between ear and front leg that is mainly whitish in colour, with scattered dark spots, versus mainly dark in colour and with scattered white spots in *E. graciloides*. The sides of the tail of *Erotoscincus sexy* sp. nov. have a well broken dark line running along either side, versus one that is either continuous or with small breaks only in *E. graciloides*.

The two preceding species, constituting the entirety of the genus *Erotoscincus* Wells and Wellington, 1984 are separated from all other Australian skinks by the following unique combination of characters:

A genus of small cryptozoic, thigmothermic, rainforest-inhabiting skinks confined to south-eastern Queensland, and distinguished by the following combination of characters: fingers four, toes five; alpha palate; moveable eyelid with undivided palpebral disk; lacks prefrontals; nasals laterally placed; limbs fail to meet when adpressed; anals enlarged; loreal single; four supraoculars; labials excluded from orbital contact by suboculars; paravertebrals largest; punctiform nasal; nasals laterally displaced by frontonasal; lacks frontonasal suture long and curved; frontal contacts first and second supraoculars; two infralabials contact mental; pair of nuchals border each parietal; one or two temporals border each parietal; two presuboculars; complete sub-ocular series; loreal single; ear opening about size of nostril, being quite small and lacking any lobules; mid-body scales 20-22 rows; sub-digital lamellae have paired callosities (12-15 under 4th toe); hemipenes unilobed with undivided sulcus that terminates apically; iris coppery bronze; oviparous." (taken from Wells and Wellington, 1984).

(PS - Thigmothermy involves heat conduction to the reptile body by direct contact with a relatively warm substratum).

The single putative taxon *E. graciloides* was originally named as "*Lygosoma graciloides*" but moved between several genera by various authors before Wells and Wellington (1984) assigned the species to a new monotypic genus.

A molecular study of Chapple *et al.* (2023) found that this genus diverged from nearest relatives being *Harrisoniascincus* Wells and Wellington, 1985, some 22 MYA.

As a pair, these two genera diverged from next nearest relative 32.6 MYA.

This confirms the taxonomic and nomenclatural judgments of Wells and Wellington (1984 and 1985) as correct, although it took many other Australian herpetologists about 38 years to get to the same



place.

My inspection of specimens from near Bundaberg, Queensland over decades, found them to be morphologically divergent from those further south, as in from the Sunshine Coast area south to north of the Brisbane River, this being the remainder of the range for the putative species.

In fact the northern populations from around Bundaberg have only been generally known to most herpetologists since about 1995, a date well after the taxonomy of the putative species *H. graciloides* was effectively "settled" including as a result of major papers by Czechura (1981) and then Wells and Wellington (1984, 1985) who reassigned the genus for the putative species.

Schembri *et al.* (2025) published a paper on the genus *Anepischetosia* Wells and Wellington, 1985.

That paper was dominantly a rehash of the findings of Hoser (2022) to the effect that there were several species in the genus *Anepischetosia* (as opposed to one as generally believed by herpetologists until 2022, except for Wells and Wellington, who had consistently asserted at least three since 1984/1985).

Yet quite scandalously Schembri *et al.* (2025) failed to cite the earlier Hoser (2022) paper in any way, shape or form, which was a serious breach of the Australian Copyright Act 1968, Section 195. They instead faked their findings of multiple species in *Anepischetosia* as their own original work and findings!

Significant in that paper of Schembri *et al.* (2025) were uncalibrated sequences for *H. graciloides* published in one of their figures, which I noted indicated a significant break in the populations of the species *H. graciloides* not in accordance with mere geographical distance between samples.

Samples across 100 km in a straight line were all closely matched while the Bundaberg sample, was widely divergent.

In other words, the genetic distance appeared to match the morphological basis for asserting that there were two species involved.

This distance also appeared to equate with similar divergences for identified *Anepischetosia* species that Schembri *et al.* (2025) had asserted (correctly and in line with Hoser 2022) were in the order of 2MYA or greater.

The two available names, "*Lygosoma graciloides*", with a type locality of Blackall Range, Queensland, Australia, and "*Lygosoma scharffii* Boulenger, 1915" with a type locality of "from One Tree Hill, near Brisbane" are both of the southern population and not the undescribed northern form, which is why it is named herein as new. In terms of the location "One Tree Hill", there are several of these in South-east Queensland, but that Boulenger's specimen was of the southern form is made clear several ways.

The colour description from Boulenger (1915) of "*dark brown above, with lighter dots*" only matches specimens of the southern (nominate) form.

In addition Boulenger (1915) noted the specimen was "*collected by Dr. R. Scharff on his visit to Australia with the British Association and submitted to me for identification*".

The relevant collection diaries are published on the internet at: <https://www.prm.ox.ac.uk/australia-1914-baas-british-association-advancement-science-meeting-sydney-etc> and taken from the diaries of Henry BALFOUR (1863-1939), anthropologist and museum curator Australia, 1914, where speaks of his travels with "*Dr. R. Scharff*" and where he wrote:

"Tues Sept 1

*Motored with Mr Brown, Miss Griffiths + Lander to top of One Tree Hill for the view over Brisbane which is very fine. Rather misty in distance, but could see from Ipswich on one side to Moreton Bay on the other with the whole of Brisbane + its winding river below.*"

This also places the "One Tree Hill" referred to by Boulenger, as being very close to the centre of Brisbane and nowhere near the "One Tree Hill" location of the paratypes for the species newly named herein (near Bundaberg in Queensland). One cannot see the view described in that diary from anywhere other than Brisbane and immediate environs and certainly not more than 100 km, 200 km or 300 km in a straight line to the north.

The view described by Henry BALFOUR matches exactly that seen at Mount Coot-tha, which was within walking distance of where I lived in 1987 at Taringa, Brisbane and a place I regularly visited.

Furthermore, Mount Coot-tha was previously known as One-Tree-Hill, confirming the collection location of Boulenger's specimen.

**Distribution:** *Erotoscincus sexy* sp. nov. is a taxon apparently restricted to the Burnett River Valley in south-east Queensland (generally south-west of Bundaberg in Queensland).

*E. graciloides* is found from the north side of the Brisbane River Valley to the Sunshine Coast, south-east Queensland.

**Etymology:** In 2019, when telling Queensland herpetologist Paul Woolf of my finding of this new lizard species, he exclaimed "sexy" and hence the etymology.

**NDURASCINCUS MERCEICAI SP. NOV.**

**LSIDurn:lsid:zoobank.org:act:FBCE9857-3680-471E-B710-5623F85750B3**

**Holotype:** A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J49747 collected from Kondalilla National Park, south-east Queensland, Australia, Latitude -25.3 S., Longitude 152.766667 E.

This government-owned facility allows access to its holdings.

**Paratypes:** Two preserved specimens at the Queensland Museum, Brisbane, Queensland, Australia, being specimen number J27721 collected from Little Yabba Creek, via Kenilworth, Queensland, Australia, Latitude -26.6 S., Longitude 152.583333 E., and specimen number J35198 collected from Dundowran, via Hervey Bay, Queensland, Australia, Latitude -25.3 S., Longitude 152.766667 E.

**Diagnosis:** The putative species *Lampropholis adonis* Ingram, 1991 as described by Ingram (1991) was one of several species transferred to the genus *Ndurascincus* Wells, 2002.

The genus had a type species of *Lampropholis adonis* Ingram, 1981.

A recent phylogeny of the relevant species by Brandley *et al.* (2015) effectively confirmed a divergence of over 10 MYA from the main *Lampropholis* Fitzinger, 1843 group (type species being *L. guichenoti* Duméril and Bibron, 1839), confirming the generic placement within *Ndurascincus* as correct.

Published gene sequences of the putative species (e.g. Brandley *et al.* 2015) indicated two species not one being the correct situation.

The northern (type) population occurs from Bowen in the north, along the Queensland coast and near hills and mountains to Marlborough in the south. The hitherto unnamed southern form, herein named as *Ndurascincus merceicai* sp. nov. is found from Raglan in the north, along the Queensland coast and near hills and mountains to the Sunshine Coast, Queensland.

*Ndurascincus merceicai* sp. nov. is separated from *Ndurascincus adonis* (Ingram, 1991) by the presence of light blackish speckling on the flank and only on the very anterior part of the dorsal edge of the (original) tail, versus heavy black speckling on the flanks and sides of the (original) tail, the speckling on the tail forming a thick black line for most of the length of the tail (on the sides of the tail) in *N. adonis*; limited and faint dark spotting on the top of the head in *N. merceicai* sp. nov., versus obvious and prominent black spots on the top of the head in *N. adonis*.

There is a strong reddish orange colour on the anterior lower parts of the flanks of breeding adult male *N. merceicai* sp. nov. versus yellowish brown in *N. adonis*.

White spotting extends along the length of the (original) tail on top and sides in *N. merceicai* sp. nov. versus not so in *N. adonis*.

The two preceding species are readily separated from all other Australian skinks by the following unique combination of characters: A robustly built small skink with a 50 mm snout-vent length in adults and original tail about 1.5 times longer. Scales are either smooth or occasionally with tiny striations. Interparietal fused with frontoparietals to form one scale, seven supralabials, seven supraciliaries, 4 supraoculars, 25-31 midbody rows; transparent disc of lower eyelid is much smaller than the eye; 19-25 smooth subdigital lamellae under the fourth toe; short hindlimbs; dorsum mainly brown with semidistinct light or dark flecks or spots and with darker upper lateral surface coloration grading evenly into a lighter lower lateral coloration. A midlateral light brown to white line or series of spots is never present. There are no vertebral lines or stripes.

*Ndurascincus adonis* is depicted in life in Wilson (2022) on page 163 left from Eungella, Queensland, and online at:

<https://www.flickr.com/photos/julesfarquhar/53358853036/> and

<https://www.flickr.com/photos/julesfarquhar/53359311895/>

from Clarke Range, Queensland, Australia, both photographs by taxonomic vandal Jules Farquhar, and

<https://www.flickr.com/photos/58349528@N02/53884332633/>

from Clarke Range, Queensland, Australia, photographed by Jordan Mulder, and

[https://www.flickr.com/photos/zimny\\_anders/32543189214/](https://www.flickr.com/photos/zimny_anders/32543189214/)

from Eungella National Park, Queensland, Australia, photographed by Anders Zimny, and

<https://www.flickr.com/photos/114192916@N07/53279339865/>

from Airlie Beach, Queensland, Australia, photographed by Justin Wright, and

<https://www.flickr.com/photos/edwardevans/53697916348/>

from Eungella National Park, Queensland, Australia, photographed by Edward Evans.

*Ndurascincus merceicai* sp. nov. is depicted in life in Wilson and Swan (2021) on page 345 bottom from Yandina, Queensland, Australia and online at:

<https://www.flickr.com/photos/143696880@N06/53933118544/>

from Kondalilla National Park, Queensland, Australia, photographed by Alexander Dudley, and

<https://www.flickr.com/photos/reptileshots/53078885834/>

and

<https://www.flickr.com/photos/reptileshots/53079184283/>

Maleny, Queensland, Australia, both photographs by Brenden Schembri, and

<https://www.flickr.com/photos/127392361@N04/49106739756/>

from Bulburin National Park, Queensland, Australia, photographed by Nick Gale.

**Distribution:** *Ndurascincus merceicai* sp. nov. is found from Raglan in the north, along the Queensland coast and near hills and mountains to the Sunshine Coast, Queensland in the south.

**Etymology:** *N. merceicai* sp. nov. is named in honor of David Merceica, owner of Snakes Downunder Reptile Park and Zoo, 51 Lucketts Rd, Childers, Queensland, Australia, in recognition of his many contributions to herpetology in Australia.

#### **NDURASCINCUS TIMHUDSONI SP. NOV.**

**LSIDurn:lsid:zoobank.org:act:AEBFCBEB-73B0-4BFD-86B5-7EDCEFAD205D**

**Holotype:** A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J62936 collected from the Mahogany Forest, Mount Moffat National Park, Queensland, Australia, Latitude -24.933333 S., Longitude 148.066667 E.

This government-owned facility allows access to its holdings.

**Paratype:** A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J62939 collected from the Mahogany Forest, Mount Moffat National Park, Queensland, Australia, Latitude -24.933333 S., Longitude 148.066667 E.

**Diagnosis:** Putative *Ndurascincus couperi* (Ingram, 1991), originally placed in the genus *Lampropholis* Fitzinger, 1843, was transferred to the genus *Ndurascincus* Wells, 2002 and has since been confirmed as a logical placement by more recently published phylogenies.

This includes that of Brandley *et al.* (2015), which indicates a divergence of the *Ndurascincus* group (type species: *Lampropholis adonis* Ingram, 1991), of more than 10 MYA from the *Lampropholis* Fitzinger, 1843 group (type species being *L. guichenoti* Duméril and Bibron, 1839).

Putative *Ndurascincus couperi* as recognised to date is herein split into the three allopatric species.

These are the nominate form *N. couperi* (type locality Kondalilla National Park, Queensland, (Latitude -26.41 S., Longitude 152.52 E.) a taxon effectively confined to south-east Queensland south of the Burnett River and to the Brisbane River in the south including the area of the coast and near ranges.

*N. timhudsoni* sp. nov. is effectively restricted to the Canarvon Gorge area in central east Queensland, Australia.

*N. caitlanhudsonae* sp. nov. is found in scattered wetter locations north of the Burnett River and south of Marlborough, Queensland, Australia.

The three species are separated from one another as follows:

*N. couperi* has tiny but prominent black flecks on the dorsum, a brown dorsum with an obviously lighter head, sometimes yellowish in colour, widely scattered whitish flecks on the mainly dark flanks.

*N. timhudsoni* sp. nov. does not have prominent black flecks on the dorsum, a brown dorsum without an obviously lighter head, there only being a slight lightening around the snout, scattered distinct small black spots of irregular shape on the head and relatively dense whitish flecks on the mainly dark flanks.

*N. caitlanhudsonae* sp. nov. is similar in most respects to *N. timhudsoni* sp. nov. but with semidistinct dark flecks on the dorsum and the dark flecks on the head are not well defined or bold as seen in *N. timhudsoni* sp. nov..

The three preceding species are separated from all other Australian skinks by the following unique combination of characters:

A robustly built small skink with a 50 mm snout-vent length in adults and original tail about 1.5 times longer. Scales are either smooth or occasionally with tiny striations.

The dorsal scales are usually smooth, but occasionally with very tiny striations. Interparietal free, that is the interparietal is not fused with frontoparietals to form one scale (as seen in the morphologically similar species *Ndurascincus couperi* (Ingram, 1991) and *Ndurascincus merceicai* sp. nov.); seven supralabials, seven supraciliaries, usually 7 supralabials; 4 supraoculars; 23-27 midbody scale rows.

Hindlimbs not long, 22-25 smooth subdigital lamellae under fourth toe.

Transparent disc of lower eyelid is much smaller than the eye.

Coloration is more-or-less uniform olive brown on top. Upper lateral surface when viewed from the side is more-or-less evenly black or blackish. Dorsum and outer edges of this area are a pale to dark brown, edged strongly in black below the light yellowish dorsolateral edge (as viewed from above).

The darker upper lateral surface coloration grades evenly into the lighter lower lateral coloration. A midlateral light brown to white line or series of spots is never present in these species.

*N. timhudsoni* sp. nov. is depicted in life in Wilson and Knowles (1988) on page 291 photo 503.

*N. couperi* is depicted in life in Wilson and Swan (2021) on page 349 second photo from top, from Mount Nebo, Queensland, Wilson, 2022 on page 165 middle left, also from Mount Nebo and online at:

<https://www.flickr.com/photos/171250498@N08/51106559581/>

from Mount Glorious, Queensland, Australia, photographed by Wes Read, and

[https://www.flickr.com/photos/zimny\\_anders/52302509570/](https://www.flickr.com/photos/zimny_anders/52302509570/)

D'Aguilar National Park, Queensland, Australia, photographed by Anders Zimny, and

<https://www.flickr.com/photos/127392361@N04/51109492445/>

from Mount Glorious, Queensland, Australia, photographed by Nick Gale, and

<https://www.flickr.com/photos/ryanfrancis/23310651662/>

from the Sunshine Coast, Queensland, Australia, photographed by Ryan Francis, and

<https://www.flickr.com/photos/euprepiosaur/16103752059/>

from Mount Nebo, Queensland, Australia, photographed by Stephen Zozaya.

**Distribution:** *N. timhudsoni* sp. nov. is effectively restricted to the Canarvon Gorge area in central east Queensland, Australia.

**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.

#### **NDURASCINCUS CAITLANHUDSONAE SP. NOV.**

**LSIDurn:lsid:zoobank.org:act:BD21590D-D845-4DF4-A5DE-69C32E1B6F89**

**Holotype:** A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J40153 collected from Kroombit Tops, Queensland, Australia, Latitude -24.366667 S., Longitude 150.983333 E.

This government-owned facility allows access to its holdings.

**Paratypes:** Two preserved specimens at the Queensland Museum, Brisbane, Queensland, Australia, specimen numbers J40154 and J40157 both collected from Kroombit Tops, Queensland, Australia, Latitude -24.366667 S., Longitude 150.983333 E.

**Diagnosis:** Putative *Ndurascincus couperi* (Ingram, 1991), originally placed in the genus *Lampropholis* Fitzinger, 1843, was transferred to the genus *Ndurascincus* Wells, 2002 and has since been confirmed as a logical placement by more recently published phylogenies.

This includes that of Brandley *et al.* (2015), which indicates a divergence of the *Ndurascincus* group (type species: *Lampropholis adonis* Ingram, 1991), of more than 10 MYA from the *Lampropholis* Fitzinger, 1843 group (type species being *L. guichenoti* Duméril and Bibron, 1839).



Putative *Ndurascincus couperi* as recognised to date is herein split into the three allopatric species.

These are the nominate form *N. couperi* (type locality Kondalilla National Park, Queensland, (Latitude -26.41 S., Longitude 152.52 E.) a taxon effectively confined to south-east Queensland south of the Burnett River and to the Brisbane River in the south including the area of the coast and near ranges.

*N. timhudsoni* sp. nov. is effectively restricted to the Canarvon Gorge area in central east Queensland, Australia.

*N. caitlanhudsonae* sp. nov. is found in scattered wetter locations north of the Burnett River and south of Marlborough, Queensland, Australia.

The three preceding species are separated from one another as follows:

*N. couperi* has tiny but prominent black flecks on the dorsum, a brown dorsum with an obviously lighter head, sometimes yellowish in colour, widely scattered whitish flecks on the mainly dark flanks.

*N. timhudsoni* sp. nov. does not have prominent black flecks on the dorsum, a brown dorsum without an obviously lighter head, there only being a slight lightening around the snout, scattered distinct small black spots of irregular shape on the head and relatively dense whitish flecks on the mainly dark flanks.

*N. caitlanhudsonae* sp. nov. is similar in most respects to *N. timhudsoni* sp. nov. but with semidistinct dark flecks on the dorsum and the dark flecks on the head are not well defined or bold as seen in *N. timhudsoni* sp. nov..

The three preceding species are separated from all other Australian skinks by the following unique combination of characters:

A robustly built small skink with a 50 mm snout-vent length in adults and original tail about 1.5 times longer. Scales are either smooth or occasionally with tiny striations.

The dorsal scales are usually smooth, but occasionally with very tiny striations. Interparietal free, that is the interparietal is not fused with frontoparietals to form one scale (as seen in the morphologically similar species *Ndurascincus couperi* (Ingram, 1981) and *Ndurascincus merceiai* sp. nov.); seven supralabials, seven supraciliaries, usually 7 supralabials; 4 supraoculars; 23-27 midbody scale rows.

Hindlimbs not long, 22-25 smooth subdigital lamellae under fourth toe.

Transparent disc of lower eyelid is much smaller than the eye.

Coloration is more-or-less uniform olive brown on top. Upper lateral surface when viewed from the side is more-or-less evenly black or blackish. Dorsum and outer edges of this area are a pale to dark brown, edged strongly in black below the light yellowish dorsolateral edge (as viewed from above).

The darker upper lateral surface coloration grades evenly into the lighter lower lateral coloration. A midlateral light brown to white line or series of spots is never present in these species.

*N. timhudsoni* sp. nov. is depicted in life in Wilson and Knowles (1988) on page 291 photo 503.

*N. couperi* is depicted in life in Wilson and Swan (2021) on page 349 second photo from top, from Mount Nebo, Queensland, Wilson, 2022 on page 165 middle left, also from Mount Nebo and online at:

<https://www.flickr.com/photos/171250498@N08/51106559581/> from Mount Glorious, Queensland, Australia, photographed by Wes Read, and

[https://www.flickr.com/photos/zimny\\_anders/52302509570/](https://www.flickr.com/photos/zimny_anders/52302509570/) D'Aguilar National Park, Queensland, Australia, photographed by Anders Zimny, and

<https://www.flickr.com/photos/127392361@N04/51109492445/> from Mount Glorious, Queensland, Australia, photographed by Nick Gale, and

<https://www.flickr.com/photos/ryanfrancis/23310651662/> from the Sunshine Coast, Queensland, Australia, photographed by Ryan Francis, and

<https://www.flickr.com/photos/euprepiosaur/16103752059/> from Mount Nebo, Queensland, Australia, photographed by Stephen Zozaya.

**Distribution:** *N. caitlanhudsonae* sp. nov. is found in scattered wetter locations north of the Burnett River and south of Marlborough, Queensland, Australia.

**Etymology:** *S. caitlanhudsonae* sp. nov. is named in honor of Caitlan Hudson of Hudson's Snake Catching, at Gilston, Gold Coast,

Queensland, Australia in recognition of her services to wildlife conservation in Australia.

In 2024, Caitlan Hudson was in line to win a Gold Coast Council award under the Environmental Warriors category.

A police-protected criminal and rival snake catcher named Tony Harrison and/or his proxies trolled the internet and the real world to set upon the council with malicious attacks and false claims against the Hudson business to sabotage Caitlan Hudson being given the expected award.

This included at least one telephone threat of violence, the recording of which I have been given and played back several times. I note the police did not lay any charges in relation to the telephone threat, because Harrison and proxies are police-protected criminals.

Another of Harrison's proxies, Rene Cox, made dozens of telephone threats (all recorded), engaged in stalking and other illegal activities. She then boasted of doing all this to a global audience online. But as a police-protected criminal she too was never charged.

For further details of the preceding, including relevant recordings, copies of written threats and other materials refer to:

<https://www.goldcoastbulletin.com.au/news/special-features/women-of-the-year/nominees-for-gold-coast-bulletins-2024-woman-of-the-year-awards-presented-by-harvey-norman/news-story/3622de257d8cb9e1ec883c5bfec1d85>

and

<https://www.snakeman.com.au/Renee-Cox-Queensland-Criminal-Threats-over-telephone.htm>

**ANEPISCHETOSIA SNAKEMANSBOGENSIS SP. NOV.**

**LSIDurn:lsid:zoobank.org:act:F18846D6-32C0-4847-AD19-5C9A6035F325**

**Holotype:** A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.167339 collected just south of Benandarah rest area at the Benandarah State Forest, New South Wales, Australia, Latitude -35.65833 S., Longitude 150.233 E.

This government-owned facility allows access to its holdings.

**Paratypes:** Four preserved specimens at the Australian Museum, Sydney, New South Wales, Australia, specimen numbers R.167340, R.167341, R.167342, and R.167343 all collected just south of Benandarah rest area at the Benandarah State Forest, New South Wales, Australia, Latitude -35.65833 S., Longitude 150.233 E.

**Diagnosis:** The putative species *Siaphos maccoyi* Lucas and Frost, 1894, with a type locality of Ringwood, Victoria, was shuffled between various genera until 1984/1985 when Wells and Wellington (1985, 1985) published two monographs on the Australian herpetofauna. Wells and Wellington erected the genus *Anepischetos* Wells and Wellington, 1984, but the name was already preoccupied by an insect genus.

Then *Anepischetosia* Wells and Wellington, 1985 was erected to accommodate the relevant species.

The putative species "*Siaphos maccoyi* Lucas and Frost, 1894" as a taxon is found from south of Sydney, along an arc of cooler locations in south-east mainland Australia to south-east South Australia, was prior to 1984 never considered to be a cluster of more than one species.

*Anepischetos sharmani* Wells and Wellington, 1984 was assigned to the most northern population from the Illawarra region of New South Wales.

*Anepischetosia brindabellaensis* Wells and Wellington, 1984 was assigned to the population from the Brindabella Ranges west of Canberra in the Australian Capital Territory.

Both were ignored by all other Australian herpetologists until 2022, when Hoser (2022) not only recognised all three species (*A. maccoyi*, *A. sharmani* and *A. brindabellaensis*), but further identified and named two additional populations as species from west Victoria.

These are *A. shireenhoserae* Hoser, 2022 for the Otway Ranges population and *A. simonkortlangi* Hoser, 2022 for the population in the Grampian Mountains, and far southwest Victoria, including nearby South Australia.

Schembri *et al.* (2025) provided a molecular basis to support all the five species identified by Hoser and in the face of robust morphological diagnoses of each species they failed to explicitly recognise any. Instead, they disparaged Wells and Wellington and in spite of obviously lifting material from Hoser (2022) failed to even cite the paper.

That was a serious breach of the Australian Copyright Act 1968, Section 195.

This is significant as the authors also trolled the internet in the previous three years disparaging the very paper of Hoser (2022). Significantly, Schembri *et al.* (2025) not only confirmed the five preceding species, all with divergences in excess of 2 MYA, but they also effectively identified three other so far unnamed species. The authors then made a point of failing to recognise any species in the complex beyond the single species *A. maccoyi* (Lucas and Frost, 1894), claiming (falsely) that they were not morphologically separable.

As they are all morphologically separable and diagnosable, the three previously unnamed forms are formally named herein as new species.

Fortunately and in light of the three newly identified populations as new species, the relevant diagnoses for the other five species as spelt out in Hoser (2022) do not need amendment in any way, shape or form.

That is a result of good luck, as opposed to good management on my part.

I note that I recently had to amend diagnostic information for numerous blind snake taxa in a 2025 paper as compared to that in a paper from 2013 dealing with the same taxa and other newly described forms, so I note that as science progresses, my conclusions and statements are not always correct and must be changed as required.

*Anepischetosia snakemansbogensis* sp. nov. is a taxon from the Bateman's Bay region of the New South Wales south coast.

*Anepischetosia grunt* sp. nov. is a taxon from the Snowy Mountains region of New South Wales, with a distribution extending into the highlands of eastern Victoria.

*Anepischetosia splinter* sp. nov. is apparently confined to the coast and near ranges from the New South Wales border with Victoria, extending south along the coast to nearby far north-east Victoria.

All three taxa are relatively range restricted as compared to most other species of small skink from south-east Australia. Specimens of those taxa were excluded from the diagnoses in Hoser (2022), which largely explains why the other five diagnoses can remain unaltered as the three new species have separate character combinations to the other five as spelt out in 2022.

The eight relevant species are separated from one another as follows:

*A. shireenhoserae* Hoser, 2022 is separated from all other species within the *A. maccoyi* species complex, including *A. simonkortlangi* Hoser, 2022, *A. maccoyi* (Lucas and Frost, 1894) from eastern Victoria, *A. sharmani* (Wells and Wellington, 1984) from the Illawarra Escarpment, *A. brindabellaensis* Wells and Wellington, 1985 from the Brindabella Ranges, west of Canberra on the border of the Australian Capital Territory (ACT) and New South Wales (NSW), *A. snakemansbogensis* sp. nov. from the Batemans Bay area of coastal New South Wales, *A. splinter* sp. nov. from far east Gippsland in Victoria and *A. grunt* sp. nov. from the Snowy Mountains in New South Wales and adjacent high country in north-east Victoria by the following unique suite of characters: Iris red; venter yellow; spots forming two longitudinal stripes, orange-red in colour on either side of the upper surface of the tail; about four alternating and obvious, well-defined dark greyish, and light whitish bands on the lower labials; anterior of snout is light brown (versus a darker body).

*A. simonkortlangi* Hoser, 2022 is readily separated from all other 7 species within the *A. maccoyi* species complex by the following unique suite of characters: Dull orange-yellow iris; a dorsum that is a light brownish-grey colour (as opposed to an obvious chocolate brown type of colour or dark greyish-brown in all other species); the upper lateral edge of the body has a well-defined black upper edge, against a dark brown dorsum, this dark edge usually covering the upper part of the lateral flank and the tail, and always forming at least a thick black line, with the surface below this (lower flanks) being whitish in colour, this not being the case in all other species in the *A. maccoyi* species complex; upper surface of the head is unicolour, being the same lightish colour of the body or slightly darker with a grey hue, but no obvious peppering; upper surface of anterior tail, has two obvious rows of black dots running either side of the midline and two less well defined similar lines of black dots on the border of the upper surface and flank of the anterior tail; no distinct or indistinct white spots or flecks on the upper surface of the body; no red spots

on the tail or body; upper labial region both in front of and behind the eye is a unicolour greyish.

*A. maccoyi* is now confined to a region following a general line from Ballarat, through the Macedon Ranges, across the hills north and east of Melbourne and through the hills to the east and south-east of Melbourne to the Wilsons Promontory area. It is separated from all other seven species within the *A. maccoyi* species complex by the following unique suite of characters: Iris is yellow-orange, rarely darker; venter light orange; large joined spots forming two longitudinal stripes, greyish-black in colour on either side of the upper surface of the tail; any red or whitish spots or marks on tail, are not part of any longitudinal lines and are otherwise scattered; lower labials are mainly greyish with a number of ill-defined cream coloured spots or blotches or rarely barred; anterior of snout is heavily peppered grey.

*A. sharmani* is separated from all other 7 species within the *A. maccoyi* species complex by the following unique suite of characters: Iris is orange; venter variable in colour, but usually orange; except for a light yellow brown line running either side of the dorsum of the lower body onto the tail, there are no spots forming two longitudinal stripes that are different in colour than the rest of the upper surface of the tail; upper labials have two to four tiny white spots or bars, all fully encircled with dark brown, with the possible exception of the rear two, which sometimes extend under the chin; anterior of snout is dark brown with some peppering; the tail has irregularly scattered red spots, but these do not form longitudinal lines.

*A. brindabellaensis* is separated from all other 7 species within the *A. maccoyi* species complex by the following unique suite of characters: Brownish iris; the upper lateral edge of the body has a well-defined black upper edge, against a dark brown dorsum, this dark edge usually covering the upper part of the lateral flank and the tail, and always forming at least a thick black line, with the surface below this (the lower flanks) being brownish in colour this not being the case in all other species in the *A. maccoyi* species complex; upper surface of dorsum is peppered with tiny indistinct white spots.

*A. snakemansbogensis* sp. nov. is separated from all other 7 species within the *A. maccoyi* species complex by the following unique suite of characters: It is the only species in the complex with obvious low keels on scales on the back. The coloration of the back is a relatively light brown, with significant sections of dark pigment from the snout to neck on the dorsal surface. On the top of the flank is a thick sharp edged dark brown or black coloured line, just under a scale in width, evenly cutting across two rows of scales at the top and bottom edges. Dorsum and flanks are peppered with numerous more-or-less evenly spaced small off-white specks. Iris is light orangish brown to beige in colour. Original tail is grey on the sides, with some irregular dull blackish markings and brown on the top vertebral line.

Sides of head is whitish brown, heavily etched and/or spotted with off white. The dark stripe from snout runs along either side of the head, through the eye and along the neck, forming into the well-defined dark band on the lateral edge.

Chin scales are white with irregularly shaped off centre, dark brown spots. Neck scales (ventrally) are whitish anteriorly, also with dark brown spots, forming five rows of spots to form short lines, before the lower neck turns the deep yellow-orange colour of the belly, which is immaculate, but has scattered irregular and semi distinct darker markings. The underside of the tail is the same colour, but most scales have a single small irregularly shaped tiny red spot in each of the lateral rows, as well as the scales on the lower sides of the tail. The medial row of scales along the underside of the tail (longitudinally) lack those spots.

*Anepischetosia grunt* sp. nov. and *A. splinter* sp. nov. are readily separated from all other 6 species within the *A. maccoyi* species complex most easily by the fact that specimens have two rows of well-defined large red spots running down either side of the original tail, these spots being the raised centres of every second or third scale as one moves distally along the tail.

Both species have a thin black line at the dorsolateral edge when viewed from the side.

It is continuous to the rear of the body in *A. grunt* sp. nov. but fades in *A. splinter* sp. nov. *A. grunt* sp. nov. has a deep yellow venter, versus orangish in *A. splinter* sp. nov.

Iris of *A. grunt* sp. nov. is deep red, while the iris of *A. splinter* sp. nov. is orange.

Upper labials of *A. grunt* sp. nov. are white barred, versus white spotted in *A. splinter* sp. nov.



The eight formally named species in the *A. maccoyi* species complex, including *A. maccoyi*, *A. shireenhoserae*, *A. simonkortlangi*, *A. sharmani*, *A. brindabellaensis*, *A. snakemansbogensis* sp. nov., *A. grunt* sp. nov. and *A. splinter* sp. nov. which in total comprise the entirety of the genus *Anepischetosia* Wells and Wellington, 1985, are readily separated from all other Australasian skinks by the following unique combination of characters: Moderate limbs that just fail to meet when adpressed; supranasals absent; nasals are small, undivided and separated; prefrontals usually absent; parietal shields in contact behind the interparietal; lower eyelid is movable with a small transparent disc; tiny ear opening that is punctiform and distinct; preanals enlarged; limbs pentadactyle (modified from Cogger 2014).

*Anepischetosia maccoyi* is depicted in life in Wilson and Swan (2021) on page 209, middle left, from Olinda, Dandenong Ranges, Victoria and online at:

<https://www.flickr.com/photos/ryanfrancis/54098276351/> and

<https://www.flickr.com/photos/ryanfrancis/54098616254/> from Wilsons Promontory National Park, Victoria, Australia, both photographs by Ryan Francis, and

[https://www.flickr.com/photos/zimny\\_anders/52518117941/](https://www.flickr.com/photos/zimny_anders/52518117941/) from Wilsons Promontory National Park, Victoria, Australia, photographed by Anders Zimny, and <https://www.flickr.com/photos/88708273@N03/13481253854/> from Kinglake, Victoria, Australia, photographed by Matt Clancy.

*Anepischetosia sharmani* is depicted in life in Wilson and Swan (1988) on page 288 bottom left, and online at:

<https://www.flickr.com/photos/moloch05/45405522905/> and

<https://www.flickr.com/photos/moloch05/32446171078/> and

<https://www.flickr.com/photos/moloch05/45594911234/> and

<https://www.flickr.com/photos/moloch05/31379327177/>

all from Wollongong, New South Wales, Australia, all photographs by David "Moloch05".

*Anepischetosia brindabellaensis* is depicted in life in Hoser (1989) on page 99 at top right, from Bulls Head, Australian Capital Territory, Australia, and online at:

<https://www.flickr.com/photos/189037423@N06/51600391601/> and

<https://www.flickr.com/photos/189037423@N06/51600391596/> from the Brindabella Ranges, Australian Capital Territory, Australia, both photographs by Angus Cleary, and

<https://canberra.naturemapr.org/sightings/2726679> from Uriarra, Australian Capital Territory, Australia, photographed by John Wombey, and

<https://canberra.naturemapr.org/sightings/2727379>

from Cotter River, Australian Capital Territory, Australia, photographed by John Wombey.

*Anepischetosia shireenhoserae* is depicted in life online at:

<https://www.facebook.com/photo.php?fbid=584058896859698&set=pb.100057667771163.-2207520000&type=3>

and the venter of the same gravid adult female is online at:

<https://www.facebook.com/photo.php?fbid=584058760193045&set=pb.100057667771163.-2207520000&type=3>

both from Apollo Bay, Victoria, Australia, both photographs by Raymond Hoser, and

<https://www.flickr.com/photos/shaneblackfnq/38322582352/>

from Kennett River, Victoria, Australia, photographed by Shane Black.

*Anepischetosia simonkortlangi* is depicted in life online at:

<https://www.flickr.com/photos/128497936@N03/53927891956/> and

<https://www.flickr.com/photos/128497936@N03/53928239999/> from the Limestone Coast, South Australia, both photographs by Shawn Scott.

*Anepischetosia snakemansbogensis* sp. nov. is depicted in life online at:

<https://southcoast-nsw.naturemapr.org/sightings/4202506> from Depot Beach, New South Wales, Australia, photographed by "Andrew CB", AND

<https://canberra.naturemapr.org/sightings/4202356> and

<https://canberra.naturemapr.org/sightings/4202354> from Monga, New South Wales, Australia, both photographed by "Andrew CB".

*Anepischetosia grunt* sp. nov. is depicted in life online at:

<https://www.flickr.com/photos/gondwanareptileproduction/50403804956/>

from Mount Buller, Victoria, Australia, photographed by Rob Valentic, and

<https://www.flickr.com/photos/114192916@N07/53532181091/>

from Mount Buller, Victoria, Australia, photographed by Justin Wright. and

<https://www.flickr.com/photos/127392361@N04/21242547969/>

from Mount Buller, Victoria, Australia, photographed by Nick Gale.

*Anepischetosia splinter* sp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/101315363>

from Noorinbee North, Victoria, Australia, photographed by Owen Lishmund, and

<https://www.inaturalist.org/observations/28027975>

from Nadgee, New South Wales, Australia, photographed by Reiner Richter.

**Distribution:** *Anepischetosia snakemansbogensis* sp. nov. is a taxon from the Bateman's Bay region of the New South Wales south coast, only known from within 50 km of that town.

**Etymology:** It was in 1990, when driving along the Pacific Highway south towards Victoria that I stropped at the type locality for this species at the Benandarah rest area at the Benandarah State Forest, New South Wales, Australia, Latitude -35.65833 S., Longitude 150.233 E, just on the northern edge of Batemans Bay to have a much needed bowel movement, or as Australian people say "a bog". So the etymology reflects what I did at the type locality and by its unusual name draws attention to a small skink that is in serious need of conservation attention and may otherwise remain overlooked by government officials, herpetologists and others alike.

**ANEPISCHETOSIA GRUNT SP. NOV.**

**LSIDurn:lsid:zoobank.org:act:7635CC15-6E70-40EB-9876-B71362BFA0E8**

**Holotype:** A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.167311 collected 1.5 km east of the Tantangara Road turn off on the Snowy Mountains Highway, Snowy Mountains, New South Wales, Australia, Latitude -35.93444 S., Longitude 148.62888 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.167312 collected 1.5 km east of the Tantangara Road turn off on the Snowy Mountains Highway, Snowy Mountains, New South Wales, Australia, Latitude -35.93444 S., Longitude 148.62888 E.

**Diagnosis:** The putative species *Siaphos maccoyi* Lucas and Frost, 1894, with a type locality of Ringwood, Victoria, was shuffled between various genera until 1984/1985 when Wells and Wellington (1985, 1985) published to monographs on the Australian herpetofauna. Wells and Wellington erected the genus *Anepischetos* Wells and Wellington, 1984, but the name was already preoccupied by an insect genus.

Then *Anepischetosia* Wells and Wellington, 1985 was erected to accommodate the relevant species.

The putative species "*Siaphos maccoyi* Lucas and Frost, 1894" as a taxon is found from south of Sydney, along an arc of cooler locations in south-east mainland Australia to south-east South Australia, was prior to 1984 never considered to be a cluster of more than one species.

*Anepischetos sharmani* Wells and Wellington, 1984 was assigned to the most northern population from the Illawarra region of New South Wales.

*Anepischetosia brindabellaensis* Wells and Wellington, 1984 was assigned to the population from the Brindabella Ranges west of Canberra in the Australian Capital Territory.

Both were ignored by all other Australian herpetologists until 2022, when Hoser (2022) not only recognised all three species (*A. maccoyi*, *A. sharmani* and *A. brindabellaensis*), but further identified and named two additional populations as species from west Victoria.

These are *A. shireenhoserae* Hoser, 2022 for the Otway Ranges

population and *A. simonkortlangi* Hoser, 2022 for the population in the Grampian Mountains, and far southwest Victoria, including nearby South Australia.

Schembri *et al.* (2025) provided a molecular basis to support all the five species identified by Hoser and in the face of robust morphological diagnoses of each species they failed to explicitly recognise any. Instead, they disparaged Wells and Wellington and in spite of obviously lifting material from Hoser (2022) failed to even cite the paper, which was an illegal act under Section 195 of the Australian Copyright Act 1968.

This is significant as the same authors directly and/or by proxy also aggressively trolled the internet in the previous three years disparaging the very paper of Hoser (2022).

Significantly, Schembri *et al.* (2025) not only confirmed the five preceding species, all with divergences in excess of 2 MYA, but they also effectively identified three other so far unnamed species. The authors then made a point of failing to recognise any species in the complex beyond the single species *A. maccoyi* (Lucas and Frost, 1894), by claiming (falsely) that they were not morphologically separable.

As all eight are all morphologically separable and diagnosable, the three previously unnamed ones are formally named herein as new species.

Fortunately and in light of the three newly identified populations as new species, the relevant diagnoses for the other five species as spelt out in Hoser (2022) do not need amendment in any way, shape or form.

That is a result of good luck, as opposed to good management on my part.

I note that I recently had to amend diagnostic information for numerous blind snake taxa in a 2025 paper as compared to that in a paper from 2013 dealing with the same taxa and other newly described forms, so I note that as science progresses, my conclusions and statements are not always correct and must be changed as required.

*Anepischetosia snakemansbogensis* sp. nov. is a taxon from the Bateman's Bay region of the New South Wales south coast.

*Anepischetosia grunt* sp. nov. is a taxon from the Snowy Mountains region of New South Wales, with a distribution extending into the highlands of eastern Victoria.

*Anepischetosia splinter* sp. nov. is apparently confined to the coast and near ranges from the New South Wales border with Victoria, extending south along the coast to nearby far north-east Victoria.

All three taxa are relatively range restricted as compared to most other species of small skink from south-east Australia. Specimens of those taxa were excluded from the diagnoses in Hoser (2022), which largely explains why the other five diagnoses can remain unaltered as the three new species have separate character combinations to the other five as spelt out in 2022.

The eight relevant species are separated from one another as follows:

*A. shireenhoserae* Hoser, 2022 is separated from all other species within the *A. maccoyi* species complex, including *A. simonkortlangi* Hoser, 2022, *A. maccoyi* (Lucas and Frost, 1894) from eastern Victoria, *A. sharmani* (Wells and Wellington, 1984) from the Illawarra Escarpment, *A. brindabellaensis* Wells and Wellington, 1985 from the Brindabella Ranges, west of Canberra on the border of the ACT and NSW, *A. snakemansbogensis* sp. nov. from the Batemans Bay area of coastal New South Wales, *A. splinter* sp. nov. from far east Gippsland in Victoria and *A. grunt* sp. nov. from the Snowy Mountains in New South Wales and adjacent high country in north-east Victoria by the following unique suite of characters: Iris red; venter yellow; spots forming two longitudinal stripes, orange-red in colour on either side of the upper surface of the tail; about four alternating and obvious, well-defined dark greyish, and light whitish bands on the lower labials; anterior of snout is light brown (versus a darker body). *A. simonkortlangi* Hoser, 2022 is readily separated from all other 7 species within the *A. maccoyi* species complex by the following unique suite of characters: Dull orange-yellow iris; a dorsum that is a light brownish-grey colour (as opposed to an obvious chocolate brown type of colour or dark greyish-brown in all other species); the upper lateral edge of the body has a well-defined black upper edge, against a dark brown dorsum, this dark edge usually covering the upper part of the lateral flank and the tail, and always forming at least a thick black line, with the surface below this (lower flanks) being

whitish in colour, this not being the case in all other species in the *A. maccoyi* species complex; upper surface of the head is unicolour, being the same lightish colour of the body or slightly darker with a grey hue, but no obvious peppering; upper surface of anterior tail, has two obvious rows of black dots running either side of the midline and two less well defined similar lines of black dots on the border of the upper surface and flank of the anterior tail; no distinct or indistinct white spots or flecks on the upper surface of the body; no red spots on the tail or body; upper labial region both in front of and behind the eye is a unicolour greyish.

*A. maccoyi* is now confined to a region following a general line from Ballarat, through the Macedon Ranges, across the hills north and east of Melbourne and through the hills to the east and south-east of Melbourne to the Wilsons Promontory area. It is separated from all other seven species within the *A. maccoyi* species complex by the following unique suite of characters: Iris is yellow-orange, rarely darker; venter light orange; large joined spots forming two longitudinal stripes, greyish-black in colour on either side of the upper surface of the tail; any red or whitish spots or marks on tail, are not part of any longitudinal lines and are otherwise scattered; lower labials are mainly greyish with a number of ill-defined cream coloured spots or blotches or rarely barred; anterior of snout is heavily peppered grey. *A. sharmani* is separated from all other 7 species within the *A. maccoyi* species complex by the following unique suite of characters: Iris is orange; venter variable in colour, but usually orange; except for a light yellow brown line running either side of the dorsum of the lower body onto the tail, there are no spots forming two longitudinal stripes that are different in colour than the rest of the upper surface of the tail; upper labials have two to four tiny white spots or bars, all fully encircled with dark brown, with the possible exception of the rear two, which sometimes extend under the chin; anterior of snout is dark brown with some peppering; the tail has irregularly scattered red spots, but these do not form longitudinal lines.

*A. brindabellaensis* is separated from all other 7 species within the *A. maccoyi* species complex by the following unique suite of characters: Brownish iris; the upper lateral edge of the body has a well-defined black upper edge, against a dark brown dorsum, this dark edge usually covering the upper part of the lateral flank and the tail, and always forming at least a thick black line, with the surface below this (the lower flanks) being brownish in colour this not being the case in all other species in the *A. maccoyi* species complex; upper surface of dorsum is peppered with tiny indistinct white spots.

*A. snakemansbogensis* sp. nov. is separated from all other 7 species within the *A. maccoyi* species complex by the following unique suite of characters: It is the only species in the complex with obvious low keels on scales on the back. The coloration of the back is a relatively light brown, with significant sections of dark pigment from the snout to neck on the dorsal surface. On the top of the flank is a thick sharp edged dark brown or black coloured line, just under a scale in width, evenly cutting across two rows of scales at the top and bottom edges. Dorsum and flanks are peppered with numerous more-or-less evenly spaced small off-white specks. Iris is light orangish brown to beige in colour. Original tail is grey on the sides, with some irregular dull blackish markings and brown on the top vertebral line.

Sides of head is whitish brown, heavily etched and/or spotted with off white. The dark stripe from snout runs along either side of the head, through the eye and along the neck, forming into the well-defined dark band on the lateral edge.

Chin scales are white with irregularly shaped off centre, dark brown spots. Neck scales (ventrally) are whitish anteriorly, also with dark brown spots, forming five rows of spots to form short lines, before the lower neck turns the deep yellow-orange colour of the belly, which is immaculate, but has scattered irregular and semi distinct darker markings. The underside of the tail is the same colour, but most scales have a single small irregularly shaped tiny red spot in each of the lateral rows, as well as the scales on the lower sides of the tail. The medial row of scales along the underside of the tail (longitudinally) lack those spots.

*Anepischetosia grunt* sp. nov. and *A. splinter* sp. nov. are readily separated from all other 6 species within the *A. maccoyi* species complex most easily by the fact that specimens have two rows of well-defined large red spots running down either side of the original tail, these spots being the raised centres of every second or third scale as one moves distally along the tail.

Both species have a thin black line at the dorsolateral edge when



viewed from the side.

It is continuous to the rear of the body in *A. grunt* sp. nov. but fades in *A. splinter* sp. nov.. *A. grunt* sp. nov. has a deep yellow venter, versus orangish in *A. splinter* sp. nov..

Iris of *A. grunt* sp. nov. is deep red, while the iris of *A. splinter* sp. nov. is orange.

Upper labials of *A. grunt* sp. nov. are white barred, versus white spotted in *A. splinter* sp. nov..

The eight formally named species in the *A. maccoyi* species complex, including *A. maccoyi*, *A. shireenhoserae*, *A. simonkortlangi*, *A. sharmani*, *A. brindabellaensis*, *A. snakemansbogensis* sp. nov., *A. grunt* sp. nov. and *A. splinter* sp. nov. which in total comprise the entirety of the genus *Anepischetosia* Wells and Wellington, 1985, are readily separated from all other Australasian skinks by the following unique combination of characters: Moderate limbs that just fail to meet when adpressed; supranasals absent; nasals are small, undivided and separated; prefrontals usually absent; parietal shields in contact behind the interparietal; lower eyelid is movable with a small transparent disc; tiny ear opening that is punctiform and distinct; preanals enlarged; limbs pentadactyle (modified from Cogger 2014).

Locations from where one can access photos of the eight preceding taxa are given within the formal description of *A. snakemansbogensis* sp. nov. which is also relied upon explicitly as part of this formal description.

However, *Anepischetosia grunt* sp. nov. is depicted in life online at: <https://www.flickr.com/photos/gondwanareptileproductio ns/50403804956/>

from Mount Buller, Victoria, Australia, photographed by Rob Valentice, and

<https://www.flickr.com/photos/114192916@N07/53532181091/>

from Mount Buller, Victoria, Australia, photographed by Justin Wright. and

<https://www.flickr.com/photos/127392361@N04/21242547969/>

from Mount Buller, Victoria, Australia, photographed by Nick Gale.

The closely related species *Anepischetosia splinter* sp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/101315363>

from Noorinbee North, Victoria, Australia, photographed by Owen Lishmund, and

<https://www.inaturalist.org/observations/28027975>

from Nadgee, New South Wales, Australia, photographed by Reiner Richter.

**Distribution:** *Anepischetosia grunt* sp. nov. is a taxon from the Snowy Mountains region of New South Wales, with a distribution extending into the highlands of eastern Victoria.

The western distributional limit of this taxon and the eastern limit of *A. maccoyi* are not known. A large gravid female specimen caught at Marysville in Victoria, (in the ranges east of the upper Yarra River Valley), had red on the tail in line with *Anepischetosia grunt* sp. nov. and may be of either that taxon or another.

**Etymology:** In the 1970's when on a school excursion in the Snowy Mountains of New South Wales, where this species occurs, myself and friends were straining ourselves to lift large rocks that these skinks hid under. I had a friend who was particularly strong and able to the biggest rocks up and he would grunt as he did it. Hence the etymology.

**ANEPISCHETOSIA SPLINTER SP. NOV.**

LSIDurn:lsid:zoobank.org:act:DD75E130-925F-4ACE-8C5A-402647B485DA

**Holotype:** A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.167328 collected from 2 km south of the junction of Coast Road with Number 5 Road and Chinamans Creek Road, Bondi State Forest, in the State of Victoria, 2 km south of the New South Wales and Victoria border, Australia, Latitude -37.17666 S., Longitude 149.10027 E.

This government-owned facility allows access to its holdings.

**Paratypes:** Three preserved specimens at the Australian Museum, Sydney, New South Wales, Australia, specimen numbers R.167329, R.167330 and R.167331 all collected from 2 km south of the junction of Coast Road with Number 5 Road and Chinamans Creek Road, Bondi State Forest, in the State of Victoria, 2 km south of the New South Wales and Victoria border, Australia, Latitude -37.17666 S., Longitude 149.10027 E.

**Diagnosis:** The putative species *Siaphos maccoyi* Lucas and Frost, 1894, with a type locality of Ringwood, Victoria, was shuffled between various genera until 1984/1985 when Wells and Wellington (1985, 1985) published to monographs on the Australian herpetofauna.

Wells and Wellington erected the genus *Anepischetosia* Wells and Wellington, 1984, but the name was already preoccupied by an insect genus.

Then *Anepischetosia* Wells and Wellington, 1985 was erected to accommodate the relevant species.

The putative species "*Siaphos maccoyi* Lucas and Frost, 1894" as a taxon is found from south of Sydney, along an arc of cooler locations in south-east mainland Australia to south-east South Australia, was prior to 1984 never considered to be a cluster of more than one species.

*Anepischetosia sharmani* Wells and Wellington, 1984 was assigned to the most northern population from the Illawarra region of New South Wales.

*Anepischetosia brindabellaensis* Wells and Wellington, 1984 was assigned to the population from the Brindabella Ranges west of Canberra in the Australian Capital Territory.

Both were ignored by all other Australian herpetologists until 2022, when Hoser (2022) not only recognised all three species (*A. maccoyi*, *A. sharmani* and *A. brindabellaensis*), but further identified and named two additional populations as species from west Victoria.

These are *A. shireenhoserae* Hoser, 2022 for the Otway Ranges population and *A. simonkortlangi* Hoser, 2022 for the population in the Grampian Mountains, and far southwest Victoria, including nearby South Australia.

Schembri *et al.* (2025) provided a molecular basis to support all the five species identified by Hoser and in the face of robust morphological diagnoses of each species they failed to explicitly recognise any. Instead, they disparaged Wells and Wellington and in spite of obviously lifting material from Hoser (2022) failed to even cite the paper.

That was a serious breach of S195 of the Australian Copyright Act 1968.

This is significant as the authors also trolled the internet directly and/or by proxy in the previous three years disparaging the very paper of Hoser (2022).

Significantly, Schembri *et al.* (2025) not only confirmed the five preceding species, all with divergences in excess of 2 MYA, but they also effectively identified three other so far unnamed species. The authors then made a point of failing to recognise any species in the complex beyond the single species *A. maccoyi* (Lucas and Frost, 1894), by claiming (falsely) that they were not morphologically separable.

As the eight species are all morphologically separable and diagnosable, the three unnamed forms are formally named herein as new species.

Fortunately and in light of the three newly identified populations as new species, the relevant diagnoses for the other five species as spelt out in Hoser (2022) do not need amendment in any way, shape or form.

That is a result of good luck, as opposed to good management on my part.

I note that I recently had to amend diagnostic information for numerous blind snake taxa in a 2025 paper as compared to that in a paper from 2013 dealing with the same taxa and other newly described forms, so I note that as science progresses, my conclusions and statements are not always correct and must be changed as required.

*Anepischetosia snakemansbogensis* sp. nov. is a taxon from the Bateman's Bay region of the New South Wales south coast.

*Anepischetosia grunt* sp. nov. is a taxon from the Snowy Mountains region of New South Wales, with a distribution extending into the highlands of eastern Victoria.

*Anepischetosia splinter* sp. nov. is apparently confined to the coast and near ranges from the New South Wales border with Victoria, extending south along the coast to nearby far north-east Victoria.

All three taxa are relatively range restricted as compared to most other species of small skink from south-east Australia. Specimens of those taxa were excluded from the diagnoses in Hoser (2022), which largely explains why the other five diagnoses can remain unaltered as the three new species have separate character combinations to the other five as spelt out in 2022.

The eight relevant species are separated from one another as follows:

*A. shireenhoserae* Hoser, 2022 is separated from all other species within the *A. maccoyi* species complex, including *A. simonkortlangi* Hoser, 2022, *A. maccoyi* (Lucas and Frost, 1894) from eastern Victoria, *A. sharmani* (Wells and Wellington, 1984) from the Illawarra Escarpment, *A. brindabellaensis* Wells and Wellington, 1985 from the Brindabella Ranges, west of Canberra on the border of the ACT and NSW, *A. snakemansbogensis* sp. nov. from the Batemans Bay area of coastal New South Wales, *A. splinter* sp. nov. from far east Gippsland in Victoria and *A. grunt* sp. nov. from the Snowy Mountains in New South Wales and adjacent high country in north-east Victoria by the following unique suite of characters: Iris red; venter yellow; spots forming two longitudinal stripes, orange-red in colour on either side of the upper surface of the tail; about four alternating and obvious, well-defined dark greyish, and light whitish bands on the lower labials; anterior of snout is light brown (versus a darker body).

*A. simonkortlangi* Hoser, 2022 is readily separated from all other 7 species within the *A. maccoyi* species complex by the following unique suite of characters: Dull orange-yellow iris; a dorsum that is a light brownish-grey colour (as opposed to an obvious chocolate brown type of colour or dark greyish-brown in all other species); the upper lateral edge of the body has a well-defined black upper edge, against a dark brown dorsum, this dark edge usually covering the upper part of the lateral flank and the tail, and always forming at least a thick black line, with the surface below this (lower flanks) being whitish in colour, this not being the case in all other species in the *A. maccoyi* species complex; upper surface of the head is unicolour, being the same lightish colour of the body or slightly darker with a grey hue, but no obvious peppering; upper surface of anterior tail, has two obvious rows of black dots running either side of the midline and two less well defined similar lines of black dots on the border of the upper surface and flank of the anterior tail; no distinct or indistinct white spots or flecks on the upper surface of the body; no red spots on the tail or body; upper labial region both in front of and behind the eye is a unicolour greyish.

*A. maccoyi* is now confined to a region following a general line from Ballarat, through the Macedon Ranges, across the hills north and east of Melbourne and through the hills to the east and south-east of Melbourne to the Wilsons Promontory area. It is separated from all other seven species within the *A. maccoyi* species complex by the following unique suite of characters: Iris is yellow-orange, rarely darker; venter light orange; large joined spots forming two longitudinal stripes, greyish-black in colour on either side of the upper surface of the tail; any red or whitish spots or marks on tail, are not part of any longitudinal lines and are otherwise scattered; lower labials are mainly greyish with a number of ill-defined cream coloured spots or blotches or rarely barred; anterior of snout is heavily peppered grey. *A. sharmani* is separated from all other 7 species within the *A. maccoyi* species complex by the following unique suite of characters: Iris is orange; venter variable in colour, but usually orange; except for a light yellow brown line running either side of the dorsum of the lower body onto the tail, there are no spots forming two longitudinal stripes that are different in colour than the rest of the upper surface of the tail; upper labials have two to four tiny white spots or bars, all fully encircled with dark brown, with the possible exception of the rear two, which sometimes extend under the chin; anterior of snout is dark brown with some peppering; the tail has irregularly scattered red spots, but these do not form longitudinal lines.

*A. brindabellaensis* is separated from all other 7 species within the *A. maccoyi* species complex by the following unique suite of characters: Brownish iris; the upper lateral edge of the body has a well-defined black upper edge, against a dark brown dorsum, this dark edge usually covering the upper part of the lateral flank and the tail, and always forming at least a thick black line, with the surface below this (the lower flanks) being brownish in colour this not being the case in all other species in the *A. maccoyi* species complex; upper surface of dorsum is peppered with tiny indistinct white spots.

*A. snakemansbogensis* sp. nov. is separated from all other 7 species within the *A. maccoyi* species complex by the following unique suite of characters: It is the only species in the complex with obvious low keels on scales on the back. The coloration of the back is a relatively light brown, with significant sections of dark pigment from the snout to neck on the dorsal surface. On the top of the flank is a thick sharp edged dark brown or black coloured line, just under a scale in width, evenly cutting across two rows of scales at the top and bottom edges.

Dorsum and flanks are peppered with numerous more-or-less evenly spaced small off-white specks. Iris is light orangish brown to beige in colour. Original tail is grey on the sides, with some irregular dull blackish markings and brown on the top vertebral line.

Sides of head is whitish brown, heavily etched and/or spotted with off white. The dark stripe from snout runs along either side of the head, through the eye and along the neck, forming into the well-defined dark band on the lateral edge.

Chin scales are white with irregularly shaped off centre, dark brown spots. Neck scales (ventrally) are whitish anteriorly, also with dark brown spots, forming five rows of spots to form short lines, before the lower neck turns the deep yellow-orange colour of the belly, which is immaculate, but has scattered irregular and semi distinct darker markings. The underside of the tail is the same colour, but most scales have a single small irregularly shaped tiny red spot in each of the lateral rows, as well as the scales on the lower sides of the tail. The medial row of scales along the underside of the tail (longitudinally) lack those spots.

*Anepischetosia grunt* sp. nov. and *A. splinter* sp. nov. are readily separated from all other 6 species within the *A. maccoyi* species complex most easily by the fact that specimens have two rows of well-defined large red spots running down either side of the original tail, these spots being the raised centres of every second or third scale as one moves distally along the tail.

Both species have a thin black line at the dorsolateral edge when viewed from the side.

It is continuous to the rear of the body in *A. grunt* sp. nov. but fades in *A. splinter* sp. nov.. *A. grunt* sp. nov. has a deep yellow venter, versus orangish in *A. splinter* sp. nov..

Iris of *A. grunt* sp. nov. is deep red, while the iris of *A. splinter* sp. nov. is orange.

Upper labials of *A. grunt* sp. nov. are white barred, versus white spotted in *A. splinter* sp. nov..

The eight formally named species in the *A. maccoyi* species complex, including *A. maccoyi*, *A. shireenhoserae*, *A. simonkortlangi*, *A. sharmani*, *A. brindabellaensis*, *A. snakemansbogensis* sp. nov., *A. grunt* sp. nov. and *A. splinter* sp. nov. which in total comprise the entirety of the genus *Anepischetosia* Wells and Wellington, 1985, are readily separated from all other Australasian skinks by the following unique combination of characters: Moderate limbs that just fail to meet when adpressed; supranasals absent; nasals are small, undivided and separated; prefrontals usually absent; parietal shields in contact behind the interparietal; lower eyelid is movable with a small transparent disc; tiny ear opening that is punctiform and distinct; preanals enlarged; limbs pentadactyle (modified from Cogger 2014).

Locations from where one can access photos of the eight preceding taxa are given within the formal description of *A. snakemansbogensis* sp. nov. which is also relied upon explicitly as part of this formal description.

However, *Anepischetosia splinter* sp. nov. is depicted in life online at: <https://www.inaturalist.org/observations/101315363>

from Noorinbee North, Victoria, Australia, photographed by Owen Lishmund, and

<https://www.inaturalist.org/observations/28027975>

from Nadgee, New South Wales, Australia, photographed by Reiner Richter.

The closely related species *Anepischetosia grunt* sp. nov. is depicted in life online at:

<https://www.flickr.com/photos/gondwanareptileproduction/50403804956/>

from Mount Buller, Victoria, Australia, photographed by Rob Valentic, and

<https://www.flickr.com/photos/114192916@N07/53532181091/>

from Mount Buller, Victoria, Australia, photographed by Justin Wright. and

<https://www.flickr.com/photos/127392361@N04/21242547969/>

from Mount Buller, Victoria, Australia, photographed by Nick Gale.

**Distribution:** *Anepischetosia splinter* sp. nov. is apparently confined to the coast and near ranges from the New South Wales border with Victoria, extending south along the coast to nearby far north-east Victoria.

**Etymology:** On the Melbourne Cup long weekend in early November 1996, I was with Rob Valentic and Clinton Logan (two



fellow herpetologists) searching for reptiles and frogs at the upper reaches of the Genoa River in far north-east Victoria, when we found specimens of this taxon (Hoser 2000) online at: <http://www.smuggled.com/Aurea3.htm>  
When lifting a log I somehow put a massive splinter into my finger and hence the etymology.

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#### CONFLICTS OF INTEREST

None.

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Eleven who may disappear!  
From rare to rarer ... Species splits of rare  
Australian skinks, making rare skinks even  
rarer, with eleven new species formally  
described!  
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## **New gecko taxa in the genus *Celertenues* Hoser, 2017.**

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### **ABSTRACT**

Following on from the paper of Hoser (2017) that erected a new genus *Celertenues* Hoser, 2017 for a divergent clade of mainly saxicoline Australian velvet geckos, this paper recognises and names two further species and three new subspecies in the genus.

These are a morphologically divergent new species from the Selwyn Range in north-west Queensland, named as *C. timhudsoni* sp. nov., another from the Gulf of Carpentaria region in the Northern Territory, herein named as *C. yanyuwaorum* sp. nov. and three additional subspecies of *C. bobbottomi* Hoser, 2017, a species with a type locality of Litchfield National Park, NT, Australia, Latitude -13.40 S., Longitude 130.89 E. These are *C. bobbottomi mirrarorum* subsp. nov. from the West Arnhem Land escarpment, *C. bobbottomi yannhanuorum* subsp. nov. from the Parsons Range, Wessell Islands and Gove Peninsula area of the northeast Northern Territory and *C. bobbottomi anindilyakwaorum* subsp. nov. from Groote Eylandt, Northern Territory, Australia.

It is also noted that:

*Amalosia nebula* Hoskin and Couper, 2023 is an illegally coined junior synonym of *Celertenues evanwhittoni* Hoser, 2017.

*Amalosia queenslandia* Hoskin and Couper, 2023 is an illegally coined junior synonym of *Celertenues helengrasswillae* Hoser, 2017.

**Keywords:** Taxonomy; nomenclature; Lizard; gecko; *Oedura*; *Celertenues*; *bobbottomi*; *helengrasswillae*; *rhombifer*; *evanwhittoni*; *nebula*; *queenslandia*; *elegans*; *picta*; *lineata*; *hinesi*; *phillipsi*; *obscura*; *queenslandia*; *capensis*; new species; *timhudsoni*; *yanyuwaorum*; new subspecies; *mirrarorum*; *yannhanuorum*; *anindilyakwaorum*.

### **INTRODUCTION**

In recent years, as a result of an audit of most of Australia's reptiles, I, Raymond Hoser published descriptions of dozens of new gecko genera and species, including in the paper of Hoser (2017), which dealt specifically with the genus *Oedura* Gray, 1842 *sensu lato* as then recognized.

That paper took the following taxonomic and nomenclatural actions. The group was expanded from four to seven genera, with three formally named for the first time.

There were also two new subgenera defined, both formally named for the first time, description of fourteen new species, four new subspecies and formalising of one tribe and five subtribes.

One of these newly erected genera was *Celertenues* Hoser, 2017 for the so-called *Oedura rhombifer* Gray, 1845 group, which had the species *Celertenues bobbottomi* Hoser, 2017 as the type species. This was the Litchfield National Park (Northern Territory, Australia) population of this species until then treated as part of *Oedura*

*rhombifer* Gray, 1845 group.

Hoser (2017) confirmed that *Oedura rhombifer* Gray, 1845 with a type locality of north-west Western Australia is a form confined to the Kimberley district of Western Australia.

In terms of the genus *Celertenues* Hoser, 2017 the only species named by Hoser (2017) were those flagged by the molecular results of Oliver *et al.* (2012), which were quite obviously unnamed species. Inspection of specimens west of the north-central Queensland fold (between Cloncurry in the west and Richmond/Hughenden in the east), as in specimens from the Selwyn Range, Queensland and into the majority of the top end of the Northern Territory indicated a number of other forms worthy of taxonomic recognition.

It was hoped that my paper of Hoser (2017) would have spurred on government-funded herpetologists to revisit these putative candidate species and get DNA evidence one way or other.

Rather than doing this, a band of taxpayer funded government scientists instead revisited Hoser (2017) and in breach of both the Australian Copyright Act 1968, Section 195, and the *International*



*Code of Zoological Nomenclature* (Ride *et al.* 1999) (AKA "The ICZN code"), they simply cut and pasted from the Hoser paper to illegally rename at least four species that were for the first time ever formally named in that paper.

That is, they created junior synonyms for those species, otherwise known as duplicate names.

They have then engaged in egregious taxonomic vandalism to promote their new names (junior synonyms) as correct ICZN names, which they are obviously not (see ICZN 2021).

In all cases it is the original and older name that should be used as correct, with the more recently coined names relegated to synonymy. The same government funded "scientists", the term only being used as an identifier in this case as their activities have not been scientific in any way, have not attempted to do a shred of scientific research or investigation into other potentially unnamed candidate species populations as flagged above, leaving me to reluctantly deal with their taxonomy and nomenclature, at no cost to the taxpayers of Australia. This is even though I'd have preferred to spend my time and effort on other conservation related activities instead.

Thus, the purpose of this paper is to formally name obviously divergent populations as new species and subspecies as outlined in the abstract.

It is done herein as ignoring taxa and pretending they do not exist is perhaps one of the worst possible conservation fates possible for the relevant taxa.

Naming species is the most important first step towards avoiding potential extinction for species that may otherwise be "saveable".

#### UNLAWFULLY CREATED JUNIOR SYNONYMS FOR GECKOS

So that people are not confused, the four pairs of names in terms of the illegally renamed species, are given below.

The newer names were created in acts of taxonomic vandalism by the Wolfgang Wüster / Adam Britton cohort, which obviously includes the authors whose names appear as listed authors of the newer synonym names.

Details of the Wolfgang Wüster / Adam Britton cohort and the full bibliographic citations for the original and synonym names listed below are in Hoser (2024).

*Amalosia nebula* Hoskin and Couper, 2023 is an illegally coined junior synonym of *Celerstenues evanwhittoni* Hoser, 2017.

*Amalosia queenslandia* Hoskin and Couper, 2023 is an illegally coined junior synonym of *Celerstenues helengrasswillae* Hoser, 2017.

*Oedura elegans* Hoskin, 2019 is an illegally coined junior synonym of *Marlenegecko shireenhoserae* Hoser, 2017.

*Oedura nesos* Oliver *et al.* 2020 is an illegally coined junior synonym of *Oedura bulliardi* Hoser, 2017.

As if this lot of taxonomic vandalism was not enough, the same cohort of authors chose to violate the *International Code of Zoological Nomenclature* (Ride *et al.* 1999) and the Australian Copyright Act 1968 at Section 195 by also assigning synonym names to one or two Wells and Wellington (1985) species of gecko in the *Oedura sensu lato* group as well!

These name pairs are as follows:

*Oedura luritja* Oliver and McDonald, 2016 is an illegally coined junior synonym of *Oedura greeri* Wells and Wellington, 1985.

One or other of the putative taxa *Oedura picta* Hoskin, 2019 or *Oedura lineata* Hoskin, 2019 is almost certainly a junior synonym of *Oedura attenboroughi* Wells and Wellington, 1985, with all three putative taxa sharing the same general areas as type localities (within a short drive of the township of Emerald, in mid-eastern Queensland, Australia).

To confuse things further, Con Man Conrad Hoskin 2019, does not provide a working diagnosis for any of the species he has claimed to have discovered in that paper, with respect of the taxon known as *Oedura marmorata* De Vis, 1888, being the species all relevant forms had earlier been treated as.

He published his rambling unscientific paper in the predatory online only journal *Zootaxa* in order to bypass any proper peer review of his 2019 paper prior to publication.

*Zootaxa*, commonly known in Zoological circles as "*Zootoxic*" is a peer reviewed in name only, online only "publication", otherwise known as "PRINOOO".

In spite of the length of the Hoskin (2019) paper, best described as "an obviously unedited waffle" he does not provide a single character or trait, or combination of them, to enable separation

of any of the species he has claimed to have newly "discovered", making it impossible to determine whether either of *Oedura picta* Hoskin, 2019 or *Oedura lineata* Hoskin, 2019 are distinct from either *Oedura marmorata* De Vis, 1888 or for that matter putative *Oedura attenboroughi* Wells and Wellington, 1985, the latter of which he quite publicly synonymised with *Oedura marmorata* De Vis, 1888, again without providing a shred of scientific evidence for his proclamation.

As a result of his lack of evidence for his various claims in his paper (Hoskin, 2019) as reported by the Australian Broadcasting Corporation (ABC) in a fake news story, they (The ABC) were subsequently forced to remove their "news" story online which had made various false and unsupported claims by Hoskin.

The ABC were also forced to publicly apologise to myself for making false and defamatory claims against myself as well as Richard Walter Wells and Cliff Ross Wellington (being Wells and Wellington).

For the record, in the relevant ABC "news" report most of the vitriol and false claims by Hoskin were made against Wells and Wellington and not myself.

The same gang have illegally assigned junior synonym names to well over 120 species and genera over the past decade and continue to do so after multiple International Commission of Zoological Nomenclature (ICZN) rulings against them, formal legal demands and multiple Australian court rulings telling them to cease and desist from this nefarious practice.

The most recent list of illegally coined junior synonym names is published in Hoser (2024), but several illegally created junior synonyms have been added to that list since. This includes a very large number of Australian frog species formally named by myself in year 2000 that have more recently been illegally renamed by Jodi Rowley, Glenn Shea and others in the Wüster / Britton gang.

Their more recent descriptions are self-evidently based on cut and paste actions from the major frog papers I published in 2020 as cited in Hoser (2024).

While I, Raymond Hoser am by far the most commonly targeted author of the Wüster / Britton gang, this is quite likely a function of the quantity of reptile and frog species and genera I have formally named, being over 2,000 species, genus and family group names as of 2025, which is about 10 times the number of that of formally named by the next nearest living herpetologist or author cohort.

(Richard) Wells and (Ross) Wellington, (and Richard Wells alone) names have also been targeted quite extensively for illegal renaming by the Wüster / Britton cohort since the mid 1980's and that is also at least in part a function of the number of taxa they have named, probably making them number 2 among living herpetologists in terms of taxa named.

More relevantly they are also a clear number one in Australia (genus and species combined) until possibly very recently (2024), when my Australian species list exceeded theirs (but still not anywhere near the number of local genera as the pair).

However, my species names in Australia are dominated by relatively obscure and tiny lizards of little interest to people, whereas their names apply to common, widespread and prominent forms (e.g. *Antaresia*, *Intellagama*, *Wollumbinia*, *Varanus kuringai*, *Morelia macdowelli*, *M. cheynei*, *M. metcalfei*, etc.).

It is worth noting that it is not possible to deal with taxon names for reptiles in Australia and not find Wells and Wellington (1984 and 1985) along with later taxonomy works of Richard Wells in the post year 2000 period as dominant or prominent in all corners, almost all Australian reptile taxon groups and all literature and citations.

Because of the complete domination of Australian reptile taxonomy and nomenclature in Australia by Wells and Wellington since 1985, the Wüster / Britton gang have in particular targeted Wells and Wellington ever since their ground-breaking papers of 1984 and 1985.

This attack on Wells and Wellington has been built on jealousy and ego issues and has in no way been proper scientific conduct or ever debated the scientific conclusions or merit or otherwise of the Wells and Wellington publications.

However, the Wüster / Britton cohort, have also targeted eminent herpetologists elsewhere including some of the major contributors from the 1800's.

This includes herpetologists at the major European Museums such as John Edward Gray of the British Museum and Wilhelm Carl Hatwig Peters at the Zoological Museum of Berlin.

There is no need to list all the illegally created junior synonyms of the

Wüster / Britton gang, here.

However, as this paper is about geckos it is appropriate that other junior synonyms for geckos as created by the group are listed herein. These include the following:

*Cyrtodactylus hoskini* Shea, Couper, Wilmer and Amey, 2011 (named in honour of their mate Con Man Conrad Hoskin) is an illegally created junior synonym of *Cyrtodactylus abrae* Wells, 2002.

*Cyrtodactylus petani* Riyanto, Grismer and Wood, 2015 is an illegally created junior synonym of *Cyrtodactylus klakahensis* Hartmann, Mecke, Kieckbusch, Mader and Kaiser, 2016 (which was quite ironic as Creationist advocate Hinrich Kaiser has been a prominent member of the Wüster / Britton gang telling people to ignore the ICZN Code and illegally rename other people's species).

*Diplodactylus tjoritjarinya* McDonald, Fenner, Torkkola and Oliver 2024 is an illegally created junior synonym of *Diplodactylus* (*Yankunytjatjaragecko*) *aah* Hoser, 2023.

*Diplodactylus fyfei* McDonald, Fenner, Torkkola and Oliver 2024 is an illegally created junior synonym of *Diplodactylus* (*Yankunytjatjaragecko*) *ooh* Hoser, 2023.

*Gehyra arnhemica* Oliver *et al.*, 2020 is an illegally created junior synonym of *Dactyloperus paulhorneri* Hoser, 2018.

*Gehyra capensis* Kealley *et al.*, 2018 is an illegally created junior synonym of *Dactyloperus bulliardi* Hoser, 2018.

*Lepidodactylus aignanus* Kraus, 2019 is an illegally created junior synonym of *Shireenhosergecko jarradbinghami* Hoser, 2018.

*Lepidodactylus kwasnickae* Kraus, 2019 is an illegally created junior synonym of *Adelynhosergecko brettbarnetti* Hoser, 2018.

*Lepidodactylus mitchelli* Kraus, 2019 is an illegally created junior synonym of *Adelynhosergecko stevebennetti* Hoser, 2018.

*Lepidodactylus pollostos* Karkkainen, Richards, Kraus, Tjaturadi, Krey and Oliver 2020 is an illegally created junior synonym of *Adelynhosergecko sloppi* Hoser, 2018.

*Lepidodactylus sacrolineatus* Kraus and Oliver, 2020 is an illegally created junior synonym of *Bobbottocolotes bobbottomi* Hoser, 2018.

*Lepidodactylus zweifeli* Kraus, 2019 is an illegally created junior synonym of *Bobbottocolotes potens* Hoser, 2018.

*Ptychozoon cicakterbang* Grismer, Wood, Grismer, Quah, Phimmachak, Sivongvay, Seateun, Stuart, Siler, Mulcahy, Anamza and Brown, 2019 is an illegally created junior synonym of *Cliveevattcolotes* (or alternatively *Ptychozoon*) *steveteesi* Hoser, 2018.

*Rhacogekko* Wood *et al.*, 2019 is an illegally created junior synonym of *Alexteescolotes* Hoser, 2018.

*Sundagekko* Wood *et al.*, 2019 is an illegally created junior synonym of *Scelotretus* Fitzinger, 1843.

## MATERIALS, METHODS AND RESULTS

In terms of materials and methods, these are as for Hoser (2017).

In terms of relevant references, these are all cited in Hoser (2017) or Hoser (2024) and are not re-cited in full in the references section herein.

The only references cited at the end of this paper are both Hoser (2017) or Hoser (2024) which in turn contain all other relevant cited material.

A pdf version of Hoser (2017) can be downloaded from:

<https://www.smuggled.com/issue-34-pages-3-35.pdf>

A pdf version of Hoser (2024) can be downloaded from:

<https://www.smuggled.com/AJH-72-pages-47-63.pdf>

As outlined in the abstract of this paper, two new species of *Celertenues* Hoser, 2017 were identified and so were three forms allied to *Celertenues bobbottomi* Hoser, 2017.

These are formally named herein.

All are morphologically divergent from one another, and all appear to be allopatric to each other and generally associated with major landforms as in large rocky hill areas and/or islands.

The relevant populations are also separated from one another by known biogeographical barriers.

In common with members in the associated genus *Amalosia* Wells and Wellington, 1984 there is a relatively low mobility within each species and strong site fidelity.

Species within the genus do not appear to disperse well.

While records for *Celertenues* Hoser, 2017 straddle the northern outlines of Queensland and the Northern Territory, there are no records for southern New Guinea and this area is relatively rock free,

so it is likely that they have never been there.

In terms of the two eastern forms named herein the following points are noted.

The population of the Selwyn Ranges, western Queensland, is quite clearly restricted to this area and so morphologically divergent to populations east of the Queensland fold and those from the southern shores of the Gulf of Carpentaria, I have no hesitation in naming it as a new species, rather than as a subspecies of already named forms to the east or north-west (as in *Celertenues bobbottomi* Hoser, 2017).

In terms of the three forms named as subspecies of *Celertenues bobbottomi* Hoser, 2017 the picture is far more uncertain.

While each population conforms to specific areas, (being centred on each of the following areas, being the Arnhem Land escarpment, Wessell Islands and Groote Eylandt), all with apparent distribution gaps between these areas, all are proximal to one another and in an area where biogeographic barriers involving saxicoline species are breached sometimes and not at others.

With this in mind and no genetic evidence available, I have taken the most conservative approach and formally described each of the three relevant forms as new subspecies.

Hoskin and Couper (2023), claimed three species from Queensland in addition to those formally named in Hoser (2017), not including their two synonym forms (names) of the two species named in Hoser (2017).

Hoskin and Couper (2023) lie in their paper by pretending that *Amalosia phillipsi* Wells and Wellington, 1985 does not exist and was never named by anyone.

In their paper they wrote:

"*Amalosia obscura* and *A. jacobae* are the only two *Amalosia* described in the last century".

After the widespread fake news reports about the discovery of five new *Amalosia* species by Hoskin and Couper (2023) that had been generated by them, I attempted to get hold of this paper with the allegedly amazing discoveries within it.

Quite correctly, I assumed the authors had bootlegged material from Hoser (2017) and claimed ownership of the discoveries within that paper.

Attempts to obtain the paper of Hoskin and Couper (2023) via the purported authors failed to obtain any copy or pdf of it.

Several herpetologists including Richard Wells, Ross Wellington and Trevor Hawkeswood and various institutions and libraries approached Hoskin and Couper for a copy of the relevant paper and none was provided.

The two putative taxa renamed by them as identified on the Wüster / Britton gang website being the Peter Uetz owned "The Reptile Database" both come from north-east Queensland and were identified as being synonymous with *Celertenues evanwhittoni* Hoser, 2017 and *Celertenues helengrasswillae* Hoser, 2017.

*Amalosia nebula* Hoskin and Couper, 2023 is an illegally coined junior synonym of *Celertenues evanwhittoni* Hoser, 2017 and *Amalosia queenslandia* Hoskin and Couper, 2023 is an illegally coined junior synonym of *Celertenues helengrasswillae* Hoser, 2017.

Eventually a pdf of the allegedly published paper of Hoskin and Couper, 2023 was obtained prior to the publication of this paper.

It was obtained in late 2024 and supplied by someone in the "Australian Society of Herpetologists" who is supposedly a colleague and friend of Con Man Conrad Hoskin, but in fact despises him and his regular faking of other people's scientific discoveries as his own.

I note that the authors of Hoskin and Couper (2023) explicitly cited Kaiser *et al.* (2013) as justification for their act of taxonomic vandalism and scientific fraud. Hoskin and Couper (2023) simultaneously ignored the ICZN ruling against the cohort in 2021.

They wrote:

"Following both the recommendation of Kaiser *et al.* (2013) and the official position statement of the Australian Society of Herpetologists (ASH 2016), we do not consider names appearing outside the peer-reviewed literature post 2000 as validly published; a decision that is mirrored by government agencies and official fauna lists (e.g., Australian Faunal Directory, a program of the Department of Climate Change, Energy, the Environment and Water; Atlas of Living Australia, supported by the Australian Government through the National Research Infrastructure Strategy; WildNet, Queensland Government's Department of Environment and Science database for biodiversity and protected areas)."

Firstly, the authors lied about the papers they chose to ignore. Unlike



their own paper being Hoskin and Couper (2023), the others were in fact properly peer reviewed.

Secondly, the government lists they referred to as not using the Hoser names they were seeking to overwrite, only deleted them from their government lists on direct request and non-stop harassment from Hoskin and Couper as well as other members of the Wuster / Britton cohort.

So in other words, it was Hoskin and Couper (2023) telling people not to use Hoser names and then claiming to follow the others acting on their request, as in themselves.

It was a self-serving circle.

This is similar to the way that they fake popularity online by running hundreds of fake accounts online to post in support of themselves and troll those they don't like or cannot censor or the countless fake Google reviews they post online via accounts they create especially for the purpose of running their false narrative.

Thirdly and most importantly, the ICZN Ruling of 30 April 2021 (ICZN 2021) explicitly ruled against Kaiser *et al.* (2013), more accurately known as Wuster (2012) in all its forms, including the various unscientific edits proclaimed by their front groups including the so-called "Australian Society of Herpetologists".

It is significant that none of the most pre-eminent Australian herpetologists, including Drs Hal Cogger and Alan Greer, as well as Richard Wells, Ross Wellington and Trevor Hawkeswood support anything to do with the rouge gang calling themselves "Australian Society of Herpetologists".

Fourthly a later proposal to the ICZN by the same gang to have all Hoser names erased from the scientific record, following the earlier loss by the Wuster / Britton gang was also REJECTED by the ICZN. That was:

"Case 3824: A special proposal to suppress certain names under the plenary powers of the Commission. Kevin R. Thiele, Paul M. Oliver, Aaron M. Bauer, Paul Doughty, Fred Kraus, Michael G. Rix and Hinrich Kaiser."

Separate to this, Kevin Thiele, a professional tax-payer funded bludger from Australia and close associate of the notorious convicted Adam Britton, currently in jail for stealing people's pet dogs, anally raping them and posting these acts on the dark web has been condemned by the entire ICZN (unanimously) several times for his acts of taxonomic vandalism, extending beyond Zoology into the realms of Botany and beyond that into the realms of illegal activities in the real world.

The only certainty I have with regards to all the putative taxa of Hoskin and Couper (2023) is that none come from the west of the Carpentaria fold and Channel Country in western Queensland and so are not of the taxa formally described in this paper.

All these new species and subspecies are from west of the Carpentaria fold.

#### 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 28 March 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 male 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. Note that there is ordinarily some sexual dimorphism between adults of species within the relevant genus.

References to tails are of original ones unless otherwise stated.

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 is 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.

#### CONSERVATION

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

#### CELERTENUES TIMHUDSONI SP. NOV.

LSIDurn:lsid:zoobank.org:act:6DCD5574-4A35-4E58-AD0E-1973D9AE40BE

**Holotype:** A preserved specimen at the South Australian Museum, Adelaide, South Australia, Australia, specimen number R63664 collected from Lake Moondarra Lookout, Warrina Park, Mount Isa, Queensland, Australia, Latitude -20.5828 S., Longitude 139.575 E. This government-owned facility allows access to its holdings.

**Paratypes:** 1/ A preserved specimen at the Western Australian Museum, Perth, Western Australia, Australia, specimen number R55643 collected on a road at night in an area of burnt Triodia on stony brown soil, from 13 km north of Mount Isa, Queensland, Australia, Latitude -20.616667 S., Longitude 139.483333 E., and 2/ A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J64474 collected from Mount Isa, Queensland, Australia, Latitude -20.709444 S., Longitude 139.483333 E.

**Diagnosis:** The species *Celertenues bobbottomi* Hoser, 2017 (and all but two of five species) had until then (2017) been treated as a regional population of *C. rhombifer* (Gray, 1854) and the proper diagnosis of *C. bobbottomi* and the other species recognized in 2017 must be in the context of separating five relevant species, being the total number of species within *Celertenues* Hoser, 2017.

For this genus, the type species is *Celertenues bobbottomi* Hoser, 2017, holotype specimen being NTM 22222, with a type locality of Litchfield National Park, Northern Territory (NT), Australia, Latitude -13.40 S., Longitude 130.89 E.

The genus and species within *Celertenues* are as defined and recognized by Hoser in 2017 as formally defined within that paper and adopted herein save for the addition of the forms described herein.

The species within *Celertenues* are species all formerly treated as being within the genus *Oedura* Gray, 1842, or more recently, *Amalosia* Wells and Wellington, 1984, the latter with a type species of *Phyllodactylus lesueurii* Duméril and Bibron, 1836.

Prior to 2017, two species within *Celertenues* Hoser, 2017 were formally named and recognized, while three new to science were formally named within Hoser (2017).

In total the five species recognized in 2017 by Hoser (2017) were: *Celertenues rhombifer* (Gray, 1845), *C. bobbottomi* Hoser, 2017, *C. evanwhittoni* Hoser, 2017, *C. helengrasswillae* Hoser, 2017 and *C. obscura* (King, 1984).

From Gray's original description of *C. rhombifer* (Gray, 1854) it is self-evident that the specimen's provenance was the Kimberley division of Western Australia as this population alone fits the description.

All five species of *Celertenues* named or recognized by Hoser (2017) can be readily separated from one another on the basis of consistent colour differences, even though otherwise all are morphologically similar and otherwise hard to separate from one another based on hasty external observation without knowledge of the various forms.

*C. rhombifer* (Gray, 1845) as defined by Hoser (2017) is confined to Kimberley division of Western Australia, mainly the west Kimberley, is readily separated from all other taxa in the genus by a distinct pattern of large light-coloured rhomboidal blotches running down the middle of the back. With the exception of *C. obscura* (King, 1984) also a west Kimberley endemic, and (the morphologically similar) *Amalosia*

*jacovae* (Couper, Keim and Hoskin, 2007), in all other species in this genus lighter blotches down the back are always joined to become merged. In *C. rhombifer* (Gray, 1845) at least some of the blotches in the middle of the back are separated by thin sections of darkened pigment, this being unique to the species.

*Celertenuus obscura* (King, 1984) from north-west Western Australia is the only taxon in the genus with a dorsal pattern of alternating dark and light cross bands that are distinct and well defined. The (original) tail of *C. obscura* is unique among the species in that it is brilliant deep yellow in colour with limited darker flecks or patches of small size.

*Celertenuus helengrasswillae* Hoser, 2017 from Queensland in the coastal and near coastal region south of the Paluma Range in the North to Kroombit Tops in the south is readily separated from the other five species by the following combination of traits: An iris that is brown, but not chocolate brown. A lighter mid dorsal stripe bounded by dark pigment and with regular jagged edges, dark coloured (blackish) limbs with irregular brown and/or light brown flecks or patches and a distinctive characteristic dark patch of large size surrounded by pale pigment at the rear of the crown, not seen in any other species with the occasional exception of some specimens of *Amalosia jacovae* (Couper, Keim and Hoskin, 2007), being a species morphologically similar to this genus.

*Amalosia queenslandia* Hoskin and Couper, 2023 with a type locality of Almaden area, Queensland, Australia, Latitude -17.2405 S., Longitude 144.3841 E. is an illegally coined junior synonym of *Celertenuus helengrasswillae* Hoser, 2017.

*Amalosia jacovae* (Couper, Keim and Hoskin, 2007) from southeast Queensland, generally south of Fraser Island is readily separated from all species in *Celertenuus* Hoser, 2017 by the presence of broken light-coloured spots on the dorsal surface of the back with obscure boundaries.

*Celertenuus evanwhittoni* Hoser, 2017 found generally from the Atherton Tableland and north in far north Queensland, is readily separated from the other five species by the following suite of characters: A brown iris, slightly reddish in colour at the top; a continuous jagged lighter line running down the middle of the back with obvious white spots on the jagged edges and well bordered on the outer edge by thick, even dark pigment; an absence of a conspicuous dark patch posterior to the crown, dense and even spotting or flecks on the limbs, mild yellowing in the colour of the tail (original tails).

*Amalosia nebula* Hoskin and Couper, 2023 is an illegally coined junior synonym of *Celertenuus evanwhittoni* Hoser, 2017.

*Celertenuus bobbottomi* Hoser, 2017 is from the tropical top end of the Northern Territory. The nominate subspecies is herein confined to the western third of the tropical top end of the Northern Territory. It is readily separated from the five other species by the following suite of characters: Iris is reddish-orange-brown. The jagged light line running down the centre of the back is punctuated by strong darker intrusions, the tail has a weak yellowish tinge, and in common with *C. obscura* but no other species, the dark line running from the eye along the back of the head and neck, is not distinct and well defined, but instead is an obscure and irregular zone of mottled dark and light pigment.

*C. obscura* is readily separated from *C. bobbottomi* Hoser, 2017 by dorsal pattern, the former having a pattern of distinctive dorsal crossbands, not seen in the latter.

*C. bobbottomi mirrarorum subsp. nov.* from the West Arnhem Land escarpment is unique within *Celertenuus* Hoser, 2017 in that the mid-dorsal zig-zag is exaggerated, either to an extreme extent, or sometimes so much so that the zig zag becomes broken to form a series of broken dark-edged or even just dark markings running down the vertebral line, these markings extending to the dorsolateral edge, but stopping there and not entering the upper parts of the flanks. The dark edges are also invariably straight edged or mainly so.

The upper surfaces of the limbs are heavily peppered dark on light, with the dark being about 50 percent of the coverage and often forming semi-distinct dark crossbands across the limbs.

Iris is orange brown, commonly with large irregular patches of yellow. Although *C. bobbottomi mirrarorum subsp. nov.* is found in an area geographically proximal to the type form of *C. bobbottomi* Hoser, 2017 with a type locality of Litchfield National Park, NT, Australia, Latitude -13.40 S., Longitude 130.89 E., it is so divergent morphologically that it warrants taxonomic recognition as a separate

taxon.

*C. bobbottomi yannhanuorum subsp. nov.* from the Parsons Range, Wessell Islands and Gove Peninsula area of the Northern Territory is separated from all other species and subspecies within *Celertenuus* Hoser, 2017 by having the unique combination of rounded edges on the zig zagging mid-vertebral stripe that is bounded by a thick dark edge on the outer edge, formed by a 100 percent coverage of dense dark peppering. At the lower edge, this dark peppering forms a straight dark line on either the dorsolateral edge or just below it.

The flanks themselves are white, being evenly and heavily peppered black, giving it a greyish appearance, with a scattering of small to tiny, semi-distinct white spots that are of irregular and often elongate shape. The upper surfaces of the limbs have a base colour that is light grey, overlain with dark peppering and where this clumps, these are often found to have tiny well-bordered white spots within them, the white spots themselves being ill-defined. Iris is light yellowish-brown.

*C. bobbottomi anindilyakwaorum subsp. nov.* from Groote Eylandt, Northern Territory, Australia is separated from all other species and subspecies within *Celertenuus* Hoser, 2017 by having the unique combination of being a generally brownish-grey coloured lizard. It has a head that is mainly light brown in colour on top, with darker pigment very obscured; the vertebral line is light brown with outer points being white tipped. The outer border is a brown line formed by dense dark peppering. The flank itself is dark brownish grey, formed by heavy peppering across the entire flank.

There is a well-defined dark brown stripe running from rear of eye to top of neck, where it forms the outer edge of the vertebral zigzag line. The same line forms on the snout, where it is indistinct, continues through the eye as an orange line through the central line of the iris (as dull orange) and beyond.

The iris is otherwise a light brown colour. The upper surfaces of the limbs are light as a base colour, heavily and fairly evenly speckled with tiny brown spots.

The dorsal colour and pattern continues along the top of the original tail, whereupon it becomes less intense about a third of the way along its length, this being also seen in an expansion in the width of the wider points of the light areas and reduction in white points.

The sides of the tail darken to become dark brownish in colour, before lightening again at the distal third.

The newly named species *Celertenuus timhudsoni sp. nov.* is known only from the Selwyn Ranges area around Mount Isa and Cloncurry Queensland, extending south along the stony ranges to the Standish Range and also to north-west of Winton in north-west Queensland.

It is readily separated from the five preceding species and *Celertenuus yanyuwaorum sp. nov.* described below by the following combination of characters:

The jagged light line running down the centre of the back (vertebral line) is relatively broad and the outer edge is relatively even as well, as in not waving in or out very much. While there is blackish spots or peppering along the outer edge of the vertebral line, this dark does not intrude on the vertebral line. The tail is of similar colour to the body, being generally greyish brown above and without any yellowing.

While there is a very slight lightening of pigment on the outermost points of the vertebral line, these are in no way of the form of white spots or similar.

There is a broad dark line running from snout, through eye, along the upper lateral edge of the back of head, side of neck and anterior body, formed by dense dark peppering on the otherwise lighter background, which dissipates on the anterior body. This line does however expand and is in the form of slighter denser dark peppering on the upper half of the flank of the upper body as opposed to the lower half, intensifying in darkness along each side of the tail making the vertebral line on the tail more prominent. The upper surfaces of the limbs are light grey, being the main colour, with scattered tiny dark spots throughout, these being more numerous on the distal parts of the upper surfaces of the limbs. The upper surface of the head anterior to the eye is mainly light in colour with indistinct irregular dark mottling, sometimes quite dense in some specimens, while not dense in others. Iris is chocolate brown.

*Celertenuus yanyuwaorum sp. nov.* from the southern edge of the Gulf of Carpentaria in both Queensland and the Northern Territory is readily separated from all other species in the genus *Celertenuus* Hoser, 2017 by being by day a noticeably lighter coloured lizard all



over. It is generally a light whitish grey all over, the vertebral line has well-defined zigzags on the outer edge, bounded on the outer edge by a thin but well-defined dark-brown etching or zig-zag line on each side, this being formed of joined tiny brown dots or pigment, that forms a well-defined and continuous edge. The rest of the flanks have similar but widely scattered and ill-defined tiny dark brown spots as does the upper surfaces of the fore and hind limbs. Iris is light orangish grey anteriorly and light grey posteriorly. The vertebral band continues on the (original) tail (as does the bordering) with it tending to break and sometimes forming large spots. Each side of the original tail is light grey, except for a series of tiny and widely separated, irregularly placed spots in a row along the medial line of each side. The head anterior to the eyes on the sides and above (wholly) is mainly light grey with yellowish tinge and scattered semi-distinct irregularly spaced small brown spots. Anterior to the eye on the lower edge and posterior to it on the upper edge is a heavy grey to brown peppering along the upper edge of the back of the head and continuing to the anterior part of the upper body where it forms the narrow well-defined dark edge bordering the vertebral line. Digits are light grey with some semi-distinct dark spots confined to the upper edge.

The other species formerly placed in the genus *Amalosia*, that are all now placed in the genus *Celertenues* Hoser, 2017 are all readily separated from all species remaining within *Amalosia* Wells and Wellington, 1984, type species being *Phyllodactylus lesueurii* Duméril and Bibron, 1836 including *A. jacovae* by having a tail that is cylindrical in cross section as opposed to being noticeably depressed.

Three additional putative species named in Hoskin and Couper (2023), being their "*Amalosia hinesii*", "*Amalosia saxacola*" and "*Amalosia capensis*" are ignored herein as they were not compared with all other relevant species such as *Amalosia phillipsi* Wells and Wellington, 1985, which Hoskin and Couper (2023) fraudulently pretended did not exist and so I am unable to confirm or deny that their other three species as just listed are valid or diagnosable taxonomic entities.

Their omission from the comparisons herein does not affect the integrity of this description as none of those putative taxa or any others east of the Carpentaria Fold have the suites of characters assigned to species west of the Carpentaria Fold and importantly do not have just two enlarged postcloacal spurs on each side (as found in all species west of the Carpentaria Fold), instead having three or more (as found in all species east of the Carpentaria Fold).

The purported taxon "*Amalosia capensis* Hoskin and Couper, 2023", with a type locality of McIlwraith Range, Queensland, Australia, Latitude -13.4234 S., Longitude 143.1844 E. may be new to science, but no concrete evidence of this was presented by Hoskin and Couper.

"*Amalosia saxacola* Hoskin and Couper, 2023", with a type locality of Mt Zero, Taravale, northeast Queensland, Australia, Latitude 19.0534 S., Longitude 146.0833 E., is also of unknown status based on available published material.

"*Amalosia hinesii* Hoskin and Couper, 2023", with a type locality of Thane Creek, Durikai State Forest. South-east Queensland, Australia, Latitude -28.1717 S., Longitude 151.4146° E. may or may not be a valid species, separate from *A. phillipsi* Wells and Wellington, 1985 with a type locality of near Tenterfield in north-east New South Wales, Australia

*Celertenues timhudsoni* sp. nov. is depicted in life online at:

<https://www.flickr.com/photos/ryanfrancis/15005689797/>

and

<https://www.flickr.com/photos/jayceebarnes/50526919247/>

and

<https://www.flickr.com/photos/ryanfrancis/7846953054/>

and

<https://www.inaturalist.org/observations/203414088>

*Celertenues yanyuwaorum* sp. nov. is depicted in life online at:

<https://arod.com.au/arod/reptilia/Squamata/Gekkonidae/Amalosia/rhombifer>

*C. bobbottomi mirrarorum* subsp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/138541435>

and

<https://www.inaturalist.org/observations/249750471>

*C. bobbottomi yannhanuorum* subsp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/141783489>

*C. bobbottomi anindilyakwaorum* subsp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/242026312>

and

<https://www.inaturalist.org/observations/229670893>

and

<https://www.inaturalist.org/observations/54241136>

**Distribution:** *Celertenues timhudsoni* sp. nov. is known only from the Selwyn Ranges area around Mount Isa and Cloncurry Queensland, extending south along the stony ranges to the Standish Range and also to north-west of Winton in north-west Queensland.

**Etymology:** *C. timhudsoni* sp. nov. is named in honour of Tim Hudson, of Gilston, Queensland, Australia a well-known snake catcher of Hudson's Snake Catching (see: <https://www.goldcoastsnakecatching.com.au>) for services to wildlife conservation in Australia.

**CELERTENUES YANYUWAORUM SP. NOV.**

**LSIDurn:lsid:zoobank.org:act:22818407-F5B6-45EA-806B-C6A0ECCC0E70**

**Holotype:** A preserved specimen at the Australian National Wildlife Collection, controlled by the Commonwealth Scientific and Industrial Research Organization (CSIRO), Canberra, ACT, Australia, specimen number R10204 collected from Butterfly Springs Falls, Northern Territory, Australia, Latitude -15.62731 S., Longitude 135.46016 E.

This government-owned facility allows access to its holdings.

**Paratype:** A preserved specimen at the South Australian Museum, Adelaide, South Australia, Australia, specimen number R13533 collected from Bing Bong Station, near Borroloola, Northern Territory, Australia, Latitude -15.62 S., Longitude 135.35 E.

**Diagnosis:** The species *Celertenues bobbottomi* Hoser, 2017 (and all but two of five species) had until then been treated as a regional population of *C. rhombifer* (Gray, 1854) and the proper diagnosis of *C. bobbottomi* and the other species recognized in 2017 must be in the context of separating five relevant species, being the total number of species within *Celertenues* Hoser, 2017.

For this genus, the type species is *Celertenues bobbottomi* Hoser, 2017, holotype specimen being NTM 22222, with a type locality of Litchfield National Park, NT, Australia, Latitude -13.40 S., Longitude 130.89 E.

The genus and species within *Celertenues* are as defined and recognized by Hoser in 2017 as formally defined within that paper and adopted herein save for the addition of the forms described herein.

The species within *Celertenues* are species all formerly treated as being within the genus *Oedura* Gray, 1842, or more recently, *Amalosia* Wells and Wellington, 1984, the latter with a type species of *Phyllodactylus lesueurii* Duméril and Bibron, 1836.

Prior to 2017, two species within *Celertenues* Hoser, 2017 were formally named and recognized, while three new to science were formally named within Hoser (2017).

In total the five species recognized in 2017 by Hoser (2017) were: *Celertenues rhombifer* (Gray, 1845), *C. bobbottomi* Hoser, 2017, *C. evanwhittoni* Hoser, 2017, *C. helengrasswillae* Hoser, 2017 and *C. obscura* (King, 1984).

From Gray's original description of *C. rhombifer* (Gray, 1854) it is self-evident that the specimen's provenance was the Kimberley division of Western Australia as this population alone fits the description.

All five species of *Celertenues* named or recognized by Hoser (2017) can be readily separated from one another on the basis of consistent colour differences, even though otherwise all are morphologically similar and otherwise hard to separate from one another based on hasty external observation without knowledge of the various forms.

*C. rhombifer* (Gray, 1845) as defined by Hoser (2017) is confined to Kimberley division of Western Australia, mainly the west Kimberley, is readily separated from all other taxa in the genus by a distinct pattern of large light-coloured rhomboidal blotches running down the middle of the back. With the exception of *C. obscura* (King, 1984) also a west Kimberley endemic, and (the morphologically similar) *Amalosia jacovae* (Couper, Keim and Hoskin, 2007), in all other species in this genus lighter blotches down the back are always joined to become merged. In *C. rhombifer* (Gray, 1845) at least some of the blotches in the middle of the back are separated by thin sections of darkened pigment, this being unique to the species.

*Celertenuus obscura* (King, 1984) from north-west Western Australia is the only taxon in the genus with a dorsal pattern of alternating dark and light cross bands that are distinct and well defined. The (original) tail of *C. obscura* is unique among the species in that it is brilliant deep yellow in colour with limited darker flecks or patches of small size.

*Celertenuus helengrasswillae* Hoser, 2017 from Queensland in the coastal and near coastal region south of the Paluma Range in the North to Kroombit Tops in the south is readily separated from the other five species by the following combination of traits: An iris that is brown, but not chocolate brown. A lighter mid dorsal stripe bounded by dark pigment and with regular jagged edges, dark coloured (blackish) limbs with irregular brown and/or light brown flecks or patches and a distinctive characteristic dark patch of large size surrounded by pale pigment at the rear of the crown, not seen in any other species with the occasional exception of some specimens of *Amalosia jacobae* (Couper, Keim and Hoskin, 2007), being a species morphologically similar to this genus.

*Amalosia queenslandia* Hoskin and Couper, 2023 with a type locality of Almaden area, Queensland, Australia, Latitude -17.2405 S., Longitude 144.3841 E. is an illegally coined junior synonym of *Celertenuus helengrasswillae* Hoser, 2017.

*Amalosia jacobae* (Couper, Keim and Hoskin, 2007) from southeast Queensland, generally south of Fraser Island is readily separated from all species in *Celertenuus* Hoser, 2017 by the presence of broken light-coloured spots on the dorsal surface of the back with obscure boundaries.

*Celertenuus evanwhittoni* Hoser, 2017 found generally from the Atherton Tableland and north in far north Queensland, is readily separated from the other five species by the following suite of characters: A brown iris, slightly reddish in colour at the top; a continuous jagged lighter line running down the middle of the back with obvious white spots on the jagged edges and well bordered on the outer edge by thick, even dark pigment; an absence of a conspicuous dark patch posterior to the crown, dense and even spotting or flecks on the limbs, mild yellowing in the colour of the tail (original tails).

*Amalosia nebula* Hoskin and Couper, 2023 is an illegally coined junior synonym of *Celertenuus evanwhittoni* Hoser, 2017.

*Celertenuus bobbottomi* Hoser, 2017 from the tropical top end of the Northern Territory, the nominate subspecies herein confined to the western third of the tropical top end of the Northern Territory, is readily separated from the five other species by the following suite of characters: Iris is reddish-orange-brown. The jagged light line running down the centre of the back is punctuated by strong darker intrusions, the tail has a weak yellowish tinge, and in common with *C. obscura* but no other species, the dark line running from the eye along the back of the head and neck, is not distinct and well defined, but instead is an obscure and irregular zone of mottled dark and light pigment.

*C. obscura* is readily separated from *C. bobbottomi* Hoser, 2017 by dorsal pattern, the former having a pattern of distinctive dorsal crossbands, not seen in the latter.

*C. bobbottomi mirrarorum subsp. nov.* from the West Arnhem Land escarpment is unique within *Celertenuus* Hoser, 2017 in that the mid-dorsal zig-zag is exaggerated, either to an extreme extent, or sometimes so much so that the zig zag becomes broken to form a series of broken dark-edged or even just dark markings running down the vertebral line, these markings extending to the dorsolateral edge, but stopping there and not entering the upper parts of the flanks. The dark edges are also invariably straight edged or mainly so.

The upper surfaces of the limbs are heavily peppered dark on light, with the dark being about 50 percent of the coverage and often forming semi-distinct dark crossbands across the limbs.

Iris is orange brown, commonly with large irregular patches of yellow. Although *C. bobbottomi mirrarorum subsp. nov.* is found in an area geographically proximal to the type form of *C. bobbottomi* Hoser, 2017 with a type locality of Litchfield National Park, NT, Australia, Latitude -13.40 S., Longitude 130.89 E., it is so divergent morphologically that it warrants taxonomic recognition as a separate taxon.

*C. bobbottomi yannhanuorum subsp. nov.* from the Parsons Range, Wessell Islands and Gove Peninsula area of the Northern Territory is separated from all other species and subspecies within *Celertenuus* Hoser, 2017 by having the unique combination of rounded edges

on the zig zagging mid-vertebral stripe that is bounded by a thick dark edge on the outer edge, formed by a 100 percent coverage of dense dark peppering. At the lower edge, this dark peppering forms a straight dark line on either the dorsolateral edge or just below it.

The flanks themselves are white, being evenly and heavily peppered black, giving it a greyish appearance, with a scattering of small to tiny, semi-distinct white spots that are of irregular and often elongate shape. The upper surfaces of the limbs have a base colour that is light grey, overlain with dark peppering and where this clumps, these are often found to have tiny well-bordered white spots within them, the white spots themselves being ill-defined. Iris is light yellowish-brown.

*C. bobbottomi anindilyakwaorum subsp. nov.* from Groote Eylandt, Northern Territory, Australia is separated from all other species and subspecies within *Celertenuus* Hoser, 2017 by having the unique combination of being a generally brownish-grey coloured lizard. It has a head that is mainly light brown in colour on top, with darker pigment very obscured; the vertebral line is light brown with outer points being white tipped. The outer border is a brown line formed by dense dark peppering. The flank itself is dark brownish grey, formed by heavy peppering across the entire flank.

There is a well-defined dark brown stripe running from rear of eye to top of neck, where it forms the outer edge of the vertebral zigzag line. The same line forms on the snout, where it is indistinct, continues through the eye as an orange line through the central line of the iris (as dull orange) and beyond.

The iris is otherwise a light brown colour. The upper surfaces of the limbs are light as a base colour, heavily and fairly evenly speckled with tiny brown spots.

The dorsal colour and pattern continues along the top of the original tail, whereupon it becomes less intense about a third of the way along its length, this being also seen in an expansion in the width of the wider points of the light areas and reduction in white points.

The sides of the tail darken to become dark brownish in colour, before lightening again at the distal third.

The newly named species *Celertenuus timhudsoni sp. nov.* is known only from the Selwyn Ranges area around Mount Isa and Cloncurry Queensland, extending south along the stony ranges to the Standish Range and also to north-west of Winton in north-west Queensland.

It is readily separated from the five preceding species and *Celertenuus yanyuwaorum sp. nov.* described below by the following combination of characters:

The jagged light line running down the centre of the back (vertebral line) is relatively broad and the outer edge is relatively even as well, as in not waving in or out very much. While there is blackish spots or peppering along the outer edge of the vertebral line, this dark does not intrude on the vertebral line. The tail is of similar colour to the body, being generally greyish brown above and without any yellowing.

While there is a very slight lightening of pigment on the outermost points of the vertebral line, these are in no way of the form of white spots or similar.

There is a broad dark line running from snout, through eye, along the upper lateral edge of the back of head, side of neck and anterior body, formed by dense dark peppering on the otherwise lighter background, which dissipates on the anterior body. This line does however expand and is in the form of slighter denser dark peppering on the upper half of the flank of the upper body as opposed to the lower half, intensifying in darkness along each side of the tail making the vertebral line on the tail more prominent. The upper surfaces of the limbs are light grey, being the main colour, with scattered tiny dark spots throughout, these being more numerous on the distal parts of the upper surfaces of the limbs. The upper surface of the head anterior to the eye is mainly light in colour with indistinct irregular dark mottling, sometimes quite dense in some specimens, while not dense in others. Iris is chocolate brown.

*Celertenuus yanyuwaorum sp. nov.* from the southern edge of the Gulf of Carpentaria in both Queensland and the Northern Territory is readily separated from all other species in the genus *Celertenuus* Hoser, 2017 by being by day a noticeably lighter coloured lizard all over. It is generally a light whitish grey all over, the vertebral line has well-defined zigzags on the outer edge, bounded on the outer edge by a thin but well-defined dark-brown etching or zig-zag line on each side, this being formed of joined tiny brown dots or pigment, that forms a well-defined and continuous edge. The rest of the flanks



have similar but widely scattered and ill-defined tiny dark brown spots as does the upper surfaces of the fore and hind limbs. Iris is light orangish grey anteriorly and light grey posteriorly. The vertebral band continues on the (original) tail (as does the bordering) with it tending to break and sometimes forming large spots. Each side of the original tail is light grey, except for a series of tiny and widely separated, irregularly placed spots in a row along the medial line of each side.

The head anterior to the eyes on the sides and above (wholly) is mainly light grey with yellowish tinge and scattered semi-distinct irregularly spaced small brown spots. Anterior to the eye on the lower edge and posterior to it on the upper edge is a heavy grey to brown peppering along the upper edge of the back of the head and continuing to the anterior part of the upper body where it forms the narrow well-defined dark edge bordering the vertebral line. Digits are light grey with some semi-distinct dark spots confined to the upper edge.

The other species formerly placed in the genus *Amalosia*, that are all now placed in the genus *Celertenues* Hoser, 2017 are all readily separated from all species remaining within *Amalosia* Wells and Wellington, 1984, type species being *Phyllodactylus lesueurii* Duméril and Bibron, 1836 including *A. jacovae* by having a tail that is cylindrical in cross section as opposed to being noticeably depressed.

Three additional putative species named in Hoskin and Couper (2023), being their "*Amalosia hinesi*", "*Amalosia saxacola*" and "*Amalosia capensis*" are ignored herein as they were not compared with all other relevant species such as *Amalosia phillipsi* Wells and Wellington, 1985, which Hoskin and Couper (2023) fraudulently pretended did not exist and so I am unable to confirm or deny that their other three species as just listed are valid or diagnosable taxonomic entities.

Their omission from the comparisons herein does not affect the integrity of this description as none of those putative taxa or any others east of the Carpentaria Fold have the suites of characters assigned to species west of the Carpentaria Fold and importantly do not have just two enlarged postcloacal spurs on each side (as found in all species west of the Carpentaria Fold), instead having three or more (as found in all species east of the Carpentaria Fold).

The purported taxon "*Amalosia capensis* Hoskin and Couper, 2023", with a type locality of McIlwraith Range, Queensland, Australia, Latitude -13.4234 S., Longitude 143.1844 E. may be new to science, but no concrete evidence of this was presented by Hoskin and Couper.

"*Amalosia saxacola* Hoskin and Couper, 2023", with a type locality of Mt Zero, Taravale, northeast Queensland, Australia, Latitude 19.0534 S., Longitude 146.0833 E., is also of unknown status based on available published material.

"*Amalosia hinesi* Hoskin and Couper, 2023", with a type locality of Thane Creek, Durikai State Forest. South-east Queensland, Australia, Latitude -28.1717 S., Longitude 151.4146" E. may or may not be a valid species, separate from *A. phillipsi* Wells and Wellington, 1985 with a type locality of near Tenterfield in north-east New South Wales, Australia

*Celertenues timhudsoni* sp. nov. is depicted in life online at:

<https://www.flickr.com/photos/ryanfrancis/15005689797/>

and

<https://www.flickr.com/photos/jayceebarnes/50526919247/>

and

<https://www.flickr.com/photos/ryanfrancis/7846953054/>

and

<https://www.inaturalist.org/observations/203414088>

*Celertenues yanyuwaorum* sp. nov. is depicted in life online at:

<https://arod.com.au/arod/reptilia/Squamata/Gekkonidae/Amalosia/rhombifer>

*C. bobbottomi mirrarorum* subsp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/138541435>

and

<https://www.inaturalist.org/observations/249750471>

*C. bobbottomi yannhanuorum* subsp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/141783489>

*C. bobbottomi anindilyakwaorum* subsp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/242026312>

and

<https://www.inaturalist.org/observations/229670893>

and

<https://www.inaturalist.org/observations/54241136>

**Distribution:** *Celertenues yanyuwaorum* sp. nov. occurs on the southern edge of the Gulf of Carpentaria in both Queensland and the Northern Territory, mainly in association with hilly and rocky habitats, expanding to stony habitats with spinifex coverage.

**Etymology:** *Celertenues yanyuwaorum* sp. nov. is named in recognition of the Yanyuwa, being one of three main groups of Aboriginal people occupying the southern Gulf of Carpentaria region prior to the European invasion of the area. The majority were exterminated at the time (in the 1800's) in a British government genocide. The land is now mainly occupied by transnational farming interests overgrazed with habitat destroying beef cattle for maximum profits.

**CELERTENUES BOBBOTTOMI MIRRARORUM SUBSP. NOV.**

**LSIDurn:lsid:zoobank.org:act:646547BC-20AF-49E3-8746-3A3D92D89CFC**

**Holotype:** A preserved specimen at the Australian National Wildlife Collection, controlled by the Commonwealth Scientific and Industrial Research Organization (CSIRO), Canberra, ACT, Australia, specimen number R03403 collected from the Jabiru area of Kakadu National Park, west Arnhem Land, Northern Territory, Australia, Latitude -12.7083 S., Longitude 132.8083 E.

This government-owned facility allows access to its holdings.

**Paratypes:** 1/ A preserved specimen at the Australian National Wildlife Collection, controlled by the Commonwealth Scientific and Industrial Research Organization (CSIRO), Canberra, ACT, Australia, specimen number R06007 collected from the Jabiru area of Kakadu National Park, west Arnhem Land, Northern Territory, Australia, Latitude -12.65 S., Longitude 132.8083 E., 2/ A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.88877 collected from the Jabiluka Project Area, west Arnhem Land, Northern Territory, Australia, Latitude -12.55 S., Longitude 132.916 E.

**Diagnosis:** The species *Celertenues bobbottomi* Hoser, 2017 (and all but two of five species) had until then been treated as a regional population of *C. rhombifer* (Gray, 1854) and the proper diagnosis of *C. bobbottomi* and the other species recognized in 2017 must be in the context of separating five relevant species, being the total number of species within *Celertenues* Hoser, 2017.

For this genus, the type species is *Celertenues bobbottomi* Hoser, 2017, holotype specimen being NTM 22222, with a type locality of Litchfield National Park, NT, Australia, Latitude -13.40 S., Longitude 130.89 E.

The genus and species within *Celertenues* are as defined and recognized by Hoser in 2017 as formally defined within that paper and adopted herein save for the addition of the forms described herein.

The species within *Celertenues* are species all formerly treated as being within the genus *Oedura* Gray, 1842, or more recently, *Amalosia* Wells and Wellington, 1984, the latter with a type species of *Phyllodactylus lesueurii* Duméril and Bibron, 1836.

Prior to 2017, two species within *Celertenues* Hoser, 2017 were formally named and recognized, while three new to science were formally named within Hoser (2017).

In total the five species recognized in 2017 by Hoser (2017) were: *Celertenues rhombifer* (Gray, 1845), *C. bobbottomi* Hoser, 2017, *C. evanwhittoni* Hoser, 2017, *C. helengrasswillae* Hoser, 2017 and *C. obscura* (King, 1984).

From Gray's original description of *C. rhombifer* (Gray, 1854) it is self-evident that the specimen's provenance was the Kimberley division of Western Australia as this population alone fits the description.

All five species of *Celertenues* named or recognized by Hoser (2017) can be readily separated from one another on the basis of consistent colour differences, even though otherwise all are morphologically similar and otherwise hard to separate from one another based on hasty external observation without knowledge of the various forms.

*C. rhombifer* (Gray, 1845) as defined by Hoser (2017) is confined to Kimberley division of Western Australia, mainly the west Kimberley, is readily separated from all other taxa in the genus by a distinct pattern of large light-coloured rhomboidal blotches running down the middle of the back. With the exception of *C. obscura* (King, 1984) also a west Kimberley endemic, and (the morphologically similar) *Amalosia jacovae* (Couper, Keim and Hoskin, 2007), in all other species in this

genus lighter blotches down the back are always joined to become merged. In *C. rhombifer* (Gray, 1845) at least some of the blotches in the middle of the back are separated by thin sections of darkened pigment, this being unique to the species.

*Celertenuus obscura* (King, 1984) from north-west Western Australia is the only taxon in the genus with a dorsal pattern of alternating dark and light cross bands that are distinct and well defined. The (original) tail of *C. obscura* is unique among the species in that it is brilliant deep yellow in colour with limited darker flecks or patches of small size.

*Celertenuus helengrasswillae* Hoser, 2017 from Queensland in the coastal and near coastal region south of the Paluma Range in the North to Kroombit Tops in the south is readily separated from the other five species by the following combination of traits: An iris that is brown, but not chocolate brown. A lighter mid dorsal stripe bounded by dark pigment and with regular jagged edges, dark coloured (blackish) limbs with irregular brown and/or light brown flecks or patches and a distinctive characteristic dark patch of large size surrounded by pale pigment at the rear of the crown, not seen in any other species with the occasional exception of some specimens of *Amalosia jacobae* (Couper, Keim and Hoskin, 2007), being a species morphologically similar to this genus.

*Amalosia queenslandia* Hoskin and Couper, 2023 with a type locality of Almaden area, Queensland, Australia, Latitude -17.2405 S., Longitude 144.3841 E. is an illegally coined junior synonym of *Celertenuus helengrasswillae* Hoser, 2017.

*Amalosia jacobae* (Couper, Keim and Hoskin, 2007) from southeast Queensland, generally south of Fraser Island is readily separated from all species in *Celertenuus* Hoser, 2017 by the presence of broken light-coloured spots on the dorsal surface of the back with obscure boundaries.

*Celertenuus evanwhittoni* Hoser, 2017 found generally from the Atherton Tableland and north in far north Queensland, is readily separated from the other five species by the following suite of characters: A brown iris, slightly reddish in colour at the top; a continuous jagged lighter line running down the middle of the back with obvious white spots on the jagged edges and well bordered on the outer edge by thick, even dark pigment; an absence of a conspicuous dark patch posterior to the crown, dense and even spotting or flecks on the limbs, mild yellowing in the colour of the tail (original tails).

*Amalosia nebula* Hoskin and Couper, 2023 is an illegally coined junior synonym of *Celertenuus evanwhittoni* Hoser, 2017.

*Celertenuus bobbottomi* Hoser, 2017 from the tropical top end of the Northern Territory, the nominate subspecies herein confined to the western third of the tropical top end of the Northern Territory, is readily separated from the five other species by the following suite of characters: Iris is reddish-orange-brown. The jagged light line running down the centre of the back is punctuated by strong darker intrusions, the tail has a weak yellowish tinge, and in common with *C. obscura* but no other species, the dark line running from the eye along the back of the head and neck, is not distinct and well defined, but instead is an obscure and irregular zone of mottled dark and light pigment.

*C. obscura* is readily separated from *C. bobbottomi* Hoser, 2017 by dorsal pattern, the former having a pattern of distinctive dorsal crossbands, not seen in the latter.

*C. bobbottomi mirrarorum* subsp. nov. from the West Arnhem Land escarpment is unique within *Celertenuus* Hoser, 2017 in that the mid-dorsal zig-zag is exaggerated, either to an extreme extent, or sometimes so much so that the zig zag becomes broken to form a series of broken dark-edged or even just dark markings running down the vertebral line, these markings extending to the dorsolateral edge, but stopping there and not entering the upper parts of the flanks. The dark edges are also invariably straight edged or mainly so.

The upper surfaces of the limbs are heavily peppered dark on light, with the dark being about 50 percent of the coverage and often forming semi-distinct dark crossbands across the limbs.

Iris is orange brown, commonly with large irregular patches of yellow. Although *C. bobbottomi mirrarorum* subsp. nov. is found in an area geographically proximal to the type form of *C. bobbottomi* Hoser, 2017 with a type locality of Litchfield National Park, NT, Australia, Latitude -13.40 S., Longitude 130.89 E., it is so divergent morphologically that it warrants taxonomic recognition as a separate taxon.

*C. bobbottomi yannhanuorum* subsp. nov. from the Parsons Range, Wessell Islands and Gove Peninsula area of the Northern Territory is separated from all other species and subspecies within *Celertenuus* Hoser, 2017 by having the unique combination of rounded edges on the zig zagging mid-vertebral stripe that is bounded by a thick dark edge on the outer edge, formed by a 100 percent coverage of dense dark peppering. At the lower edge, this dark peppering forms a straight dark line on either the dorsolateral edge or just below it.

The flanks themselves are white, being evenly and heavily peppered black, giving it a greyish appearance, with a scattering of small to tiny, semi-distinct white spots that are of irregular and often elongate shape. The upper surfaces of the limbs have a base colour that is light grey, overlain with dark peppering and where this clumps, these are often found to have tiny well-bordered white spots within them, the white spots themselves being ill-defined. Iris is light yellowish-brown.

*C. bobbottomi anindilyakwaorum* subsp. nov. from Groote Eylandt, Northern Territory, Australia is separated from all other species and subspecies within *Celertenuus* Hoser, 2017 by having the unique combination of being a generally brownish-grey coloured lizard. It has a head that is mainly light brown in colour on top, with darker pigment very obscured; the vertebral line is light brown with outer points being white tipped. The outer border is a brown line formed by dense dark peppering. The flank itself is dark brownish grey, formed by heavy peppering across the entire flank.

There is a well-defined dark brown stripe running from rear of eye to top of neck, where it forms the outer edge of the vertebral zigzag line. The same line forms on the snout, where it is indistinct, continues through the eye as an orange line through the central line of the iris (as dull orange) and beyond.

The iris is otherwise a light brown colour. The upper surfaces of the limbs are light as a base colour, heavily and fairly evenly speckled with tiny brown spots.

The dorsal colour and pattern continues along the top of the original tail, whereupon it becomes less intense about a third of the way along its length, this being also seen in an expansion in the width of the wider points of the light areas and reduction in white points.

The sides of the tail darken to become dark brownish in colour, before lightening again at the distal third.

The newly named species *Celertenuus timhudsoni* sp. nov. is known only from the Selwyn Ranges area around Mount Isa and Cloncurry Queensland, extending south along the stony ranges to the Standish Range and also to north-west of Winton in north-west Queensland.

It is readily separated from the five preceding species and *Celertenuus yanyuwaorum* sp. nov. described below by the following combination of characters:

The jagged light line running down the centre of the back (vertebral line) is relatively broad and the outer edge is relatively even as well, as in not waving in or out very much. While there is blackish spots or peppering along the outer edge of the vertebral line, this dark does not intrude on the vertebral line. The tail is of similar colour to the body, being generally greyish brown above and without any yellowing.

While there is a very slight lightening of pigment on the outermost points of the vertebral line, these are in no way of the form of white spots or similar.

There is a broad dark line running from snout, through eye, along the upper lateral edge of the back of head, side of neck and anterior body, formed by dense dark peppering on the otherwise lighter background, which dissipates on the anterior body. This line does however expand and is in the form of slighter denser dark peppering on the upper half of the flank of the upper body as opposed to the lower half, intensifying in darkness along each side of the tail making the vertebral line on the tail more prominent. The upper surfaces of the limbs are light grey, being the main colour, with scattered tiny dark spots throughout, these being more numerous on the distal parts of the upper surfaces of the limbs. The upper surface of the head anterior to the eye is mainly light in colour with indistinct irregular dark mottling, sometimes quite dense in some specimens, while not dense in others. Iris is chocolate brown.

*Celertenuus yanyuwaorum* sp. nov. from the southern edge of the Gulf of Carpentaria in both Queensland and the Northern Territory is readily separated from all other species in the genus *Celertenuus* Hoser, 2017 by being by day a noticeably lighter coloured lizard all over. It is generally a light whitish grey all over, the vertebral line



has well-defined zigzags on the outer edge, bounded on the outer edge by a thin but well-defined dark-brown etching or zig-zag line on each side, this being formed of joined tiny brown dots or pigment, that forms a well-defined and continuous edge. The rest of the flanks have similar but widely scattered and ill-defined tiny dark brown spots as does the upper surfaces of the fore and hind limbs. Iris is light orangish grey anteriorly and light grey posteriorly. The vertebral band continues on the (original) tail (as does the bordering) with it tending to break and sometimes forming large spots. Each side of the original tail is light grey, except for a series of tiny and widely separated, irregularly placed spots in a row along the medial line of each side.

The head anterior to the eyes on the sides and above (wholly) is mainly light grey with yellowish tinge and scattered semi-distinct irregularly spaced small brown spots. Anterior to the eye on the lower edge and posterior to it on the upper edge is a heavy grey to brown peppering along the upper edge of the back of the head and continuing to the anterior part of the upper body where it forms the narrow well-defined dark edge bordering the vertebral line.

Digits are light grey with some semi-distinct dark spots confined to the upper edge.

The other species formerly placed in the genus *Amalosia*, that are all now placed in the genus *Celertenues* Hoser, 2017 are all readily separated from all species remaining within *Amalosia* Wells and Wellington, 1984, type species being *Phyllodactylus Lesueurii* Duméril and Bibron, 1836 including *A. jacovae* by having a tail that is cylindrical in cross section as opposed to being noticeably depressed.

Three additional putative species named in Hoskin and Couper (2023), being their "*Amalosia hinesi*", "*Amalosia saxacola*" and "*Amalosia capensis*" are ignored herein as they were not compared with all other relevant species such as *Amalosia phillipsi* Wells and Wellington, 1985, which Hoskin and Couper (2023) fraudulently pretended did not exist and so I am unable to confirm or deny that their other three species as just listed are valid or diagnosable taxonomic entities.

Their omission from the comparisons herein does not affect the integrity of this description as none of those putative taxa or any others east of the Carpentaria Fold have the suites of characters assigned to species west of the Carpentaria Fold and importantly do not have just two enlarged postcloacal spurs on each side (as found in all species west of the Carpentaria Fold), instead having three or more (as found in all species east of the Carpentaria Fold).

The purported taxon "*Amalosia capensis* Hoskin and Couper, 2023", with a type locality of McIlwraith Range, Queensland, Australia, Latitude -13.4234 S., Longitude 143.1844 E. may be new to science, but no concrete evidence of this was presented by Hoskin and Couper.

"*Amalosia saxacola* Hoskin and Couper, 2023", with a type locality of Mt Zero, Taravale, northeast Queensland, Australia, Latitude 19.0534 S., Longitude 146.0833 E., is also of unknown status based on available published material.

"*Amalosia hinesi* Hoskin and Couper, 2023", with a type locality of Thane Creek, Durikai State Forest. South-east Queensland, Australia, Latitude -28.1717 S., Longitude 151.4146° E. may or may not be a valid species, separate from *A. phillipsi* Wells and Wellington, 1985 with a type locality of near Tenterfield in north-east New South Wales, Australia

*Celertenues timhudsoni* sp. nov. is depicted in life online at:

<https://www.flickr.com/photos/ryanfrancis/15005689797/>

and

<https://www.flickr.com/photos/jayceebarnes/50526919247/>

and

<https://www.flickr.com/photos/ryanfrancis/7846953054/>

and

<https://www.inaturalist.org/observations/203414088>

*Celertenues yanyuwaorum* sp. nov. is depicted in life online at:

<https://arod.com.au/arod/reptilia/Squamata/Gekkonidae/Amalosia/rhombifer>

*C. bobbottomi mirrarorum* subsp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/138541435>

and

<https://www.inaturalist.org/observations/249750471>

*C. bobbottomi yannhanourum* subsp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/141783489>

*C. bobbottomi anindilyakwaorum* subsp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/242026312>

and

<https://www.inaturalist.org/observations/229670893>

and

<https://www.inaturalist.org/observations/54241136>

**Distribution:** *C. bobbottomi mirrarorum* subsp. nov. appears to be endemic to the West Arnhem Land escarpment and outliers.

**Etymology:** *C. bobbottomi mirrarorum* subsp. nov. is named after the Mirrar people, who were the original inhabitants of the area pre-dating European invasion of the area.

This particular group of Aborigines got lucky, in that they managed to gain "land rights" over the area at a time when the land was deemed relatively useless to the Australian government based in Canberra in the Australian Capital Territory, some 3000 km southeast.

The discovery of Uranium needed to make atomic weapons to drop on the evil Russian Communists suddenly made the area valuable and the surviving Mirrar people were able to extract cash from the Federal Government and mining companies as royalties at time when both were rolling in cash.

So as of 2025, the Mirrar are one of the few relatively well-off groups of indigenous Australians in Australia.

However, a lot of this wealth has been siphoned off by so called "hobby coons" who are white Anglo-Australians masquerading as Aborigines that they are not, solely for the purpose of scamming money from the genuine Aborigines or otherwise meant to be paid to them.

**CELERTENUES BOBBOTTOMI YANNHANOURUM SUBSP. NOV.**

**LSIDurn:lsid:zoobank.org:act:C37ABDD7-E757-426D-9614-75F7DDE77651**

**Holotype:** A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, specimen number R26335 collected from Jensen Bay, Marchinbar Island, Wessel Islands, Northern Territory, Australia, Latitude -11.167 S., Longitude 136.683 E.

This government-owned facility allows access to its holdings.

**Paratypes:** Nine preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, specimen numbers R26333, R26336, R26337, R26338, R08956, R08957, R08984, R08985 and R08986 all collected from Jensen Bay, Marchinbar Island, Wessel Islands, Northern Territory, Australia, Latitude -11.167 S., Longitude 136.683 E.

**Diagnosis:** The species *Celertenues bobbottomi* Hoser, 2017 (and all but two of five species) had until then been treated as a regional population of *C. rhombifer* (Gray, 1854) and the proper diagnosis of *C. bobbottomi* and the other species recognized in 2017 must be in the context of separating five relevant species, being the total number of species within *Celertenues* Hoser, 2017.

For this genus, the type species is *Celertenues bobbottomi* Hoser, 2017, holotype specimen being NTM 22222, with a type locality of Litchfield National Park, NT, Australia, Latitude -13.40 S., Longitude 130.89 E.

The genus and species within *Celertenues* are as defined and recognized by Hoser in 2017 as formally defined within that paper and adopted herein save for the addition of the forms described herein.

The species within *Celertenues* are species all formerly treated as being within the genus *Oedura* Gray, 1842, or more recently, *Amalosia* Wells and Wellington, 1984, the latter with a type species of *Phyllodactylus lesueurii* Duméril and Bibron, 1836.

Prior to 2017, two species within *Celertenues* Hoser, 2017 were formally named and recognized, while three new to science were formally named within Hoser (2017).

In total the five species recognized in 2017 by Hoser (2017) were: *Celertenues rhombifer* (Gray, 1845), *C. bobbottomi* Hoser, 2017, *C. evanwhittoni* Hoser, 2017, *C. helengrasswillae* Hoser, 2017 and *C. obscura* (King, 1984).

From Gray's original description of *C. rhombifer* (Gray, 1854) it is self-evident that the specimen's provenance was the Kimberley division of Western Australia as this population alone fits the description.

All five species of *Celertenues* named or recognized by Hoser (2017) can be readily separated from one another on the basis of consistent colour differences, even though otherwise all are morphologically

similar and otherwise hard to separate from one another based on hasty external observation without knowledge of the various forms. *C. rhombifer* (Gray, 1845) as defined by Hoser (2017) is confined to Kimberley division of Western Australia, mainly the west Kimberley, is readily separated from all other taxa in the genus by a distinct pattern of large light-coloured rhomboidal blotches running down the middle of the back. With the exception of *C. obscura* (King, 1984) also a west Kimberley endemic, and (the morphologically similar) *Amalosia jacovae* (Couper, Keim and Hoskin, 2007), in all other species in this genus lighter blotches down the back are always joined to become merged. In *C. rhombifer* (Gray, 1845) at least some of the blotches in the middle of the back are separated by thin sections of darkened pigment, this being unique to the species.

*Celertenuus obscura* (King, 1984) from north-west Western Australia is the only taxon in the genus with a dorsal pattern of alternating dark and light cross bands that are distinct and well defined. The (original) tail of *C. obscura* is unique among the species in that it is brilliant deep yellow in colour with limited darker flecks or patches of small size.

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*Amalosia queenslandia* Hoskin and Couper, 2023 with a type locality of Almaden area, Queensland, Australia, Latitude -17.2405 S., Longitude 144.3841 E. is an illegally coined junior synonym of *Celertenuus helengrasswillae* Hoser, 2017.

*Amalosia jacovae* (Couper, Keim and Hoskin, 2007) from southeast Queensland, generally south of Fraser Island is readily separated from all species in *Celertenuus* Hoser, 2017 by the presence of broken light-coloured spots on the dorsal surface of the back with obscure boundaries.

*Celertenuus evanwhittoni* Hoser, 2017 found generally from the Atherton Tableland and north in far north Queensland, is readily separated from the other five species by the following suite of characters: A brown iris, slightly reddish in colour at the top; a continuous jagged lighter line running down the middle of the back with obvious white spots on the jagged edges and well bordered on the outer edge by thick, even dark pigment; an absence of a conspicuous dark patch posterior to the crown, dense and even spotting or flecks on the limbs, mild yellowing in the colour of the tail (original tails).

*Amalosia nebula* Hoskin and Couper, 2023 is an illegally coined junior synonym of *Celertenuus evanwhittoni* Hoser, 2017.

*Celertenuus bobbottomi* Hoser, 2017 from the tropical top end of the Northern Territory, the nominate subspecies herein confined to the western third of the tropical top end of the Northern Territory, is readily separated from the five other species by the following suite of characters: Iris is reddish-orange-brown. The jagged light line running down the centre of the back is punctuated by strong darker intrusions, the tail has a weak yellowish tinge, and in common with *C. obscura* but no other species, the dark line running from the eye along the back of the head and neck, is not distinct and well defined, but instead is an obscure and irregular zone of mottled dark and light pigment.

*C. obscura* is readily separated from *C. bobbottomi* Hoser, 2017 by dorsal pattern, the former having a pattern of distinctive dorsal crossbands, not seen in the latter.

*C. bobbottomi mirrarorum subsp. nov.* from the West Arnhem Land escarpment is unique within *Celertenuus* Hoser, 2017 in that the mid-dorsal zig-zag is exaggerated, either to an extreme extent, or sometimes so much so that the zig zag becomes broken to form a series of broken dark-edged or even just dark markings running down the vertebral line, these markings extending to the dorsolateral edge, but stopping there and not entering the upper parts of the flanks. The dark edges are also invariably straight edged or mainly so.

The upper surfaces of the limbs are heavily peppered dark on light,

with the dark being about 50 percent of the coverage and often forming semi-distinct dark crossbands across the limbs.

Iris is orange brown, commonly with large irregular patches of yellow. Although *C. bobbottomi mirrarorum subsp. nov.* is found in an area geographically proximal to the type form of *C. bobbottomi* Hoser, 2017 with a type locality of Litchfield National Park, NT, Australia, Latitude -13.40 S., Longitude 130.89 E., it is so divergent morphologically that it warrants taxonomic recognition as a separate taxon.

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The flanks themselves are white, being evenly and heavily peppered black, giving it a greyish appearance, with a scattering of small to tiny, semi-distinct white spots that are of irregular and often elongate shape. The upper surfaces of the limbs have a base colour that is light grey, overlain with dark peppering and where this clumps, these are often found to have tiny well-bordered white spots within them, the white spots themselves being ill-defined. Iris is light yellowish-brown.

*C. bobbottomi anindilyakwaorum subsp. nov.* from Groote Eylandt, Northern Territory, Australia is separated from all other species and subspecies within *Celertenuus* Hoser, 2017 by having the unique combination of being a generally brownish-grey coloured lizard. It has a head that is mainly light brown in colour on top, with darker pigment very obscured; the vertebral line is light brown with outer points being white tipped. The outer border is a brown line formed by dense dark peppering. The flank itself is dark brownish grey, formed by heavy peppering across the entire flank.

There is a well-defined dark brown stripe running from rear of eye to top of neck, where it forms the outer edge of the vertebral zigzag line. The same line forms on the snout, where it is indistinct, continues through the eye as an orange line through the central line of the iris (as dull orange) and beyond.

The iris is otherwise a light brown colour. The upper surfaces of the limbs are light as a base colour, heavily and fairly evenly speckled with tiny brown spots.

The dorsal colour and pattern continues along the top of the original tail, whereupon it becomes less intense about a third of the way along its length, this being also seen in an expansion in the width of the wider points of the light areas and reduction in white points.

The sides of the tail darken to become dark brownish in colour, before lightening again at the distal third.

The newly named species *Celertenuus timhudsoni sp. nov.* is known only from the Selwyn Ranges area around Mount Isa and Cloncurry Queensland, extending south along the stony ranges to the Standish Range and also to north-west of Winton in north-west Queensland.

It is readily separated from the five preceding species and *Celertenuus yanyuwaorum sp. nov.* described below by the following combination of characters:

The jagged light line running down the centre of the back (vertebral line) is relatively broad and the outer edge is relatively even as well, as in not waving in or out very much. While there is blackish spots or peppering along the outer edge of the vertebral line, this dark does not intrude on the vertebral line. The tail is of similar colour to the body, being generally greyish brown above and without any yellowing.

While there is a very slight lightening of pigment on the outermost points of the vertebral line, these are in no way of the form of white spots or similar.

There is a broad dark line running from snout, through eye, along the upper lateral edge of the back of head, side of neck and anterior body, formed by dense dark peppering on the otherwise lighter background, which dissipates on the anterior body. This line does however expand and is in the form of slighter denser dark peppering on the upper half of the flank of the upper body as opposed to the lower half, intensifying in darkness along each side of the tail making the vertebral line on the tail more prominent. The upper surfaces of the limbs are light grey, being the main colour, with scattered tiny dark spots throughout, these being more numerous on the distal parts



of the upper surfaces of the limbs. The upper surface of the head anterior to the eye is mainly light in colour with indistinct irregular dark mottling, sometimes quite dense in some specimens, while not dense in others. Iris is chocolate brown.

*Celertenues yanyuwaorum* sp. nov. from the southern edge of the Gulf of Carpentaria in both Queensland and the Northern Territory is readily separated from all other species in the genus *Celertenues* Hoser, 2017 by being by day a noticeably lighter coloured lizard all over. It is generally a light whitish grey all over, the vertebral line has well-defined zigzags on the outer edge, bounded on the outer edge by a thin but well-defined dark-brown etching or zig-zag line on each side, this being formed of joined tiny brown dots or pigment, that forms a well-defined and continuous edge. The rest of the flanks have similar but widely scattered and ill-defined tiny dark brown spots as does the upper surfaces of the fore and hind limbs. Iris is light orangish grey anteriorly and light grey posteriorly. The vertebral band continues on the (original) tail (as does the bordering) with it tending to break and sometimes forming large spots. Each side of the original tail is light grey, except for a series of tiny and widely separated, irregularly placed spots in a row along the medial line of each side. The head anterior to the eyes on the sides and above (wholly) is mainly light grey with yellowish tinge and scattered semi-distinct irregularly spaced small brown spots. Anterior to the eye on the lower edge and posterior to it on the upper edge is a heavy grey to brown peppering along the upper edge of the back of the head and continuing to the anterior part of the upper body where it forms the narrow well-defined dark edge bordering the vertebral line. Digits are light grey with some semi-distinct dark spots confined to the upper edge.

The other species formerly placed in the genus *Amalosia*, that are all now placed in the genus *Celertenues* Hoser, 2017 are all readily separated from all species remaining within *Amalosia* Wells and Wellington, 1984, type species being *Phyllodactylus Lesueurii* Duméril and Bibron, 1836 including *A. jacobae* by having a tail that is cylindrical in cross section as opposed to being noticeably depressed.

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The purported taxon "*Amalosia capensis* Hoskin and Couper, 2023", with a type locality of McIlwraith Range, Queensland, Australia, Latitude -13.4234 S., Longitude 143.1844 E. may be new to science, but no concrete evidence of this was presented by Hoskin and Couper.

"*Amalosia saxacola* Hoskin and Couper, 2023", with a type locality of Mt Zero, Taravale, northeast Queensland, Australia, Latitude 19.0534 S., Longitude 146.0833 E., is also of unknown status based on available published material.

"*Amalosia hines* Hoskin and Couper, 2023", with a type locality of Thane Creek, Durikai State Forest. South-east Queensland, Australia, Latitude -28.1717 S., Longitude 151.4146" E. may or may not be a valid species, separate from *A. phillipsi* Wells and Wellington, 1985 with a type locality of near Tenterfield in north-east New South Wales, Australia

*Celertenues timhudsoni* sp. nov. is depicted in life online at:

<https://www.flickr.com/photos/ryanfrancis/15005689797/>

and

<https://www.flickr.com/photos/jayceebarnes/50526919247/>

and

<https://www.flickr.com/photos/ryanfrancis/7846953054/>

and

<https://www.inaturalist.org/observations/203414088>

*Celertenues yanyuwaorum* sp. nov. is depicted in life online at:

<https://arod.com.au/arod/reptilia/Squamata/Gekkonidae/Amalosia/rhombifer>

*C. bobbottomi mirrarorum* subsp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/138541435>

and

<https://www.inaturalist.org/observations/249750471>

*C. bobbottomi yannhanuorum* subsp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/141783489>

*C. bobbottomi anindilyakwaorum* subsp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/242026312>

and

<https://www.inaturalist.org/observations/229670893>

and

<https://www.inaturalist.org/observations/54241136>

**Distribution:** *C. bobbottomi yannhanuorum* subsp. nov. appears to be confined to the area bound by the Parsons Range in the south, Wessell Islands in the west and Gove Peninsula in the east in the Northern Territory, generally in the far north-east corner of the top end of the Northern Territory, Australia.

**Etymology:** *C. bobbottomi yannhanuorum* subsp. nov. is named after the Yan-nhanu people, who were the original inhabitants of the area pre-dating European invasion of the area. Most were either killed directly by the British invaders or died of smallpox after being given smallpox infected clothes by the invaders.

**CELERTENUES BOBBOTTOMI ANINDILYAKWAOURUM SUBSP. NOV.**

**LSID** Durn:lsid:zoobank.org:act:5868C314-C51D-4F66-BAA9-0729D278F0F1

**Holotype:** A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.128563 collected from Angurugu, Groote Eylandt, Northern Territory, Australia, Latitude -13.966 S., Longitude 136.433 E.

This government-owned facility allows access to its holdings.

**Paratypes:** 1/ Three preserved specimens at the Australian Museum, Sydney, New South Wales, Australia, specimen numbers R.13517, R.13518 and R.13627 all collected from Groote Eylandt, Northern Territory, Australia., 2/ Two preserved specimens at the Museum and Art Gallery of the Northern Territory, Darwin, Northern Territory, Australia, specimen numbers R07554, R07555 collected at Angurugu, Groote Eylandt, Northern Territory, Australia, Latitude -13.966 S., Longitude 136.433 E.

**Diagnosis:** The species *Celertenues bobbottomi* Hoser, 2017 (and all but two of five species) had until then been treated as a regional population of *C. rhombifer* (Gray, 1854) and the proper diagnosis of *C. bobbottomi* and the other species recognized in 2017 must be in the context of separating five relevant species, being the total number of species within *Celertenues* Hoser, 2017.

For this genus, the type species is *Celertenues bobbottomi* Hoser, 2017, holotype specimen being NTM 22222, with a type locality of Litchfield National Park, NT, Australia, Latitude -13.40 S., Longitude 130.89 E.

The genus and species within *Celertenues* are as defined and recognized by Hoser in 2017 as formally defined within that paper and adopted herein save for the addition of the forms described herein.

The species within *Celertenues* are species all formerly treated as being within the genus *Oedura* Gray, 1842, or more recently, *Amalosia* Wells and Wellington, 1984, the latter with a type species of *Phyllodactylus lesueurii* Duméril and Bibron, 1836.

Prior to 2017, two species within *Celertenues* Hoser, 2017 were formally named and recognized, while three new to science were formally named within Hoser (2017).

In total the five species recognized in 2017 by Hoser (2017) were: *Celertenues rhombifer* (Gray, 1845), *C. bobbottomi* Hoser, 2017, *C. evanwhittoni* Hoser, 2017, *C. helengrasswillae* Hoser, 2017 and *C. obscura* (King, 1984).

From Gray's original description of *C. rhombifer* (Gray, 1854) it is self-evident that the specimen's provenance was the Kimberley division of Western Australia as this population alone fits the description.

All five species of *Celertenues* named or recognized by Hoser (2017) can be readily separated from one another on the basis of consistent colour differences, even though otherwise all are morphologically similar and otherwise hard to separate from one another based on

hasty external observation without knowledge of the various forms. *C. rhombifer* (Gray, 1845) as defined by Hoser (2017) is confined to Kimberley division of Western Australia, mainly the west Kimberley, is readily separated from all other taxa in the genus by a distinct pattern of large light-coloured rhomboidal blotches running down the middle of the back. With the exception of *C. obscura* (King, 1984) also a west Kimberley endemic, and (the morphologically similar) *Amalosia jacovae* (Couper, Keim and Hoskin, 2007), in all other species in this genus lighter blotches down the back are always joined to become merged. In *C. rhombifer* (Gray, 1845) at least some of the blotches in the middle of the back are separated by thin sections of darkened pigment, this being unique to the species.

*Celertenues obscura* (King, 1984) from north-west Western Australia is the only taxon in the genus with a dorsal pattern of alternating dark and light cross bands that are distinct and well defined. The (original) tail of *C. obscura* is unique among the species in that it is brilliant deep yellow in colour with limited darker flecks or patches of small size.

*Celertenues helengrasswillae* Hoser, 2017 from Queensland in the coastal and near coastal region south of the Paluma Range in the North to Kroombit Tops in the south is readily separated from the other five species by the following combination of traits: An iris that is brown, but not chocolate brown. A lighter mid dorsal stripe bounded by dark pigment and with regular jagged edges, dark coloured (blackish) limbs with irregular brown and/or light brown flecks or patches and a distinctive characteristic dark patch of large size surrounded by pale pigment at the rear of the crown, not seen in any other species with the occasional exception of some specimens of *Amalosia jacovae* (Couper, Keim and Hoskin, 2007), being a species morphologically similar to this genus.

*Amalosia queenslandia* Hoskin and Couper, 2023 with a type locality of Almaden area, Queensland, Australia, Latitude -17.2405 S., Longitude 144.3841 E. is an illegally coined junior synonym of *Celertenues helengrasswillae* Hoser, 2017.

*Amalosia jacovae* (Couper, Keim and Hoskin, 2007) from southeast Queensland, generally south of Fraser Island is readily separated from all species in *Celertenues* Hoser, 2017 by the presence of broken light-coloured spots on the dorsal surface of the back with obscure boundaries.

*Celertenues evanwhittoni* Hoser, 2017 found generally from the Atherton Tableland and north in far north Queensland, is readily separated from the other five species by the following suite of characters: A brown iris, slightly reddish in colour at the top; a continuous jagged lighter line running down the middle of the back with obvious white spots on the jagged edges and well bordered on the outer edge by thick, even dark pigment; an absence of a conspicuous dark patch posterior to the crown, dense and even spotting or flecks on the limbs, mild yellowing in the colour of the tail (original tails).

*Amalosia nebula* Hoskin and Couper, 2023 is an illegally coined junior synonym of *Celertenues evanwhittoni* Hoser, 2017.

*Celertenues bobbottomi* Hoser, 2017 from the tropical top end of the Northern Territory, the nominate subspecies herein confined to the western third of the tropical top end of the Northern Territory, is readily separated from the five other species by the following suite of characters: Iris is reddish-orange-brown. The jagged light line running down the centre of the back is punctuated by strong darker intrusions, the tail has a weak yellowish tinge, and in common with *C. obscura* but no other species, the dark line running from the eye along the back of the head and neck, is not distinct and well defined, but instead is an obscure and irregular zone of mottled dark and light pigment.

*C. obscura* is readily separated from *C. bobbottomi* Hoser, 2017 by dorsal pattern, the former having a pattern of distinctive dorsal crossbands, not seen in the latter.

*C. bobbottomi mirrarorum subsp. nov.* from the West Arnhem Land escarpment is unique within *Celertenues* Hoser, 2017 in that the mid-dorsal zig-zag is exaggerated, either to an extreme extent, or sometimes so much so that the zig zag becomes broken to form a series of broken dark-edged or even just dark markings running down the vertebral line, these markings extending to the dorsolateral edge, but stopping there and not entering the upper parts of the flanks. The dark edges are also invariably straight edged or mainly so. The upper surfaces of the limbs are heavily peppered dark on light, with the dark being about 50 percent of the coverage and often

forming semi-distinct dark crossbands across the limbs.

Iris is orange brown, commonly with large irregular patches of yellow. Although *C. bobbottomi mirrarorum subsp. nov.* is found in an area geographically proximal to the type form of *C. bobbottomi* Hoser, 2017 with a type locality of Litchfield National Park, NT, Australia, Latitude -13.40 S., Longitude 130.89 E., it is so divergent morphologically that it warrants taxonomic recognition as a separate taxon.

*C. bobbottomi yannhanuorum subsp. nov.* from the Parsons Range, Wessell Islands and Gove Peninsula area of the Northern Territory is separated from all other species and subspecies within *Celertenues* Hoser, 2017 by having the unique combination of rounded edges on the zig zagging mid-vertebral stripe that is bounded by a thick dark edge on the outer edge, formed by a 100 percent coverage of dense dark peppering. At the lower edge, this dark peppering forms a straight dark line on either the dorsolateral edge or just below it.

The flanks themselves are white, being evenly and heavily peppered black, giving it a greyish appearance, with a scattering of small to tiny, semi-distinct white spots that are of irregular and often elongate shape. The upper surfaces of the limbs have a base colour that is light grey, overlain with dark peppering and where this clumps, these are often found to have tiny well-bordered white spots within them, the white spots themselves being ill-defined. Iris is light yellowish-brown.

*C. bobbottomi anindilyakwaorum subsp. nov.* from Groote Eylandt, Northern Territory, Australia is separated from all other species and subspecies within *Celertenues* Hoser, 2017 by having the unique combination of being a generally brownish-grey coloured lizard. It has a head that is mainly light brown in colour on top, with darker pigment very obscured; the vertebral line is light brown with outer points being white tipped. The outer border is a brown line formed by dense dark peppering. The flank itself is dark brownish grey, formed by heavy peppering across the entire flank.

There is a well-defined dark brown stripe running from rear of eye to top of neck, where it forms the outer edge of the vertebral zigzag line. The same line forms on the snout, where it is indistinct, continues through the eye as an orange line through the central line of the iris (as dull orange) and beyond.

The iris is otherwise a light brown colour. The upper surfaces of the limbs are light as a base colour, heavily and fairly evenly speckled with tiny brown spots.

The dorsal colour and pattern continues along the top of the original tail, whereupon it becomes less intense about a third of the way along its length, this being also seen in an expansion in the width of the wider points of the light areas and reduction in white points.

The sides of the tail darken to become dark brownish in colour, before lightening again at the distal third.

The newly named species *Celertenues timhudsoni sp. nov.* is known only from the Selwyn Ranges area around Mount Isa and Cloncurry Queensland, extending south along the stony ranges to the Standish Range and also to north-west of Winton in north-west Queensland.

It is readily separated from the five preceding species and *Celertenues yanyuwaorum sp. nov.* described below by the following combination of characters:

The jagged light line running down the centre of the back (vertebral line) is relatively broad and the outer edge is relatively even as well, as in not waving in or out very much. While there is blackish spots or peppering along the outer edge of the vertebral line, this dark does not intrude on the vertebral line. The tail is of similar colour to the body, being generally greyish brown above and without any yellowing.

While there is a very slight lightening of pigment on the outermost points of the vertebral line, these are in no way of the form of white spots or similar.

There is a broad dark line running from snout, through eye, along the upper lateral edge of the back of head, side of neck and anterior body, formed by dense dark peppering on the otherwise lighter background, which dissipates on the anterior body. This line does however expand and is in the form of slighter denser dark peppering on the upper half of the flank of the upper body as opposed to the lower half, intensifying in darkness along each side of the tail making the vertebral line on the tail more prominent. The upper surfaces of the limbs are light grey, being the main colour, with scattered tiny dark spots throughout, these being more numerous on the distal parts of the upper surfaces of the limbs. The upper surface of the head



anterior to the eye is mainly light in colour with indistinct irregular dark mottling, sometimes quite dense in some specimens, while not dense in others. Iris is chocolate brown.

*Celertenues yanyuwaorum* sp. nov. from the southern edge of the Gulf of Carpentaria in both Queensland and the Northern Territory is readily separated from all other species in the genus *Celertenues* Hoser, 2017 by being by day a noticeably lighter coloured lizard all over. It is generally a light whitish grey all over, the vertebral line has well-defined zigzags on the outer edge, bounded on the outer edge by a thin but well-defined dark-brown etching or zig-zag line on each side, this being formed of joined tiny brown dots or pigment, that forms a well-defined and continuous edge. The rest of the flanks have similar but widely scattered and ill-defined tiny dark brown spots as does the upper surfaces of the fore and hind limbs. Iris is light orangish grey anteriorly and light grey posteriorly. The vertebral band continues on the (original) tail (as does the bordering) with it tending to break and sometimes forming large spots. Each side of the original tail is light grey, except for a series of tiny and widely separated, irregularly placed spots in a row along the medial line of each side.

The head anterior to the eyes on the sides and above (wholly) is mainly light grey with yellowish tinge and scattered semi-distinct irregularly spaced small brown spots. Anterior to the eye on the lower edge and posterior to it on the upper edge is a heavy grey to brown peppering along the upper edge of the back of the head and continuing to the anterior part of the upper body where it forms the narrow well-defined dark edge bordering the vertebral line.

Digits are light grey with some semi-distinct dark spots confined to the upper edge.

The other species formerly placed in the genus *Amalosia*, that are all now placed in the genus *Celertenues* Hoser, 2017 are all readily separated from all species remaining within *Amalosia* Wells and Wellington, 1984, type species being *Phyllodactylus Lesueurii* Duméril and Bibron, 1836 including *A. jacovae* by having a tail that is cylindrical in cross section as opposed to being noticeably depressed.

Three additional putative species named in Hoskin and Couper (2023), being their "*Amalosia hinesi*", "*Amalosia saxacola*" and "*Amalosia capensis*" are ignored herein as they were not compared with all other relevant species such as *Amalosia phillipsi* Wells and Wellington, 1985, which Hoskin and Couper (2023) fraudulently pretended did not exist and so I am unable to confirm or deny that their other three species as just listed are valid or diagnosable taxonomic entities.

Their omission from the comparisons herein does not affect the integrity of this description as none of those putative taxa or any others east of the Carpentaria Fold have the suites of characters assigned to species west of the Carpentaria Fold and importantly do not have just two enlarged postcloacal spurs on each side (as found in all species west of the Carpentaria Fold), instead having three or more (as found in all species east of the Carpentaria Fold).

The purported taxon "*Amalosia capensis* Hoskin and Couper, 2023", with a type locality of McIlwraith Range, Queensland, Australia, Latitude -13.4234 S., Longitude 143.1844 E. may be new to science, but no concrete evidence of this was presented by Hoskin and Couper.

"*Amalosia saxacola* Hoskin and Couper, 2023", with a type locality of Mt Zero, Taravale, northeast Queensland, Australia, Latitude 19.0534 S., Longitude 146.0833 E., is also of unknown status based on available published material.

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rhombifer

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<https://www.inaturalist.org/observations/138541435>

and

<https://www.inaturalist.org/observations/249750471>

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*C. bobbottomi anindilyakwaorum* subsp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/242026312>

and

<https://www.inaturalist.org/observations/229670893>

and

<https://www.inaturalist.org/observations/54241136>

**Distribution:** *C. bobbottomi anindilyakwaorum* subsp. nov. appears to be endemic to Groote Eylandt, Northern Territory, Australia.

**Etymology:** *C. bobbottomi anindilyakwaorum* subsp. nov. is named in recognition of the Anindilyakwa people, being the original inhabitants of Groote Eylandt, Northern Territory, Australia. Like the Mirrar people of west Arnhem Land, Northern Territory, the Anindilyakwa people got lucky when high grade ore was found on the island and a mine started up in recent years.

In this case it was manganese ore.

Manganese ore is the fourth most widely used metal in terms of tonnage after iron. It is primarily used as a crucial ingredient in steel production, acting as an alloying agent to enhance strength, toughness, and workability. It's also used in various other industries, including dry-cell batteries, fertilizers, and as a colorant in glass and ceramics.

Notwithstanding funds siphoned off by so-called "hobby coons" including within a bloated Australian government public service, the Anindilyakwa people have managed to get sufficient funds in royalties from the mining company and state government to attain a manageable standard of living.

#### REFERENCES CITED

(BEING THOSE IN ADDITION TO THOSE OF HOSER (2017) AND HOSER (2024) THAT ARE RELIED UPON FOR THIS PAPER)

Hoser, R. T. 2017 A further break-up of the Australian gecko genus *Oedura* Gray, 1842 *sensu lato* as currently recognized, from four to seven genera, with two new subgenera defined, description of fourteen new species, four new subspecies and formalising of one tribe and five subtribes. *Australasian Journal of Herpetology* 34:3-35.

A pdf version of Hoser (2017) can be downloaded from:

<https://www.smuggled.com/issue-34-pages-3-35.pdf>

Hoser, R. T. 2024. Taxonomic vandalism by Wolfgang Wüster and his gang of thieves. Yet more illegally coined names by the rule breakers for species and genera previously named according to the rules of the International Code of Zoological Nomenclature. *Australasian Journal of Herpetology* 72:47-63.

A pdf version of Hoser (2024) can be downloaded from:

<https://www.smuggled.com/AJH-72-pages-47-63.pdf>

#### CONFLICT OF INTEREST

None.

#### Cite this paper as:

Hoser, R. T. 2025.  
New gecko taxa in the genus *Celertenues*  
Hoser, 2017. *Australasian Journal of Herpetology* 75:46-59.  
Published 6 May 2025.

**Yet another new species of *Crinia* Tschudi, 1838, subgenus  
*Ranidella* Girard, 1853 from New South Wales, Australia.**

**LSIDURN:LSID:ZOOBANK.ORG:PUB:B04F5BA5-7E25-46A0-AF78-5C57933B6E90**

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**ABSTRACT**

Following on from the paper of Hoser (2023) that named four species and two subspecies in the *Crinia* (*Ranidella*) *signifera* Girard, 1853 species group, this paper formally names a hitherto unnamed species until now treated by most authors either as an aberrant population of *Crinia* (*Ranidella*) *signifera* Girard, 1853 or alternatively an “unidentified” small frog.

It is known to occur within a fairly small area of central and western New South Wales, from the upper Blue Mountains at Wentworth Falls, where it appears to be sympatric with typical *C. signifera* and remains so to near Bathurst and west to at least as far as Orange and Canobolas.

Formally named herein as *C. vellai* sp. nov. it is readily separated from all other species in the *Crinia* (*Ranidella*) *signifera* Girard, 1853 complex as described by Hoser (2022) by a unique combination in adult females of large size 35 mm (versus to 30 mm in *C. signifera* and 30 mm or less in other species in the genus), extensive elongated ridging on the upper part of the dorsum, between eye and body, being either side of the vertebral axis, raised warts on the upper surfaces of the limbs and carbuncles on the upper surface of the rear of the body, ventrally scaly in appearance, a slightly stockier build, shorter body and blunter snout, distinctive black post-ocular bar to the axila of the front leg and reddish above the iris rather than below. Ventrally (in females) the posterior is mainly whitish posteriorly and anteriorly mainly black, on the black scaly areas, each so-called scale is usually smudged white or white tipped and differentiation between black and white on the lower abdomen is sharp and well defined, typically with black on either side and in the centre and the rest white, versus marbled black (white interspaces) on the side black areas in adult female typical *C. signifera*.

**Keywords:** Taxonomy; Amphibia; nomenclature; frog; Australia; NSW, Victoria; Bairnsdale; Cann River; *Crinia*; *Ranidella*; *Lowingdella*; *Oxydella*; species; *signifera*; *roypailsei*; *aagh*; *lynnepailsae*; *fiacummingae*; subspecies; *aberrans*; *kroombitensis*; new species; *vellai*.

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**INTRODUCTION**

In recent years, as a result of an audit of most of Australia's frogs, I, Raymond Hoser published descriptions of dozens of new frog genera and species, including in the papers of Hoser (2016, 2019a, 2020a-f, 2023).

These papers effectively audited all Australasian frogs except for the microhylids; that group being subject of an ongoing audit.

Included in the earlier papers were four species and two subspecies in the *Crinia* (*Ranidella*) *signifera* Girard, 1853 species group.

These were *Crinia aagh* Hoser, 2023, *Crinia aberrans* Hoser, 2023, *Crinia fiacummingae* Hoser, 2023, *Crinia lynnepailsae* Hoser, 2023, *Crinia roypailsei* Hoser, 2023 as well as the subspecies *Crinia signifera aberrans* Hoser, 2023 and *Crinia signifera kroombitensis* Hoser, 2023.

Hoser (2020) also named six taxa within the *Crinia* Tschudi, 1838

subgenera of *Lowingdella* Hoser, 2020 and *Oxydella* Hoser, 2020.

A very small number of candidate species were not formally named at the time the preceding papers were published, pending inspection of further specimens.

One of these taxa was putative *Crinia signifera* Girard, 1853 from the upper Blue Mountains and west of there in nearby parts of New South Wales, Australia.

**MATERIALS, METHODS AND RESULTS**

Live specimens of relevant putative *C. signifera* from the region between Wentworth Falls and Orange as flagged in the book of Hoser (1989) and the paper of Symula *et al.* (2008) were inspected and compared with all other known and named forms as including those published or identified by name in Hoser (2023).

They did not match any previously named forms, but based



on the image on page 43 bottom of Hoser (1989) and the molecular results of Symula *et al.* were both morphologically and genetically divergent from the type form of *C. signifera* from the same region.

Symula *et al.* at fig. 3, found divergences of all relevant forms to be in excess of 2 MYA, including the larger than usual form found in the Upper Blue Mountains at Wentworth Falls, west to at least Orange and Canobolas, flagging it as a candidate species.

Since the publication of Hoser (2023), Matthew Vella a herpetologist from Penrith in New South Wales, sent me a number of images of a second female of the same taxon photographed in Hoser (1989) on page 43 bottom and we spoke at length about our findings with regards to the taxon.

I then was able to inspect other specimens of putative *Crinia signifera* from the Upper Blue Mountains and west to Orange in New South Wales, including photos sent to me by Matthew Vella of the larger form.

From a viewing of relevant images on the photo sharing websites "Inaturalist" and "Flickr" it appeared that at least as far as Lithgow, both forms appeared to be sympatric and not hybridising, implying a full species division.

From west of Lithgow to Orange in New South Wales, the larger form appears to be the only taxon.

In any event, these findings confirmed that the larger form was an unnamed species and so it is formally named herein as *Crinia (Ranidella) vellai sp. nov.*

References cited within the papers of Hoser (2016, 2019a, 2020a-f, 2023) and sources cited therein also formed the basis of the taxonomic and nomenclatural conclusion herein.

The statements with respect of the species description herein are those of Hoser (2023) and the comments with regards to the long-term conservation of the species and subspecies named in Hoser (2016, 2019a, 2020a-f, 2023) apply herein to this taxon.

I also mention that with a divergence of over 3 MYA from nominate *C. signifera*, *C. signifera aberrans* Hoser, 2023, should in retrospect be treated as a full species and so is herein elevated to that status.

The other subspecies named in Hoser (2023), *C. signifera kroombitensis* Hoser, 2023, is also quite likely a full species rather than a subspecies, but it is presently still treated as a subspecies in the absence of molecular evidence one way or other.

#### INFORMATION RELEVANT TO THE FORMAL DESCRIPTION THAT FOLLOWS

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 a relevant staff at museums who made specimens and records available in line with international obligations.

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

Material downloaded from the internet and cited anywhere in this paper was downloaded and checked most recently as of 28 March 2025.

Unless otherwise stated explicitly, colour descriptions apply to living adult female specimens of generally good health and not under any form of stress by means such as excessive cool, heat, dehydration or abnormal skin reaction to chemical or other input. Adult males are on average smaller in size and with a less elongate body.

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.

Delays in recognition of this species could jeopardise the long-

term survival of this taxon as outlined by Hoser (2019b, 2019c, 2023) and sources cited therein.

This is especially with respect of this newly named taxon as it may be at risk of hybridisation with translocated individuals of putative *C. signifera* from elsewhere, which regularly get transported by people in pot plants and the like, overlooked often due to their tiny size and cryptic colouration.

See also Hoser (1995) and Hoser and Valentic (1996).

#### CRINIA (RANIDELLA) VELLAI SP. NOV.

LSIDurn:lsid:zoobank.org:act:49708750-A4C4-40F4-943D-22E2A8378196

**Holotype:** A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.167692 collected at Macquarie Woods, New South Wales, Australia, Latitude -33.41146 S., Longitude 149.30896 E.

This government-owned facility allows access to its holdings.

**Paratypes:** Two preserved specimens at the Australian Museum, Sydney, New South Wales, Australia, specimen numbers R.167695 and R.167699 both collected at Macquarie Woods, New South Wales, Australia, Latitude -33.41146 S., Longitude 149.30896 E.

**Diagnosis:** *C. vellai sp. nov.* it is readily separated from all other species in the *Crinia (Ranidella) signifera* Girard, 1853 complex as described by Hoser (2022) by a unique combination of the following characteristics:

In adult females, being of an unusually large size of 35 mm length (versus to 30 mm in *C. signifera* and 30 mm or less in other species in the subgenus *Ranidella* Girard, 1853), amplified by a stockier and more robust build, versus obviously more elongate and rectangular in shape on the body of other *Ranidella* species; extensive elongated ridging on the upper part of the dorsum, between eye and body, being either side of the vertebral axis similar to that seen in *C. roypailsei* Hoser, 2023, raised warts on the upper surfaces of the limbs and carbuncles on the upper surface of the rear of the body, ventrally scaly in appearance, caused by the extreme expansion in size of the tubercles, distinctive black post-ocular bar to the axilla of the front leg and reddish above the iris rather than below. Ventrally (in females) the posterior is mainly whitish posteriorly and anteriorly mainly black, on the black scaly areas, each so-called scale is usually smudged white or white tipped and differentiation between black and white on the lower abdomen is sharp and well defined, typically with black on either side and in the centre and the rest white, versus marbled black, distinctive white interspaces or peppered black on white on the side black areas in adult female typical *C. signifera* and other species in the subgenus *Ranidella*. Flanks of females are distinctively dark greyish or blackish in overall colour.

Adult male *C. vellai sp. nov.* while smaller than females are relatively larger than those seen in the other *Ranidella* species. They are also stockier in average build than counterparts in the other *Ranidella* species.

The most common colour form of males is with a dorsal colour pattern that is a three-way combination of dark brown, light brown and light reddish brown.

These are arranged with light brown on the anterior snout, infused with stripes of dark brown from eye to snout and in the middle of the top of the anterior snout. There is a triangular dark brown crown between the eyes, the apex pointing in a posterior direction. Behind that is a V-shaped section of light brown, followed by two broad dark-brown paravertebral stripes that extend to the rear of the body. On either side of these paravertebral stripes the dorsum is a light reddish brown, bordered on the vertebral edge by a rapid lightening to form a thin near yellow stripe. Flanks are mainly an even dark brownish grey colour.

Both sexes have a distinctive orange-brown wash through their colouration or colour pattern and/or alternatively large areas of pigment colour that is orangish to reddish brown.

Males have a call that is an extended single pulse, versus a distinctive alternating two pulse call in the type form of *C.*

*signifera* (Girard, 1853), which is otherwise the most similar other species in the genus and that to which *C. vellai* sp. nov. is closest to by way of molecular divergence.

The call of *C. vellai* sp. nov. can be found online at:

<https://www.inaturalist.org/observations/228574604>

recorded by Marita Sydes on 11 July 2024 at Bloomfield Road, Orange, New South Wales, Australia.

*C. vellai* sp. nov. is depicted in life in Hoser (1989) on page 43 at bottom right and online at:

<https://www.inaturalist.org/observations/153304470>

being an adult female photographed by Brian Rosenberg at Vittoria, New South Wales, 2799, Australia on 27 March 2023, and

<https://www.inaturalist.org/observations/102402804>

being a pair of adults (male and female) in amplexus photographed by "teloepa95" on 29 November 2021 at Windradyne, New South Wales, 2795, Australia.

*C. signifera* of the type form from New South Wales is depicted in Hoser (1989) on page 23, Anstis (2013) pages 576 (right) to 579 and Cogger 2014 on page 83, or online at:

<https://www.inaturalist.org/observations/55013920>

All species within the *Crinia signifera* (Girard, 1853) species group, including that formally named for the first time in this paper and those named in Hoser (2023), and those otherwise resurrected from synonymy with that species (*C. signifera*) in Hoser (2023), are separated from all other species in the genus *Crinia* Tschudi, 1838, by the following unique suite of characters: Obviously granular belly in adults, ranging to near scaly in appearance in *Crinia vellai* sp. nov.; adults have more-or-less dermal fringes on the toes; no pink or red on the hind side of the thighs; no median white line on the throat; throat of breeding male is dark with white pectoral spots; belly of female is boldly blotched with black and white in some kind of configuration; both sexes usually but not always have warts or carbuncles of some form, although some individuals of some species may be wholly smooth skinned, palm is tubercular; vomerine teeth absent (derived from Cogger, 2014).

Cogger (2014) on page 71, also provides a key that separates species of the genus *Crinia* from other Myobatrachid frog species.

According to Symula *et al.* (2008) *Crinia vellai* sp. nov. diverged from its nearest relatives more than 2 MYA, the closest related species being the type form of *C. signifera* (Girard, 1853).

**Distribution:** To date *Crinia vellai* sp. nov. is only known from a fairly small area of central and western New South Wales, from the upper Blue Mountains at Wentworth Falls, where it appears to be sympatric with typical *C. signifera* and remains so to near Bathurst and west to at least as far as Orange and Canobolas.

**Etymology:** The species *Crinia vellai* sp. nov. is named in honour of well-known herpetologist Matthew Vella of Penrith, New South Wales, Australia in recognition of his ongoing contributions to herpetology in Australia.

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#### CONFLICTS OF INTEREST

None.

#### Cite this paper as:

Hoser, R. T. 2025. Yet another new species of *Crinia* Tschudi, 1838, subgenus *Ranidella* Girard, 1853 from New South Wales, Australia. *Australasian Journal of Herpetology* 75:60-62.

Published 6 May 2025.



**Accidentally left in a taxonomic disaster zone ... a new species of *Ctenotus* Storr, 1964 from north-west Queensland as well as other taxonomic and nomenclatural issues with skinks.**

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### **ABSTRACT**

As part of an audit of the Australian herpetofauna, the genus *Ctenotus* Storr, 1964 *sensu lato* was scrutinized by Hoser (2024a, 2024b), those papers naming 40 new species and 11 new subspecies.

An unnamed species inadvertently omitted from being named in those papers is named herein.

*Ctenotus kalkadoon* sp. nov. occurs in the Mount Isa / Selwyn Ranges region of north-west Queensland and has until now been treated as a divergent population of *C. brevipes* Storr, 1981, a species found in elevated areas east of the dark soiled Carpentaria Fold.

Conservation of Australian fauna cannot be properly executed in the absence of a full inventory of species and this paper represents an important step in that direction.

In addition, a skink genus *Celerscincus* was erected by Hoser in 2024. That name is a junior homonym for *Celerscincus* Hoser, 2022 as a subgenus within *Acritoscincus* Wells and Wellington, 1985, making the 2024 group effectively unnamed.

It is formally redescribed herein with the new name *Celereeskinkus* gen. nov. as an available name for the genus so other herpetologists can identify the group properly and in line with the rules of the *International Code of Zoological Nomenclature* (Ride et al. 1999).

A paper of Hoser (2019) formally named a subgenus as *Paragreersaurus* Hoser, 2019, but then referred to the same genus in the paper extensively as *Paragreerscincus*. That was in error.

As first revisor, I formally assign the correct name as *Paragreersaurus* Hoser, 2019, which is in line with the genus erected in the paper, namely *Greersaurus* Hoser, 2019.

**Keywords:** Taxonomy; nomenclature; lizard; skink; Australia; Queensland; Selwyn Range; *Ctenotus*; *brevipes*; *Celerscincus*; *Paragreersaurus*; *Paragreerscincus*; first revisor; Hoser; 2019, 2022, 2024, homonym; new genus name; *Celereeskinkus*; new species; *kalkadoon*.

### **INTRODUCTION**

As part of an audit of the Australian herpetofauna, the genus *Ctenotus* Storr, 1964 *sensu lato* was scrutinized by Hoser (2024a and 2024b), those papers naming 40 new species and 11 new subspecies.

An unnamed species inadvertently omitted from being named in that paper is named herein.

*Ctenotus kalkadoon* sp. nov. which is formally described below in accordance with the *International Code of Zoological Nomenclature* (Ride et al. 1999) occurs in the Mount Isa / Selwyn Ranges region of north-west Queensland and has until now been treated as a divergent population of *C. brevipes* Storr, 1981.

That is a species found in elevated areas east of the dark soiled Carpentaria Fold in north-east Queensland and herein confined to this area.

This is in contrast to Storr (1981) who referred Selwyn Ranges animals to the other species.

Conservation of Australian fauna cannot be properly executed in the absence of a full inventory of species and this paper represents an important step in that direction.

As also mentioned in the abstract a skink genus *Celerscincus* was erected by Hoser in 2024. That name is a junior homonym for *Celerscincus* Hoser, 2022 as a subgenus within *Acritoscincus* Wells and Wellington, 1985, making the 2024 group effectively unnamed.

It is formally redescribed herein with the new name *Celereeskinkus* gen. nov. as an available name for the genus so other herpetologists can identify the group properly and in line with the rules of the *International Code of Zoological Nomenclature* (Ride et al. 1999).

A paper of Hoser (2019) formally named a subgenus as *Paragreersaurus* Hoser, 2019, but then referred to the same genus in the paper extensively as *Paragreerscincus*. That was in error.

As first revisor, I formally assign the correct name as *Paragreersaurus* Hoser, 2019, which is in line with the genus erected in the paper, namely *Greersaurus* Hoser, 2019.

### **MATERIALS, METHODS AND RESULTS**

All are as for Hoser (2024).

The relevant species named in this paper *Ctenotus kalkadoon* sp. nov. while morphologically most similar to *C. brevipes* Storr, 1981 and until now treated by all publishing authors as conspecific is both morphologically divergent and geographically disjunct.

The Carpentaria Fold in northern central Queensland, that separates the two relevant species, contrasts with areas to the east and west by being relatively flat and with heavy black soils.

It is a significant biogeographical barrier for species pairs that are either sand dwelling or saxicoline in preferred habits.

Thus, the formal separation and naming of this species should not be seen as particularly new of novel as seen by other examples either published in or cited in Hoser (2024b).

Relevant references in terms of the taxonomic decision herein are cited by Hoser (2024b) and include the relevant sources cited therein as well.

#### **CTENOTUS KALKADOON SP. NOV.**

**LSIDurn:lsid:zoobank.org:act:87C627E2-9C9C-4113-AB6E-081D30009CF0**

**Holotype:** A preserved specimen at the Western Australian Museum, Perth, Western Australia, Australia, specimen number WAM R58266 collected from Rifle Creek, 18 km south of Mount Isa, north-west Queensland, Australia, Latitude -20.95 S., Longitude 139.566667 E. This government-owned facility allows access to its holdings.

**Paratype:** A preserved specimen at the Western Australian Museum, Perth, Western Australia, Australia, specimen number WAM R58267 collected from Rifle Creek, 18 km south of Mount Isa, north-west Queensland, Australia, Latitude -20.95 S., Longitude 139.566667 E.

**Diagnosis:** Until now *Ctenotus kalkadoon* sp. nov. of the Mount Isa and Selwyn Ranges region of north-west Queensland has been treated as an outlier population of *C. brevipes* (Storr, 1981), otherwise being found generally on most parts of Cape York (see below).

That species originally described as "*Ctenotus essingtonii brevipes*" has the following holotype details.

"R63611 in Australian Museum, collected on 24 June 1977 by A. E. and P. Greer at Venture Creek, 62 km E of Croydon, Queensland, in 18°13'S, 142°49'E."

The two morphologically similar taxa, both treated as one by Storr (1981) and all publishing authors since are geographically disjunct, being split by the Carpentaria Fold, generally running south from the south-east corner of the Gulf of Carpentaria.

In contrast to the sandy soiled and rocky areas to the east and west, the Carpentaria Fold is dominated by heavy dark soils and is unsuitable habitat for either species of the pair and has caused them to diverge.

*C. kalkadoon* sp. nov. is separated from *C. brevipes* by the following suite of characters: Dorsum is light yellowish-brown with well-defined medium brown etchings on each dorsal scale, versus medium brown without obvious darker etchings on each dorsal scale in *C. brevipes*; the light dorsolateral line is well defined and yellow, versus very thin and/or poorly defined, usually white or only slightly tinged yellow in *C. brevipes*; the thin dark brown line on the lower edge is well defined and not peppered in any way, versus the same line being broad, heavily infused white in *C. brevipes*; the upper labials are immaculate white or whitish, versus with brown peppering, infusions or even a lower line in *C. brevipes*.

The two species *C. kalkadoon* sp. nov. and *C. brevipes* are separated from all other species of *Ctenotus* Storr, 1964 *sensu lato* as defined in Cogger (2014) by the following combination of characters:

No ear lobules, relatively short limbs, with length of appendages being (% SVL): foreleg 21-26 (N 14, mean 22.7), hindleg 36-44 (N 14, mean 39.8), tail 193-211 (N 8, mean 201.4), 21-26 midbody rows; toes slightly compressed; 17-21 (N 15, mean 18.8) lamellae under fourth toe, each with a narrow to moderately wide callus. Nasals usually narrowly separated, occasionally in short contact. Prefrontals separated (usually widely, occasionally narrowly). Supraoculars 4, first 3 in contact with frontal; second much wider than first and third. Supraciliaries 7-10 (mostly 8, N 13, mean 8.2), third to penultimate much smaller than others. Upper ciliaries 7-11 (N 15, mean 8.5). Second loreal 1.3-1.9 (N 14, mean 1.65) times as wide as high. Presuboculars 2. Upper labials 7 (N 13) or 6 (1). Ear lobules absent, unless a small slit-like preauricular scale partly covering upper anterior sector of aperture is construed as a lobule. Nuchals 3-5 (N 15, mean 3.7).

For adult specimens, the colouration is as follows:

Upper surface is brown, tinged with olive on head, red on tail and sometimes yellow on back. As a rule no dorsal pattern. Narrow but conspicuous white or yellow dorsolateral stripe from orbit to tail (on which it is suffused with reddish-brown), edged above by a narrow, sharply defined, blackish-brown latero-dorsal stripe. Blackish-brown upper lateral zone, continuing forward through the orbit as a loreal stripe to the nasal, and back on to tail (on which it becomes reddish-brown with dark edges). White midlateral stripe extending forward above ear aperture and below eye to bottom of first loreal, and back on to tail, where it is suffused with pink. Blackish-brown lower lateral stripe extending forward to lips (not on them in any way on *C. kalkadoon* sp. nov.). Some indication of a dark brown ventrolateral stripe in front of and behind the arm. (taken, corrected and modified from Storr 1981).

**Distribution:** *Ctenotus kalkadoon* sp. nov. occurs in the Mount Isa and Selwyn Ranges region including northern outliers and elevated nearby areas, near the southern edge of the Gulf of Carpentaria (all in Queensland), including just into the Northern Territory, all within northern Australia.

*C. brevipes* occurs east of the Carpentaria Fold generally including all of Cape York, except for the wetter parts in the far east and far north generally.

**Etymology:** The species name "*kalkadoon*" is of the Aboriginal tribe native to the region. The spelling should not be changed and is intentional.

**Conservation:** There are no known threats to the species *Ctenotus kalkadoon* sp. nov..

**A HOMONYM CORRECTED AND OTHER MATTERS.**

**CELEREESKINKUS GEN. NOV.**

LSIDurn:lsid:zoobank.org:act:51C6DDCF-5236-42EC-8F66-2103E59ACAAAD

**Type species:** *Heteropus rostralis* De Vis, 1885.

A skink genus *Celerscincus* was erected by Hoser in the paper Hoser (2024c) at page 20, cited in full below. That name is a junior homonym for *Celerscincus* Hoser, 2022 (with type species "*Acritoscincus* (*Celerscincus*) *katrinahoserae* sp. nov.") as a subgenus within *Acritoscincus* Wells and Wellington, 1985, making the identified 2024 genus group (with type species "*Heteropus rostralis* De Vis, 1885") remaining effectively unnamed, due to the unavailability of the 2024 homonym name for this group.

The "*Heteropus rostralis* De Vis, 1885" group is therefore formally redescribed herein with the new name *Celereeskinkus* gen. nov. as an available name for the genus so other herpetologists can identify the group properly and in line with the rules of the *International Code of Zoological Nomenclature* (Ride et al. 1999).

The single species in this genus, including the described subspecies in Hoser (2024c) at pages 20-21, originally described as "*Celerscincus rostralis blacki* subsp. nov.", but now formally identified as *Celereeskinkus*

*rostralis blacki* (Hoser, 2024) now formally placed in the genus in *Celereeskinkus* gen. nov. are separated from all other species in the two genera, *Carlia* Gray, 1845 type species *Mococa melanopogon* Gray, 1845 and *Lygisaurus* De Vis, 1884, type species *Lygisaurus foliorum* De Vis, 1884 as defined by Cogger (2014) by the following unique combination of characters:

Dorsal scales are smooth, striated or weakly keeled, 4-sided and each with a smoothly curved posterior edge; prefrontals separated; seven supraciliaries; interparietal is distinct and not fused to the frontoparietals; 25-38 midbody rows; 26-36 lamellae under the fourth toe; males with a very distinctive black throat and broad upper lateral stripe from the eye to hindlimb; females with a conspicuous pale dorso-lateral stripe; ear opening vertically elliptic and slightly larger than the palpebral disc, with 1-3 enlarged anterior facing pointed lobules, the remainder of the ear without enlarged scales; up to 65 mm snout-vent length.

The closely related and morphologically similar genus *Veloxscincus* Hoser, 2024 known alternatively as the "*Carlia fusca* group" is separated from *Celereeskinkus* gen. nov. by the fact that breeding males lack a very distinctive black throat and broad upper lateral stripe from the eye to hindlimb and females lack a pale dorsolateral stripe.

Both preceding genera are separated from the morphologically similar genus *Circularisauris* Hoser, 2024 by the presence of an ear opening that is vertically elliptic or oblong shaped, versus a well formed circular ear opening in *Circularisauris* Hoser, 2024. Furthermore, the rim of the ear in *Circularisauris* Hoser, 2024 is encircled with smallish acute auricular lobes, distinctly pointed on anterior and anteriodorsal edges, contrasting with the blunter lobes confined to the anterior and anteriodorsal border in the other two genera.

**Distribution:** Wet tropics of north-east Queensland, with apparent outlier populations on the Northern part of Cape York and eastern Gulf of Carpentaria.

**Etymology:** The Latin word "celer" means fast and "skinkus" is the Latinised word for skink, with a bastardised spelling to prevent creation of yet another homonym and hence the genus name says "fast skink", which is an apt description. The words are an adjective and noun in apposition. British entomologist Keith Edkins is thanked for bringing the matter of the homonym name *Celerscincus* Hoser, 2024 to my attention so that a new genus name could be created.

**Content:** *Celereeskinkus rostralis* (De Vis, 1885) (monotypic as treated herein and including one divergent subspecies).

**GENUS NAME RESOLVED BY FIRST REVISOR**

A paper of Hoser (2019) (cited in full below) formally named a subgenus as *Paragreersaurus* Hoser, 2019, (as pages 8-9) but then referred to the same genus in the paper extensively as *Paragreerscincus*, including within the formal description of *Paragreersaurus* itself. That use of the word *Paragreerscincus* was in error.

As first revisor, I formally assign the correct name as *Paragreersaurus* Hoser, 2019, which is in line with the genus erected in the paper of which it is a subgenus, namely *Greersaurus* Hoser, 2019. The Zoobank registration has been correct since the time of publication of the paper in 2019.

British entomologist Keith Edkins is thanked for bringing this matter and several other errors to my attention and I own all the mistakes wholly ... there is no blame shifting here.

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**CONFLICT OF INTEREST - NONE**