

A new species of *Ophioscincus* Peters, 1873 (Reptilia: Squamata: Scincidae) from south-east Queensland.

LSIDURN:LSID:ZOOBANK.ORG:PUB:0EDDD409-98C1-4635-B9FE-66C7A5985137

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Received 6 August 2019, Accepted 17 August 2019, Published 6 August 2020.

ABSTRACT

A new species of *Ophioscincus* Peters, 1873 from south-east Queensland, Australia superficially similar to *Ophioscincus ophioscincus* (Boulenger, 1887) is formally described and named for the first time in accordance with the rules of the *International Code of Zoological Nomenclature* (Ride *et al.* 1999).

Keywords: Lizards; reptilia; skink; Queensland; Australia; *Ophioscincus*; Mount Glorious; Brisbane; New species; *paulwoolffi*.

INTRODUCTION

Over some decades of fieldwork in south-east Queensland, Australia, I have caught a number of skinks that were tentatively identified and keyed out as *Ophioscincus ophioscincus* (Boulenger, 1887).

However in the relevant period, noticeable morphological differences between specimens found north of the Bundaberg dry zone and south of the Bundaberg dry zone were self evident, leading to a more detailed line of investigation.

MATERIALS AND METHODS

Revisiting the above situation and viewing more specimens in Queensland during a field trip in mid 2019, led to the inescapable conclusion that more than one species was involved.

A review of the morphology of relevant specimens was conducted as was a survey of regions of likely habitats and potential biogeographical barriers.

RESULTS AND CONCLUSIONS

The species group clearly included at least two species and populations were well separated by dry zones of habitat not occupied by any relevant specimens. These dry zones are not of recent genesis and so I have concluded that the differences are significant and of species level.

The northern form is that which type specimen of *Ophioscincus ophioscincus* (Boulenger, 1887) is.

This means the southern form from the environs of Brisbane, Queensland is that which until now has been undescribed.

It is herein named as a new species, *Ophioscincus paulwoolffi* sp. nov.

Little has been published to date on the species *Ophioscincus ophioscincus* (Boulenger, 1887). However literature consulted as relevant to the conclusions herein included the following: Boulenger (1897), Cogger (2014), Cogger *et al.* (1983), Peters (1874) and Wells and Wellington (1984, 1985).

In terms of the description herein and this paper, the relevant new species name should not be altered by later authors unless mandated by the *International Code of Zoological Nomenclature*

(Ride *et al.* 1999) or later equivalent document. There are no conflicts of interest in terms of this paper.

OPHIOSCINCUS PAULWOOLFI SP. NOV.

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Holotype: A preserved specimen in the Queensland Museum, Brisbane, Queensland, Australia, Specimen number J85811 collected from Mount Glorious, near Brisbane, Queensland, Australia, Latitude -27.33 S., Longitude 152.77 E. This government-owned facility allows access to its holdings.

Paratypes: 1/ A preserved specimen in the Queensland Museum, Brisbane, Queensland, Australia, Specimen number J76933 from Enoggera Reservoir, near Brisbane, Queensland, Australia, Latitude -27.45 S., Longitude 152.92 E.

2/ A preserved specimen in the Queensland Museum, Brisbane, Queensland, Australia, Specimen number J2831 from Enoggera Reservoir, near Brisbane, Queensland, Australia, Latitude -27.45 S., Longitude 152.92 E.

3/ A preserved specimen in the Queensland Museum, Brisbane, Queensland, Australia, Specimen number J18603, collected from Oxley Creek, Acacia Ridge, (Brisbane), Latitude -27.58 S., Longitude 153.03 E.

Diagnosis: The species *Ophioscincus paulwoolffi* sp. nov. is similar in most respects to *Ophioscincus ophioscincus* (Boulenger, 1887) and would key as this species using the diagnostic information in Cogger (2014), in particular the key on page 668.

Ophioscincus paulwoolffi sp. nov. is readily separated from *O. ophioscincus* (Boulenger, 1887) by having a less blunt tail end (original tails). This is well rounded in *O. ophioscincus* versus somewhat pointed (but still blunt) in *O. paulwoolffi* sp. nov..

O. paulwoolffi sp. nov. is further distinguished from *O. ophioscincus* by colouration in life.

This includes by having indistinct light markings on the upper surfaces of the flanks of the dark coloured tail, versus obvious yellow-spotting on purplish black in *O. ophioscincus*. The light yellowish brown upper surface of the head of *O. paulwoolffi* sp.

nov. is heavily laden with purple markings, especially between the eyes, versus no such markings in *O. ophioscincus*. The upper surface of the neck of *O. paulwoolffi sp. nov.* has large purplish black spots not seen in *O. ophioscincus*. The upper surface of the body of *O. paulwoolffi sp. nov.* has a series of well-defined purplish black spots forming four longitudinal lines down the back. In *O. ophioscincus* these spots are tiny, making the lines similarly indistinct.

Both *O. paulwoolffi sp. nov.* and *O. ophioscincus* are separated from all similar species of skink in eastern Australia by the following unique suite of characters: No limbs, short obtuse snout, very small eye, lower eyelid scaly. Two loreals. Nostril pierced in the anterior part of a large nasal; no supranasal; rostral protrudes between the nasals, forming a suture with the frontonasal, which forms a broad suture with the frontal; prefrontals very small and widely separated; frontal broader than long, forming a suture with the first supraciliary and with the first supraocular; three supraoculars, first largest; five supraciliaries; frontoparietals distinct, a little smaller than the interparietal; parietals forming a suture behind the interparietal; two pairs of nuchals; ear completely hidden. 20-24 smooth midbody scale rows; dorsals being largest. A pair of enlarged preanals. Tail thick, ending obtusely either in a rounded end (*O. ophioscincus*) or a blunt tip (*O. paulwoolffi sp. nov.*), the length of the tail being a little shorter than head and body. Colouration is beige on top; with flanks of body and tail blackish purple in colour. Venter is pinkish-yellow, with the latter half of the tail becoming dark in colour like the flanks. Back has closely placed spots or tiny flecks forming a series of four (usually) or more well-defined lines on the beige background. Adult snout vent length is usually about 75 mm and tail is about 65 mm.

A photo of an adult *O. paulwoolffi sp. nov.* in life is seen in Wilson and Swan (2017) page 383 middle right or Wilson and Knowles (1988), page 308, top left (image 602). A photo of an adult *O. ophioscincus* in life is in Cogger (2014) page 669, top left.

Habits: Both *O. ophioscincus* and *O. paulwoolffi sp. nov.* are known to have a habitat preference for rainforest and adjoining wet sclerophyll forest, where they are most commonly found sheltering under small rocks, logs and other available ground cover. They appear to be crepuscular as in most active at dusk and especially so in the warmer summer months. In mid-winter they appear to hibernate in the true sense of the word in that they hide inside logs or well-embedded rocks, often in the shade, indicating no desire for activity in the relevant season, from which they do not appear to emerge for some weeks or perhaps even months.

Distribution: *O. paulwoolffi sp. nov.* is found in the region bounded by Bundaberg in the north (it is absent from this specific locality) and the Brisbane River Valley in the south. It is a Queensland endemic species. *O. ophioscincus* is found north of Bundaberg in Queensland in suitable habitat to areas slightly north of Rockhampton in Queensland.

Conservation Status: No immediate risks are known as the species is common and found in numerous protected areas and reserves not likely to be destroyed in the near future. There is no known trade in the species, nor is any foreseeable.

Etymology: Named in honour of Paul Woolf, of Walloon, Queensland, Australia, for his services to herpetology in Australia spanning some decades, including as foundation president for the Herpetological Society of Queensland, Incorporated, who incidentally have taken a strong stance against the taxonomic vandalism of Wolfgang Wüster and his gang of thieves as detailed by Hoser (2007, 2009, 2012a-b, 2015, 2015a-f, 2019a-b) and sources cited therein.

REFERENCES CITED

Boulenger, G. A. 1887. *Catalogue of the lizards in the British Museum (Nat. Hist.) III. Lacertidae, Gerrhosauridae, Scincidae, Anelytropsidae, Dibamidae, Chamaeleontidae*. London: 575pp.
 Cogger, H. G. 2014. *Reptiles and Amphibians of Australia* (Seventh edition), CSIRO. Sydney, Australia:1064 pp.
 Cogger, H. G., Cameron, E. E. and Cogger, H. M. 1983. *Zoological Catalogue of Australia (1) Amphibia and Reptilia*. Australian Government Publishing Service, Canberra, ACT, Australia:319 pp.

Hoser, R. T. 2007. Wells and Wellington - It's time to bury the hatchet. *Calodema* Supplementary Paper 1:1-9.

Hoser, R. T. 2009. Creationism and contrived science: A review of recent python systematics papers and the resolution of issues of taxonomy and nomenclature. *Australasian Journal of Herpetology* 2:1-34. (3 February).

Hoser, R. T. 2012a. Exposing a fraud! *Afronaja* Wallach, Wüster and Broadley 2009, is a junior synonym of *Spracklandus* Hoser 2009! *Australasian Journal of Herpetology* 9 (3 April 2012):1-64.

Hoser, R. T. 2012b. Robust taxonomy and nomenclature based on good science escapes harsh fact-based criticism, but remains unable to escape an attack of lies and deception. *Australasian Journal of Herpetology* 14:37-64.

Hoser, R. T. 2013. The science of herpetology is built on evidence, ethics, quality publications and strict compliance with the rules of nomenclature. *Australasian Journal of Herpetology* 18:2-79.

Hoser, R. T. 2015a. Dealing with the "truth haters" ... a summary! Introduction to Issues 25 and 26 of *Australasian Journal of Herpetology*. Including "A timeline of relevant key publishing and other events relevant to Wolfgang Wüster and his gang of thieves." and a "Synonyms list". *Australasian Journal of Herpetology* 25:3-13.

Hoser, R. T. 2015b. The Wüster gang and their proposed "Taxon Filter": How they are knowingly publishing false information, recklessly engaging in taxonomic vandalism and directly attacking the rules and stability of zoological nomenclature. *Australasian Journal of Herpetology* 25:14-38.

Hoser, R. T. 2015c. Best Practices in herpetology: Hinrich Kaiser's claims are unsubstantiated. *Australasian Journal of Herpetology* 25:39-64.

Hoser, R. T. 2015d. PRINO (Peer reviewed in name only) journals: When quality control in scientific publications fails. *Australasian Journal of Herpetology* 26:3-64.

Hoser, R. T. 2015e. Rhodin *et al.* 2015, Yet more lies, misrepresentations and falsehoods by a band of thieves intent on stealing credit for the scientific works of others. *Australasian Journal of Herpetology* 27:3-36.

Hoser, R. T. 2015f. Comments on *Spracklandus* Hoser, 2009 (Reptilia, Serpentes, ELAPIDAE): request for confirmation of the availability of the generic name and for the nomenclatural validation of the journal in which it was published (Case 3601; see *BZN* 70: 234-237; comments *BZN* 71:30-38, 133-135). *Australasian Journal of Herpetology* 27:37-54.

Hoser, R. T. 2019a. 11 new species, 4 new subspecies and a subgenus of Australian Dragon Lizard in the genus *Tympanocryptis* Peters, 1863, with a warning on the conservation status and long-term survival prospects of some newly named taxa. *Australasian Journal of Herp.* 39:23-52.

Hoser, R. T. 2019b. Richard Shine *et al.* (1987), Hinrich Kaiser *et al.* (2013), Jane Melville *et al.* (2018 and 2019): Australian Agamids and how rule breakers, liars, thieves, taxonomic vandals and law breaking copyright infringers are causing reptile species to become extinct. *Australasian J. of Herp.* 39:53-63.

Peters, W. C. H. 1874. Über neue Saurier (*Sphaerodactylus*, *Anolis*, *Phrynosoma*, *Tropidolepisma*, *Lygosoma*, *Ophioscincus*) aus Centralamerika, Mexico und Australien. *Monatsber. königl. Akad. Wiss. Berlin*. 1873 (November):738-747.

Ride, W. D. L. (ed.) *et al.* (on behalf of the International Commission on Zoological Nomenclature) 1999. *International code of Zoological Nomenclature*. The Natural History Museum - Cromwell Road, London SW7 5BD, UK.

Wells, R. W. and Wellington, C. R. 1984. A synopsis of the class Reptilia in Australia. *Australian Journal of Herp.* 1(3-4):73-129.

Wells, R. W. and C. R. Wellington. 1985. A classification of the Amphibia and Reptilia of Australia. *Australian Journal of Herpetology Supplementary Series* 1:1-61.

Wilson S. K. and Knowles, D. G. 1988. *Australian Reptiles: A photographic guide to the terrestrial reptiles of Australia*. Collins, Sydney, NSW, Australia:447 pp.

Wilson, S. and Swan, G. 2017. *A complete guide to reptiles of Australia*, 5th ed. Chatswood: New Holland:647 pp.

CONFLICTS OF INTEREST - None.