

## **Are they too dangerous to look at? ... Scallation of Coastal Taipans *Oxyuranus scutellatus* (Peters, 1867).**

LSIDURN:LSID:ZOOBANK.ORG:PUB:2B4F727F-E256-4D29-8C5F-69152FDA1054

RAYMOND T. HOSER

LSIDURN:LSID:ZOOBANK.ORG:AUTOR:F9D74EB5-CFB5-49A0-8C7C-9F993B8504AE

488 Park Road, Park Orchards, Victoria, 3134, Australia.

Phone: +61 3 9812 3322 Fax: 9812 3355 E-mail: snakeman (at) snakeman.com.au

Received 20 April 2024, Accepted 1 March 2025, Published 25 March 2025.

### **ABSTRACT**

It has been widely reported in the published literature for many decades, that Taipans, genus *Oxyuranus* Kinghorn, 1923, a group of snakes from Australia and New Guinea, all have all divided subcaudals (Hoser, 1989, Cogger 2014).

This is not regarded as exceptional as all members of the associated genus *Pseudonaja* Günther, 1858, have (as far as is known) all subcaudals strictly divided except for the subspecies *Pseudonaja textilis bicucullata* McCoy, 1879, being of the Murray / Darling basins of south-east Australia and immediately adjacent southern Victoria (Hoser, 2003).

However, in the recent past, three hatchling Coastal Taipans *Oxyuranus scutellatus* (Peters, 1867) bred from parents obtained immediately south of Iron Range, Queensland were raised by this author.

One of the trio had four single anterior subcaudals placed behind the first past the vent that was divided.

Another had one single anterior subcaudal also behind a single paired one anterior to it.

The third snake had all divided subcaudals, that being the typical form for the species.

With two snakes from the same litter having single subcaudals, this implies that the character state may be common, at least in some areas and that the reported cases are not just one-off anomalies.

This observation highlights the need for herpetologists to revisit long accepted facts with regards to common species as quite often what is thought to be correct or a general rule, simply is not.

**Keywords:** Taxonomy; Systematics; Taipan; Snake; Australia; Elapidae; *Oxyuranus*; *scutellatus*; scalation; subcaudals; single; divided.

### **INTRODUCTION**

Coastal Taipans *Oxyuranus scutellatus* (Peters, 1867) are an iconic Australasian snake.

Being the longest Australasian elapid snake and often regarded as one of the most dangerously venomous, it is a stalwart of elapid keepers and major collections across Australia.

Hence it is a commonly kept, bred, raised and well-known snake.

So much so that basics such as general appearance, scalation and other attributes as reported in the literature has not changed in decades.

In line with all other members of the genus *Oxyuranus* Kinghorn, 1923, Coastal Taipans have long been known to have strictly divided subcaudals.

This "fact" has been so well known and for so long that herpetologists and reptile keepers gave up looking at the tail scalation of these snakes decades ago.

Because Coastal Taipans are regarded as highly strung, jumpy and deadly, most keepers of them keep at arms lengths, handle

only with sticks and tongs and therefore keepers rarely even get the opportunity to even casually observe the subcaudal scales, except of course when dealing with sloughed skins.

Elapid snakes held at our facility are unique in Australia in being the only ones in the country that are surgically de venomized. These are best known as venomoids as described in Hoser (2024a, 2024b).

Added to the fact that they are handled daily for training dogs to avoid snakes, as the trademarked *Snake Avoidance*, for live reptile shows, including at the trademarked *reptile parties* and so on, our elapids are closely handled and inspected daily, even if by way of observations when being moved around by hand from cage to box.

In addition, most snake keepers with Taipans are not taxonomists and would either not be aware of the scalation details of taipans, remember what is or is not normal, or even care.

Hence, if scalation anomalies were to occur in any of the large numbers of Coastal Taipans in captivity in Australia, chances are they would be overlooked.

In this case, this is not what happened.

Our animals are closely monitored in all senses of the word. They are kept indoors, singly and under strict control in order to maintain optimal health, 24 hours a day access as required for reptile shows and so on.

Furthermore, having been working as a taxonomist for decades including auditing the entire Australasian herpetofauna, I would notice scalation anomalies in elapids held here.

Hence when I noticed that one of the Taipans here had single subcaudals, I knew it was apparently something out of the ordinary.

A check of the literature showed that single subcaudals had never been previously reported in this genus and hence this paper.

#### MATERIALS, METHODS AND RESULTS

The three Coastal Taipans relevant to this paper were obtained from a well-known breeder in Queensland, with parents being legally wild caught from near Iron Range in far north Queensland.

All were males and held at our facility in Melbourne, Australia and kept in our standard cages at one snake per cage in strict compliance with the "Code of Practice for the Welfare of Animals - Private Keeping of Reptiles - Victoria" (see image of an exact cage in Hoser 2009 on page 24).

A complaint that our cages did not comply with the "Code of Practice for the Welfare of Animals - Private Keeping of Reptiles - Victoria" that was maliciously pursued by the Victorian Government Wildlife Department (by Kate Gavens, calling herself the "conservation regulator" - an oxymoron) in the Supreme Court of Victoria in 2024 failed.

That is, our cages were wholly legal and the relevant "Direction Notice" of 7 December 2023 was found to be illegal and illegally issued.

On 29 May 2024, Judge Jacinta Forbes found that thug-like wildlife officers operating at the instigation of Kate Gavens, had acted unlawfully and had by way of unlawful directions sought to kill the relevant reptiles (Forbes 2024).

She ordered the Wildlife Department to pay our legal costs and as of 2025, and the time this paper was written and published, this money had not been paid (Forbes 2024).

The relevant Taipans were raised from hatchlings at our facility to adulthood (taking about 2-3 years to get to full size at about 180 cm long total length for each).

They were trouble free and totally normal as captives and remained alive and well at the time of writing and publishing this paper as of June 2024 (date of final draft for submission).

Inspection of the trio showed them to be "normal" in all other ways.

One had four single anterior subcaudals with a divided one anterior to them, one had a single anterior subcaudal also with a divided subcaudal anterior to it (as in between the vent and the single ones) and the third snake had no single subcaudals.

All the rest of the subcaudals were strictly divided in the normal way, to the tail tips.

#### DISCUSSION

With two snakes from the same litter having single subcaudals (4 and 1 of the totals), this implies that the character state may be

common, at least in some areas and that the two reported instances are not just one-off anomalies.

This observation highlights the need for herpetologists to revisit long accepted facts with regards to common species as quite often what is thought to be correct or a general rule, simply is not or not always so.

#### REFERENCES CITED

Cogger, H. G. 2014. *Reptiles and Amphibians of Australia* (Seventh edition), CSIRO. Sydney, Australia:1064 pp.

Forbes, J. 2024. *Hoser v Secretary of the Department of Energy, Environment and Climate Action [2024] VSC 277* (29 May 2024):46 pp.

Hoser, R. T. 1989. *Australian Reptiles and Frogs*. Pierson and Co., Mosman, NSW, 2066, Australia:238 pp.

Hoser, R. T. 2004a. Surgical Removal of Venom Glands in Australian Elapid Snakes: The creation of venomoids. *Herpfile* 29:1 (March 2004):36-52. (Reprinted in *Crocodylian: Journal of the Victorian Association of Amateur Herpetologists* 4(5):cover and pages 17-31 (November 2004).

Hoser, R. T. 2004b. Silicone snakes cause sensation in Australia and elsewhere. *Hard Evidence* (November 2004) 4(6):25-29.

Hoser, R. T. 2009 One or two mutations doesn't make a new species ... The taxonomy of Copperheads (*Austrelaps*) (Serpentes:Elapidae). *Australasian Journal of Herpetology* 1:1-28.

Hoser, R. T. 2023. A new species of elapid (Serpentes: Elapidae) from western New South Wales. *Crocodylian: Journal of the Victorian Association of Amateur Herpetologists* 4(2):19-26.

Kinghorn, J. R. 1923. A new genus of elapine snake from north Australia. *Records of the Australian Museum* 14(1):42-45.

McCoy, F. 1879. The two-hooded *Furina* snake. *Prodromus of the Zoology of Victoria* 4:13-15.

Peters, W. C. H. 1867. Über Flederthiere (*Pteropus gouldii*, *Rhinolophus deckenii*, *Vespertilio lobipes*, *Vesperugo temminckii*) und Amphibien (*Hypsilurus godeffroyi*, *Lygosoma scutatum*, *Stenostoma narirostre*, *Onychocephalus unguirostris*, *Ahaetulla poylepis*, *Pseudechis scutella*). *Monatsberichte der Königlichen Preussische Akademie des Wissenschaften zu Berlin* 1867 (November):703-712.

#### CONFLICT OF INTEREST

None.



Taipan: Anterior underside of tail showing four single subcaudals.