

Five new species within *Carlia sensu lato* (Scincidae), from Australia.

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ABSTRACT

An ongoing audit of the Australian herpetofauna has confirmed the existence of some obviously unnamed species within *Carlia* Gray, 1845 *sensu lato* in northern Australia.

Rather than risk these taxa expiring through benign neglect, they are formally identified and named herein. The relevant newly named forms are as follows:

A northern outlier population of putative *Liburnascincus coensis* (Mitchell, 1953), type locality of Coen, Queensland, with a distinctive dorsal patterning is formally named as *L. wellsei* sp. nov..

Putative *L. mundivensis* (Broom, 1898), type locality of Muldiva, North Queensland, is formally split three ways, with the two southern forms formally named as *L. bradcrossmani* sp. nov. and *L. gregwallisi* sp. nov..

Putative *Carlia sexdentata* (Macleay, 1877), type locality of Cape Grenville, North-east Queensland, from the eastern Northern Territory is formally named as *C. sergeimosyakini* sp. nov..

Putative *C. storri* Ingram and Covacevich, 1989, type locality of Bamaga, Queensland, from the wet-tropics area of north Queensland is formally named as *C. caitlinmoranae* sp. nov..

Keywords: Taxonomy; nomenclature; Australia; skink; lizard; *Carlia*; *Liburnascincus*; Queensland; Northern Territory; *storri*; *coensis*; *mundivensis*; *sexdentata*; new species; *wellsei*; *bradcrossmani*; *gregwallisi*; *sergeimosyakini*; *caitlinmoranae*.

INTRODUCTION

An ongoing audit of the Australian herpetofauna has confirmed the existence of some obviously unnamed species within *Carlia* Gray, 1845 *sensu lato* in northern Australia.

Rather than risk these taxa expiring through benign neglect, they are formally identified and named herein.

MATERIALS AND METHODS

Gene sequences with Genbank were checked to see if any sequences attributed to given putative species flagged one or more potential species. That is, were they sufficiently divergent.

These were then cross-checked against known populations of the same species to see if there were morphologically divergent forms that corresponded to potentially unnamed species.

This was done by inspecting specimens of each putative species from the relevant parts of their ranges, including all areas they were known to occur.

These newly identified forms were then checked against various synonyms lists (e.g. Cogger *et al.* 1983, Wells and Wellington 1984 and 1985), as well as against more recently named species within *Carlia* or associated genera to confirm that they were in fact unnamed species.

A number of species identified did already have available names or had been recently named by others and for the purpose of this paper, those ones have been ignored.

There is nothing to be gained by breaching Copyright laws or the *International Code of Zoological Nomenclature* (Ride *et al.* 1999) by renaming species already formally named.

These newly identified species are listed below.

Relevant references to the audit of the genus *Carlia sensu lato* and confirmation of the relevant hitherto unnamed forms were the following: Bragg *et al.* (2018), Broom (1898), Cogger (2014), Cogger *et al.* (1983), Couper *et al.* (2005), Covacevich (1971), De Vis (1884, 1885), Dolman and Hugall (2008), Donnellan *et al.* (2009), Duméril and Bibron (1839), Fitzinger (1843), Gray (1845), Hoser (1989), Hoskin and Couper (2015), Ingram and Covacevich (1989), Macleay (1877), Mitchell (1953), Neave (1939), Storr (1974), Stuart-Fox *et al.* (2002), Wells and Wellington (1984, 1985), Zietz (1920), Zug (2004) and sources cited therein.

RESULTS

The relevant newly named forms in accordance with the rules of the *International Code of Zoological Nomenclature* (Ride *et al.* 1999) as amended (ICZN 2012) are as follows:

A northern outlier population of putative *Liburnascincus coensis* (Mitchell, 1953), type locality of Coen, Queensland, with a distinctive dorsal patterning is formally named as *L. wellsei sp. nov.*

It occurs just 50 km north of the main population of *L. coensis* in the general region of the Iron Range, Queensland, Australia, but is readily separated by consistent dorsal colouration differences. Putative *L. mundivensis* (Broom, 1898), type locality of Muldiva, North Queensland, is formally split three ways.

The type population is that from Cairns, Queensland and nearby areas.

Two morphologically divergent southern forms are formally named as *L. bradcrossmani sp. nov.* and *L. gregwallisi sp. nov.*. They appear to be allopatric in terms of one another.

Putative *Carlia sexdentata* (Macleay, 1877), type locality of Cape Grenville, North-east Queensland, from the eastern Northern Territory is formally named as *C. sergeimosyakini sp. nov.*. Adult males in particular, differ strongly from both *C. sexdentata* as well as the morphologically similar *Carlia longipes* (Macleay, 1877).

Putative *C. storri* Ingram and Covacevich, 1989, type locality of Bamaga, Queensland, from the wet-tropics area of north Queensland is formally named as *C. caitlinmoranae sp. nov.*. The new species lacks the well-defined dorsal and lateral bands seen in adult *C. storri*.

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.

Material downloaded from the internet and cited anywhere in this paper was downloaded and checked most recently as of 20 May 2023, 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 or abnormal skin reaction to chemical or other input.

It should be noted that in skinks in particular, juveniles can often appear quite different in colour to mature adults, as can be each sex in adults, including within some of the species described herein.

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 these species and subspecies could jeopardise the long-term survival of the taxa as outlined by Hoser (2019a, 2019b) and sources cited therein.

Therefore attempts by taxonomic vandals like 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, Thiele *et al.* 2020, Hammer and Thiele 2021) to unlawfully suppress the recognition of these taxa on the basis they have a personal dislike for the person who formally named it should be resisted (e.g. Dubois *et al.* 2019 and Ceriaco *et al.* 2023).

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, all of which were discredited long ago as

outlined by Ceriaco *et al.* (2023), Cogger (2014), Cotton (2014), Dubois *et al.* (2019), Hawkeswood (2021), Hoser, (2007, 2009a, 2012a, 2012b, 2013, 2015a-f, 2019a, 2019b), ICZN (1991, 2001, 2012, 2021), Mosyakin (2022), Wellington (2015) and sources cited therein.

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

LIBURNASCINCUS WELLSEI SP. NOV.

LSIDurn:lsid:zoobank.org:act:A5302813-7EB1-4B73-9E06-54A75FA5C291

Holotype: A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.100087 collected from Pascoe River, North Queensland, Australia, Latitude 12.883 S., Longitude 143.016 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.107042 collected from Pascoe River, North Queensland, Australia, Latitude - 12.933 S., Longitude 143.066 E. 2/ A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J89008 collected from Fall Ck, at the Sir William Thompson Range, north Queensland, Australia, Latitude -13.0275 S., Longitude 143.066111 E.

Diagnosis: *Liburnascincus wellsei sp. nov.* from the Iron Range and environs in far north Queensland, is readily separated from the closely related and morphologically similar species *L. coensis* (Mitchell, 1953) from Coen and nearby areas in far north Queensland (about 50 km straight line south), by the following characters:

- 1/ The light gold-coloured dorsal midline is broken on the back, versus joined and continuous in *L. coensis*.
- 2/ The rows of lighter gold/yellow spots running along the dorso-lateral line are well separated in *L. wellsei sp. nov.*, versus closely separated in *L. coensis*.
- 3/ The yellow/gold line running from the back of the eye along the dorsolateral line to the back of the head and neck is bold and continuous to the back of the head and neck in *L. coensis*, versus not so in *L. wellsei sp. nov.*

Both *L. coensis* and *L. wellsei sp. nov.* are separated from all other species within *Liburnascincus* Wells and Wellington, 1984, by the combination of having rounded ear lobules; dorsal scales that are four sided, each with a smoothly curved posterior edge and scales that are smooth, striated or feebly keeled.

L. coensis and *L. wellsei sp. nov.* are further characterised by having prefrontals usually separate, but sometimes in contact; usually seven supraciliaries; ear opening that is circular and about equal to the palpebral disc in size with about four tubercular lobules anteriorly; 35-45 mid-body rows; 32-36 lamellae under the fourth toe and about 50 mm snout-vent in adult size (modified from Cogger 2014).

Skinks within the genus *Liburnascincus* Wells and Wellington, 1984 are defined herein as follows: A genus of the *Carlia* Gray, 1854 group of skinks, maximum adult SVL ranging from 56 to 68 mm, body robust to dorsoventrally flattened, limbs long and sprawling. Parietal shields contact posterior to a distinct interparietal; dorsal scales either four-sided with a smooth curve to the posterior edge, or 6-sided with each usually with an angular posterior or free edge; being smooth, weakly or strongly keeled; each dorsal with longitudinal rows of low, rounded tubercles; ear opening round or vertically elliptic, about equal in size to palpebral disk; usually 7 supralabials, sexes similar in colour and pattern, males without bright colours, usually 13 premaxillary teeth (derived from Ingram and Covacevich, 1989, Wells and Wellington, 1984 and Cogger 2014).

The species *L. mundivensis* (Broome, 1898) and associated species, were not included in the original genus *Liburnascincus* by Wells and Wellington (1984) but have been more recently treated as part of the genus by most authors, including for

example Cogger (2014), due to the obviously close relationship and form, confirmed by molecular studies such as that of Bragg *et al.* (2018).

L. wellsei sp. nov. in life is depicted in Cogger (2014) on page 633, at bottom and online at:

<https://www.flickr.com/photos/mattsummerville/19103816325>

and
<https://arod.com.au/arod/reptilia/Squamata/Scincidae/Liburnascincus/coensis>

and
<https://www.inaturalist.org/observations/142043483>

Liburnascincus coensis (Mitchell, 1953) is depicted in life in Wilson and Swan (2021) on page 393 middle.

Distribution: *L. wellsei sp. nov.* is only known from the Iron Range, Pascoe, Lockhardt and Wenlock Rivers area of far north Queensland. *L. coensis* (Mitchell, 1953) occurs in the lower McIlwraith Range area of far north Queensland about 50 km straight line south of where *L. wellsei sp. nov.* is found.

Etymology: *L. wellsei sp. nov.* is named in honour of Australian reptile taxonomist and past president of the Australian Herpetological Society, Richard Wells, currently (in 2023 and 2024) of Drake, in northern New South Wales, Australia.

LIBURNASCINCUS BRADCROSSMANI SP. NOV.

LSIDurn:lsid:zoobank.org:act:B8127C3D-0373-47A6-804C-9D4B53490198

Holotype: A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J33935 collected from Oaky Creek Bank, adjoining Site 10, at Homevale, Queensland, Australia, Latitude -21.45 S., Longitude 148.533333 E.

This government-owned facility allows access to its holdings.

Paratypes: 25 preserved specimens at the Queensland Museum, Brisbane, Queensland, Australia, specimen numbers J33864, J33866, J33871, J33872, J33874, J33882, J33887, J33885, J33922, J33923, J33924, J33925, J33926, J33927, J33928, J33929, J33930, J33931, J33932, J33933, J33934, J33936, J33938, J33971 and J80864 all collected from Oaky Creek Bank, adjoining Site 10, at Homevale, Queensland, Australia, Latitude -21.45 S., Longitude 148.533333 E.

Diagnosis: The three species, *L. mundivensis* (Broome, 1898), type locality of Muldiva, North Queensland, from the region generally north of Townsville, Queensland, *L. bradcrossmani sp. nov.* in the region centred around Mackay, north-east Queensland, and *L. gregwallisi sp. nov.* from generally west and south-west of Rockhampton, Queensland are all morphologically very similar.

They are however separated from one another by the following unique suites of characters:

L. mundivensis is characterised by a dorsum that is reddish-brown in colour, which has well-defined dark brown stripes across the dorsum, broken along the mid-line, where they are absent, lower labials that are white, but with dark brownish black at the posterior edge of each and well-defined markings on the upper surfaces of the limbs.

L. bradcrossmani sp. nov. has a greyish-brown dorsum lacking the obvious markings seen on the upper surfaces as seen in *L. mundivensis*. Lower labials are whitish with black barring at the posterior edges. Markings on the upper surfaces of the limbs are poorly defined.

L. gregwallisi sp. nov. has an obvious white line on the anterior upper labials, separating this from the preceding two taxa. *L. gregwallisi sp. nov.* has semi-distinct darker markings on the dorsum and flanks, excluding only the very centre of the midline, but unlike in *L. mundivensis* these markings do not tend to form bands or similar in any way. The lower labials, while whitish, lack any obvious dark markings or barring on the posterior edges, these being reduced and faded to be tiny markings and greyish. All of *L. mundivensis*, *L. bradcrossmani sp. nov.* and *L.*

gregwallisi sp. nov. are separated from the other species in the genus *Liburnascincus* Wells and Wellington (1984), by having dorsal scales that are six-sided, each usually with an angular posterior or free edge and being moderately to strongly keeled, (versus four-sided, each with a normally curved posterior edge, with smooth, striated or weakly keeled dorsals only in the other species).

Skinks within the genus *Liburnascincus* Wells and Wellington, 1984 are defined herein as follows: A genus of the *Carlia* Gray, 1854 group of skinks, maximum adult SVL ranging from 56 to 68 mm, body robust to dorsoventrally flattened, limbs long and sprawling. Parietal shields contact posterior to a distinct interparietal; dorsal scales either four-sided with a smooth curve to the posterior edge, or 6-sided with each usually with an angular posterior or free edge; being smooth, weakly or strongly keeled; each dorsal with longitudinal rows of low, rounded tubercles; ear opening round or vertically elliptic, about equal in size to palpebral disk; usually 7 supralabials, sexes similar in colour and pattern, males without bright colours, usually 13 premaxillary teeth (derived from Ingram and Covacevich, 1989, Wells and Wellington, 1984 and Cogger 2014).

The species *L. mundivensis* (Broome, 1898) and associated species, were not included in the original genus *Liburnascincus* by Wells and Wellington (1984) but have been more recently treated as part of the genus by most authors, including for example Cogger (2014), due to the obviously close relationship and form, confirmed by molecular studies such as that of Bragg *et al.* (2018).

L. mundivensis (Broome, 1898) in life is depicted in Cogger (2014) on page 633, bottom right, Wilson and Swan (2021) on page 393 bottom and online at:

<https://www.inaturalist.org/observations/158040090>

L. bradcrossmani sp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/30734570>

L. gregwallisi sp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/26266641>

and

<https://www.inaturalist.org/observations/107367211>

Distribution: *L. bradcrossmani sp. nov.* is only known from the Mackay region, Queensland, generally south of the Burdekin River, usually occurring in rocky areas.

Etymology: *L. bradcrossmani sp. nov.* is named in honour of Australian herpetologist and professional snake catcher, Bradley Crossman, originally from Greenwich, New South Wales, but in more recent years a snake catcher at Proserpine, Queensland, in recognition of his services to herpetology over many decades.

LIBURNASCINCUS GREGWALLISI SP. NOV.

LSIDurn:lsid:zoobank.org:act:1FFEA9F3-082B-4C0C-96A9-4BF5BB1E6A24

Holotype: A preserved specimen at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J64593 collected from the Buffer Zone at the Stanwell Power Station, Stanwell, 23 kilometres south-west of Rockhampton, Queensland, Australia, Latitude -23.516667 S., Longitude 150.333333 E.

This government-owned facility allows access to its holdings.

Paratypes: 1/ Two preserved specimens at the Queensland Museum, Brisbane, Queensland, Australia, specimen numbers J66645 and J66657 collected from the Buffer Zone at the Stanwell Power Station, Stanwell, 23 kilometres south-west of Rockhampton, Queensland, Australia, Latitude -23.516667 S., Longitude 150.333333 E. 2/ Two preserved specimens at the Australian Museum, Sydney, NSW, Australia, specimen number R.128483 collected from Crocodile Creek, Mt. Usher, Queensland, Australia, Latitude -23.6 S., Longitude 150.466 E., and specimen number R.47190 collected from 19 km south-west of Mount Morgan, Queensland, Australia, Latitude -23.25 S., Longitude 150.416 E.

Diagnosis: The three species, *L. mundivensis* (Broom, 1898), type locality of Muldiva, North Queensland, from the region generally north of Townsville, Queensland, *L. bradcrossmani* sp. nov. in the region centred around Mackay, north-east Queensland, and *L. gregwallisi* sp. nov. from generally west and south-west of Rockhampton, Queensland are all morphologically very similar.

They are however separated from one another by the following unique suites of characters:

L. mundivensis is characterised by a dorsum that is reddish-brown in colour, which has well-defined dark brown stripes across the dorsum, broken along the mid-line, where they are absent, lower labials that are white, but with dark brownish black at the posterior edge of each and well-defined markings on the upper surfaces of the limbs.

L. bradcrossmani sp. nov. has a greyish-brown dorsum lacking the obvious markings seen on the upper surfaces as seen in *L. mundivensis*. Lower labials are whitish with black barring at the posterior edges. Markings on the upper surfaces of the limbs are poorly defined.

L. gregwallisi sp. nov. has an obvious white line on the anterior upper labials, separating this from the preceding two taxa. *L. gregwallisi* sp. nov. has semi-distinct darker markings on the dorsum and flanks, excluding only the very centre of the midline, but unlike in *L. mundivensis* these markings do not tend to form bands or similar in any way. The lower labials, while whitish, lack any obvious dark markings or barring on the posterior edges, these being reduced and faded to be tiny markings and greyish.

All of *L. mundivensis*, *L. bradcrossmani* sp. nov. and *L. gregwallisi* sp. nov. are separated from the other species in the genus *Liburnascincus* Wells and Wellington (1984), by having dorsal scales that are six-sided, each usually with an angular posterior or free edge and being moderately to strongly keeled, (versus four-sided, each with a normally curved posterior edge, with smooth, striated or weakly keeled dorsals only in the other species).

Skinks within the genus *Liburnascincus* Wells and Wellington, 1984 are defined herein as follows: A genus of the *Carlia* Gray, 1854 group of skinks, maximum adult SVL ranging from 56 to 68 mm, body robust to dorsoventrally flattened, limbs long and sprawling. Parietal shields contact posterior to a distinct interparietal; dorsal scales either four-sided with a smooth curve to the posterior edge, or 6-sided with each usually with an angular posterior or free edge; being smooth, weakly or strongly keeled; each dorsal with longitudinal rows of low, rounded tubercles; ear opening round or vertically elliptic, about equal in size to palpebral disk; usually 7 supralabials, sexes similar in colour and pattern, males without bright colours, usually 13 premaxillary teeth (derived from Ingram and Covacevich, 1989, Wells and Wellington, 1984 and Cogger 2014).

The species *L. mundivensis* (Broome, 1898) and associated species, were not included in the original genus *Liburnascincus* by Wells and Wellington (1984) but have been more recently treated as part of the genus by most authors, including for example Cogger (2014), due to the obviously close relationship and form, confirmed by molecular studies such as that of Bragg *et al.* (2018).

L. mundivensis (Broome, 1898) in life is depicted in Cogger (2014) on page 633, bottom right, Wilson and Swan (2021) on page 393 bottom and online at:

<https://www.inaturalist.org/observations/158040090>

L. bradcrossmani sp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/30734570>

L. gregwallisi sp. nov. is depicted in life online at:

<https://www.inaturalist.org/observations/26266641>

and

<https://www.inaturalist.org/observations/107367211>

Distribution: *L. gregwallisi* sp. nov. is only known from the

Rockhampton region, Queensland, Australia, including generally west and south-west of there in wetter and rocky near coastal areas.

Etymology: *L. gregwallisi* sp. nov. is named in honour of Australian herpetologist Greg Wallis formerly of Harbord (Sydney) New South Wales and more recently of Caulfield (Melbourne), Victoria, Australia, in recognition for his services to herpetology over many years.

CARLIA SERGEIMOSYAKINI SP. NOV.

LSIDurn:lsid:zoobank.org:act:03648A90-C87A-4374-AF54-A2B3716CB3A9

Holotype: A preserved specimen at the Museum and Art Gallery of the Northern Territory, Darwin, NT, Australia, specimen number R22742, collected from Pobasso Island, The English Companys Islands, Northern Territory, Australia, Latitude -11.901 S., Longitude 136.452 E.

This government-owned facility allows access to its holdings.

Paratypes: Seven preserved specimens at the Museum and Art Gallery of the Northern Territory, Darwin, NT, Australia, specimen numbers R22745, R22757, R22760, R22761, R22765, R22779, and R22843 all collected from The English Companys Islands, Northern Territory, Australia.

Diagnosis: *C. sergeimosyakini* sp. nov. has until now been treated as a western population of either *Carlia sexdentata* (Macleay, 1877) or the morphologically similar *Carlia longipes* (Macleay, 1877).

C. sergeimosyakini sp. nov. is separated from both species by the unique combination of:

Ear opening, with pointed lobules that are well-developed along the anterior margin, but much reduced or absent on the remaining margins (versus completely surrounded by pointed lobules in *C. longipes*). The lobules are thin with narrow points in *C. sexdentata* versus thicker and slightly blunted at the ends in *C. sergeimosyakini* sp. nov..

Adult male *C. sergeimosyakini* sp. nov. have a yellowish iris, versus orange in *C. sexdentata*. In adult male *C. sergeimosyakini* sp. nov. the dark interstitial skin is prominent on the sides of the head and neck, versus not so in *C. sexdentata*. In breeding male *C. sergeimosyakini* sp. nov. the flanks are typically orange-yellow in colour, rather than the deep orange to red seen in *C. sexdentata*.

The three species *C. sergeimosyakini* sp. nov., *C. sexdentata* and *C. longipes* are separated from all other species within the genus *Carlia* Gray, 1845 by the following suite of characters:

A distinct interparietal; dorsal scales four-sided, each with a smoothly curved posterior edge, and being smooth, striated or feebly keeled; no rows of raised tubercles on the dorsal scales; ear opening roundish, or slightly vertically elliptical and with at least two pointed ear lobules, at least on the anterior edge; there is no pale mid-lateral stripe split or displaced by the ear opening; no black throat or black upper lateral stripe from eye to forelimb in males; males or females do not have a pale dorsolateral stripe or discontinuous pale mid-lateral stripe (modified from Cogger 2014).

C. sergeimosyakini sp. nov. in life is depicted online at:

<https://www.inaturalist.org/observations/108281767>

C. sexdentata in life is depicted online at:

<https://www.inaturalist.org/observations/135885587>

C. longipes in life is depicted in Wilson and Swan (2021) on page 227 at bottom.

Distribution: *C. sergeimosyakini* sp. nov. is restricted to the top end of the north-east Northern Territory. *C. sexdentata* and *C. longipes* are confined to Cape York, Queensland, Torres Strait and nearby southern New Guinea.

Etymology: *C. sergeimosyakini* sp. nov. is named in honour of Sergei L. Mosyakin, born 30 November 1963, who is a prominent Ukrainian Botanist, who took a strong stand in 2022

against taxonomic vandalism in botany by Kevin Thiele, Peter Uetz, Hinrich Kaiser, Mark O'Shea and Wolfgang Wüster (see Mosyak 2022).

CARLIA CAITLINMORANAE SP. NOV.

LSIDDurn:lsid:zoobank.org:act:8A5F0382-8776-4629-9A49-702DFD7FB5B3

Holotype: A preserved specimen at the Australian Museum, Sydney, New South Wales, Australia, specimen number R.81111 collected from 10.0 km west of the Bruce Highway via the road to Paluma, Queensland, Australia, Latitude -19.0 S., Longitude 146.233 E.

This government-owned facility allows access to its holdings.

Paratypes: 1/ Two preserved specimens at the Australian Museum, Sydney, New South Wales, Australia, specimen numbers R.81112 and R.81114 collected from 10.0 km west of the Bruce Highway via the road to Paluma, Queensland, Australia, Latitude -19.0 S., Longitude 146.233 E.

2/ Two preserved specimens at the Queensland Museum, Brisbane, Queensland, Australia, specimen number J26632 collected from 1 km west of Moongobulla, 65.3 km, north-west of Townsville, Queensland, Australia, Latitude -18.983333 S., Longitude 146.316667 E. and specimen number J26558 collected from 66.3 km north-west of Townsville, on the Bruce Highway, Queensland, Australia, Latitude -18.983333 S., Longitude 146.3 E.

Diagnosis: *C. caitlinmoranae* sp. nov. from the wet tropics region of far north Queensland, is morphologically similar in form and closely related to *C. storri* Ingram and Covacevich, 1989, type locality of Bamaga, Queensland and herein confined to the region generally north of Cooktown, Queensland, including Torres Strait and southern New Guinea.

C. caitlinmoranae sp. nov. is readily separated from *C. storri* by the absence of a distinctive white line running across the upper labials. Adult *C. storri* also have scattered yellow, beige or white flecks on the upper body, which are not seen in *C. caitlinmoranae* sp. nov.. Black flecks on the dorsum of *C. storri* commonly tend to form indistinct longitudinal lines, but this is not the case in *C. caitlinmoranae* sp. nov..

Iris of *C. caitlinmoranae* sp. nov. is light orange, versus brown or brown with orange tinge in *C. storri*.

Both *C. storri* and *C. caitlinmoranae* sp. nov. are separated from other species in the genus *Carlia* Gray, 1845 by the following suite of characters: Interparietal is distinct; dorsal scales are mostly bicarinate, 6 sided, each usually with an angular posterior or free edge and moderately to strongly keeled; ear opening is surrounded by acute unequal pointed scales; usually less than 34 midbody scale rows (modified from Cogger 2014).

C. caitlinmoranae sp. nov. in life is depicted online at: <https://www.inaturalist.org/observations/142718638>

and

<https://www.inaturalist.org/observations/57182840>

C. storri in life is depicted online at:

<https://www.inaturalist.org/observations/126190775>

and

<https://www.inaturalist.org/observations/142343784>

Distribution: *C. caitlinmoranae* sp. nov. is found in the wet-tropics region of far north Queensland from Townsville in the south to about Cooktown in the north and including the near coastal ranges. *C. storri* is found to the north of this area and including the northern tip of Cape York, Queensland, Torres Strait and nearby parts of southern New Guinea.

Etymology: *C. caitlinmoranae* sp. nov. is named in honour of Caitlin Moran. In 2022, she was a celebrated indigenous Australian National Rugby League Women's (NRLW) star who was lampooned publicly for simply saying things as she saw them.

On the day Australia's absentee Queen, Queen Elizabeth 2

of "Great Britain" died, in September 2022, Moran posted on Instagram "*Today's a good fucking day, uncle Luke (country singer Luke Coombs) announces his tour, and this dumb dog (Queen Elizabeth) dies. Happy fucking Friday.*"

Noting that the majority of Australian Aborigine's were effectively exterminated by the British Crown, and those who survived were generally bashed and incarcerated, it should not surprise anyone that the indigenous Australians have little time for the dysfunctional British Royal Family of paedophiles and animal abusers and all the thieving and brutality them and their corrupt legal system represents.

However as Australia is a fascist state, Moran was vilified in the (largely tax exempt) Rupert Murdoch controlled and State controlled media.

As a result Moran was banned from playing sport and fined! (See detail at: <https://www.newcastleknights.com.au/news/2022/09/13/club-statement-caitlin-moran/>).

Rather than honouring the now deceased Queen, who's name appears on countless places and things in Australia, or give any further recognition to her dysfunctional family of adulterers and paedophiles, I have decided to honour this species after a descendant of victims of the British Crown instead.

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CONFLICT OF INTEREST
None.

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