Changes from the WA Museum Checklist 2016 (updated 11 October 2017)

Reptiles and Amphibians

New Kimberley Blindsnake and notes on *Anilios* taxonomy.

A new blindsnake, *Anilios zonula* was described from the west Kimberley based on only two specimens, one of which was recently collected from DPaW's Kimberley Islands Survey. This brings the total of the little-seen Australian blindsnakes to 45 species, with most of the diversity in Western Australia.

In addition, until further morphological and molecular studies are undertaken to clarify their status, *A. nigricaudus* is maintained as the junior synonym of *A. guentheri*, and *A. nigroterminatus* as a junior synonym of *A. grypus*.

Ellis, R.J. (2016). A new species of Blindsnake (Scolecophidia: Typhlopidae: *Anilios*) from the Kimberley Region of Western Australia. *Herpetologica* **72**: 271–278.

Description of a new *Aprasia. Aprasia wicherina* is a recently-described species of *Aprasia* only occurs in a small area near Geraldton, WA. It is the 14th species of *Aprasia* described, most of which occur only in WA. It was inadvertently omitted from our previous checklist.

Maryan, B., Adams, M. and Aplin, K.P. (2015). Taxonomic resolution of the *Aprasia repens* species-group (Squamata: Pygopodidae) from the Geraldton Sandplains: a description of a new species and additional mainland records of *A. clairae. Records of the Western Australian Museum* **30**: 12–32.

New species name for Pilbara and Gascoyne marbled velvet geckos. A revision of arid and semi-arid marbled velvet geckos of the genus *Oedura* was recently undertaken. The name *Oedura marmorata* is now restricted to the Top End of the Northern Territory. The Western Australian populations were described as a new species, *O. fimbria*. In addition, *O. cincta* de Vis was resurrected for eastern arid zone populations, and *O. bella* was described as a new species from the Gulf of Carpentaria country.

Oliver, P.M. and Doughty, P. (2016). Systematic revision of the marbled velvet geckos (*Oedura marmorata* species complex, Diplodactylidae) from the Australian arid and semi-arid zones. *Zootaxa* **4088**: 151–176.

Revision of the clawless geckos (*Crenadactylus ocellatus***).** Based on strong genetic and morphological evidence, the former monotypic genus *Crenadactylus*, with one species (*ocellatus*) and four subspecies (*ocellatus* in the south-west, *horni* in the arid zone, *naso* in the northern Kimberley and *rostralis* in the southern Kimberley) was revised. All subspecies were elevated to full species, with three new species described: *C. occidentalis* for western coastal populations, *C. tuberculatus* for a distinctive form restricted to the Cape Range and *C. pilbarensis* for the Pilbara

populations. The three new species were formerly regarded as belonging to the subspecies *C. o. horni*, but *C. horni* (full species) is now restricted to the Central Ranges of the Northern Territory and no longer occurs in Western Australia.

Doughty, P., Ellis, R.J., and Oliver, P.M. (2016). Many things come in small packages: revision of the clawless geckos (*Crenadactylus*: Diplodactylidae) of Australia. *Zootaxa* **4168**: 239–278.

Revision of the ring-tailed rock dragons. Melville *et al.* (2016) recently undertook a molecular analysis of the subspecies of *C. caudicinctus*. This resulted in no subspecies recognized. The full species are *caudicinctus*, *graafi*, *infans* and *slateri*. The former subspecies *mensarum* and *macropus* were synonymized into *caudicinctus* and *slateri*, respectively.

Melville, J., Haines, M.L., Hale, J., Chapple, S. and Ritchie, E.G. (2016). Concordance in phylogeography and ecological niche modelling identify dispersal corridors for reptiles in arid Australia. *Journal of Biogeography* **43**: 1844–1855.

Change of family name to Australian hylids. We have changed the family name for all *Litoria* and *Cyclorana* from Hylidae to Pelodryadidae in step with recent analyses, e.g. Duellman *et al.* (2016). However, we maintain *Cyclorana* and do not assign half the *Litoria* species to either *Dryosophus* or *Ranoidea*. This is consistent with the Australian Society of Herpetologists' <u>national checklist</u>.

Duellman, W.E., Marion, A.B., and Hedges, S.B. (2016) Phylogenetics, classification, and biogeography of the treefrogs (Amphibia: Anura: Arboranae). *Zootaxa* **4104**: 1–109.

Subspecies of the yellow-bellied seasnake (Hydrophis platurus platurus). A new subspecies of yellow-bellied sea snake, Hydrophis platurus xanthos, has been described from Costa Rica on morphological, distributional and ecological evidence. This necessitates erecting a nominate subspecies for the widely distributed subspecies H. platurus platurus that occurs in Western Australian waters. The new subspecies is smaller and has nearly uniform yellow colouration whereas typical H. p. platurus is black and yellow. If H. p. xanthos is raised to full species in the future, then H. p. platurus would revert to just H. platurus.

Bessesen, B.L. and Galbreath, G.J. (2017). A new subspecies of sea snake, *Hyrophis platurus xanthos,* from Golfo Dulce, Costa Rica. *ZooKeys* **686**: 109–123.

Revision of the skinks *Ctenotus duricola* and *C. piankai.* Based on genomic analyses and morphological assessment, four divergent lineages were recovered in the skink species *C. piankai* and *C. duricola. Ctenotus piankai* was split into *C. piankai* from the western deserts, extending as far east as Queensland, and *C. rhabdotus* Rabosky & Doughty from the southern Kimberley, Tanami and northern deserts of the Northern Territory. In the Pilbara region, *C. duricola* is now restricted to the northern and eastern Pilbara, and *C. pallasotus* Doughty & Rabosky occurs in the western Pilbara, Hamersley Range and as far south as the North West Cape.

Rabosky, D.L., Doughty, P. and Huang, H. (2017). Lizards in pinstripes: morphological and genomic evidence for two new species of scincid lizards within *Ctenotus piankai* Storr and *C. duricola* Storr (Reptilia: Scincidae) in the Australian arid zone. *Zootaxa* **4303**: 1–26.

Addition of *Gehyra versicolor*. An individual of *Gehyra versicolour* Hutchinson, Sistrom, Donnellan & Hutchinson, 2014 from near Warburton was genotyped as this species (unpublished data), confirming this species occurrence in Western Australia.

Hutchinson, M.N., Sistrom, M.J., Donnellan, S.C. & Hutchinson, R.G. (2014). Taxonomic revision of the Australian arid zone lizards *Gehyra variegata* and *G. montium* (Squamata, Gekkonidae) with description of three new species. *Zootaxa* **3814**: 221–241.

Recognition of *Lerista miopus* as separate from *L. lineopunctulata*. A genetic and morphological reassessment of sand sliding skinks from the west coast has resulted in the recognition of *Lerista miopus* as distinct from *L. lineopunctulata*. *Lerista miopus* occurs from around Jurien north to Exmouth along the coast, whereas *L. lineopunctulata* is now restricted to an area from Jurien in the north and south to the Swan Coastal Plain.

Amey, A.P. & Edwards, D.L. (2017). Taxonomy of the sand sliders of Western Australia's central coast (genus *Lerista*, Squamata: Scincidae): recognition of *L. miopus* (Günther, 1867). *Zootaxa* **4317**: 111–133.

Two new species of *Carlia* **from the Kimberley.** A morphological and molecular appraisal of Carlia johnstonei and C. tricantha found evidence for a cryptic species within each of these taxa. Carlia insularis sp. nov. occurs on islands in the north-west Kimberley and was formerly assigned to C. johnstonei. Carlia isotricantha

Afonso Silva, A.C., Santos, N., Ogilvie, H.A. & Moritz, C. (2017). Validation and description of two new north-western Australian Rainbow skinks with multispecies coalescent methods and morphology. *PeerJ* **5**: e3724.

Revision of Anilios leptosoma. Based on morphological and molecular evidence the Anilios leptosoma species complex was revised. Genetic evidence revealed three divergent lineages within A. leptosoma with morphological support for the recognition of two new species. Anilios leptosoma was redescribed with two new species described: A. systemos from the Geraldton area northeast to Mullewa and A. obtusifrons known only from few specimens collected from the coast between Kalbarri and Gregory. Anilios leptosoma is now known to occur from Northampton to Wooramel and inland to Meeberrie Station.

Ellis, R.J., Doughty, P., Donnellan, S.C., Marin, J. and Vidal, N. (2017). Worms in the sand: systematic revision of the Australian blindsnake *Anilios leptosoma* (Robb, 1972) species complex (Squamata: Scolecophidia: Typhlopidae) from the Geraldton Sandplain, with description of two new species. *Zootaxa* **4323**: 1–24.

<u>Birds</u>

Since 2016, two species have been added to the WA State checklist *viz*. Kermadec Petrel *Pterodroma neglecta* and White-necked Petrel *Pterodroma cervicalis*. Also the generic name of the two turtle-doves has changed from *Streptopelia* to *Spilopelia*.

Noteworthy is the addition of the first checklist of the birds of Christmas Island and Cocos (Keeling) Islands based on museum collections, photographs and detailed descriptions from field observations.

<u>Mammals</u>

Revision of species status of the Dingo (Canis dingo).

A review of the genetics, morphology, behaviour and reproduction in the Dingo (*Canis dingo*) has discussed the current species status and recommended that based on the data currently available, the Dingo cannot be a distinct species, and should be synonymised with dogs, as *Canis familiaris*.

Jackson, S.M., Groves, C.P., Fleming, P.J.S., Aplin, K.P., Eldridge, M.D.B., Gonzales, A. and Helgen, K.M. (2017). The Wayward Dog: Is the Australian native dog or Dingo a distinct species? *Zootaxa* **4317**: 201–224.