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A new skink (Scincidae: *Liburnascincus*) from rocky habitat on Cape York, northeast Australia

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Abstract

The genus *Liburnascincus* is composed of saxicoline skinks restricted to northeast Australia. This small radiation consists of one widespread species, *L. mundivensis*, found in a variety of rocky habitats in eastern Queensland, and two localized species, *L. coensis* and *L. scirtetis*, restricted to granite boulder habitats on Cape York Peninsula, in north Queensland. Here we describe a fourth species, *L. artemis* **sp. nov.**, from the Bamboo Range, a low rocky range on Cape York. As for other *Liburnascincus*, the new species is a saxicoline skink that is active on boulder surfaces primarily early and late in the day. *Liburnascincus artemis* **sp. nov.** is most similar to *L. mundivensis* but can be diagnosed based on longer limbs, higher toe and finger lamellae counts, lower midbody scale count, and other aspects of morphology, scalation and colour pattern. *Liburnascincus artemis* **sp. nov.** is currently known from a very small area but further surveys will likely extend the range. It is geographically separated from *L. mundivensis* to the south by unsuitable habitat in the Laura region, but it may abut the range of *L. coensis* to the north. Despite a small distribution, *L. artemis* **sp. nov.** occurs at high density at the known sites and appears to be currently secure. In this paper we also discuss the distributions and biogeography of *Liburnascincus* more broadly.

Key words: *Liburnascincus artemis*, *Liburnascincus mundivensis*, *Liburnascincus coensis*, *Liburnascincus scirtetis*, Queensland, rock, saxicoline

Introduction

Liburnascincus Wells & Wellington, 1984 consists of three species restricted to northeast Australia. Until recently these three species were included in *Carlia* Gray, 1845 (Ingram & Covacevich 1989; Stuart-Fox *et al.* 2002; Wilson 2005; Dolman & Hugall 2008). The genus *Liburnascincus* was erected for two of these species, *L. coensis* (Mitchell, 1953) and *L. scirtetis* (Ingram & Covacevich, 1980). However, the generic definition by Wells & Wellington (1984) was inadequate and the broader community did not accept the name until the publication of a comprehensive genetic phylogeny (Dolman & Hugall 2008), which supported the recognition of *Carlia*, *Lygisaurus* de Vis, 1884, and *Liburnascincus* as separate clades. Dolman & Hugall (2008) refined the definition of *Liburnascincus* to incorporate additional morphological traits, and to also include *L. mundivensis* (Broom, 1898). Recognition of *Liburnascincus* is further supported in a recent global phylogenetic analysis of squamate reptiles (Pyron *et al.* 2013).

Liburnascincus are restricted to rocky environments (Wilson & Swan, 2013). The species rarely occur in rainforest but there is often 'dry rainforest' or vine thickets associated with their rocky habitats (CH & PC, pers. obs.). The three described species are allopatrically distributed (Fig. 1) and consist of two localized species in north Queensland, *L. coensis* (Fig. 2A) and *L. scirtetis* (Fig. 2C), and a more widespread species in eastern Queensland, *L. mundivensis* (Fig. 2D). The two northern species are restricted to granite boulder habitats and are morphologically highly distinct (long, splayed limbs; large, flattened bodies; short faces; Ingram & Covacevich 1980; Ingram & Covacevich 1989; Goodman *et al.* 2008; Fig. 2). *Liburnascincus coensis* is found in boulder-

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