

A Review of the Morphology, Biology, Distribution and Conservation Status of the New Caledonian Scincid Lizard *Simiscincus aurantiacus* (Reptilia: Scincidae)

ROSS A. SADLIER^{1*}, GERRY SWAN², STÉPHANE ASTRONGATT³,
STEPHANE MCCOY⁴ AND AARON M. BAUER⁵

¹ Senior Fellow, Australian Museum Research Institute,
1 William Street, Sydney NSW 2010, Australia

² Research Associate, Australian Museum Research Institute,
1 William Street, Sydney NSW 2010, Australia

³ Expert in terrestrial environment, Nouméa, New Caledonia

⁴ Responsable Service Préservation de l'Environnement—Valé Nouvelle Calédonie, New Caledonia

⁵ Department of Biology, Villanova University,
800 Lancaster Avenue, Villanova, Pennsylvania 19085, United States of America

ABSTRACT. *Simiscincus aurantiacus* was described in 1997 from a single specimen collected in humid forest habitat on Mt Koghis in southern New Caledonia. The recent acquisition of a number of additional specimens from surveys conducted in the south of the island has provided new information on the species' morphology, biology and distribution. The results of field studies indicate it has a scattered distribution across the region that includes both humid forest and tall, canopied maquis forest habitats, and that it can persist in even extremely small remnants of these forest types and appears to have a primarily subterranean mode of existence. The additional material collected has also allowed an assessment of variation in the species' morphology, including an unusually long tail the basal half of which is uniformly rounded. Morphological studies suggest a close relationship between *Simiscincus aurantiacus* and the regionally sympatric fossorial species *Graciliscincus shonae*, and genetic studies undertaken since its description place these taxa within a larger group that also includes the surface active species of the genera *Caledoniscincus* and *Phaeoscincus*, the latter only recently established. The information on the species' distribution and biology presented here supports its recent IUCN Red List assessment as Vulnerable.

KEYWORDS. Scincidae; *Simiscincus*; New Caledonia; morphology; forest; fragmentation; vulnerable.

SADLIER, ROSS A., GERRY SWAN, STÉPHANE ASTRONGATT, STEPHANE MCCOY AND AARON M. BAUER. 2018. A review of the morphology, biology, distribution and conservation status of the New Caledonian scincid lizard *Simiscincus aurantiacus* (Reptilia: Scincidae). *Records of the Australian Museum* 70(5): 435–446.
<https://doi.org/10.3853/j.2201-4349.70.2018.1709>