



## A revision of *Strophurus taenicauda* (Squamata; Diplodactylidae) with the description of two new subspecies from central Queensland and a southerly range extension

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### Abstract

The Golden-tailed Gecko, *Strophurus taenicauda* (De Vis 1886), is redescribed and two new subspecies from central Queensland are diagnosed on the basis of scalation, colour pattern and genetic differences. The distribution of *S. t. taenicauda* comprises the south-eastern part of the Queensland Brigalow Belt bioregion. *Strophurus taenicauda albiocularis* **ssp. nov.** occupies the northern half of the range whilst *S. taenicauda triaureus* **ssp. nov.** has a limited range in the central eastern part of the Brigalow Belt. The two new subspecies are predominantly inhabitants of *Eucalyptus* woodlands and are not as restricted to Brigalow (*Acacia harpophylla*) woodlands as *S. t. taenicauda*. A single record of the nominate subspecies from northern New South Wales is also reported, extending the range of the species by >250km.

**Key words:** *Strophurus taenicauda albiocularis* **ssp. nov.**, *Strophurus taenicauda triaureus* **ssp. nov.**, Brigalow Belt, reptile

### Introduction

Members of the genus *Strophurus* Fitzinger, 1843 are allied on the basis of the presence of caudal glands and, in most species, ornate tail spines and spines around the eyes. *Strophurus taenicauda* (De Vis, 1886) is one of the most primitive forms and lacks the caudal spines and eye spines (Kluge 1967). *Strophurus* was reviewed by Kluge (1967), as part of *Diplodactylus*, a lectotype of *S. taenicauda* designated, and a redescription of the species presented, based on samples from throughout the distribution. Subsequent authors have accepted Kluge's treatment of this species as monotypic; however, the senior author has been aware of three morphotypes ("normal", "bar-tailed" and "white-eyed") among captive specimens since 1999 but until recently was unaware of their existence as naturally occurring forms with distinct distributions. This paper recognises that these morphotypes represent three subspecies readily distinguished by colour, pattern, scalation, eye colour and genetic divergence.

*Strophurus taenicauda* is currently listed as 'near threatened' under the Queensland (Qld) Nature Conservation Act 1992 and by the International Union for Conservation of Nature (IUCN 2010). The species is found only in the Brigalow Belt, a bioregion under extreme pressure from continued clearing of native vegetation, unsustainable grazing practices and the proliferation of feral animals and plants (Richardson 2006). The description of two new subspecies has significant conservation implications in that it requires consideration of three taxonomic units, each with a much smaller distribution than the former monotypic species.

### Material and methods

**Taxon sampling.** Tissues were obtained from eight *S. taenicauda* specimens taken either from wild-caught or captive-bred stock representing the three morphotypes (see Table 1). In addition to *S. taenicauda*, four tissue samples