



## The Barrier skink *Oligosoma judgei* n. sp. (Reptilia: Scincidae) from the Darran and Takitimu Mountains, South Island, New Zealand

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### Abstract

A new species of alpine skink, *Oligosoma judgei*, is described from the Darran and Takitimu Mountains, South Island, New Zealand. This species is diagnosed on the basis of morphological, ecological, and genetic differentiation from the following congeners: *O. pikitanga*, *O. acrinasum*, *O. infrapunctatum*, *O. otagense*, *O. taumakae*, *O. waimatense* and *O. grande*. The new species is characterized by a black base colour with bright green or yellow dorsal speckles, a white belly with occasional black speckles, and distinctive head scalation. The conservation status of the new taxon appears secure due to the altitude and extensive habitat in the Darran Mountains and apparently wide range extending to the Takitimu Mountains.

**Key words:** *Oligosoma judgei* n. sp.; Barrier skink; Scincidae; Reptilia; taxonomy; morphology; genetics; *O. pikitanga*; *O. acrinasum*; Darran Mountains; Takitimu Mountains; Fiordland, New Zealand

### Introduction

The number of lizard species in New Zealand remains unresolved. At present, only 50 of at least 90 recognised lizard taxa are formally described (Hitchmough et al 2007), and ongoing research and discoveries continue to add new species every year. Alpine areas in New Zealand are a potential hotspot for hitherto unknown lizard species, especially in unexplored Fiordland (Bell et al 2008). The first truly alpine New Zealand lizard, the gecko *Hoplodactylus kahutaruae*, was described over twenty years ago (Whitaker 1984). Since then several other alpine New Zealand lizard species have been discovered, but until recently these have all been geckos.

In 2004 a skink was discovered by Tony Jewell in Sinbad Gully, Llawrenny Peaks, Fiordland, at 1150 m above sea level (ASL) (Jewell & Tocher 2005) that was subsequently described as *Oligosoma pikitanga* (Bell and Patterson 2008). In 2005, Murray and Bronwyn Judge discovered another skink species on Barrier Knob in the Darran Mountains, Fiordland, at 1600 m ASL (Figs. 1–3), 20 km south-east of Sinbad Gully. This new taxon, assigned the tag name *Oligosoma* sp. ‘Barrier’ in reference to the locality (Bell et al 2008; Bell & Patterson 2008), is described herein.

Further, during the preparation of this manuscript, a large skink was discovered and photographed by Kees Green in February 2009 at Cheviot Face in the Takitimu Mountains. A further five specimens were captured in a follow-up survey which indicated they are of the new taxon described here (Edmonds 2009).

The research conducted here is part of a two-year Conservation Management Units Fund (CMUF) project on *Oligosoma* skink species in the south-western South Island area (Fiordland, Wakatipu and West Coast), funded by the New Zealand Department of Conservation (DOC). This project is also connected to previous