EARTHWORMS (MEGASCOLECIDAE: OLIGOCHAETA) FROM MOUNT KOSCIUSKO, AUSTRALIA

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Figures 1–7

Manuscript received 16th August, 1971

SUMMARY

Earthworms collected for the Australian CSIRO from the Mt Kosciusko region of the Australian Alps are described and the zoogeography of the fauna is discussed. Of the known indigenous elements of the Australian Megascolecidae, Mt Kosciusko lacks Acanthodrilinae but harbours all tribes of the subfamily Megascolecinae, *viz*. the tribes Perionychini, Dichogastrini and Megascolecini. The Perionychini are represented by *Diporochaeta pheretima* sp. nov., *Graliophilus montiskosciuskoi* sp. novd *G. woodi* sp. nov., *Cryptodrilus fastigatus* Fletcher, 1889, *C. tenuis* Fletcher 1889, and by two species of the new genus *Vesiculodrilus*, namely *V. frenchi* (Spencer, 1892) and *V. purpureus* sp. nov. Other species, not from Mt Kosciusko, which are transferred to *Vesiculodrilus* as new combinations, are *Cryptodrilus gippslandicus* Spencer, 1892; *C. hobartensis* Spencer, 1895; *C. insularis* Spencer, 1895; *C. tanjilensis* Spencer, 1892; *Megascolides tisdalli* Spencer, 1900; *Plutellus uncinatus* Stephenson, 1933; *Cryptodrilus victoriae* Spencer, 1900, and *Megascolides volvens* Spencer, 1900. *Diporochaeta pheretima* sp. nov. is considered to have close affinities with *Vesiculodrilus* but must be placed in *Diporochaeta* pending revision of that genus. The Dichogastrini are represented on Mt Kosciusko by *Notoscolex montiskosciuskoi* sp. nov. and the Megascolecini by *Oreoscolex imparicystis* gen. et sp. nov. and *Megascolex celmisiae* sp. nov.

Evidence is presented for restriction of *Graliophilus montiskosciuskoi* to subalpine and alpine zones, a rare phenomenon in the Australian fauna. Zoogeographically the earthworm fauna of Mt Kosciusko has close affinities with surrounding southeastern Australia and its tertiary isolate, Tasmania.

INTRODUCTION

Mount Kosciusko includes the highest peak (7,316 feet) in Australia. It forms part of the Australian Alps, a southerly portion of the Great Dividing Range which extends from Cape York Peninsula to southeastern Australia and re-emerges in Tasmania. It is snow-capped in winter and has formerly been extensively glaciated. It holds particular interest, with other peaks in the Australian Alps, in supporting the only alpine herbfield on the Australian mainland and of thereby having the potentiality to harbour a cold-adapted endemic fauna.

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