
Book Review

Fauna of New Zealand, 53: Harpalini (Insecta: Coleoptera: Carabidae: Harpalinae).

A. Laroche and M. –C. Larivière.

Manaaki Whenua Press, 2005. 160pp. NZD55.00

ISSN 0111-5383. ISBN 0-478-09369-1

Thank goodness someone has tackled the Pandora's Box of the carabid world from a New Zealand perspective: the Harpalinae. Until now, we had to be content with scribbings by Laporte de Castelnau in 1867, and since then, the odd sporadic appearance in other works by various authors, including Laroche and Larivière's 2001 'Fauna of New Zealand' (Vol. 43: Carabidae). André and Marie-Claude now provide us with a dedicated and concise work of a tribe of beetles that, like so many others in New Zealand, contains a high proportion of species unique to this country. The reader gets a taste for the remarkable biodiversity of the Harpalini at the start of the revision's popular summary. Here we find that three-quarters of New Zealand's Harpalini and just over half of the tribes genera in this country are found nowhere else. The majority is flightless and armed with subapterous (usually vestigial) wings; a product of speciation in isolation following the break-up of eastern Gondwanaland. Extant members of the Harpalinae evolved from ancestral lineages that radiated during the Cretaceous (144-65Mya).

This revision is a welcomed undertaking. André and Marie-Claude provide detailed description of twenty genera and fifty-seven species including five new genera and twenty-three new species. In addition, eight new synonymies are established and thirteen lectotypes are assigned. Several adventive species are also recorded in New Zealand for the first time. In addition to the fine artistry of Des Helmore, the authors have fully utilised Syncroscopy Automontage® imaging software for many figures including frontispiece, habitus and pronotal figures (e.g., Figs 114-225).

The check list of taxa (pages 12-13) is a convenient 'easy-find' index enabling us to delve into subtribe, genus or species of choice located deep in the revision. The authors down play gamma

taxonomy in the methodology, opting for more intensive field work with the aim of providing a basis for more detailed studies in the future. The rest of the revision's format follows a relatively user-friendly 'Fauna of New Zealand' template. Typically, this issue is loaded with technical lingo in its keys making them proverbial mine-fields for use by amateur enthusiasts. But then again, it's not pitched at the amateur level. In all, 'Fauna of New Zealand, 53' is a one-hundred and sixty page biome that leaves the on-the-ball enthusiast well equipped to tackle their own identifications of New Zealand harpalines that are so far described.

The cave dwelling members of the Stenolophina and Pelmatellina are particularly aberrant harpalines described in this revision. Three new species of *Pholeodytes* (*P. helmorei*, *P. nunni*, and *P. palmai*) are described in the Stenolophina while a single new species within *Syllectus* (*S. gouleti*) is described in the Pelmatellina. Both genera display morphologically convergent characters associated with a troglitic existence in South Island caves. *Syllectus magnus* is the exception being trogliphilous, living more at the entrance of caves than inside them. This species is distributed nationwide whereas the other *Pholeodytes* and *Syllectus* species are confined to caves in the north-west regions (i.e., Nelson, Buller) of the South Island. Aspects of the biology, ecology and seasonality of these species were studied by the authors, thus contributing valuable information on a guild of beetles of which very little was previously known.

But, this fauna tells us about much more than cave dwelling Harpalini. Thanks to the authors' utilisation of a more field work based methodology we find much new information on many more of these carabids appearing in this revision. So, if you have an interest in New Zealand's weird and

wonderfully unique carabid fauna then 'Fauna of New Zealand, 53: Harpalini' is a must.

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