



A GUIDE TO THE
BEEETLES
OF AUSTRALIA

GEORGE HANGAY AND PAUL ZBOROWSKI



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Preface

The aim of this book is to help the reader recognise most beetle families that may be encountered in Australia. We have tried to do this by presenting brief descriptions of 17 superfamilies as well as 91 families – about 80 per cent of the beetle families occurring in Australia. We have also provided sample selections of as many subfamilies, genera and species as is possible within the confines of a guide book. Families which are poorly represented in Australia or rarely seen by non-specialists have been omitted. As a general rule we have tried to restrict descriptions of the morphological features of the beetles by focusing on those which can be examined by a hand-held 10x magnifier. However, a great percentage of beetles are very small, necessitating the use of a stereoscopic microscope.

The taxonomy in this book is based on Families and subfamilies of Coleoptera by JF Lawrence and AF Newton Jr, appearing on pp. 779–1006 of *Biology, Phylogeny, and Classification of Coleoptera; Papers Celebrating the 80th Birthday of Roy A Crowson*, published by Museum i Instytut Zoologii PAN, Warszawa, in 1995. We have made some alterations to reflect recent changes in the classification of beetles.

The natural history of beetles is fascinating and in the introductory chapters we have presented some of the basic facts relating to these amazing insects. The family chapters with about 400 illustrations give descriptions of the beetles, their names, distribution and some information regarding their habits and biology.

Common names were used in accordance with existing Australian, American and British publications, but the correctness of these are often arbitrary and many alternative names exist.

The sizes, given in millimetres, indicate the total length of a beetle, from the front of its head to the very end of its abdomen. Most of the specimens in the illustrations were photographed live in their natural habitats and afterwards set free. Consequently measurements couldn't be taken absolutely accurately and the sizes given in the captions are approximate only.

Those readers who are new to entomology may find many unfamiliar words in the text. These words – usually derived from Latin or Ancient Greek – form the language of entomology. This language helps to describe or explain something in a relatively short and concise manner. An extensive glossary is provided at the end of this book.

Unless otherwise stated, all the photographs in the book were taken by Paul Zborowski, while the text is mainly the work of George Hangay. This project was a difficult task, but a great learning experience for both authors.

One of the greatest coleopterists of our time, the late Dr Elwood C Zimmerman wrote: 'Those who know most about this subject know best how little they know.' How true this is!

George Hangay
Paul Zborowski

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We are also very grateful to all those authors whose publications we have used to gather information for this book. Some specific references can be found in the endnotes, but we couldn't possibly find room for all; they are too numerous to mention here, as their work would fill an entire library.

Mentioning all these eminent coleopterists should not be perceived as a disguised disclaimer. Any errors in identification or other faults in the text result from our own assumptions or misinterpretation of correct advice received.

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The jewel beetle *Castiarina luteipennis* (subfamily Buprestinae) occurs in New South Wales, the Australian Capital Territory and Victoria. It lives in a variety of environments, including those at higher altitude. This specimen was photographed near the Putty Road, north of the Colo River, New South Wales, on flowering *Angophora*.