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## **Naturalist Review**

BY IAN FAITHFUL

### **Beetles of Australia**

BY TREVOR HAWKESWOOD

Angus and Robertson Publishers, 1987,  
248pp., 192 colour plates. Soft cover. \$17.95.

R.A. Crowson introduces his monumental work **The Biology of the Coleoptera** with an irresistible quotation from Charles Darwin: "Whenever I hear of the capture of rare beetles, I feel like an old warhorse at the sound of a trumpet". T.J. Hawkeswood is one who knows this feeling and **Beetles of Australia** is his fanfare. Hawkeswood should be familiar to readers because of the many contributions he has made to the **Naturalist** in recent years, notably on jewel beetles and the role of Coleoptera in pollination.

**Beetles of Australia** immediately captures the attention with a superb series of colour plates which illustrate 180 species and include 10 photographs of larvae and 3 of pupae. The book could not be, and "is not intended to be", a "comprehensive account" of the fauna, for there are some 20,000 named Australian beetles, another 3,000 awaiting description, plus an estimated 12,000 yet to be collected. "The main aim is to make people aware of our diverse beetle fauna

and to provide them with data on the selected species . . . so that they may be able to appreciate their importance in the natural environment!"

A brief introduction covers morphology, life cycles, habitat and classification. It is pitched at the beginner's level and explains simply the major biological characteristics of beetles. Where terms of entomological jargon are introduced they are usually shown in bold type and defined in a nine page glossary near the end of the book. The introduction is followed by the 120 pages which constitute the main text. Here the author gives, in systematic order, the details of each of the families illustrated, with descriptions, life histories, habitats and distributions of each of the species pictured. These family sections cover biology in greater detail and discuss the peculiarities of sub-families and genera. The notes for each species are succinct: an average of perhaps fifty words. The glossary of terms, a useful but rather idiosyncratic eleven page bibliography grouped

by family, and a taxonomic index complete the work.

Unfortunately the text is frequently marred by minor errors, many of which could have been corrected by reference to publications cited in the bibliography. For example *Xylotrupes gideon* (Fabricius) is incorrect. Linnaeus, not Fabricius, first described this well known northern species. *Anoplognathus*, or Christmas Beetles as they are commonly called, are no more "wary" than many other beetles and do not "usually fly away upon the slightest disturbance". Not all male Dynastinae have horns on the head. *Stigmodera macularia* is known from Victoria as well as New South Wales. If there is to be a second edition of this book the author must make a determined effort to improve its accuracy.

The life histories and behaviour of over two thirds of the species dealt with are said to be "largely unknown", "not described", or similar. This adequately reflects our ignorance of Australian beetles but the reader would benefit more if the chosen species were better and not lesser known. Rather than make the statement that most Scaritinae are uncommon and poorly known, Hawkeswood should have kept to his main aim and explained that they are generally nocturnal burrowing species which are often flightless. Of course most insects are uncommon and poorly known. The message does not need overkill. The non-specialist readership to which this book attempts to appeal will be unable to appreciate the importance of these animals we know so little about.

The author admits a bias towards the beetles of New South Wales and Queensland and notes that many of the species illustrated are rare and of localised occurrence. This makes the book of

rather limited use for the beginner and the residents of other states. Hawkeswood stresses the importance of documenting Australia's beetle fauna before its members become extinct. But in order for this to happen it is essential for more people to collect specimens. Nowhere in the book is there a clue on how to make a scientifically useful collection, nor is there a hint as to where such information could be found. There is another bias I don't like. Members of several small families are illustrated while much larger (though less conspicuous) groups (for example Melyridae, Histeridae, Pselaphidae) are ignored. Buprestidae in particular, along with Lucanidae and Cerambycidae, the Jewel, Stag and Longicorn beetles respectively, are over represented in terms of their diversity in the Australian fauna. This is understandable because they are favourites amongst beetle collectors, being generally medium to large in size, often colourful and easier to photograph, but it is awfully misleading.

A few of the photographs are of a poor standard, at least in relation to the very high quality of the others. Living beetles are not easy to capture on film but most of the plates are unqualifiedly beautiful.

These criticisms should not deter the general reader too much. The book is a good starting point for the novice who will soon find that the major families can be readily recognised and that the biological functions of beetles are less mysterious than they seem. The layout is neat, the size convenient and the arrangement of the sections logical so that the book is pleasing to use. It deserves a place in school and public libraries throughout the country. As the only Australian book available which covers the order as a whole it is a long overdue addition to the naturalist's bookshelf.