

Crustacea: Malacostraca: Phyllocarida, Hoplocarida, Eucarida (Part 1). Davie, P. J. F., 2002. In: Wells, A. & W. W. K. Houston (eds.), *Zoological Catalogue of Australia*. Vol. 19.3A. Melbourne: CSIRO Publishing, Australia. xii + 551 pp. AU\$ 140.00. ISBN 0-643-06791-4.

Crustacea: Malacostraca: Eucarida (Part 2: Decapoda—Anomura, Brachyura). Davie, P. J. F., 2002. In: Wells, A. & W. W. K. Houston (eds.), *Zoological Catalogue of Australia*. Vol. 19.3B. Melbourne: CSIRO Publishing, Australia. xiv + 641 pp. AU\$ 150.00. ISBN 0-643-06792-2.

These two excellent volumes summarise the systematics and taxonomy of most of the major groups of Australian crustaceans (except Syncarida and Peracarida, which is dealt with in two other volumes) within the largest class of subphylum Crustacea—Malacostraca. The volumes are part of the Australian Biological Resources Study (ABRS) produced Zoological Catalogue of Australia series, which is known for its high quality of taxonomic and nomenclatural information.

The last such inventory of the Australian crustacean fauna was published more than a hundred years ago by W. A. Haswell in 1882 (*Catalogue of the Australian stalk- and sessile-eyed Crustacea*. Australian Museum, Sydney. xxiv + 326 pp.), so the present works are certainly welcome and have been highly-anticipated. The impressive combined coverage of these two volumes includes more than 2,400 species (70 families, 343 genera and 1,225 species of Australian shrimps, prawns and lobsters in Vol. 19.3A; and 55 families, 438 genera and 1,243 species of Australian crabs, and hermit crabs and their kin in Vol. 19.3B).

The large number of taxa to a certain extent reflects the considerable geographic scope that the volumes cover. Australia is defined in the series as including all Australian territories and protectorates such as Norfolk and Lord Howe Island; Elizabeth and Middleton Reefs; Coral Sea Islands Territory; Cartier and Hibernia Reefs; Christmas and Cocos Keeling Islands; and Australian Antarctic Territory and Subantarctic islands. And while many groups represented here, especially the tropical ones, have Indo-Malaysian and Indo-West Pacific affinities, the temperate and freshwater fauna, which display a high degree of endemism, have also contributed to the high species counts.

Both volumes begin with a general introduction to the Malacostraca, followed by a historical overview of the most important contributions to Australian carcinology over the past 200 years. The bulk of the volumes, the summaries of taxonomic and nomenclatural information for all Australian Phyllocarida, Hoplocarida and Eucarida (crabs hermit crabs and allies in Vol. 19.3B; the rest in Vol. 19.3A) down to species group level, are then presented in a concise and practical format, which is clearly explained in the Editorial Preface to each volume. A brief introduction containing comments on phylogenetic relationships and other recent studies, and a diagnosis, is given for every higher level taxon down to subfamily group level. Genera and species are then listed with relevant information including type data, type locality, distribution and ecology. Primary references are given for all names including junior synonyms, while references for synonymy often refers to the latest review paper being followed, and not necessarily the original reference responsible for the synonymy.

Although the two volumes were not intended to be sources of new information, a good number of new decisions regarding synonymies, type species designations, higher classification, etc., have also been made, based either on the experience of the author, or in consultation with or based on the unpublished information of other experts, all of whom are acknowledged. This makes the present compilation even more invaluable as it is very “up to date”.

This timely pair of publications helps bring the reader up to date with the state of systematics and taxonomy of Australian malacostracans, many of which are species of economic importance, not just in Australia, but also occur in many other parts of the Indo-West Pacific, making the volumes invaluable outside Australia as well. Gaps in our knowledge of this significant group have also been identified. They are therefore a “must-have” for crustacean taxonomists and marine ecologists, as well as fisheries and aquaculture workers, and sustainable resource managers.

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