Book reviews

The Biodiversity Crisis and Crustacea

This volume is the second derived from papers presented at the Fourth International Crustacean Congress in 1998 and brings to 156 the number so far published. Volume 1 was edited by the same authors (Schram and Vaupel Klein, 1999). The pair have done a commendable job in publishing so much within 20 months. These two volumes are not the only outcomes: *Crustaceana* 72 (8), November 1999, is devoted to the Jan H. Stock Memorial Symposium held at the same time and *Contributions to Zoology* 69 (1/2), 2000, is devoted to the biology and control of sea lice. *Crustacean Issues*, Vol. 13 will publish papers on isopod biology from a satellite meeting.

The major benefits of attendance at international symposia are the contacts made with fellow scientists and discussions out of session about shared problems. Presentation of papers and posters usually serves to advertise an interest in a particular field of research, as much as to present specific results. It is inevitable at a large congress, like ICC-4 which attracted 500 crustacean biologists, that topics covered are diverse and only parts will appeal to any one individual. The same can be said of the conference proceedings.

A preface explains the volume’s genesis before the papers are arranged into seven sections: 1, invasive crustaceans and distribution; 2, ecology and behaviour; 3, toxicity and physiology; 4, reproduction; 5, larvae; 6, fisheries and aquaculture; and 7, biodiversity. The sections overlap the subthemes in the sister volume but lack the taxonomy and biogeography covered previously. The contributors’ names and addresses are listed at the end, an appendix provides titles of volume 1 and an index concludes.

The 79 individual contributions may be characterised as single species (rather than community) studies, descriptive rather than experimental, addressing regional rather than global issues, and presenting data rather than discussing principles. Very few papers actually address the issues raised in the title of the volume. In some ways this detracts from the value of the volume as a resource for crustacean research workers, but does illustrate the variety of questions this diverse and widespread taxon raises.

The exceptions take a broader overview. Van der Velde et al.’s review (pp. 3–33) of ecological impact of crustacean invaders, in particular of the Rhine River, demonstrates...
that improvement in water quality has encouraged exotic invasions. Holdich (pp. 85–97) shows a negative impact on crayfish farming from the introduction of alien crayfish to the UK. Galil (pp. 47–54) shows that migration into the eastern Mediterranean through the Suez Canal has led to higher diversity and to fisheries dependant on exotic prawns and crabs. Hansen and Richardson (pp. 799–805) demonstrate that the existence of 14 species of freshwater crayfish in Tasmania, previously treated as one, has important conservation implications. And Jamieson (pp. 627–641) discusses how fisheries can be selective agents.

Not all papers address applied issues or bring bad news. Thiel (pp. 211–226) reassures us that many crustaceans display parental (usually maternal) care. Richardson and Swain (pp. 807–816) discuss how amphipods colonised the land. Hartnoll (pp. 519–525) discusses the costs and benefits of different mating strategies in crabs. And Schubart et al. (pp. 817–830) review the value of the 16S rRNA gene in phylogenetic studies.

The editors deserve praise for the high editorial standard and conciseness of the papers, many from authors for whom English is not their first language. But as reprints or photocopies (which is how the information will be disseminated in future) the papers do not stand alone, lacking authors’ complete addresses, the book or journal name, and date of publication.

The volume will be available in libraries that have a standing order for Crustacean Issues and is already in the hands of the 500 carcinologists at ICC-4 (who paid quite high registration costs for the privilege). It is unlikely that any individual will find enough of interest in such a diverse volume to spend US$110 to obtain a copy. But those in universities should encourage their libraries to purchase it because its diversity illustrates the types of research that crustaceans support.

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Reference

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