25. Muirhead-Thomson, R. C.: Trap Responses of Flying Insects. The Influence of Trap Design on Capture Efficiency. – Academic Press, London, 1991. 287 pp.

Insect trapping is a basic field research tool for many entomologists. Over the years a great variety of treaps have been developed to suit particular species, habitats, and research requirements. In this volume a broad review of insect traps with a great variety of methods is given: light traps, suction traps, peromone-based and sex lure traps, animal-baited traps, carrion traps and many others. The various methods are compared, informative diagrams show the different patterns of response (quality and quantity). The analysis of flight response with respect to factors such as lunar cycles, sex ratio, wind and so forth is also very interesting. Unfortunately, however, the works reviewed come almost exclusively from the English language literature, and important works in other languages have been overlooked. This volume is of great interest to all those who plan a trapping programme or who have to develop methods and need to understand the interaction between the design of the traps and the specific behavior of the insects involved. K. Schönitzer & A. Hausmann

26. Vermeij, G. J.: A natural history of shells. – Princeton University Press, New Jersey, 1993. 207 pp. ISBN 0-691-00167-7.

The shell is one of the most interesting and frequently studied aspects of a mollusc. Recently there have been advances in the understanding of how shell form relates to both function and evolutionary history. Geerat Vermeij is one of the leaders in this field, and has published numerous papers on evolution of molluscs and the role of historical biogeography in the present day distributions of these animals.

This book is divided into three parts. Part I, 'The rules of shell construction', deals with the geometry of shells and the economics of having a shell. Theoretically possible shell-shapes are described and constraints on shell-shape in the real world are discussed. Part II, 'Life in a dangerous world', covers the environmental conditions that shells face in habitats from rocky shores to sandy and muddy sediments, and shell adaptations in these environments, as well as the role of predation on the evolution of shells. Part III, 'The dimension of time', shows how historical biogeography is important in understanding the present day distributions of shell traits and how they evolved, and covers both tropical and temperate / polar regions.

This book is a very well written and readable account of molluscan shells and will be of interest to both the professional malacologist and amateur collector alike. It would provide also an excellent introduction for students to the concepts of adaptation and evolution in the Mollusca. S. Ridgway

27. Schuh, R. T. & J. A. Slater: True Bugs of the World (Hemiptera: Heteroptera). Classification and Natural History. – Comstock Publishing Associates, Cornell Univ. Press, Ithaca & London, 1995. 337 pp., many figs. ISBN 0-8014-2066-0.

The Heteroptera, or true bugs, are the largest and most diverse group of hemimetabolous insects. Their structural and biological diversity is enormous. This volume provides a general summary of what is currently known about these interresting insects. The first chapters contain a general outline of the morphology and biology of heteroptera, as well as reviews on the major workers, techniqies, attributes of general biological interest, and of economic importance. Furthermore this book represents a synthesis of the current classification of the Heteroptera, which will certainly be a standard for many years. The book contains valuable keys, diagnoses and general natural history information of all Herteroptera to the subfamily and partly to the tribal level. The book contains numerous figures, both to show the habitus of the bugs or their morphological details. Especially helpful are the many scanning electron micrographs. The extensively cited literature is a key to find further information. This volume can highly be recommended to all who are interrested in bugs. K. Schönitzer

28. Otte, D.: Orthoptera Species File, 2 Grasshoppers (Acridomorpha) A, Eumastacoidea, Trigonopterygoidea, Pneumoroidea. – The Orthopterists' Society & The Academy of Natural Sciences of Philadelphia, Philadelphia, 1994. 162 pp. ISBN 0-9640101-3-5.

This catalogue constitutes the second volume of the Orthoptera Species File and is the first part of the systematic catalog to the world's grasshopper species. It includes all described species in the three superfamilies Eumastacoidea (Eumastacidae, Proscopiidae), Trigonopterygoidea, and the Pneumoroidea (Pneumoridae, Xyronotidae, and Tanaoceridae) with relevant bibliographic references. As far as possible this volume contains also data on types and their deposition. This catalogue will certainly be of great help to scientists working with Orthoptera.

K. Schönitzer

29. Ben-Dov, Y.: A Systematic Catalogue of the Mealybugs of the World (Insecta: Homoptera: Coccoidea). – Intercept Ltd., Andover, 1994. 686 pp. ISBN 1-898298-07-6.

This catalogue of the mealybugs (auf deutsch "Schmier- oder Wolläuse") of the world lists almost 2000 species and subspecies which have been described since Linnè. The mealybugs are terrestrial, plant-feeding insects that constitute the two families Pseudococcidae and Putoidae, among the 16 to 20 families of Coccoidea. This catalogue presents for all taxa mentioned extensive data on taxonomy, nomenclature, deposits of type-series, synonyms, geographical distribution, host plants, biology and economic importance. Several new combinations and new names are given. The catalogue also contains discussion on suprageneric groups in the families and provides biographical data on deceased coccidologists. Indices to genera and specie are given.

K. Schönitzer