BOOK REVIEW

Land snails of the Land of Israel. Natural history and a field guide: 1–360, 198 figures, many colour drawings, by J. Heller 2009. ISBN 978-954-642-510-2 (HB), ISBN 978-954-642-511-9 (e-book). Published by: Pensoft Publishers, Geo Milev Str. 13a, Sofia 1111, Bulgaria; www.pensoft.net; hardcover, € 70.

This book on the land snails of the Land of Israel consists of two parts, with the first part covering aspects of the natural history of land snails, and a second part being a field guide to the molluscan biodiversity of Israel. Parts of this book are based on an earlier version in Hebrew. Next to a general introduction to land snails, the natural history section is subdivided in chapters dealing with the shell, the body, activity patterns, resistance to desiccation and heat, predation, defence strategies, biogeographical aspects, and confrontations with man. Two supplements give information on the freshwater snails of the region and their biogeography, and finally a short sketch on the history of land snail research with an extensive list of references completing the first section. In the second part, the field guide lists all of the species of recent land snails considered native to the region. Each is characterised by a short description, a colour drawing and a map illustrating its distribution.

It has to be said that this book is unique, as there is no modern comprehensive work of such a high scientific standard available for the area. In the natural history section, the author arrives at quite a successful balance between introducing laymen to general characteristics and habits of land snails and focussing on the special ecological requirements of snails living under steppe- to desert-like conditions. The first chapters contain information on gastropod taxonomy, shell morphology, life styles and similar topics, but even here, the direct relationship to the area is always stressed. The chapters on activity and resistance to desiccation are exemplary, with the autecology of particular species summarised to display the adaptation strategies used by snails in withstanding uncomfortable environmental conditions. The chapters on freshwater snails (quite unusual in a book on land snails) are very useful

and owe much to the author's professional interest in the freshwater fauna of the Middle East. The final chapter on the history of land snail research, is aimed at readers not well acquainted with malacology in general and is somewhat superficial: for those with a deeper interest in this subject, other sources are needed.

Last but not least, the field guide part of the book is more a list or appendix compared to the discursive style of the first part. Recalling the complicated nomenclatural history of dozens of the species treated, presentation of more nomenclatural details in this section would certainly have raised the quality. The species-level taxonomy is debatable in several cases, but these issues are only seldom mentioned, as for example in the question of whether *Oxychilus camelinus* and *Oxychilus renanianus* actually represent two distinct species or not! In its current form, the field guide suggests a stability of taxonomy which has clearly not yet been reached in the East Mediterranean region.

In conclusion, it can be said that this book is a must not only for all students of malacology in the area, but also for those who wish to learn about the fascinating adaptation strategies of land snails in an arid environment. It should also be read as a plea for more effective conservation efforts in a region which will be probably be considerably affected by global climate change. It is therefore hoped that it will not in time become merely an illustration of vanished malaco-biodiversity.

> Dr. Eike Neubert Natural History Museum of the Burgergemeinde Bern Bernastr. 15 CH-3005 Bern eike.neubert@nmbe.ch