Book Reviews

The Non-Marine Molluscs Of The Maltese Islands.

Monografie XV, Museo Regionale di Scienze Naturali -Torino. F. Giusti, G. Manganelli & P.J. Schembri. Torino, 1995, 607pp.

Land and freshwater snails, slugs and bivalves travel relatively short distances and remain in close association with their habitat throughout their lives. Those with shells leave them when they die as testimony of their having lived in that particular location. Survival of fossil shells provides clues to the nature of habitats extant at the time and how the changes occurred over the millennia. The biology of these relatively sedentary animals is, therefore, fascinating not only to biologists and malacologists but also to palaeobiologists.

The three authors of this book have strong interests in all these aspects. They have successfully accomplished the task of bringing together all the data relevant to the land mollusc fauna of Malta. It is the first time that an animal or plant group from our Islands has received such a thorough appraisal.

The book begins with an introduction to the physical geography of the Islands. This chapter is full of information applicable to biology beyond malacology. It is also well referenced. I found the section on vegetation all too brief and little more than a list of the dominant species in the various habitats and plant communities. No information (presumably because of lack of data) is given which may help to associate various plant communities with different snail populations and species composition.

The third chapter is an overview of the work done on the non-marine (non-molluscan) fauna of Malta. I am not sure what relevance this topic has to molluscs but the chapter is full of interest and well written. It highlights the deficiencies and therefore the urgency for more studies before the relentless destruction of natural habitats continues.

Palaeogeography dominates the section on biogeography with little data on the present day situation again presumably for lack of studies.

The section on general organisation and morphology is not easy. It is written for the specialist already familiar with the terminology. Students in the early years at university should cope. Although the style is simple and lucid, a non-expert needs to refer to other texts. This problem would have been avoided had there been more diagrams and a glossary. However, structures important for the identification of the species, for example, the radula and the genitalia, are well illustrated. I found the key for the identification of species relatively easy to follow although some characters require experience for correct interpretation. Some words are unexplained, for example, "trochiform" and "pilaster". This may be a stumbling block for amateurs. The authors have not written this book for anateurs but they express the wish in the forward that the book be useful to this (larger) group of individuals.

In my opinion, the main body of the book, which deals with the catalogue of species, is a real gem. It is comprehensive. All acronyms are explained. Excellent black and white photographs illustrate all the species and in many cases these are supplemented with high quality diagrams of dissections of the reproductive system. Also, for each species, the authors deal with palaeontology, distribution, status and conservation.

This is a superb book of high scientific and publishing quality. It will not be superseded for many years to come. It is a must for the professional malacologist as well as the amateur but should a mere enthusiast look through it I doubt whether he or she would fail to find much of interest and of use. The wealth of information contained in the introductory chapters will be useful to biologists working in other disciplines of Maltese terrestrial fauna. At almost LM30, this book is not cheap but it is worth every cent.

Martin J Ebejer Associate Editor *Xjenza*

Introduction of Alien Species of Flora & Fauna Proceedings of Seminar held at Qawra, Malta

A.E. Baldacchino and A. Pizzuto, (Eds.) Environment Protection Department, Malta. 1996, 77pp.

This booklet gives an accurate and complete summary of the proceedings of the seminar. There are seven chapters corresponding to each of the lectures which were delivered by specialists in their respective field. The scope was wide and the speakers, likewise, had very varied backgrounds. They included botanists, biologists, a legal expert, a veterinary surgeon, a horticulturist and a representative of the authorities whose unenviable task and responsibility it is to formulate policies. However, the main purpose of this seminar was to air the major issues and problems, which can be caused by the introduction into Malta of a non-native type of plant or animal.

Many who attended had a vested interest in the

proceedings. Consequently, at times, objectivity was lost during the lively discussions, which were recorded and are reproduced, without modification, at the end of the booklet.

The contributions from the speakers were of a high standard but, in my opinion, two stood out as being the most informative, illuminating and pertinent. Philip Tortell defined his terminology and the concepts before giving an excellent review of New Zealand's approach to the problem of importation (accidental or intentional) of alien species. He discussed in detail the enormous economic, ecological and administrative implications. Patrick Schembri and Edwin Lanfranco, in turn, gave a most informative and objective assessment of the imported species in Malta, interspersed with occasional snippets of historical interest.

The booklet needs to be read carefully and comprehensively rather than "dipped into from time to time". This is because of the complex economic, biological and administrative problems created by alien species. The booklet provides food for thought and, perhaps, even some guidance to persons involved locally in biology, ecology, natural history, teaching of life sciences, agriculture, horticulture and the pet trade.

The Editors deserve to be congratulated for an excellent technical production of this booklet and for their comprehensive and faithful recording of the proceedings. Copies are available for the price of LM1.50 from the Environment Protection Department, Floriana.

Martin J Ebejer Associate Editor *Xjenza*

The Faber Book of Science

edited by John Carey. ISBN: 0-571-17901-0. Paperback edition first published 1996, 528pp.

If you wish to re-kindle your jaded spirit during the long hot summer months this book is for you. Professor John Carey's anthology is second to none and what is more by one whose first love is English. Carey is the current Merton Professor of English at Oxford University whilst also being a distinguished critic, reviewer and broadcaster, and the author of several books. At first glance, however, it would appear that someone with this sort of background would be inappropriate to relate the excitement of, for example, those hectic months in Edison's laboratory that culminate in the invention of electric light. Do not be fooled by first impressions as Carey's anthology has been carefully researched, in that each piece has been painstakingly selected to engender a feeling of the development of what we know as modern science today. In addition, his preparatory notes at the beginning and sometimes in the middle of a number of pieces provide a clear insight into the period of writing.

The book is arranged in chronological order from da Vinci to the Language of Genes. You will have gathered that Carey has clearly decided to include works from da Vinci onwards and not those of Aristotle (Eureka!), alchemy and astrology, considered to be history and science fiction that would require a book of their own. Consequently, good science writing from da Vinci onwards was the first requirement and secondly, and more importantly, the writing must be of the "mind-stretching" and "explanatory" type with the best usually having a mixture of both.

Carey, however, has a bias for the explanatory and argues that they best provide a "feeling of enlightenment" and divides them into three genres, namely, those that correctly interpret a piece of evidence, problem solving and clarification of a scientific concept. His three favourites to exemplify these are by Galileo, who correctly deduced that the moon's surface was rough not smooth, Darwin's solution to the problem of how a species of plant spread to barren islands in the open ocean and finally, Haldane's exposition "On Being the Right Size" demonstrating the use of simple arithmetic to dispel the idea that the 60-foot-high Giants Pope in Pilgrim's Progress could not have existed as they would have broken their thighs every time they put a foot forward.

I certainly do not live up to Carey's excellent writing style in trying to transmit to you the excitement and fun that I had when I read and re-read a number of passages from this anthology. My favourites however, just might give some inkling into the various scientists and their craft that are covered by this collection. The following titles to the passages contained therein should make some amends: Chains and Rings: Kekule's Dream, The Devil's Chaplain, Socialism and Bacteria, God and Molecules, Inventing Electric Light, The Secret of the Mosquito's Stomach, Drawing the Nerves, Black Holes, Fractals Chaos and Strange Attractors, The Plan of Living Things.

This short list is taken from a hundred or so insertions that make up this anthology, which to my mind is 500 pages to the good. It importantly includes where the original articles first appeared. This anthology should provide, for anyone with an interest in science, the chance to understand and enjoy what science is really all about.

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