

BOOK REVIEWS

Land and Freshwater Molluscs of Brazil by L. R. L. Simone published by EGB, Fundação de Amparo à Pesquisa do Estado de São Paulo, Brazil 2006. 390pp A4 Hardback, ISBN 85-906670-0-6. Price c.£90.

The non-marine molluscan fauna of Brazil is rich and varied, matching the variety of habitats that this large area encompasses, many of which are sadly disappearing under environmental degradation such as urban areas or forest clearance. This book helps to fill one of the many gaps that still exist in modern regional identification guides on land and freshwater molluscs. Its subtitle, "An illustrated inventory on the Brazilian Malacofauna, including neighbor regions of the South America, respect to the terrestrial and freshwater Ecosystems", aside from demonstrating its occasional problems with written English, sums up its aim. In the book's introduction the author states that in preparation for volume 1074 separate species of non-marine molluscs were identified from this area but he estimates that about two thirds of land and half of the freshwater species are yet to be discovered or described. Species from surrounding areas within the same ecosystem, such as the Amazon Rain Forest and river basin, are also included, as well as a section on introduced species which include the usual suspects, such as *Achatina fulica* (Bowditch), *Cornu aspersum* (L.) and alien *Corbicula* species.

The book consists of a well designed and profusely illustrated taxonomic list of the molluscan fauna, which is summarised in phylogenetic order in the useful contents, whilst there is also an alphabetic index of species and family names. In order to devote the maximum amount of space to the species illustrated, each mollusc is indicated by its name followed by keyed symbols for different information categories. The symbol for "Occurrence" is followed by an abbreviation to indicate either a country or Brazilian region where the species occurs. There then follows what the author says is an exhaustive list of references, referred to by a number (and sometimes a code to indicate the type of reference e.g. figurative, descriptive, anatomical etc) which is indeed referenced to a detailed list of over two and a half thousand references at the back of the volume. Where the species is illustrated (as it is in over 95% of cases) the photograph is normally that of a type specimen,

where these have been available, and reference is made to the holding institution along with the dimensions of the specimen. Most species are well photographed on a dark background, usually showing multiple views and often multiple specimens. Very occasionally, and most often with the smaller species, photographs lack sharpness and space issues have presumably precluded photographs of some diagnostic features, such as nepionic whorls. There are also drawings of some species where specimens were not available and the occasional small photograph depicting the live animal.

Where applicable a list of synonyms is also given. This is a very useful aspect of the book for collectors and museum staff confronted with old labels, since these synonyms are also included in the index, however users will also have to accustom themselves to the use of some updated generic names (for example *Odontostomus pantagruelinus* becomes *Burringtonia pantagruelina* (Moricand 1833)). The use of type specimens wherever possible to illustrate the species ensures authenticity, however there are many instances, for example in the case of *Gonyostomus egregius* (Pfeiffer, 1845) (where the Holotype of the synonimal *G. hybridus* (Gould, 1846) is used), when the type is faded, worn or damaged (as in this case) and a more modern specimen, where available, would have been far more useful.

Much systematic work is sorely needed on families of non-marine mollusca that have not received a substantial revision for many decades, and the author admits that further studies are necessary around species definition and the description of new species and he makes a plea for further information from workers in this area. However, whilst avoiding the potential quagmire of varieties, forms and subspecies, the book tends to come down on the side of "splitters" rather than "lumpers". For example 61 species of the large snails belonging to the *Megalobulimidae* are listed. Amongst them are *Megalobulimus auritus* (Sowerby, 1838) but also *Megalobulimus versatilis* (Fulton, 1905), which J. C. Bequaert, in his 1948 Monograph of the

Strophocheilidae (*Bulletin of The Museum of Comparative Zoology, Harvard, U.S.A.*, Vol. 100, No.1), considered a synonym of the former, since *M. versatilis* is very variable "the variation not being correlated with any other distinctive character, particularly not with the absence of a tubercle on the upper part of the parietal wall." A further example in this direction might be the inclusion of the recently described *Megalobulimus riopretensis* Simone & Leme, 1998 which was considered by at least one expert as a form of the variable *Megalobulimus oblongus* (Muller, 1774) (Tom Pain, 1999, *pers. com.*).

Despite a few possible shortcomings, which are probably inevitable in a publication of this scope, the book has much to commend it. The inclusion of families that are either not frequently illustrated, such as the Systrophiidae, or not always included comprehensively in

books which often focus on the terrestrial fauna, such as the Unionoidea, together with the comprehensive reference list, only add to the usefulness of this volume. The recent ban (early 2008) by the Brazilian government on the export of Brazilian land shells, coupled with the destruction of many former habitats (a classic example of which is the long extinct *Megaspira elatior* (Spix, 1827) whose type locality probably lies somewhere under the city of Rio de Janeiro) will increase this book's value at a time when more and more of the species illustrated are becoming less familiar to conchologists. I strongly recommend this illustrated catalogue to anyone with an interest in non-marine mollusca, as a much needed addition to the literature in this area.

Peter Topley

***Spiny Oysters: A Revision of the Living Spondylus Species of the World* by Kevin Lamprell privately published by Mrs Jean Lamprell (PO Box 933, Morayfield, Queensland, Australia, 4506) in a limited edition of 500 numbered copies. ISBN 1.921.054611, 119 page A4 Hardback. \$50 Australian (approx £34).**

The death, in 2003, of Kevin Lamprell was a great loss to Australian malacology. His publications on Australian bivalves – whether in scientific journals or the more popular, though no less scientific, two volume 'Bivalves of Australia' (vol. 1. co-authored with Thora Whitehead and vol. 2. with John Healy) – have greatly advanced our knowledge and appreciation of bivalves. In this volume, completed shortly before his death, he returns to the subject of one of his early works "Spondylus: Spiny Oyster Shells of the World" (R. Brown & Associates, 1986), however recent field discoveries, and the study of important museum collections, have enabled him to bring a far greater understanding of the group to this new book.

Introductory sections include a diagnosis of the family Spondylidae, information on anatomy and shell structure, and a detailed section on collecting *Spondylus* in the field and the subsequent cleaning of the shells for the cabinet, both drawing heavily on the author's personal experience, though I wonder how many private collectors will find 'grit blasting' with ground walnut shell relevant, or who would have access

to the necessary 'blasting cabinet'. Photographs showing the same specimen in different stages of cleaning show just what is possible though. One plate in the introductory section shows various uses of *Spondylus* by the ancient peoples of south America, and I personally would have welcomed more text relating to this, though selected references are given.

The bulk of the book is devoted to accounts of the 76 living species considered valid, no fewer than 15 of which have been described by Kevin Lamprell himself, either alone or with colleagues, while the fact that eight of these species have been described following extensive collecting by the ORSTOM expeditions in New Caledonia suggests that many more species remain undescribed.

Each species account gives details of type locality and type material; a full synonymy; information on habitat and distribution; a detailed description of the species highlighting diagnostic features and starting with the height of the largest specimen the author had seen – though for shells bearing spiky outgrowths I

would like to have seen a definition of height; 'remarks' which include comparisons between similar species and notes on nomenclature; finally there are details of the figured specimens. There is a wealth of information within these accounts, which deserve careful reading.

We are told, for example, that *Spondylus limbatus* "is commercially fished for its adductor muscle in Mexico, where it is known as the *Calle burro*, or donkey scallop". *Spondylus americanus* is "a favourite food of the large and voracious murex *Hexaplex fulvescens*, a single specimen can, in a short space of time, leave a trail of gaping and eviscerated spondylids in its wake". While *Spondylus proneri* "seems to exclusively cement itself inside dead valves of the same species. As such, it is possible that these dead *S. proneri* form the only hard substrate in the area of its habitat". Though this begs the question of where the species first settled before its predecessors shells were available. I would however query one point. Referring to *Spondylus depressus* we are told that this "appears to be confined to New Caledonia. Recent dredging by the ORSTROM expeditions only obtained one specimen from this region, while there does not appear to be any other records apart from the type specimen". While the slender evidence of two specimens would allow the statement 'only known from New Caledonia', this is, to me, not enough to suggest that the species is confined to the area. Indeed, the failure of the ORSTROM expeditions to find more than a single specimen would rather suggest that this is perhaps the fringe of the species' range and that we should look elsewhere for the main habitat. This though is simply a

question of interpretation, not of fact.

Interspersed with the species accounts are 40 full page colour plates plus one black and white plate illustrating all the species, together with a number of smaller colour plates showing living animals in situ. The layout is such that the plates appear immediately opposite the relevant text, making comparison of text and plate very easy. Multiple specimens are shown for each species – helpful for such variable shells – often showing interior, exterior and side profile to emphasise diagnostic characters. The inclusion of numerous type specimens only adds to the books usefulness, while the donation of the author's collection, including figured specimens, to the Queensland Museum has ensured their continued availability for study.

A good bibliography, glossary and full index, which clearly and helpfully differentiates between valid species and synonyms/homonyms, complete this book.

For collectors, Spiny Oysters are among the most attractive and sought after bivalves, yet the variability of their shells has led to much confusion over their identification. This book goes a long way to resolve that confusion, it has certainly enabled me to identify some previously 'problem' specimens, and can be highly recommended. As a limited edition the book will become sought after in its own right, apart from its importance as a reference work. It is a fitting and lasting part of Kevin Lamprell's significant scientific legacy.

Kevin Brown

***Seashells of the Egyptian Red Sea* by Mary Lyn Rusmore-Villaume. Published by The American University in Cairo Press 2008. ISBN 978-977-416-096-7. XII+308pp. Price £17.95 Hardback.**

The author of this book spent some 15 years living in Egypt and took full advantage of the opportunity this afforded to collect shells and, equally importantly, to meticulously record where these shells were found. The collection arising from this fieldwork now forms the basis of this book.

After a brief introductory section, the bulk of this book, some 278 pages, gives a systematic

account of over 500 species of shells "...at least 80 percent of the species I have seen in the Egyptian Red Sea". The species are arranged in standard systematic order at family level, then alphabetically by genus within the family, and alphabetically by species within the genus, nice and easy to use. Throughout this section we find double page spreads with text on the left and the associated full colour plate conveniently opposite.

For each species we are given the full scientific name, and sometimes an English common name, principal synonyms, size range based on Egyptian specimens examined, a description of the shell, details of rarity and distribution within Egyptian waters based on the specimens collected, and notes on those species endemic to the Red Sea. Finally there are helpful notes which include comments on human usage, natural predators, habitat preference, and often tips on separating similar species. The book is worth obtaining for these notes alone, for they provide some fascinating observations. *Fulva fragilis* "thrives in sewage-polluted water". *Potamides conicus* "thrives in hypersaline conditions; sometimes literally millions are found in drying lagoons". "The empty shell [of *Conomurex fasciatus*] is often found outside the caves of octopi. It may be one of that creatures favourite foods". "Both [species of *Periglypta*] seem to be a favourite food of some larger creature, perhaps the Titan Triggerfish, divers often find one intact valve with the broken remains of the other still attached". "An interesting point about *Nerita sanguinolenta* and *N. orbignyana* is that sometimes their colour is the same as the rocks on which they live. Particularly in the northern part of the Gulf of Aqaba you will find red ones on red granite rocks, black and white ones on black and white rocks, and greenish ones on greenish rocks". Specimens of *Luria isabella* from "south of Marsa Alam tend to be larger and proportionally broader than northern specimens". All very interesting and thought provoking.

The 139 photographic plates are clearly laid out and in full colour throughout. It is worth commenting that they were taken by the author herself, for they are equal to the 'professional' photographs seen in many other shell books. Most specimens are shown at life size, while smaller species are shown both at life size and in clearly indicated enlargements. There are dorsal and ventral views of gastropods, interior and exterior views of bivalves, with multiple specimens shown for variable species – ten *Fusinus verrucosus* and six *Mirapekten yaroni* for example. It is particularly pleasing that a number of juvenile specimens are included as these are seldom shown and may be difficult to identify when varying from the adult.

The book includes a number of recently described species including: *Echinolittorina*

marisrubri Reid, 2007; *Austrotrivola rubramaculosa* (Fehse & Greco, 2002); *Nassarius dekkeri* Kool, 2001; *Diplodonta bogii* Van Aartsen, 2004; and *Gari sharabatiae* Rusmore-Villaume, 2005 (which was discovered and described during the course of this study) together with many species which have seldom been illustrated or are poorly known – the endemic *Signatica mienisi* (Kilburn, 1988); *Scutarcopagia delicatula* (Selli, 1974); *Pitar spoori* Lamprell & Whitehead, 1990 and no less than three *Plesiothyreus*, all of which only add to the usefulness of the book.

The 'micro' distributions cited are of considerable interest. We are told that *Mammilla melanostoma* is "abundant in the Gulf of Aqaba and from Safaga south, not found in the Gulf of Suez ..." The absence of this species in the Gulf of Suez is interesting given its abundance everywhere else". *Tutufa bufo* is found in "the Gulf of Aqaba only". *Casmaria erinaceus* is found in "the Gulf of Aqaba and the southern regions, never in the Gulf of Suez" and similarly *Distorsio anus* is "common in the Gulf of Aqaba and the south rare in the Gulf of Suez". All too often it is assumed that species have continuous distributions, where in fact they may occur sporadically where conditions are right for the species – right depth, right substrate, presence of right food source etc. – The distributions cited here are useful reminders of this, though it would have been helpful to have had some more information about the different collecting areas cited to help interpret the distributions given. One would for instance note that the Gulf of Suez is shallower than the Gulf of Aqaba which alone could account for the presence or absence of some species.

It is very unusual to find a shell book where, as here, all the specimens featured have been beach collected after the living molluscs death. While this is welcome from a conservation point of view it does raise a number of questions. *Raeta pellicula* (Deshayes, 1855) is included with the comment "lives offshore in deeper water in fine sand or mud substrates This beached specimen is the only one I have seen in Egypt" "Very rare". The rarity rating (as indicated in the introduction) relates to the occurrence of the species as a beached specimen rather than the occurrence of the living species, which are two very different things. Similarly when considering the 'micro' distributions recorded here it must be remembered that these are based

on beached shells only and record where the dead specimens were found rather than where the mollusk was actually living. An important distinction, particularly if these distributions are used to record future distribution changes or as the basis for designating conservation areas. The reliance on dead collected material has also meant the illustration of a few poor condition specimens which are not good representations of the species. I would cite the specimen of *Bistolida erythraeensis* which appears to be decurtate, *Bursa lamarckii*, and particularly *Euprotomus aurora* Kronenberg, 2002 which few collectors will be familiar with. It would have been more helpful to have included illustrations of good specimens of these from outside the study collection for comparison alongside the poor specimens actually figured. Especially as this is a tiny minority of species.

There are a number of omissions, no chitons, no Vermetids (strange when several are shown in situ on the surface of other shells shown) and perhaps most surprisingly no *Cypraea pantherina*. Presumably the latter was not found during this study, but it is a pity that such an iconic endemic Red Sea species, which is known to occur in

Egypt (Lorenz & Hubert 1993), should be omitted from this book. Exclusions like this are a shame, particularly for local people for whom this may be the only shell book available, and one is forced to wonder how many other species found in the Egyptian Red Sea have been excluded from the book simply because they were not present in the study collection upon which it is based.

Overall the author is to be congratulated on this book. It shows the serious scientific contribution which can be made through collecting dead shells alone – even to the discovery of new species – provided that, like the author, one follows the three fold path of collecting, recording and publishing. The book will be an invaluable identification guide not just for the Egyptian Red Sea, but for the Red Sea in general. It will hopefully make the Egyptian molluscan fauna better understood and appreciated both in Egypt and further afield. It can be highly recommended. The price is very modest, for this is no cheap edition, the book is printed on good quality paper, hardback with full colour cover and dustwrapper, it represents very good value.

Kevin Brown

