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Review: Under Southern Seas: The Ecology of Australia's Rocky Reefs

By Neil Andrew (Ed.)

Reviewed by Xavier Gros

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Andrew, Neil (Ed).. *Under Southern Seas: The Ecology of Australia's Rocky Reefs*. Malabar, FL: Krieger, 2000. 238 pp. ISBN: 1-57524-141-2 (hardbound). US\$49.50

A colourful and refreshing publication about marine life of the Australian rocky reefs, this hardcover, oversize volume provides readers with comprehensive materials on the ecology of Australia's rocky reefs and their fisheries. Divided into three parts and containing 26 chapters, *Under Southern Seas* is a pleasure to the eye. Richly illustrated with around 200 colour photographs, and contributions of 32 marine biologists, Neil Andrew's work maintains a good balance between text and photos.

The six chapters of the first part (and not seven as the editor indicates in the introduction) focus on oceanography. Readers discover Australian's underwater landscapes, the major currents around Australia and their effects on marine species. Authors provide an understanding of species interaction and introduce the diversity of rocky reefs plant and animal communities. Although the underwater Australian landscape is covered in its entirety, "little is known of the processes that operate on reefs to determine where species occur and how abundant individual animals and algae are" (write Edyvane and Shepherd in chapter 5).

The next two parts describe the ecology of sea animals. The book progresses logically from 'Algae & Invertebrates' (part 2) to animals and large mammals such as 'Sharks, Fishes & Seals' (part 3). For example, Steinberg and Kendrick describe the ecology of a kelp community in chapter seven. Next, one can learn about blacklip abalone (the most abundant marine snails on rocky reefs). Chapters 10 and 11 deal respectively with the "hidden inhabitants of the rocky reefs" (i.e. octopuses and their relatives) and jellyfish. Pitt and Kingsford from the University of Sydney explain how these fragile and beautiful species move, feed and breed. Chapters 12 to 14 concentrate on lobsters from South, East and West rocky reefs, while chapter 15 reports on the ecological role of Australia's twenty species of sea urchins.

Reef sharks and rays open the third part of *Under Southern Seas*. From the well-known grey nurse shark to the mysterious "banded wobbegong" (also

known as carpet shark) and its underwater camouflage; chapter 17 is a valuable source of information for those interested in these creatures. The following chapters are more peaceful and readers can enjoy the friendly look of damselfishes or yellotail kingfishes. Lowry and Cappo write about morwongs, a fish enjoying strong popularity among underwater photographers due to its striking colours. Chapter 22 conveys information on the largest reef fish in temperate Australia: the friendly blue groper. They can live up to 50 years old and reach a size of 1420 mm. This docile fish with an inquisitive nature was an easy target for fishermen, and is now under a protection program for obvious reason. In chapter 25, Glasby and Kingsford discuss aspects of the life of planktivorous fishes. Described as the most conspicuous fishes on temperate rocky reefs, these marine species still remain to be fully discovered. The book ends with a chapter on seals and sea lions, by Shaughnessy from CSIRO.

Each chapter follows a similar pattern in which the animal behaviour, reproduction, and feeding processes are described. In addition, each chapter contains an additional document highlighting a specific species such as seastar or underwater landscape/region. Although the index is quite complete, and a thorough list of references is provided, it is a bit unfortunate that the table of contents does not list the additional documents contained in separate boxes in each chapter. Nevertheless, this publication is fairly priced and may help readers become ecologically aware and appreciate this unique marine environment.

Australian underwater seas appears to contain an invaluable source of information, knowledge, and wonders that still remain to be explored and understood in their entirety. *Under Southern Seas* does not fail to enhance our understanding of the diversity of marine flora and fauna. It may also increase awareness of the need to preserve the natural environment of these wide varieties of marine species. This extensive presentation of the rich marine life and diversity in Australian rocky reefs makes *Under Southern Seas* suitable for marine biologists and the like, but also for underwater photographers, or everyone willing to discover Australian's underwater world.

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