

Preface

In this book we have sought to summarise what is known about the life history, ecology and behaviour of organisms – from algae to seals, sharks and even whales – that live in or visit the rocky coastal regions of southern Australia. Most is known about the shallow reef life to ~20 m deep, but remarkably little about life below that. Nevertheless, we have included snippets of information gleaned from studies extending over shelf waters. We have brought together field, laboratory and fisheries information in order to present as complete an account as possible, not of every species, but of a selected few that have been well studied, and provide a flavour of the wealth of knowledge available on the rich southern marine flora and fauna. Subtidal reefs are incredibly diverse and dynamic, and our fascination grows with our understanding of the ecology and life history of just a few of the many players in the system.

Where possible, we have illustrated our accounts with current theory, but with caution because so many ideas are fashionable for a time and then become dated. It is often better to let the accounts speak for themselves, and avoid interpretation. Conceptually, we have emphasised ecology and behaviour, but have included aspects of morphology, evolution and development where they contribute to a better understanding. Much of the literature on particular groups has developed its own specialist jargon, which impedes understanding and renders the work inaccessible to all except the few elite specialists in the field. We have consciously tried to avoid jargon, and use non-specialist terms and simple language wherever possible. We have used common names of species (where they exist) and, to avoid ambiguity where different names are used, we give the scientific name when the species is first mentioned.

The book is aimed at several different kinds of readers. Firstly, our fellow marine ecologists are becoming increasingly narrow in their field of expertise, and they may wish to expand their knowledge into related or overlapping areas. This book will provide easy access into some of those fields. Secondly, students, whether under- or postgraduate, may wish to look over the fence into neighbouring gardens and appreciate some of the beauty hidden there. Thirdly, there is a growing band of interested and highly skilled amateur divers and underwater photographers who have long had access to books describing the flora and fauna of temperate waters, and now wish to flesh out their basic knowledge with a richer understanding. Lastly, fishery biologists, managers and aquaculturists may find that the natural history of the species they work with, and knowledge of their habitats, may help them in their work or in understanding the ecosystem that they help to manage or wish to have well managed.

We apologise to authors or readers whose work is not cited, or is dealt with too briefly to do it justice. In this kind of book many references must be omitted, especially in fields where the literature is profuse. Inevitably we will have overlooked studies of seminal value, omitted a reference to a local journal or thesis, or favoured work with which we are familiar. One of us (SAS) has training in algal biology from the eminent Professor HBS Womersley, as well as in zoology. The other (GJE) has very wide experience of the temperate Australian marine life, and both of us have logged many thousands of hours underwater around southern Australia, as well as broadening our knowledge in other temperate regions, such as the Mediterranean, Pacific, Atlantic and Indian Oceans.