

Foreword

The Great Barrier Reef is one of the most spectacular examples of natural ecosystems anywhere, which easily justified its inclusion as a UNESCO World Heritage Area in 1981. Arguably, the Reef is also the best managed marine parks to be found anywhere. And for Australians going back thousands of years, it has been a central part of our identity, community and economy.

Preserving this magnificent piece of Australia's natural wealth has grown in importance as our understanding and knowledge of the system has increased. Developing a multi-use park system in 1975, Australia pioneered the idea that areas as large as the Great Barrier Reef Marine Park should not be shut away, but rather should be part of a harmonious balance between preservation and use.

This approach, however, has not always been easy. As the 1970s taught us, communities can see things in very different lights. At one end there were people who wanted to exploit the resources of the Reef without regard; at the other, people who wanted to simply lock it up. Fortunately, however, Australia chose the middle ground which requires us to understand and regulate the use of the park, while keeping it in good condition in perpetuity.

As a test of that dialogue and transparency of process, the Park underwent a systematic review of its zoning at the beginning of the Millennium, which resulted in extensive consultation with Australians and the international community. Led by the Hon Virginia Chadwick AO, who wrote the Preface to the first edition of this book, the review led to the largest and most comprehensive review of a Park system anywhere.

The results of the rezoning of the Park were spectacular. As a result of that consultation and process, the Park went from around 5% of its zones as 'no take' to no take areas comprising more than 33% of the total Park area. A key feature of these

modifications to the Great Barrier Reef was that they involved consultation with thousands, and that people discussed and owned the outcome. As a result of the changes, the *Great Barrier Reef Act* passed relatively easily through Federal Parliament in 2004.

This was a miraculous achievement in many minds, but heavily depended on having the necessary science in place to inform management decisions. And in this regard, it has been important that we have built our understanding and knowledge of the reef, so as to underpin the sorts of management decisions that were typical of re-zoning process.

The world's oceans, including the Great Barrier Reef, are being challenged at an unprecedented level. The ongoing challenges of dealing with climate change, overfishing and impacts from the land continue. Like coral reefs elsewhere, new methods of extraction are also posing additional challenges for the GBR, especially for lesser known areas such as the deep mesophotic reefs. These challenges, however, make it more, not less, important to base decisions relating to resource use and conservation on sound knowledge and understanding of the complex processes involved.

In its second edition, this book on the Reef builds on the tradition of the first edition and has expanded the already amazing array of authors and expertise to tackle a number of new and current issues to do with the Reef. Stretching from the geology, biology and oceanography of the Reef, to modern issues such as water quality, climate change and socio-economics of the Reef, this book enables the reader to get a total insight to how the world's largest coral reef functions. This is a book that will be useful for school students through to experts, and has relevance for people interested in coral reefs and related ecosystems worldwide.

For these reasons, I am extremely pleased to see the publication of the second edition of the book, the Great Barrier Reef. To put it bluntly, understanding how this vast system operates is in everyone's interest. This is why books such as *The Great Barrier Reef* are so important.

Honourable Robert Hill AC*
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Defence**
Ambassador for Australia to the United Nations

* The Honourable Robert Hill was responsible for establishing the Commencement of Representative Areas Program (1998) that led to the rezoning of the GBR in 2004. He also initiated what would become the world's first national Oceans Policy just before that time, although he had moved on from Environment Department before it was implemented.