

The Great Barrier Reef

Isobel Bennett



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The Great Barrier Reef

The Great Barrier Reef, stretching 2,000 kilometres (1,200 miles) down the Queensland Coast, is the greatest natural wonder of the southern seas — a vast maze of islands, reefs and passages supporting a delicately balanced, complex and beautiful ecological system that equals any of the world's great regions of fauna.

Marine biologist Isobel Bennett's Great Barrier Reef is not the romantic, tourist brochure world of tropic nights, fairy lights, sunbathing and pleasure cruising.

It is a silent world of reality, teeming with a strange life of predator and victim, of tiny but sophisticated animal mechanisms, spectacular corals and reef shells, exotic tropical fish and multitudinous bird life.

In this first popular scientific book on the Great Barrier Reef Isobel Bennett's encompassing account of the extent, structure and ecology of the reef reveals a more enduring magic and beauty than that of the few inhabited reef islands. She explains, vividly and concisely, how the reefs were formed and how they live and grow. She describes the life mechanisms of the reef's invertebrate animals including sponges, worms, crabs, molluscs, sea stars and sea urchins; the rich vegetation and the fish and bird life of the reef zone; the extent and rare beauty of the thousands of islands, cays, sand spits, reefs and rocks that lie scattered, jewel like, in the warm, blue sea.

She outlines some of the scientific controversy that has raged over reef life and its origins, and some discoveries of the reef's secrets that have been made only recently. She discusses the reef's future — the destructive potential of the Crown of Thorns starfish, oil drilling and spillage, the dumping of silt into the clear, coastal waters, the growth of tourism and the small devastations left by single, thoughtless humans.

The author's colour photographs, maps and diagrams give lavish substance to the detailed description of the reef zone. Since all her photographs were taken without the aid of an underwater camera, it is obvious that visitors may, without the use of a snorkel or scuba gear, appreciate much of the beauty and diversity of animals and plants by merely wandering over the reefs at low tide.

Isobel Bennett writes: "All Australians should endeavour to understand one of their greatest natural assets — one of the world's truly magnificent reservoirs of tropical islands and coral reefs." This book makes that understanding possible and totally enjoyable.

Front cover: The holothurian, *pseudocolochirus axiologus* (Photograph: Reg Morrison)

Back cover: Ribbon Reefs (Nos. 2 & N. E. of Cairns

Barner,

The Great Barrier Reef

To

The Honourable Dato Seri Dr Mahathir
bin Mohamad, Prime Minister of Malaysia

and

Dato Sri Datin Paduka Dr Siti Nasmah

With Compliments

Graeme Kelleher

Chairman, Great Barrier Reef Marine Park Authority

The Great



Barrier Reef

Isobel Bennett

Photography by the Author



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DEDICATION

To the memory of Professor William John Dakin (Challis Professor of Zoology, University of Sydney, 1928-1948), who guided my first footsteps as a marine biologist, and introduced me to that fascinating realm of life 'Twixt Tide and Tide's Returning'.

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By the same author

Australian Seashores with W. J. Dakin and E. C. Pope
 The Great Barrier Reef with W. J. Dakin
 The Fringe of the Sea
 On the Seashore
 Shores of Macquarie Island
 Discovering Lord Howe Island with Jean Edgecombe

Contents

Preface	
Acknowledgements	
Chapter 1 The Great Barrier Reef Province	14
Chapter 2 Coral Reefs and Atolls	28
The Reefs of the 'Outer Barrier'	
The Shelf Edge Reefs and the Inner Shelf Reefs	
Chapter 3 Coral Cays and their Associated Features	50
Chapter 4 Continental Islands and Near-Shore (fringing) Reefs	68
Chapter 5 The Reef-Building Corals	78
Chapter 6 Coral Reef Animals	102
Chapter 7 The Mollusca—the Sea Shells	126
Chapter 8 The Echinodermata—the Sea Stars and Sea Urchins	143
Chapter 9 The Reef Fish	158
Map of the Great Barrier Reef	174
Bibliography	178
General Index	181
Scientific Index	183

Sunday 12th August, 1770: "I immediately went upon the highest hill on the Island where to my mortification I discovered a Reef of Rocks laying about 2 or 3 Leagues with out the Island, extending in a line NW and SE farther than I could see on which the Sea broke very high."
(Voyage of the *Endeavour*. James Cook)

The ten years that have elapsed since this book was written have seen a considerable growth in interest in the Great Barrier Reef, with a far greater public awareness of its value as a National Heritage.

Numerous major scientific papers have been published, including a comprehensive monograph series on the reef-building corals of the Province. The hopes expressed on page 173 have been fulfilled, for on 20 June 1975, the Great Barrier Reef Marine Park Act became law, with Proclamation on 21 October 1979, of the Capricornia Section of the Marine Park.

Controversies such as the Crown-of-Thorns, mining and oil drilling, have been waged in the media, thus the whole region of the Great Barrier Reef has been brought to public notice as never before.

With the establishment of the Great Barrier Reef Marine Park Authority, there now exists a body responsible for the management of, and co-ordination of research within the Province. With the expertise available today, and given the chance to proceed with its plans, the Authority augers well for the future.