

Preface

This book is not just about Hong Kong's reef fishes. What began as a record of, and much-needed guide to, local reef fish fauna, became testimony to the diversity and loss, neglect and hope associated with our near-shore reef habitats today. Diversity, in the high number of fish species encountered which matches that of such fully tropical areas as the Caribbean. Losses, in fish species diversity, abundance and habitat, which became evident when comparing our findings to earlier literature and the firsthand accounts of local fishers and divers. Many species, once common, are rarely encountered today, while an increasingly heavy focus on the commercial capture of juvenile fishes is clearly taking its toll. Neglect, is evident in the almost complete absence of protection or management of reef fishes or reef areas; notable exceptions are the law prohibiting the use of explosives and poisons for fishing, although such practices continue, and the Marine Parks Ordinance that went into effect in 1996, after this book project was started.

And finally, hope, that stems from the growing interest in Hong Kong's marine environment, and from recent government initiatives to increase protection of reef habitats through the creation of protected areas for fisheries management. At present, less than 1% of local waters is fully safeguarded from extractive activities, primarily at the Cape d'Aguilar Marine Reserve. A much greater commitment

to habitat protection is needed to slow, and ultimately reverse, the heavy losses of many decades. Given the rapidly growing international support for marine reserves as the best possible approach to protecting biodiversity and managing reef fisheries, we hope we will not have to wait yet another ten years to see the same approach embraced in Hong Kong.

How many reef fishes are here? We are confident we have recorded the majority of local reef-associated species, and certainly all of the common ones, adding over 100 new species records, and 6 new families, to previous records. But still we have not done full justice to local diversity. Over 325 fishes are included in this book, yet we estimate, from early literature and taking into account which families might have been underrepresented by our sampling techniques, that over 500 reef species may ultimately be known from around local rocky reefs and coral communities. We have taken but a first step in the process of documentation — a foundation to build upon.

Likewise, little is known of the biology of Hong Kong's reef fishes, particularly those with no obvious commercial significance; recent studies have begun to address this shortcoming. Yet, reef fishes have a value that goes well beyond that of food. Several local species are used in traditional Chinese medicine and many bring pleasure to snorkellers and divers who watch and photograph them. A rich, protected, reef fish fauna, therefore, has not only an intrinsic value but also an economic worth to diving operators and associated businesses.

A passion for the animals and a need for a guide to local reef fishes resulted in a proposal which was funded by the Hong Kong Jockey Club Charities Trust in 1995 — it is a credit to the Trust that this work has been possible. To further support work into this regionally little-known group of animals, proceeds from the sale of the book will fund research on local fish fauna, based at the University of Hong Kong.

To provide a background to Hong Kong's marine environment and reef fish fauna, and to understand the threats they are facing, the species descriptions that follow are preceded by a brief introduction to Hong Kong's hydrology and coastal geology. A history of local ichthyology and consideration of reef fishes in a regional context follow, then a brief introduction to reef fish biology and, finally, guidelines to the layout of the family descriptions that form the core of this book. A full listing of reef fish records for Hong Kong is appended. By showing the animals in colour, many of them alive and in the field, and describing a little of their lives, we have tried to bring them to life. Our intent was not only to document local diversity, but also to raise public awareness and appreciation for the richness that abounds along our shores, the better to protect and conserve it.