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PREFACE

For any observer of the literature on coral reef fishes it is easy to note that there have been a series of primary topics, each lasting about a decade. Back in the '70s, a lot of attention was given to competition. By the '80s, we had jumped onto the wagon of recruitment and the roles of post-recruitment mortality. And, by the '90s, the focus had shifted to the dispersal of reef fish larvae and their behaviors. This last decade was also very exciting. New discoveries, technologies, and international collaborations yielded important advances in the field of larval dispersal and macroecological patterns. We also saw the emergence of new disciplines related to social-ecological systems and the impact of human disturbances. Our scientific understanding of reef fishes also rose to an all-time high given that such information is necessary if we are to effectively protect reef systems constantly subjected to anthropogenic stressors. Just consider that during the last decade alone our population grew by about 1 billion people, which undoubtedly has and will continue to put stress on coral reefs, especially since human populations close to most coral reefs could double in size before the end of this century.

Another thing to note about the field of reef fish ecology is that about every 10 years since 1980, Peter F. Sale has delivered general overviews on the state of the knowledge, but none has appeared in the last decade. So the observation that considerable advances have happened in the last decade and that no overview has been written drove me to ask Peter whether he was planning to work on this decade's overview and whether he would let me help continue his legacy. I wrote a nice email, on which I worked him over a week, indicating how necessary this book was and how I would like him to help and that I will take care of the heavy lifting. I assumed he was already preparing for it but his response was NO; he was "done editing books on reef fish ecology". In fairness, he is supposed to be retired and his wife Dona would probably divorce

him if he were to undertake a book project like this. It is interesting, though, that Peter still publishes key papers in the field, one for this book, which is to tell you that once you get hooked on reef fish ecology you will never really retire! But also that Dona is a very enduring woman! Anyway, while Peter's response was no, he also said that I should edit the book myself. Hmmm, so I did.

In planning this book, there was only one goal in my mind: to provide the must-go-to reference regarding the ecology of fishes on coral reefs. For this, the book needed to be comprehensive: in the sense that all topics should be reviewed and in the sense that it should include all literature, old and recent. For the purpose of covering all topics, the book provides chapters related to basic ecology, large-scale biodiversity pattern and processes, human footprints, and conservation. The large variety of topics covered is reflected by the fact that this book includes 36 chapters in comparison to 19–20 included in previous books. In order to encompass old and recent literature, authors were asked to provide the historical background of their reviewed topics and then focus on recent progress. The book also includes several short essays describing controversial issues, changes in paradigms and relevant ideas that have emerged during the history of coral reef fish ecology. These topics were at some point the focus of considerable research or debate in reef fish ecology and, although they may be regarded as old or as already resolved, they contribute importantly to our cumulative knowledge of reef fishes. I reason that such topics should be included in a general ecology book on reef fishes, particularly a book that will attempt to summarize the entire field.

My other goal was for the book to be of the highest scientific standards. So, leading reef fish ecologists were asked to write the chapters. My biggest worry about editing this book alone was the extent to which I could attract leading scientists in the field. To

my surprise, one right after the other, every expert I asked, said yes. Of all experts I contacted, only three declined to participate in the book due to other commitments. I also encouraged leading authors to form alliances with other experts to ensure that a complete and fair coverage of the literature was undertaken. In total, the book is written by 57 leading ecologists in the field. I wish to clarify that while expertise was the primary criteria for selecting authors, for chapters with more than one potential expert writer, I tried to balance authors from different laboratories, universities, countries, and as much as possible age and gender. To further ensure quality, each chapter underwent peer-review, commonly by three reviewers but never fewer than two and, at times, up to five. In short, every effort was made for the book to capture the current state of knowledge on the ecology of coral reef fishes with a standard of quality that I hope will measure up to its predecessors.

While researching what to say in a Preface, I read Peter's Prefaces for the previous books and it struck me that it might have been very challenging to put those books together. On the contrary, this book moved very smoothly, and although I may have "twisted" some arms at times, all chapters were delivered on time. So I thank very much all authors for their patience, responsiveness, and for delivering chapters of their highest standard. I also want to thank the over 80 reviewers who committed their time to review the chapters and the over 40 photographers that shared their photos to illustrate this book; they are all named below. This book is an important milestone for me that I would have not been able to achieve without the great mentors I have had all along including Professor Cleotilde, Professor Brito, Professor Mariela, Professor Zapata, Peter Sale, Ross Robertson, Ram Myers, and Boris Worm, and my personal inspirations, Apito, Amita, mother and father. In closing, I am grateful to Audrey and Asryelle for their enthusiasm and endless support. I dedicate my work on this book to my daughter Asryelle with the desire that her generation gets to enjoy coral reefs, at least the ones that I got to see.

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