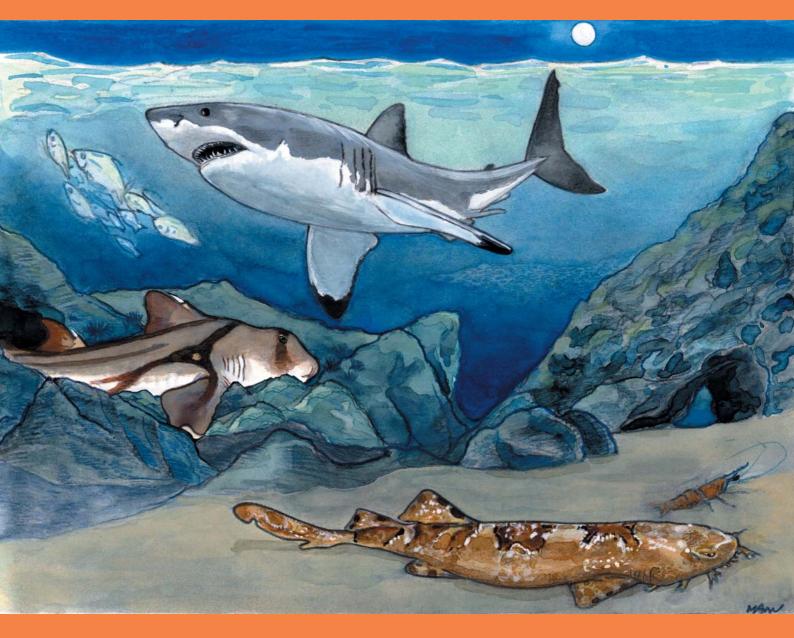


## **SHARKS OF THE WORLD**

# AN ANNOTATED AND ILLUSTRATED CATALOGUE OF SHARK SPECIES KNOWN TO DATE

Volume 2. Bullhead, mackerel and carpet sharks (Heterodontiformes, Lamniformes and Orectolobiformes)







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Bullhead, mackerel and carpet sharks (Heterodontiformes, Lamniformes and Orectolobiformes)

by

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#### **ABSTRACT**

This is the second volume of an extensively rewritten, revised, and updated version of the original FAO Catalogue of Sharks of the World. The present volume reviews all 15 families 25 genera and 57 species of living bullhead, mackerel and carpet sharks (orders Heterodontiformes, Lamniformes and Orectolobiformes), that is, the non-carcharhinoid galeomorph sharks, including certain well-established but currently undescribed species mainly from Australia. It gives accounts for all orders, families and genera and all keys to taxa are fully illustrated. Information under each species account includes: valid modern names and original citation of the species (or subspecies); synonyms; the English, French, and Spanish FAO Names for the species; a lateral view and often other useful illustrations; field marks; diagnostic features; distribution, including a GIS map; habitat; biology; size; interest to fisheries and human impact; local names when available; a remarks section when necessary; and literature. The volume is fully indexed and also includes sections on terminology and measurements including an extensive glossary, a list of species by FAO Statistical Areas, an appendix on shark preservation, and a dedicated bibliography.

#### Distribution

Authors FAO Fisheries Officers Regional Fisheries Councils and Commissions Selector SC

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It is hard to summarize the large number of people that have helped me over the course of preparing the 1984 shark catalogue and its current revision; several are no longer living, but I salute the memories of the dead as with the living, and make no distinction here. I apologize beforehand if I have forgotten anybody, which will inevitably happen.

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The 1984 catalogue owed an enormous amount to the untiring and titanic efforts of Dr Walter Fischer, formerly Marine Resources Department, FAO Fisheries Division, who inspired me to make it a far more useful work than would have been my inclination as a professional systematist. This was not entirely a painless process, but I learned an enormous amount while writing it. Special thanks go to Dr Bernard Zahuranec, of the US Office of Naval Research, for providing support for the writing of the catalogue over three years in the form of a research contract to the writer at the Tiburon Center for Environmental Studies, San Francisco State University, Tiburon, California, and for arranging funding for a circumglobal research trip in 1982. Thanks also to Dr Samuel E. Gruber (University of Miami) and the American Elasmobranch Society for support for the publication of the 1984 catalogue in the United States. Dr Cornelia E. Nauen, formerly of the Marine Resources Department, FAO Fisheries Division, was extremely helpful in the organization of the final version of the 1984 catalogue, which went through several changes in format during the past five years. Thanks also to the staff of Dr W. Fischer's Species Identification and Data Programme (SIDP) at FAO for their efforts, particularly for the fine artistic work of Emanuela D'Antoni, Pier Luigi Isola, Paolo Lastrico, and Oliviero Lidonnici in translating often difficult material from the literature as well as the writer's research drawings and maps into the illustrations in this catalogue; and to Giulia Sciarappa-Demuro for typing the final manuscript. Mrs Paula Smith, Ms Barbara Nabors, and Ms Dale White of the Tiburon Center for Environmental Studies helped in the typing and copying of versions of the manuscript and the organization of the bibliography.

The present revised Catalogue was made much easier on the writer's side by powerful personal computers, slide and flatbed scanners, OCR and digital graphics programmes, and electronic communications, which eliminated the need to spend part of the time at Rome to produce the Catalogue. A very large thanks to Dr Ramón Bonfil (Fisheries Centre, University of British Columbia), who served as grand coordinator of production and editor for the Catalogue at SIDP, as well as peer reviewer, user-friendliness tester, and contributor to the work; a massive task, but from this side not thankless! Thanks to Dr Pere Oliver, Dr Kent Carpenter, Mr Jascha Minow, Ms Michèle Kautenberger, Ms Emanuela D'Antoni, Ms Nicoletta De Angelis and Ms Guilia Sciarappa at SIDP, and Mr Fabio Carocci at FAO, for their outstanding work during various stages of the project that helped to make it possible.

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