lated drainage basins. Identification is by means of a small colour drawing of a fish, sometimes of only a spawning adult, sometimes of both sea-run and stream-resident forms, with enlarged details of key colour features. This does not allow all life stages to be identified and obviously would not work on preserved material. Tabulated comparisons of characters for the numerous subspecies would have been a useful addition to the book.

The Index is somewhat incomplete in that scientific names occur only in full – to find *aguabonita* you would have to be aware that it occurs under *Oncorhynchus mykiss* (in older literature it was known as *Salmo aguabonita*).

This book is a fascinating read and an indictment of management practices for native fishes. It should be of great interest to naturalists, anglers, and conservationists. For scientists studying these or any other fishes it is an examplar of a particular taxonomic point of view and well worth consideration.

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## Bigelow and Schroeder's Fishes of the Gulf of Maine

Edited by Bruce B. Collette and Grace Klein-MacPhee. 2002. Smithsonian Institution Press, Washington and London. Third Edition. xxxiv + 748 pp., illus. U.S. $75.

This volume is a revised edition of an earlier work, originally published in 1925 and re-worked in 1953. The latter has long been a standard reference work, as recognized in this new edition by the authors' names in the title, and of great value to Canadians on the Atlantic coast interested in fish and fisheries. The new edition was 13 years in the making and has 38 contributors, including the editors, an indication of the volume of knowledge and the consequent increasing specialisation of scientists.

The layout follows the pattern of other books on fishes, with a Foreword, Preface, Acknowledgements, Acronyms and Abbreviations (useful for the neophyte and the forgetful), Contributors, and a 7-page History of the Fishes (actually the fisheries). The species accounts follow, arranged by families in systematic order, then there are 39 distribution maps, a comprehensive 107 pages of Literature Cited, and Indices of scientific and common names. The species accounts are preceded by a general description of the family, of varying length and depth of treatment. The area of coverage includes parts of New Brunswick and Nova Scotia.

The Contents serves as a checklist for the 252 species in 118 families covered by this book, 33 species more than the 1953 version.

Species accounts comprise common and scientific names, other common names, page of the account in Bigelow and Schroeder (1953), and an illustration. Text headings may vary within each account but can include Description, Meristics, Color, Size, Distinctions, Habits, Food, Feeding by Larval and Juvenile Stages, Feeding Behavior, Predators, Parasites, Reproduction, Spawning Season, Spawning Behavior, Early Life History, Age and Growth, Larval and Juvenile Distribution, Larval and Juvenile Habits, General Range, Occurrence in the Gulf of Maine, Migrations and Movements, Importance, Stocks, and Management, among others. Not all species have entries under all these headings as some, for example, do not migrate or do not have commercially important stocks. Some accounts are quite short, less than a page, while the Atlantic Herring, for example, runs to 16 pages.

Common names are capitalized above the illustration at the beginning of each species account but not in the text. Traditionally fish common names are not capitalized, unlike those of birds and certain other groups, but arguments have been advanced to start this (Nelson et al., 2002). Certainly Atlantic Cods would clearly mean more than one individual *Gadus morhua* while Atlantic cods could mean several different cod species found together in the Atlantic Ocean.

Minor errors are inevitable in a work of this length with numerous authors, e.g. Labrador is misspelled on page 665, but the most serious one is the orientation of illustrations of right-eyed flatfishes. Convention has it that fish illustrations have the head on the left but this does not work with these flatfishes. Their left eye "migrates" during development so that both eyes are on the right side of the fish. Their "belly", bottom or blind side is actually their left side, not the ventral surface. To view the uppermost, pigmented and eyed side of these fishes, the head must be on the right. The illustrations have been mirror-imaged in this book and represent a body form that does not exist (note that the families of left-eyed flatfishes correctly have images with their heads on the left; and that some right-eyed species very rarely have left-eyed individuals).

There is no key to families, often a useful way of narrowing down possibilities for those new to an ichthyofauna. There is a key to Percoidei, the largest suborder of perch-like fishes but this again presupposes some knowledge of fish classification. The keys to species within families do not give the page number of the description so a lot of page turning is needed to locate the species account in speciose families; luckily most families have relatively few species. In addition the keys give the common name and the species are arranged alphabetically by scientific

name. Even more confusing is the key to sculpins so-named (actually the superfamily Cottoidea) which includes the single member of the poachers (Agonidae) , a fathead sculpin (Psychrolutidae) and a sea raven (Hemitripteridae) as well as the sculpins (Cottidae).

The systematic treatment is very up-to-date and careful delving can reveal new records for Canadian waters where the Gulf of Maine overlaps into New Brunswick and Nova Scotia. Occasionally some points may be questioned – why is *Scomberesox saurus saurus* listed as a trinomial? Another subspecies exists but its distribution is not in the area under consideration.

The end plates give an overview of the geography of the Gulf of Maine but omit some salient features. There is no border between the USA and Canada in the sea, Halifax is not marked but is mentioned in illustrations and capture localities, and such places as Georges Basin are referred to in the text but not indicated.

Canadian scientists will need to refer to this volume as it corrects identifications in Scott and Scott's (1988) *Atlantic Fishes of Canada*. It also provides a review of work done on many species since the mid-1980s and on the changes that continue to occur in the northwest Atlantic fish populations – Atlantic Cod are no longer "Canada's single most important commercial species", for example.

This book gives a thorough treatment of the biology and systematics of these fishes, many of them familiar to residents of maritime Canada, and is a most significant addition to our knowledge of North American fishes.

**Literature Cited**

**Nelson**, **J. S.**, **W. C. Starnes**, and **M. L. Warren**. 2002. A capital case for common names of species of fishes – a white crappie or a White Crappie. Fisheries 27(7):31-33.

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## A Spring Expedition to the Falkland Islands and Antarctica

By Diantha L. Knott. 2002. Masalavita Video Productions, Oregon. 55 minutes VHS Video U.S. $30 + $5 Shipping.

This is a video of an early summer (November, the equivalent to June in the north) voyage of 2000 plus miles to the Antarctic area at the south end of the Atlantic Ocean. The video covers the Falkland Islands and the Antarctic Peninsula, but not South Georgia and the South Orkneys or the Pacific side of Antarctica. The tape comes with two photocopies of maps showing the itinerary.

The video quality and photography are very good. The images are crisp and have a good depth of field. The colours are true. The sound is well balanced and clear. The narrator's voice is gentle and relaxing, but not soporific. There is no musical background. Instead the sea and wind fill the spaces between the limited, often simplistic, narration.

The video covers most of the major Antarctic species of bird and mammal. I counted about two dozen named species of bird and five species of mammal. The two species of Antarctic flowering plants were not mentioned. This is a good introduction to this region for the potential eco-traveller. The main characters are the five species of penguin. These birds are natural actors and the footage will be a great delight to penguin fans. With the other birds and mammals covered, this video gives a great sense of this remote region. The rocks, ice, scenery, colours, and weather are artistically portrayed and provide the viewer with a good understanding of the land and wildlife. Also, the videographer has included some footage of life on a cruise. Shots of people landing, walking, eating, and frolicking are included. I estimated this occupied about 15% of the film and thought some of these scenes were too long (two minutes of watching people eat at a BBQ was 1.75 minutes too long!).

The ardent naturalist may be somewhat more frustrated. A number of birds included in this film were not identified (e.g., White-chinned Petrel, Grey-headed Albatross). Some others were only given a generic identification (e.g. shag, skua) and some that were mentioned were not seen (e.g., the storm petrels). Some identifications are delayed for up to several minutes (most notably with Adelie Penguins). Overall, I think about 40 bird species is a reasonable tally for such a cruise, with perhaps a few more on a good trip. Most noticeably there were several "standard" birds that were completely missing (Royal and Wandering Albatross over the ocean, Turkey Vultures in the Falklands). The narrator does not give any information on abundance. As the footage on the Southern Fulmar is less than that of an Antarctic Petrel a viewer might infer that fulmars are the rarer species. As the itinerary goes through the breeding area of the fulmar, they will be abundant. In contrast, the petrel breeds at some distance from the peninsula and are likely to occur in very small numbers.

I thought that a dozen species of mammal are more likely to be seen than the five depicted in the video. Especially missing were the whales; only a Killer Whale from the pod north of the Lemaire Channel is shown. The narrator does not mention the common species (Minke, Humpback) or the dolphins and does