

Book Reviews

ZOOLOGY

Fish of Alberta

By Amanda Joynt and Michael G. Sullivan. 2003. Lone Pine Publishing, Edmonton, Alberta. 176 pages. \$18.95. ISBN 1-55105-191-5.

This book is a popular account of the 54 established and 11 more rare fishes of Alberta. It consists of Acknowledgements, Foreword (by J. S. Nelson, the expert on fishes of Alberta), Reference Guide, Introduction, Keys to the Fishes, Species Accounts, Size Comparisons, Other Alberta Fishes (the rarer species), Glossary, Checklist, Selected References, Further Information, Index of Scientific Names, Index of Common Names and About the Authors. These are mostly self-explanatory. The Reference Guide is a colour pictorial summary of each of the 54 species while Size Comparisons show the fish in relation to a loonie or a page in the book. The Glossary, Selected References and Further Information sections are short but give some additional sources and explications of terms. Schreckstoff is misspelled and the term "alarm substance" is more user-friendly. Laterally compressed is a tautonym, as compressed means flattened from side to side. For a more complete listing of terms used in ichthyology see www.briancoad.com.

The ichthyofauna includes 16 families with minnows (Cyprinidae) having 17 species, 3 introduced; trouts (Salmonidae) 16 species, 6 introduced; and suckers (Catostomidae) 7 species. Other families are lampreys, sturgeons, mooneyes, bullhead catfishes, pikes, trout-perches, cods, livebearers (2 species introduced to the Banff hot spring marshes), sticklebacks (1 introduced), sculpins, sunfishes (introduced), perch and cichlids (1 introduced to the Banff marshes).

The Introduction has information about identifying fishes, the lives of fishes, adaptations to life in water, the underwater world, drainage basins of Alberta, top Alberta fishwatching sites and fishwatching ("not yet a popular sport"), history of fishes and conservation issues. Key words are in bold text and some, but not all of these, have illustrations. One illustration, of Bull Trout and Walleye larvae used to explain reproductive strategies, is confusing in that these two distinctive species have the same larva illustrated.

The Species Accounts comprise two pages for each established species, in landscape orientation. This requires some twisting for reading introductory and other sections that have a standard orientation. Nonetheless, the landscape arrangement enables the fish illustrations to spread across the broadest reach of the page. Each Account has an introductory section,

Viewing Tips (localities and habitats where the fish can be seen), Feeding, Spawning, Other Names, Did You Know? (an anecdote or interesting factoid), ID (identification characters), Similar Species, Status, Habitat, Length and Weight, the colour illustration and a colour, shaded distribution map.

Generally, the book is a good, popular treatment of this fish fauna written in a readable style that is not as dry as more scientific accounts. Some errors occur, perhaps as a result of this style or perhaps from the more pedantic viewpoint of the reviewer; e.g., in the Longnose Sucker account pharyngeal teeth are said to be in the mouth which could mislead the reader into thinking these throat teeth are readily visible.

The definition of "fish" and "fishes" is given on page 10 in the Introduction, fish being a single individual or more than one individual of a single species while fishes refers to more than one species. Curiously, the book is wrongly titled. The Reference Guide has a colour code for groups of species but since these colours are various shades of green and blue, they do not lend themselves to a ready means of locating species groups.

The fish illustrations are positioned with the head to the right, not a problem for most users, but somewhat disconcerting to those familiar with most fish books where traditionally the head faces left. The colour illustrations lack the details that can be included on line drawings, so certain critical features are not always visible. The illustrations have streaks of white meant as highlights but in some specimens look like a colour pattern.

Scientific names are given for all species and are accurate and, although *Stizostedion* may now be correctly *Sander*, the decision to leave it as the more familiar North American genus is probably apposite for information retrieval. Conversely, the Arctic Lamprey is given its newer name, *Lampetra camtschatica*, which is less well known than the older version, *L. japonica*, which is not mentioned and would inhibit search for information in other books. Common names are standard and include the Northern Pikeminnow, although its former name Northern Squawfish was not so much an "unpopular" designation as a derogatory one.

Despite the minor criticisms outlined above, this book is a good introductory guide to Alberta's fishes. Alberta seems well served in this respect with Nelson and Paetz's earlier book (1992). The older work provides a more detailed account of the fish fauna and

may be more suited to the serious student of Alberta's fishes – there is an extensive list of references (24 pages compared to only 11 references in Joynt and Sullivan). The book reviewed here has accounts for 65 species while Nelson and Paetz have a more complete analysis of 59 species and a further 29 species recorded as rare or doubtful for Alberta.

Literature Cited

Nelson, J. S., and M. J. Paetz. 1992. *The Fishes of Alberta*. The University of Alberta Press, Edmonton and the University of Calgary Press. 2nd Edition, 437 pages.

BRIAN W. COAD

Canadian Museum of Nature, P.O. Box 3443, Station D, Ottawa, Ontario K1P 6P4 Canada

Sharks

By Andrea and Antonella Ferrari. 2002. Firefly Books, Toronto, Ontario. 256 pages. \$24.95. ISBN 1-55209-629-7.

Sharks are the most popular of fishes for publications as people seem to have a fascination for organisms that can eat you (although more sharks are killed by people than the reverse). This is one of many that have appeared on this topic.

Despite its title, the book covers the appearance and behaviour of 120 species of sharks and rays. Coverage is therefore not complete as sharks and rays number over 1000 species (as the Foreword states), the aim being to give an overview of the main groups by selecting typical and unusual or fascinating species. Four species of rabbitfishes (out of about 31 species in the Chimaeriformes) are also mentioned.

The book has an Introduction of 77 pages with descriptions of anatomy and biology. Three pages are devoted, deservedly, to explaining the ampullae of Lorenzini, an important feature of shark anatomy and biology, first discovered by an Italian scientist in the seventeenth century and, surely by coincidence, this book has Italian authors and is a translation from an Italian version. This is followed by how to avoid sharks, how to assist them (by not eating them or buying shark teeth), marine organisms more dangerous than sharks (mostly venomous sea snakes, cone shells, sea urchins, jellyfishes and fishes, but also fish that bite divers enthusiastically), and personal accounts of shark encounters. The Entries section describes the sharks, rays and rabbitfishes (153 pages), the Appendices (17 pages) give a Classification of Sharks (but not rays or rabbitfishes), an Index, Bibliography and Websites (each a page long), and Photographic Credits. The websites "Catalog of Fishes" and "FishBase" are not quoted, although these give entry to much of the names, biology and literature on sharks and rays world-wide for the more serious student. There are pictorial keys to

the shark and ray orders but not any for families or species so the book cannot be used, nor is it meant, as a field guide.

The Entries section describes each selected species, allotting half to two pages per species. There is an annoying symbol system at the top of each account to indicate when the shark is active and its danger level with respect to humans. This information could

easily have been included in the text. A distribution map is given but at 1 × 2 cm can only convey a general impression of where these sharks and rays are found. The map for the Bluntnose Shark is inaccurate, for example, showing it in Canadian Arctic waters when it was first caught at its northern limit in Nova Scotian waters in 1989 (Gilhen and Coad 1991). The common and scientific names are given but the