Title

A Field Guide to the Fishes of the Salish Sea is a portable work of art

Journal

Environmental Biology of Fishes, 106(12)

ISSN

0378-1909

Author

Bizzarro, Joseph J

Publication Date

2023-12-01

DOI

10.1007/s10641-023-01506-x

Environ Biol Fish
https://doi.org/10.1007/s10641-023-01506-x

BOOK REVIEW

A Field Guide to the Fishes of the Salish Sea is a portable work of art

Theodore W. Pietsch, James W. Orr (illustrated by Joseph R. Tomelleri): *A field guide to the fishes of the Salish Sea: Puget Sound and the straits of Georgia and Juan de Fuca, Washington State and British Columbia.* Chatwin Books, 2023

Joseph J. Bizzarro

Received: 28 November 2023 / Accepted: 12 December 2023

A Field Guide to Fishes of the Salish Sea contains beautiful, meticulous illustrations, descriptions, and biological information for all 260 fishes that have been documented to occur in the Salish Sea. You may be asking, "What is the Salish Sea?" It is the marine, inland region, officially recognized in 2009, that extends from southern Puget Sound, Washington, to the northern Strait of Georgia, British Columbia, including the Strait of Juan de Fuca, a surface area of ~ 18,000 km^2. The Salish Sea comprises a great diversity of habitats for fishes, ranging from oceanic to deep sea (maximum depth 732 m), and including salt marshes, mudflats, and seasonally variable brackish waters. Additionally, the Salish Sea is readily accessible to a large surrounding human population, providing a receptive audience for this book among the many amateur naturalists, fish enthusiasts, educators/academics, and recreational fishers who live and vacation in the region.

J. J. Bizzarro (✉)
Fisheries Collaborative Program, Cooperative Institute for Marine Ecosystems and Climate, University of California, Santa Cruz, 110 McAllister Way, Santa Cruz, CA 95060, USA
e-mail: joe.bizzarro@noaa.gov

J. J. Bizzarro
Fisheries Ecology Division, Southwest Fisheries Science Center, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, 110 McAllister Way, Santa Cruz, CA 95060, USA

The newly available *Field Guide* was abridged and slightly modified from the recently published *Fishes of the Salish Sea: Puget Sound and the Straits of Georgia and Juan de Fuca* (2019), a universally acclaimed instant classic (e.g., Quinn 2020; Sidlauskas 2020; Bodensteiner 2021) that stands proudly on my bookshelf next to other heralded regional ichthyological works such as *Fishes of the Gulf of Maine* (Bigelow and Schroeder 1953) and *The Sea Fishes of Southern Africa* (Smith 1949). The *Field Guide* reduces the hefty three-volume hardcopy set to a manageable size without losing any of the documented fish species. Its cover art, a rainbow of scale patterns of different fishes, is visually compelling. Although the authors refer to the book as "small and light-weight," that is more accurate in comparison to the hardcopy tome from which it is derived than to similar faunal guides that cover the Salish Sea (e.g., Lamb and Edgell 2010; Kells et al. 2016). Its overall size and total number of pages (372) are similar to these other softcopy books, but the paper is considerably thicker, resulting in a bulkier field guide.

The publication of the *Field Guide to the Fishes of the Salish Sea* was a practical necessity, since the larger work from which it was derived is too cumbersome, ornate, and expensive to use for use in the field. It begins with an introductory section that follows the structure of the larger work, providing background information on the fish fauna, its nomenclature, taxonomic classification, and anatomical considerations, and notes about the creation

Published online: 23 December 2023

of the illustrations. Family accounts are distinct from and precede species accounts, each of which encompasses a single page. These accounts are headed by an illustration of the relevant fish species, and in some cases a second illustration displaying a different color morph (i.e., salmon) or a magnified duplication of the fish's head. There are four sections for each species account. A "Recognition" section provides important characteristics for identification. Maximum size (Size), geographic range and occurrence within the Salish Sea (Distribution), and habitat characteristics (Habitat) also are provided. Each species gets the same treatment, regardless of their relative abundance or (fishery, ecological, or societal) importance.

There are many positive attributes of the *Field Guide to the Fishes of the Salish Sea*, in addition to those previously noted, that make it a desirable purchase for amateur and professional ichthyophiles. A quick glance is all the reader needs to realize that the artwork included in this book is exquisite. Positioned above each species account, Tomelleri's drawings shine, appearing in such exquisite detail and color that they can be mistaken for photographs; however, this field guide is much more than a collection of beautiful illustrations. The subject material was thoroughly researched by two distinguished ichthyologists with a deep knowledge of the Salish Sea fish fauna. As a result, the information contained in the species accounts is more scientifically accurate and informative than that of most guides. The fishes selected for inclusion reflect those with at least one documented record of a juvenile or adult (not larval) form based on an exhaustive review of prior faunal accounts and museum records. By including all potentially encountered species and treating them equally, the authors help to advance knowledge of the lesser-known species (e.g., snailfish, pricklebacks). Though some could argue this is at the expense of fishes that are more likely to be encountered or of greater interest, such information is not necessary for a field guide and can be ascertained from myriad other sources, including the three-volume hardcover set. Fishes are mapped back to the "Families" section of the *Field Guide* through the inclusion of generalized illustrations at the bottom of each species account. This section provides useful, interesting details on distinguishing characteristics of the relevant fauna and biological and fisheries notes. Given the high quality of its content and illustrations, this field guide is reasonably priced at $36 USD.

There are also, unfortunately, some weaker aspects of this work that keep me from holding it in the same esteem as its antecedent. The primary goal of a field guide is to enable a non-professional to readily identify species of a particular taxon or habitat; however, I believe this will be difficult to easily accomplish for some taxa, given the content and arrangement of this guide. There are no instructions concerning its use for identification purposes and the useful, family-level key that was included in the larger work was omitted. Additionally, separating the family descriptions from the species accounts adds unnecessary confusion by making the reader thumb back through the guide for the pertinent information instead of having it readily available. The drawings contain no reference to anatomical features that are important for identification, and an accounting of similar species is only rarely included in the "Recognition" sections. Instead, the guide relies mainly on the illustrations and descriptive text, which is a difficult way to identify morphologically similar species, such as the many rockfishes, sculpins, and pricklebacks that inhabit the Salish Sea. Similarly, the glossary is helpful, but such information is better represented through visual representation in a field guide. Although the drawings are beautiful, they represent the static depiction of a general case, whereas fish coloration often is highly variable among individuals and across ontogeny. Furthermore, the live coloration that is depicted fades quickly once a fish has been captured or killed. The phylogenetic arrangement of families and species is common, but there is considerable habitat differentiation among Salish Sea fishes. This could have been captured if not in the arrangement of species, then perhaps in a general table or a graphic at the bottom of each species profile to quickly eliminate certain species that look morphologically similar but exhibit different habitat use (e.g., eelpouts and gunnels). Finally, the book could be better organized to reduce the large amount of blank space by providing illustrations as multi-species plates or by slightly reducing the large font size and including more than one species per page.

In conclusion, *A Field Guide to the Fishes of the Salish Sea* is an excellent addition to the ichthyofaunal guides of the Pacific Northwest and British Columbia. The artwork alone justifies its list price,

and it contains a wealth of information to pique the interest and expand the knowledge of fish enthusiasts from the focal region and beyond. Pietsch and Orr's *Field Guide* fits nicely among two other guides that cover the regional ichthyofauna, *Coastal Fishes of the Pacific Northwest* (Lamb and Edgell 2010) and *A Field Guide to Coastal Fishes* (Kells et al. 2016) but does not obsolete either book. Instead, they each have complementary strengths. For instance, Lamb and Edgell (2010) include many in situ photos and provide behavioral information that make it ideal for divers, whereas Kells et al. (2016) include dichotomous and pictorial keys and depictions of different color morphs that assist in reliable field identification. If your main goal is the proper identification of fishes you encounter in the Salish Sea, then you will probably want to reference more than one of these field guides; however, if you are interested in gallery-quality illustrations and interesting, exhaustively researched biological and descriptive information, you will not regret the purchase of *A Field Guide to the Fishes of the Salish Sea*.

References

Bigelow HB, Schroeder WC (1953) Fishes of the Gulf of Maine. Fish Bull 53:1–577

Bodensteiner L (2021) Fishes of the Salish Sea: Puget Sound and the straits of Georgia and Juan de Fuca. BC Stud 211:145–146

Kells V, Rocha LA, Allen LG (2016) A field guide to coastal fishes. John Hopkins University Press, Baltimore, MD

Lamb A, Edgell P (2010) Coastal fishes of the Pacific Northwest, 2nd edn. Harbour Publishing, Madeira Park, BC

Quinn TP (2020) Fishes of the Salish Sea: Puget Sound and the straits of Georgia and Juan de Fuca. Q Rev Biol 95:70–71

Sidlauskas BL (2020) Fishes of the Salish Sea: Puget Sound and the straits of Georgia and Juan de Fuca. Northwest Nat 101:139–141

Smith JLB (1949) The sea fishes of Southern Africa. Central News Agency Ltd, Johannesburg, South Africa