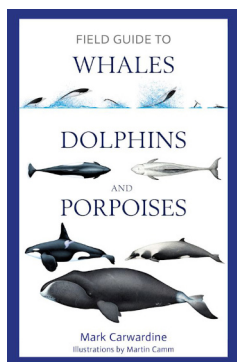


Field Guide to Whales, Dolphins and Porpoises

By Mark Carwardine. Illustrations by Martin Camm. 2022. Bloomsbury Wildlife. 288 pages, 29.00 CAD, Paper, 20.99 CAD, E-book.

The *Field Guide to Whales, Dolphins and Porpoises* is a nice little book that provides a wealth of handy information for identifying cetaceans in the field. It has many of the typical features that you would expect from any field guide: range maps, species descriptions, and a drawing of each species with key characteristics for identification. The author, Mark Carwardine, is a zoologist, wildlife photographer, and science communicator who has written more than 50 books on wildlife, including the precursor to this book, *Handbook of Whales, Dolphins and Porpoises* (Bloomsbury Wildlife, 2020). Unlike the precursor, which is a larger book that is much less portable in the field, this field guide is smaller and more portable.



Field guides are key tools for field biologists to help them with species identification. There are many things that biologists look for in a field guide, including: 1) portability and ability to withstand field conditions, 2) organization, and 3) accuracy and ability to guide the user to the correct species identification. Small books with durable covers and pages are key to satisfying the first requirement, but this is then traded off against the third requirement. There is often far more information available that could be included in a field guide to aid in species identification and provide background that many biologists would find interesting, but authors often must sacrifice relevant information for the sake of space. Organization may seem like an odd component to include in the list above, but a logical organization structure helps readers find information quickly. For example, species might be listed alphabetically, but is this done based on common name or scientific name? If using the common

name, which common name, because there are often multiple common names for the same species? Worse still, sometimes multiple species have the same common name. Many biological field guides choose to order alphabetically first by a higher order of taxonomy, like family, and then within family, and then by either the species' scientific or common name. Some field guides do break this mould, though.

So, is *Field Guide to Whales, Dolphins and Porpoises* the one book to bring on a trip, to use up valuable room in your field bag, or perhaps is there a different book you should select? I will not be providing suggestions for other field guides: I leave that up to the individual user. But I will provide a breakdown of this field guide based on the above criteria. Note that in my own research, I mostly study Arctic marine mammals, so I draw heavily on my knowledge of these species when assessing the accuracy of the content.

Portability. This field guide is relatively small ($22 \times 14 \times 1.5$ cm, 288 pages), so clearly quite portable. It is a paperback with a glossy finish, and pages are slightly thicker than standard paper. This book could withstand repeated use in dry conditions, but would not stand up in moist field conditions. I would not recommend it for use in an open-hulled boat, and if brought out on a boat at all, it should stay indoors. For those studying whales from shore, this book could be a good choice, assuming it isn't foggy or raining.

Organization. I found myself questioning the organizational strategy of this field guide frequently. The baleen whales are lumped together, as are the toothed whales, and then porpoises. It would have been good to label these larger sections more clearly, and perhaps comment on the ordering in the introduction to the book. For example, Sperm Whales appear right after Humpback Whales, and other than a small label on the bottom denoting a change in taxonomic families, there is little way to tell that there has been a large jump in taxonomy, from baleen whales to toothed

whales. Within these larger groupings, sections are labelled based on taxonomic family, but the order is not alphabetical. The species accounts within the sections for each family also follow an unknown organization, which is not alphabetical based on either species or common names. While all of this might seem like too much attention to detail, it does mean that readers have to spend more time flipping pages to find the species that they are looking for.

Accuracy. Overall, this guide is filled with a lot of very useful information. One of the most heavily used features of any field guide are the species illustrations, and the illustrations in this guide are excellent. They point out key features such as body size and shape, colour patterns, and dorsal fin and fluke (tail) shape for identification of the species in the field. A nice addition is the description of blow (water vapour expelled by the whale during an exhale), which can aid in species identification of cetaceans at a distance just based on the size and shape of their blow. The range maps are also good, although some provide more details than others and often lack consistency in terms of colouration and level of detail. For example, Bowhead Whales have four populations (or stocks), and all of these are colour-coded in the map. Meanwhile, Belugas have at least 18 populations, yet the Beluga range is shown as a single population with a single colour on the range map. One suggestion would be to highlight seasonal changes in the population range, as is typically done in field guides for birds. The level of detail within individual species accounts also varies. Many species have one or two pages, as would be expected for most field guides, yet certain more common or popular species, including Killer Whales and Humpback Whales, have many pages. Killer Whales, for example, have 14 pages devoted to them, which seems excessive. The International Union for Conservation of Nature (IUCN) status of each species is listed, and additional population-level status is also provided for some species. Note that the guide's introduction states that only the IUCN status is provided, but clearly this is

not the case. For example, Belugas are listed as Least Concern by IUCN, but then the Cook Inlet population is listed as Endangered. I believe this status for the Cook Inlet population is specific to the United States *Endangered Species Act*, rather than IUCN. It seems odd to list one population with a more severe status, but not others, such as the St. Lawrence Estuary population of Belugas in Canada, which is listed as Endangered under Canada's *Species at Risk Act*. Similar examples can be found in multiple other species accounts, including Killer Whales, where the Strait of Gibraltar population is listed as Critically Endangered, but the southern resident Killer Whale population of the North Pacific is not listed, despite being Endangered in both the USA and Canada.

Two other areas could have used strengthening in this book. First, there are quite a few technical terms that remain undefined. The book has a glossary, so the author clearly attempted to deal with the jargon to some extent, but, for example, in the Killer Whale sections terms like 'resident' and 'transient' could have been more thoroughly explained. Also, the subject of acoustics is entirely missing. Marine mammals are some of the most vocally active species on the planet, and their vocalizations can often be a key feature in identifying them; many field-naturalists carry a hydrophone with them on the water for species identification. Including a sentence or two about common vocalizations would have been a good addition. Many bird field guides include short descriptions of vocalizations for each species.

Despite these criticisms, *Field Guide to Whales, Dolphins and Porpoises* is a wonderful resource for people to use in the field for identification of cetaceans, and also for reading at home to learn about the diversity of these interesting marine mammals.

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