
LITERATURE CONNECTIONS FOR THE OPEN OCEAN

Note on grade levels: A range of grade levels is usually given, to reflect both interest level and reading level. Most books can be enjoyed by a wide age range, although younger children must be read to while older children can read alone.

Ballard, Robert D. Exploring the Bismarck: The Real-Life Quest to Find Hitler's Greatest Battleship. Scholastic/Madison Press, 1991. Gr. 5 to Adult.

The author, a well-known marine geologist and deep-sea explorer, has here interwoven the tale of a bloody sea battle of World War II with the equally exciting account of the search for the sunken battleship Bismarck fifty years later. Even reluctant readers will be interested in the efforts to examine a wreck 15,000 feet deep, and will be able to comprehend the technology involved in getting near enough to it to photograph details. The battle and its personnel seem to outweigh the later discovery in emphasis, but there is still enough detail about the depth of the ocean and the geological formations of the ocean floor to be of interest. Photographs are many and clear, and include identified details of ship construction as well as of changes caused by fifty years' exposure to the sea. Not as well written or as informative as the author's book on the Titanic (see below) but this will attract a type of reader who might otherwise be uninvolved.

Ballard, Robert D. Exploring the Titanic: How the Greatest Ship Ever Lost Was Found. Scholastic/Madison Press, 1988. Gr. 5 to Adult.

A clear and exciting account of the sinking of the "unsinkable" Titanic, and the later discovery and examination of it as it lay in its ocean grave 12,460 feet down. Many photographs and diagrams bring to life the accounts of the Titanic as it was built and launched on its first and last voyage; many photographs and diagrams also clarify and make immediate the recounting of the technological marvels allowing close inspection of the Titanic's resting place, and thence allowing a reconstruction of what must actually have happened. There is a detailed description of what was seen as the specially-

built submarine dived, as well as what was "seen" by the remote-controlled underwater robot -- layer by layer, the reader is told of ocean inhabitants living at different depths. There is also considerable discussion of the effects of deep ocean conditions on the sunken ship and its contents. An irresistible book, almost guaranteed to draw in even a reluctant reader, and containing much material for class discussion.

Crespo, George. How the Sea Began: A Taino Myth. Clarion, 1993. Gr. 1-6.

This myth, collected in the time of Columbus, tells of a long-ago age when there was no sea encircling the land. The grieving parents of a skilled hunter drowned in a hurricane put his weapons in a gourd, which then magically provides food during a time of hunger and scarcity. Mischievous, greedy boys upset the gourd, out of which spills the sea, with all its plenty of fish and other living things. Full of drama, action, grief, and humor, this tale is an excellent read-aloud.

Darling, James. Wild Whales. West Coast Whale Research Foundation, 1987. Gr. 3-6.

A pictorial study of humpbacks, gray whales, and orcas, together with some general information on whales. The text is easy to read, mainly one-paragraph captions for the many excellent color photographs of whales, their habitats, and whale behaviors. A good choice for a first introduction to whale life, or for those needing material on an easy reading level, or for children with limited English proficiency.

Hare, Tony. Polluting the Sea. Gloucester Press, 1990. Gr. 4-7.

An easily read and understood introduction to a large topic, this discusses various forms of pollution -- oil, litter, sewage, metals, chemicals, and radioactivity -- and explains why it happens, what effects follow, and what can be done about the problem. Many photographs, drawings, and diagrams help to emphasize the importance of taking this very seriously and doing something about it. Addresses are given to which the reader can write for more information, and there are suggestions for activities.

Hoyt, Erich. Meeting the Whales: The Equinox Guide to Giants of the Deep. Camden House, 1991. Gr. 5 to Adult.

A great many topics are introduced in only 72 pages: general information about whales (including fascinating facts and speculation about how whales perceive their world); specific information about nine kinds of baleen whales and ten kinds of toothed whales; discussions of whale behaviors and a series of short chapters on whales and humans in all kinds of interactions, from photographing whales to communicating with them. This is for a good reader: the size of the type and the vocabulary may be overly challenging for a struggling reader, and this is more for information-seekers than for browsers. But there is much to discover here, and some chapters which would readily

lend themselves to class discussion and perhaps inspire a reader to further exploration.

Knapp, Toni. The Six Bridges of Humphrey the Whale. Rockrimmon Press, 1989. Gr. 3-6.

This is the story of Humphrey the humpbacked whale, who swam upstream into the Sacramento River Delta, and became trapped. Humphrey's odyssey, and his rescue, were chronicled hourly by newspapers and television, and the story has been the subject of several books. This version of the saga minutely examines Humphrey's journey day by day, noting every action and attempting to theorize as to Humphrey's emotions and mental state. The anthropomorphism can become tiresome, but can form a topic for discussion in itself; the behavior of the whale is interesting without such speculations. This could be read in conjunction with material on whale migrations.

Lye, Keith. The Ocean Floor. Bookwright Press, 1991. Gr. 3-6.

An introduction to the study of the ocean floor, its geological features, changes, and its evolution over time. With many colored photographs and drawings, this makes clear such concepts as plate tectonics. This might be interesting read in conjunction with Ballard's *Exploring the Titanic* (see above), in which there is much discussion involving concepts introduced and explained here, and in which the submersible *Alvin*, discussed here, is used for underwater exploration.

Martin, James. Tentacles: The Amazing World of Octopus, Squid, and Their Relatives. Crown, 1993. Gr. Gr. 3-6.

A marvelous cover photograph and a stunning page-one illustration presage the visual attractiveness throughout. Vivid descriptions and lively anecdotes are interspersed with information regarding cephalopods, and the text is clarified and extended by means of photographs and labeled drawings of each animal discussed. Children will enjoy descriptions such as that of the "vampire squid", which resembles Dracula's cape, or that of the six-foot-long Humboldt squid, who hunt in packs like wolves. A reader will pick this up to browse, and will want to go on to other books to read more about these animals. *Tentacles* will be especially exciting for students that have dissected squid.

Morton, Alexandra. Siwiti: A Whale's Story. Orca Book Publishers, 1991. Gr. 3-6.

Illustrated with many color photographs, this tells the story of a wild female orca, Sawiti, from birth (apparently in the autumn) until the next spring. Behaviors within the pod are carefully described, and social relationships as well. We read about communications, spyhopping, play behaviors, and echolocation. A gentle and quiet, very appealing account of the life of one small orca.

Nixon, Hershell H. and Joan Lowery Nixon. Land Under the Sea. Dodd, Mead, 1985. Gr. 4-6.

Readers who have finished Lye's *Ocean Floor* (see above) and want to know more will find it here. This describes the various explorations of the ocean floor, including work being done at the time the book was written to map volcanic activity. It specifically mentions work done by Robert Ballard, author of the first two books on this list, in searching for undersea hydrothermal activity, using the same submersible that he later used in searching for the wreck of the Titanic. The contours of the ocean bottom are described, making it clear to any reader that the bottom of the sea is as varied, as full of surprises, and as fascinating as any more easily visible part of this planet. Black-and-white photographs and a rather dry presentation make this more suitable for readers who are already interested in the topic.

Patent, Dorothy Hinshaw. Dolphins and Porpoises. Holiday House, 1987. Gr. 4-6

A thorough discussion of those animals which, as the author notes, "have inspired special feelings in people for centuries." Varieties of dolphins, dolphin life and behaviors, tales of human-dolphin interaction edging into folklore, are all mentioned. Because of its ubiquity in television and oceanarium shows, the bottlenose dolphin is given an entire chapter, in which many of its behaviors are discussed, including its mode of communication. The author is quite concerned with captive dolphins generally, and there is much discussion about their life in captivity, alteration of normal behaviors, and their treatment; ethical questions are raised which would be interesting to discuss in a classroom setting. A careful, thoughtful discussion.

Patent, Dorothy Hinshaw. Whales: Giants of the Deep. Holiday House, 1984. Gr.4-6.

In a format similar to that of her *Dolphins and Porpoises* (see above), the author discusses whales and their behaviors. There is general information about whales; information about specific types both of baleen and toothed whales; a series of discussions of "whale mysteries" (e.g. cetacean sonar, stranding, etc.). Finally, the discussion of "people and whales" introduces a number of questions concerning human treatment of whales, including their endangerment by humans, and what humans can do about it. Although the black and white pictures may not attract browsers as readily as the color photos found in other books on this topic, the careful setting forth of accurate and well-researched information and the attention given to ethical questions deserves note. This could be the basis of many productive class discussions.

Penny, Malcolm. Exploiting the Sea. Bookwright Press, 1991. Gr. 3-6.

Human use and abuse of ocean resources, both living and inanimate, are the focus of this first simple introduction to a complex topic. From whaling to pollution, from land reclamation to desalination, the sea is here briefly looked at in terms of human use. Some of the uses described here cause harm, others

do not. Where do we draw the line between exploitation and plunder? This can cause a previously unreflecting reader to begin thinking about it.

Reeves, Randall R. and Stephen Leatherwood. The Sea World Book of Dolphins. Harcourt Brace Jovanovich, 1987. Gr. 5 to Adult.

Written by two of the world's leading dolphin scientists, this well-illustrated compilation of information on dolphins includes information on dolphins and their evolution, as well as on dolphins that are adapted to specific habitats, such as rivers, seacoasts, the continental shelf, and the high seas. Dolphins in captivity are also given a chapter, as is the effort for conservation of dolphins. Many species are here mentioned and described; there are color photos, drawings (including a world map showing continental shelf, continental slope, and deep sea in relation to the continents), a list of common and scientific names for many species of dolphins, and a chart showing the names and relative sizes of 39 species of dolphins and porpoises.

Rogers, Daniel. Waves, Tides and Currents. Bookwright, 1991. Gr. 3-6.

This is a brief and entertaining overview meant to introduce a topic to readers previously unfamiliar with it, and to gain their interest, perhaps causing them to go on to more demanding material. As introduction and browsing material this is successful: waves and erosion, tsunamis, tides, floods and currents are all discussed, illustrated with well-chosen color photographs, and with enough diagrams to clarify topics such as the creation of tides. A glossary defines unfamiliar terms, and a list of "Books to Read" comprises a short list of materials to go on to from here. Interesting, and a good starting point.

Sattler, Helen Roney. Whales, the Nomads of the Sea. Lothrop, Lee and Shepard, 1987. Gr. 5-9.

There are two parts to this book: first, a 50 page discussion of whales, written in a conversational style, as interesting as any fiction. Whale behaviors are described, their sonar is explained, as are their various modes of communication by songs, clicks and whistles. Beautifully detailed pencil drawings show whale anatomy, movements, parenting and travel. Small margin drawings show details such as different types of baleen -- even whale lice are carefully depicted. Then, the next fifty pages are a "glossary of whales" -- alphabetical listing, one-paragraph descriptions, and drawings showing many different species of cetaceans, from Amazon River Dolphins to beaked whales. This impressive effort is finished off with a two page list of materials for further reading, which includes magazine articles, books, and adult materials as well as those intended for children.

Simon, Seymour. Oceans. Morrow Junior Books, 1990. Gr. 3-6.

In a very clear, simply worded text, many full-page color photographs, and an ample number of diagrams for additional clarification, the author discusses the Earth as a planet covered by water in which the continents are islands. The topography of the ocean floor is discussed, as is wave motion, wave energy,

and ocean currents. Tides and waves are explained. This is an easily understood first introduction to these concepts, presented in such a way that even readers previously unfamiliar with them will comprehend easily.