



# **BIBLIOGRAPHY**

## **LIFE IN THE ESTUARY**

### **FOR SEA: Investigating Marine Science - Grade 3**

This bibliography has been selected specifically for *Life in the Estuary - Grade Three*. A few of the titles listed are out of print, but worthwhile enough for you to check for them in your school and public libraries.

### **RESOURCES FOR STUDENT INFORMATION**

A FIELD GUIDE TO SEASHORES COLORING BOOK. John C. Kricher. Houghton Mifflin. 1989.

So much more than a coloring book. The major habitats of the seashore provide an organizer for the presentation of the dominant organisms.

CARGO SHIPS. Herbert S. Zim and James R. Skelly. Morrow. 1970. Clear explanations of a variety of types of cargo ships and their purposes. Many diagrams of ships, rigging, engines, etc., illustrate the text. Includes descriptions of the jobs of the crew and also of the U.S. Merchant Marine Academy.

CRABS. Sylvia A. Johnson. Lerner Natural Science. 1982. The life cycle, physical characteristics, and behaviors of several species of crabs are described and pictured in color photographs and drawings.

CRABS. Herbert S. Zim and Lucretia Krantz. Morrow. 1974. Describes the anatomy, behavior and life cycle of many species. Black and white drawings clearly illustrate the text which includes information on harvesting.

THE CRAB ON THE SEASHORE. Jennifer Coldrey. Gareth Animal Habitats. 1986.

The life and behavior of crabs in their natural habitat are described. A food chain chart is included. The color photographs are by Oxford Scientific Films.

DISCOVERING CRABS AND OYSTERS. Jill Bailey. Bookwright Discovering Nature. 1987.

Describes many species of crabs and lobsters. Discusses and illustrates with Oxford Scientific Film photographs the anatomy, behaviors and life cycle of these invertebrates.

EXPLORING THE SEASHORE. William H. Amos. National Geographic Books for Young Explorers. 1984.

Beautiful color photographs enhance the simple text which explores rocky, sandy and marshy shores. Some of the plants and animals of these three habitats are described.

THE FOUR ELEMENTS - WATER. Carme Solé Vendrell & J. M. Parramón. Barron's. 1985.

Simple illustrations of where we find water and how we use it. Additional follow-up information on the water cycle, how water is cleaned, etc., is included for use by teachers or parents.

FREIGHTERS: CARGO SHIPS AND THE PEOPLE WHO WORK THEM. George Ancona. Crowell. 1985.

Various types of cargo ships and their crews are described in this black and white photo essay which also includes graphics and drawings.

RED TAG COMES BACK. Fred Phleger. Harper Science I CAN READ. 1961.

This non-fiction narrative tells the life history of a young salmon as she travels down the river to the ocean and then, four years later returns up that river. The color illustrations are by Arnold Lobel.

THE ROCK POOL. David Bellamy. Clarkson Potter Our Changing World. 1988.

The interactions between animals and plants of a rock pool are described and the disastrous results which occur when an oil spill washes ashore are realistically portrayed. The text and color illustrations depict the changing scene with vivid clarity and emphasize the relationship of humans with the natural world.

SEA GIFTS. George Shannon. David R. Godine, Publisher. 1989.

An Alaskan man "who trades with the sea" combs the beaches at dawn for driftwood and cast-off items. Each day he returns from gathering his driftwood treasure to carve a small figure, a gift for the sea.

SHELLS ARE SKELETONS. Jean Berg Victor. Crowell Let's Read and Find Out Science. 1977.

An introduction to some of the marine mollusks, explaining how they live, move, eat and form their shells. Ink and wash drawings complement the text.

SEASHORE. Steve Parker. Knopf Eyewitness. 1989.

Animals and plants of the seashores are examined in this photo essay for all ages. Detailed color photographs and drawings are excellent.

SHELL. Alex Arthur. Knopf Eyewitness. 1989.

Close-up color photographs and drawings of shells and shelled animals amplify the text which examines the world of shells. A striking look at this subject, but the information on collecting shells as a hobby is not recommended.

SHIPS AND SEAPORTS. Katherine Jones Carter. Children's New True. 1982.

Briefly describes various ships and their specialized uses. Includes an introduction to a seaport. Color photographs illustrate the text.

STARFISH, SEASHELLS, and CRABS. George S. Fichter. Western Publishing. 1993.

A Golden Junior Guide with colored illustrations which add great detail to the informative text. Includes some anatomical drawings.

TANKERS: GIANTS OF THE SEA. Charles Coombs. Morrow. 1979.

Describes the construction and operation of enormous oil tankers, as well as the life and duties of the crew on board. Black and white photographs illustrate this information.

WAVES, TIDES AND CURRENTS. Elizabeth Clemons. Knopf. 1967.

Discusses the factors influencing tides, waves and currents, as well as the effects of these water movements. Includes maps, diagrams and black and white photos.

WHAT'S FOR LUNCH? THE EATING HABITS OF SEASHORE CREATURES.

Sam and Beryl Epstein. Macmillan Publishing. 1985.

An informative book about 20 seashore creatures. What they eat, how they eat and how they avoid being eaten are included. Black and white drawings accompany the text.

WHAT'S INSIDE SHELLS? DK Direct Limited. Dorling Kindersley. 1991.

Photographs and colored illustrations help children understand what goes on in the hidden world of a shell.

WHAT'S INSIDE SEA CREATURES? DK Direct Limited. Dorling Kindersley. 1993.

Photographs and colored illustrations show children the insides of common sea creatures as the text explains the function of the structures.

THE WORLD OF CRABS. Jennifer Coldrey. Gareth Stevens. 1987.

Crabs in their natural habitats are depicted in simple text and color photographs. Adaptations to their environment and their place in the ocean food chain are included.

### **RESOURCES FOR LITERATURE INTEGRATION**

Please be aware that in the more fanciful of these titles, the science content may not be accurate.

CLAMS CAN'T SING. James Stevenson. Greenwillow. 1980.

Two clams at the beach prove to their friends that they have talents other than singing. This delightful and humorous story, illustrated by the author, might lead to some musical drama improvisations.

THE CRAB THAT PLAYED WITH THE SEA. Rudyard Kipling. Macmillan. 1982.

A *Just So Story* of why the crab came to live both in the sea and on land, why it molts, and why the moon governs the tide. A classic, beautifully illustrated by Michael Foreman.

HOW AND WHY STORIES. Maria Eich. Penguin. 1967

Includes "Why the Tides Ebb and Flow".

HERON STREET. Ann Turner. Harper. 1989.

Changes to the natural world which occur as a marsh by the sea is developed for human use are dramatically pictured in Lisa Desimini's stark paintings which accompany a rhythmic text.

NIGHT OF GHOSTS AND HERMITS: NOCTURNAL LIFE ON THE SEASHORE.

Mary Stolz. Harcourt. 1985.

In this lyrical narrative, the reader learns scientific information about the nocturnal activities of seashore creatures. The text is illustrated with appropriate gray-toned drawings.

PRINCE WILLIAM. Gloria Rand. Holt. 1992.

A story about one of the seals rescued from the 1989 oil spill in Prince William Sound, Alaska. Provides insight into the volunteers' work caring for animals after the disaster. Watercolors illustrate the story.

SPILL. Chester Aaron. Atheneum. 1978.

This story takes place against the documented background of a very destructive oil spill from the collision of two huge oil tankers near the Golden Gate Bridge. The author tells this moving story of one family's crisis that resolves itself during the grueling days of rescuing birds and fighting to save an important lagoon.

THE WALRUS AND THE CARPENTER. Lewis Carroll. Henry Holt & Co. 1986.

A walrus and a carpenter encounter some oysters during their walk on the beach; an unfortunate meeting for the oysters.

WATERMAN'S BOY. Susan Sharpe. Bradbury Press. 1990.

Two boys from a small town on the Chesapeake Bay challenge parental disapproval of people with too much education and of outsiders' interference in their means of earning a living as the boys help a scientist interested in cleaning up the water for the benefit of animals, plants, and people.

WETLAND TALES: A COLLECTION OF STORIES FOR WETLAND EDUCATION.

Available from: Wetlands Section, Dept. of Ecology, P.O. Box 47600  
Olympia, WA 98504-7600.

A selection of folktales that portray the plants and animals that inhabit wetlands. A short essay follows each story, elaborating on the natural history themes that arise in the tale.

WHITE WAVE: A CHINESE TALE. Diane Wolkstein. Crowell. 1979.

This story of a young Chinese farmer who finds a goddess in a moon snail shell is beautifully and simply told. Ed Young's lovely illustrations mirror the beauty of the tale and the shell.

WHY THE CRAB HAS NO HEAD: AN AFRICAN TALE. Barbara Knutson, reteller. Carolrhoda. 1987.

Crab's excessive pride meets with disfavor from his creator in this African folk tale, told with charm and illustrated by the author in strong black and white prints.

WHY THE TIDES EBB AND FLOW. Joan Chase Bowden. Houghton Mifflin. 1979.

This folktale explaining why the sea has tides is a delightful "just-so" story. Marc Brown's illustrations, evoking an African setting, enhance the telling of the tale.

THE WORLD THAT JACK BUILT. Ruth Brown. Andersen Press. 1990.

This powerful picture book, based on a well-known rhyme, carries an important environmental message as it shows how human technology can affect the environment. Beautifully illustrated by the author.

## **RESOURCES FOR TEACHERS & STUDENTS**

Included are books, curricula, media resources, equipment, posters, etc. The books in this list present further information in a more difficult text; even so, many of them will be enjoyed by children for the illustrations and photographs.

### **BOOKS**

#### **CHAINS, WEBS AND PYRAMIDS: THE FLOW OF ENERGY IN NATURE.**

Laurence Pringle. Crowell. 1975.

Food chain dynamics are described. Includes discussion of marine and salt marsh chains in easy to understand text. Clear illustrations and charts are by Jan Adkins.

#### **EXPLORING THE SEASHORE IN BRITISH COLUMBIA, WASHINGTON AND OREGON.**

Gloria Snively. Gordon Soules Book Publishers. 1978.

A field guide that includes plants and animals of the intertidal; arranged by habitat, beach type, and tidal zone. A very readable, “user-friendly” guide that simplifies identification, stressing understanding of how the organisms are “equipped to live in their world”.

#### **THE MARINE BIOLOGY COLORING BOOK.**

Thomas M. Niesen. Barnes and Noble. 1982.  
An introduction to the inhabitants of the major marine environments. Coloring plates illustrate the organisms in detail and the text explains their life cycles and interactions.

#### **PLANKTON: DRIFTING LIFE OF THE WATERS.**

Julian May. Holiday. 1972.  
Simple descriptions of plant and animal plankton in their various forms with emphasis on their role in the food chain. Color illustrations extend the text.

#### **PACIFIC SEASHORES: A GUIDE TO INTERTIDAL ECOLOGY.**

Thomas Carefoot. University of Washington Press. 1983.  
A guide describing the evolution of the coastlines, water movement, the distribution and interaction of plants and animals, mariculture and pollution. Contains many black and white drawings and some color photos.

#### **THE SEASIDE NATURALIST: A GUIDE TO NATURE STUDY AT THE SEASHORE.**

Deborah A. Coulombe. Prentice. 1984.  
A combined field guide and introductory marine biology text, illustrated by the author with black and white drawings.

SUPERTANKER! THE STORY OF THE WORLD'S BIGGEST SHIPS. George Sullivan. Dodd. 1978.

Describes and discusses the design, construction and problems of the giant tankers.

WETLANDS; AUDUBON SOCIETY NATURE GUIDE. William Nierling. Knopf. 1985.

An accurately portrayed, illustrated introduction to wetlands.

## POETRY

A CHILD'S TREASURY OF SEASIDE VERSE. Mark Daniel, (comp.). Dial. 1991.

A collection of verses about the sea from Byron, Shakespeare, Whitman and other British and American writers of the 19th and early 20th centuries.

ALL THE SMALL POEMS. Natalie Worth. Farrar. 1987.

These small poems of familiar, ordinary subjects are perfectly complemented by Natalie Babbitt's small black and white drawings.

PIPING DOWN THE VALLEYS WILD. Nancy Larrick. Dell. 1968.

A wonderful collection of poems including many relating to the sea and shore.

THE RANDOM HOUSE BOOK OF POETRY. Jack Prelutsky, (comp.).

Illustrated by Arnold Lobel. Random House. 1983.

A treasury of 572 poems, many with a marine theme.

THE SEA IS CALLING ME. Poems selected by Lee Bennett Hopkins. Harcourt. 1986.

A collection of poems pertaining to the sea and seashores. Each poem is appropriately illustrated in soft colors.

## CURRICULUM

THE BEACH BOOK; A TEACHER'S GUIDE. Pacific Educational Press. 1990.

A wonderful guide to effectively explore a beach habitat. The section on the plants and animals at the beach is very informative with good line drawings.

RANGER RICK'S NATURESCOPE; WADING INTO WETLANDS Curriculum. National Wildlife Federation. 1988.

WATERBIRDS Curriculum guide. Project ORCA, Pacific Science Center Explore More Store, 200 Second Ave. N., Seattle, WA 98109. (206) 443-2870.

WOW!: THE WONDERS OF WETLANDS. Available from: Environmental Concern, Inc. Education Dept., P.O. Box P, St. Michaels, Maryland 21663 (410)745-9620.

A very complete guide to more than 40 wetlands learning activities.

## POSTERS

BIVALVE SHELLFISH OF WASHINGTON Poster. Available from: WA State Dept. of Fisheries, Office of Information and Education, Rm. 115 General Administration Bldg., Olympia, WA 98504.

HOW BIRDS MAKE A LIVING ON THE COAST Poster. Contact: Will Hon, University of Georgia, Marine Extension Service, Savannah, Georgia 31416.

INTERTIDAL ORGANISMS ZONATION Poster. Available for \$2.00 from the Hatfield Marine Science Center, 2030 Marine Science Drive, Newport OR 97365.

MOLLUSKS AND CRUSTACEANS OF THE COASTAL. U.S. NOAA Poster. Contact: Superintendent of Documents, Government Printing Office, Washington DC 20402-9325.

## VIDEOTAPES and SLIDES

THE MONTEREY BAY AQUARIUM VIDEO TREASURY. Monterey Bay Aquarium, 886 Cannery Row, Monterey, CA 93940-1085 ph. (408) 648-4850.

Segments in the 69 minute long video tape include: Feeding on the Rocky Shore, Reproduction on the Rocky Shore, The Kelp Forest, Marine Mammal Introduction, Flukes and Flippers, Voices in the Sea, Seasons of the Squid, Plankton, Behind-the-Scenes: Collecting, and Dive into Monterey Canyon.

OCEANS ALIVE! Video. Available from Environmental Media, P.O. Box 1016, Chapel Hill, NC 27514 1-800-368-3382.

A series of 5 minute programs. Part Three, which includes: Introduction, Marine Mammals, The Dolphin, Sea Birds, The Salt Marsh, The Food Web, Plankton, Mollusks, Sand Country, and Homes, is most relevant to this curriculum.

## OTHER RESOURCES

DISCOVERY SCOPES. Available from: Discovery Scope, Inc., P.O. Box 607, Green Valley, AZ 85622 (602) 648-1401.

This usable and highly versatile hand-held, wide-field microscope includes an adaptor to hold clear view chambers which can serve as tiny aquariums.



MAC'S FIELD GUIDES. 2321 -34th Ave. S. Seattle, WA 98144.

Available for all kinds of marine and terrestrial organisms, Mac's guides are heavy plastic cards with detailed drawings for identification. Card NW-1 is Northwest Coastal Invertebrates. Card NW-4 is Waterbirds of the Northwest Coast.

MARINE EDUCATION; A BIBLIOGRAPHY OF EDUCATIONAL MATERIALS AVAILABLE FROM THE NATION'S SEA GRANT COLLEGE PROGRAMS.

July 1988. Available from: Marine Information Service, Sea Grant College Program, Texas A & M University, College Station, TX 77843-4115.

A highly recommended free resource that includes a state-by-state listing of regional resources, as well as curriculum and other materials of general interest.

THE MONTEREY BAY AQUARIUM ANIMAL SETS and ECOSYSTEM SETS.

Monterey Bay Aquarium, 886 Cannery Row, Monterey, CA 93940-1085 ph. (408) 648-4850.

Animal sets include: Marine Mammals (Gr. K-12) and Sharks/Fishes (Gr. 3-12). Ecosystem sets include: Rocky Shore (Gr. K-5), Sandy Seashore (Gr. K-8), Kelp Forest (Gr. K-12), Deep Sea (Gr. 6-12) and Ecology/ Conservation (Gr. K-12). Each set includes materials and activities developed by the aquarium staff.

“National Estuarine Research Reserve System; A Tour of the Reserves” pamphlet from Sanctuaries and Reserves Division, Office of Ocean and Coastal Resource Management, NOAA, Washington DC 20235