
OSTB home

A cooperative project between the National Science Teachers Association and the Children's Book Council. This list is published annually in the March issue of Science and Children, the journal devoted to preschool through middle level science teaching. The books on the list are targeted at grades K–8.

Categories:

- Committee's Choice
- Biography Plus
- Integrated Science
- Life Science
- Paleontology
- Physical Science
- Science-Related Careers

Notes:

- About the Books and the Selection Process
- About the Annotations

Committee's Choice

*** A DROP OF WATER: A BOOK OF SCIENCE AND WONDER. Walter Wick. Illustrated with photographs by the author. Scholastic Press. 40pp. ISBN 0-590-22197-3. $16.95. (I) Easy-to-read text and exquisite photographs explain the concepts of evaporation, condensation, capillary attraction, and surface tension. The camera halts and magnifies the action so all states of water can be observed. A collection of simple, exceptional experiments offers ways to further investigate the principles of water transformation. Author's Note. KBH (III)
Biography Plus


ELEPHANT WOMAN: CYNTHIA MOSS EXPLORES THE WORLD OF ELEPHANTS. Laurence Pringle. Illustrated with photographs by Cynthia Moss. Atheneum. 48pp. ISBN 0-689-80142-4. $16. (I,A) Meet Cynthia Moss, a renowned elephant researcher in Kenya, Africa. Learn about the family structure, social life, and communication processes of elephants, as well as the story of how Moss came to devote her life to the study of these fascinating animals. Engaging photographs accompany informative text. Index. Further Reading List. DMD (VII,IV)

Environment and Ecology

ANIMALS YOU NEVER EVEN HEARD OF. Patricia Curtis. Illustrated with various photographs. Sierra Club. 32pp. ISBN 0-87156-594-3. $16.95. (I) Features 12 rare, unusual, and less well known species of animals struggling to stay alive in today's changing environments. Includes colorful photographs and descriptions that categorize these animals as either "endangered," "threatened," or "rare." Author's Note. Index. LLM (IV,II)

BACK TO THE WILD. Dorothy Hinshaw Patent. Illustrated with photographs by William Munoz. Gulliver. 70pp. ISBN 0-15-200280-4. $18. (I) Discusses specific endangerment and efforts of biologists to prevent extinction and, in some cases, return animals to the wild. Some experiments have succeeded, others have failed. Examples of special interest — including the red wolf, the black-footed ferret, the golden lion tamarin, and the lemur — are related in detail and documented with striking photographs. Introduction. Index. MM (IV,VI)

BEFORE AND AFTER: A BOOK OF NATURE TIMESCAPES. Written and illustrated by Jan Thornhill. National Geographic. 32pp. ISBN 0-7922-7093-2. $16. (P) This beautifully illustrated book will capture young readers' interest with an engaging presentation of the changes that occur in a variety of natural settings. Readers observe the changes that occur over spans of time, ranging from a few seconds to a year. Author's Note. Nature Notes. MBC (IV,VI)


young readers with a perspective on the interesting rain forest environment. Many descriptions of rain forest animals are woven through this book as the narrative guides the reader through a day in a tropical rain forest. Notes. MBC (IV, VII)


**PROJECT PUFFIN: HOW WE BROUGHT PUFFINS BACK TO EGG ROCK** *(A National Audubon Society book).* Stephen W. Kress, as told to Pete Salmansohn. Illustrated with various photographs. Tilbury. 40pp. ISBN 0-88448-170-0. $16.95. (I) Journey to Egg Rock, Maine, to learn how biologist Stephen Kress and his team of scientists successfully reintroduced puffins to the island’s bird population. Discover fascinating facts about puffins, as well as the scientific processes the team used to solve complex problems. Revealing photographs accompany detailed narrative. Preface. Glossary. Notes. DMD (IV, II)

**TURTLE BAY.** Saviour Pirotta. Illustrated by Nilesh Mistry. Farrar. 28pp. ISBN 0-374-37888-6. $15. (P, I) An intriguing story about Taro, a young boy in Japan, and his fascination with a wise old man who awaits the return of the loggerhead turtles, one of seven kinds of turtles living in the sea. Taro helps clean the beach for the annual arrival of the turtles ready to lay their eggs. Readers learn about the characteristics, behavior, and life cycle of the loggerhead turtle. Author’s Note. LLM (IV, II, VII)

**Integrated Science**

**CLOSE, CLOSER, CLOSEST.** Shelley Rotner and Richard Olivo. Illustrated with photographs by the authors. Atheneum. 36pp. ISBN 0-689-80762-7. $13. (P) This fabulous book explores the concept of spatial relationships. The photographs show objects from three distinct distances. The magnified objects are virtually unrecognizable without the benefit of the comparative photographs and written descriptions. Afterword. KBH (II)


* **WEATHER EXPLAINED: A BEGINNER’S GUIDE TO THE ELEMENTS** *(Your World Explained series).* Derek Elsom. Illustrated with various photographs, illustrations, and diagrams. Holt. 70pp. ISBN 0-8050-4875-8. $18.95. (I, A) A wonderful read! This beginner’s guide captures your attention from the opening overview of weather through sections on the world’s changing climate. The information and the inviting format of this book make it required reading for anyone curious about the weather. The author has taken complex phenomena and described them with words and pictures in a very understandable way. Glossary. Index. RJK (I, III, V, II)
**Life Science**

**ABOUT MAMMALS: A GUIDE FOR CHILDREN.** Cathryn Sill. Illustrated by John Sill. Peachtree. 48pp. ISBN 1-56145-141-X. $14.95. (P) This book combines an easy-to-read text with beautiful illustrations to show the similarities and differences that exist among various mammals. A section at the end of the book provides additional information about each featured mammal and could be used to stimulate discussion. Afterword. CRB (IV)

**THE BRAIN: OUR NERVOUS SYSTEM.** Seymour Simon. Illustrated with various photographs. Morrow Junior Books. 32pp. ISBN trade: 0-688-14640-6, $16; library: 0-688-14641-4, $15.93. (I) Stunning photographs and well-written text take the reader on a tour of the brain. This is an excellent introduction to the complex processes that go on inside our heads. The electron microscope pictures of nerve cells, axons, and the synapse region are outstanding. RJK (IV, I)

**THE BURROW BOOK: TUNNEL INTO A WORLD OF WILDLIFE.** Shaila Awan. Illustrated by Richard Orr. DK Publishing. 24pp. ISBN 0-7894-2025-2. $14.95. (P, I) From the arctic tundra to the deserts, grasslands, and tropical forests of the world, burrows provide a home and shelter for amazingly diverse species of wildlife. This book describes in pictures and words how burrows are used by a number of animals. The vivid drawings and layout are sure to engage children. RJK (IV)


* **CITY FOXES.** Susan J. Tweit. Illustrated with photographs by Wendy Shattil. Denver Museum of Natural History/Alaska Northwest. 32pp. ISBN 0-88240-493-8. $16.95. (P, I) This engaging book describes the lives of six young red foxes born in a city cemetery. Their real-life adventures include surviving a snowstorm, learning about strange foods, and adapting to living on their own. This book is a beautiful blending of the talents of the author/naturalist and first woman to be named Wildlife Photographer of the Year. Includes ecology notes and red fox facts for older readers. Photographer's Note. LLM (IV, II)

**EVERYBODY HAS A BELLYBUTTON: YOUR LIFE BEFORE YOU WERE BORN.** Laurence Pringle. Illustrated by Clare Wood. Boyds Mills. 32pp. ISBN 1-56397-009-0. $14.95. (P, I) This gentle, yet informative text introduces the reader to human life within the womb. Various stages of development are described, as well as the function of the umbilical cord. Enhanced by stunning pencil drawings on pastel backgrounds. Includes a note to parents. Further Reading List. DMD (IV)

**GULLS … GULLS … GULLS.** Written and illustrated by Gail Gibbons. Holiday House. 32pp. ISBN 0-8234-1323-3. $15.95. (P, I) Gulls are birds commonly seen and heard near the coasts of North America. The author uses detailed text and clear illustrations to describe virtually every aspect of gulls, from appearance to migration and more. Notes. Fact Sheet. GMM (IV)
HAWK HIGHWAY IN THE SKY: WATCHING RAPTOR MIGRATION. Caroline Arnold. Illustrated with photographs by Robert Kruidenier. Gulliver. 48pp. ISBN trade: 0-15-200868-3, $18; paperback: 0-15-200040-2, $8. (I) Color photographs of raptors that fly over the Hawk Watch site in the Goshute Mountains of Nevada complement the text. Includes information on raptors' life cycle, physical features, and migration, as well as how they are studied, tracked, and protected. Special features are the list of day — flying raptors of North America, a map of other study sites, and a list of raptor families. Author's Note. Index. JRW (IV)

* A LOG'S LIFE. Wendy Pfeffer. Illustrated by Robin Brickman. Simon and Schuster. 32pp. ISBN 0-689-80636-1. $16. (P) Through stunning cut-paper collages and lyrical, descriptive text, young readers are introduced to the life cycle of a tree. Children will be fascinated as they learn about the many animals that depend upon the tree for food and shelter, as well as assist in the decay process. Illustrator's Note. DMD (IV,V)

PIGEONS. Dorothy Hinshaw Patent. Illustrated with photographs by William Munoz. Clarion. 80pp. ISBN 0-395-69848-0. $15.95. (I) A group of birds everyone has seen and heard are pigeons. However, how much attention do we really pay to these interesting creatures? This book presents clear and accurate information along with interesting illustrations of one of our most familiar "feathered friends." A great book for students living in the inner city as well as the country. Glossary. Index. CRB (IV)

SIMON AND SCHUSTER CHILDREN'S GUIDE TO INSECTS AND SPIDERS. Jinny Johnson. Illustrated with various drawings and photographs. Simon and Schuster. 80pp. ISBN 0-689-81163-2. $19.95. (I) This is an excellent guide to common insects and related arthropods. The information is accurate and concise and the illustrations are outstanding. The book is a great resource for students in the intermediate grades. Foreword. Glossary. Index. CRB (IV)

TALE OF A TADPOLE. Barbara Ann Porte. Illustrated by Annie Cannon. Orchard. 32pp. ISBN trade: 0-531-30049-8, $15.95; library: 0-531-33049-4, $16.99. (P,I) A family's experience of observing the transformation of a tadpole to a frog is shared in this charming book. Day by day, Francine observes her tadpole slowly transforming into a frog and shares the experience with her family. MBC (IV)

* THERE'S STILL TIME: THE SUCCESS OF THE ENDANGERED SPECIES ACT. Mark Galan. Illustrated with various photographs. National Geographic. 40pp. ISBN 0-7922-7092-4. $15. (I) This well-written book discusses and illustrates the successes of the Endangered Species Act of 1973 and the work that remains. From the well-known bald eagle to the lesser-known Louisiana pearlshell mussel, the author explores the recovery of 19 plants and animals through informative text and amazing photographs. Foreword. Index. GMM (VII,IV)

THINKING ABOUT ANTS. Barbara Brenner. Illustrated by Carol Schwartz. Mondo. 32pp. ISBN 1-57255-210-7, $14.95; paperback: 1-57255-352-9, $26.70 for six copies. (P) This book contains detailed illustrations and informative text about the color, size, shape, and texture of various ants. The colorful and poetic presentation encourages young readers to actively explore the life cycles, characteristics, and habitats of a number of different kinds of ants in our natural environment. Index. LLM (IV,II)

* WATCHING WATER BIRDS. Written and illustrated by Jim Arnosky. National Geographic. 32pp. ISBN 0-7922-7073-8. $16. (I) The author of this unique book grabs the reader's attention from the very...
first page. The life-size paintings of favorite water birds in both fresh and saltwater environments are informative and delightful. Author's Note. MM (IV)

* WHAT DO YOU DO WHEN SOMETHING WANTS TO EAT YOU? Written and illustrated by Steven Jenkins. Houghton Mifflin. 32pp. ISBN 0-395-82514-8. $16. (P) This book introduces young readers to the specialized adaptations animals use to avoid the constant threat of becoming another animal's meal. Intricate paper collages display the unique defense mechanisms animals use to escape from dangerous situations. MBC (IV)

WHAT'S A PENGUIN DOING IN A PLACE LIKE THIS? Miriam Schlein. Illustrated with various photographs. Millbrook. 64pp. ISBN library: 0-7613-0003-1. $23.90. (I) One usually imagines penguins in a cold, snowy, harsh environment. This comprehensive book helps clear up this misconception by describing many species of penguins, including their habitats, differences, and similarities. Wonderful photographs enhance the well-written text. Further Reading List. Index. GMM (IV)

WILD FLAMINGOS. Bruce McMillan. Illustrated with photographs by the author. Houghton Mifflin. 32pp. ISBN 0-395-84545-9. $15. (I) Living on the Caribbean island of Bonaire, the greater flamingos are orange-red, not pink, because of their food. They always eat with their heads upside-down and can drink salt water. These and other interesting facts, as well as stunning color photographs, will draw readers into the world of these fascinating birds. Includes a list of flamingo facts. Bibliography. Index. JRW (IV)


* YIKES! YOUR BODY, UP CLOSE! Mike Janulewicz. Illustrated with various photographs. Simon and Schuster. 32pp. ISBN 0-689-81520-4. $15. (P,I) A fascinating, close-up look at various parts of the body shown through color photographs taken using an electron microscope. The text asks the reader to guess the body part in the picture. The large, interesting, and sometimes creepy pictures, as well as the foldout flaps, will be enticing to readers of various ages. JRW (IV)

Paleontology

DINOSAUR GHOSTS: THE MYSTERY OF COELOPHYSIS. J. Lynett Gillette. Illustrated by Douglas Henderson and various photographs. Dial BFYR. 32pp. ISBN trade: 0-8037-1721-0, $15.99; library: 0-8037-1722-9, $15.89. (I) What happened over 200 million years ago at a place called Ghost Ranch? Why were so many dinosaur remains found in this area? This book presents different scenarios that scientists have used to answer these questions. Through a well-written text and beautiful illustrations, the reader is provided with an exciting account of one of the most unusual dinosaur discoveries of all times. Index includes pronunciations. CRB (II,VIII,VII)
* FOSSIL FEUD: THE RIVALRY OF THE FIRST AMERICAN DINOSAUR HUNTERS. Thom Holmes. Illustrated by Cameron Clement and various photographs, prints, and drawings. Messner. 160pp. ISBN library: 0-382-39148-9, $19.95; paperback: 0-382-39149-7, $7.95. (I,A) An interesting account of the bitter rivalry between two famous paleontologists who were the first to organize large-scale fossil hunting expeditions. Through this account, middle-grade readers get a glimpse of the human dimensions of the scientific enterprise. Includes a geological time chart, a timetable of dinosaur discoveries, and a list of dinosaur museums. Further Reading List. Index. CRB (II,VIII,VII)

Physical Science

BIG BANG: THE STORY OF THE UNIVERSE. Heather Couper and Nigel Henbest. Illustrated by Luciano Corbella. DK Publishing. 46pp. ISBN 0-7894-1484-8. $16.95. (A) From the opening statement describing space and time, the reader is drawn into the amazing story of the origin and evolution of our universe. The pictures, the text, and, above all, the science combine to make this book an exciting adventure. The authors have done an outstanding job in describing the big bang model at a child's level. Glossary. Index. RJK (IV,V)

THE KINGFISHER YOUNG PEOPLE’S BOOK OF OCEANS. David Lambert. Illustrated with various photographs, drawings, maps, and diagrams. Kingfisher. 96pp. ISBN 0-7534-5098-4. $19.95. (I,A) Numerous engaging illustrations support the information-packed text of this book about oceans. Readers learn about the ocean from several angles as they are presented with information about the physical, biological, and environmental influences the oceans have on our planet. Includes a list of oceanographers. Glossary. Index. MBC (V,III,IV,VI)

LIGHTNING. Seymour Simon. Illustrated with various photographs. Morrow Junior Books. 32pp. ISBN trade: 0-688-14638-4, $16; library: 0-688-14639-2, $15.93. (I) Spectacular photographs accompany this very readable description of different forms of lightning. This book introduces readers to the nature of lightning, to streamers called stepped leaders, and to the main lightning bolt itself. Simon has produced another outstanding book for readers of all ages, but especially for children. RJK (III)

Science-Related Careers

I WANT TO BE A VETERINARIAN (I Want to Be . . . Book series). Stephanie Maze and Catherine O’Neill Grace. Illustrated with photographs by Stephanie Maze. Harcourt Brace. 48pp. ISBN 0-15-201296-6. $16. (I,A) For children who love animals, this book provides great information about the education and experiences necessary to become a veterinarian. Readers will explore all aspects of this career, from its history and famous faces to a typical day at work. Includes information on pet veterinarians as well as veterinarians who work with animals in zoos and in the field. Notes. GMM (VII,VIII)

ability to solve problems through mathematics and science using curiosity, imagination, and intelligence. List of sources. KBH (VII)

About the Books and the Selection Process

The books that appear in this annotated bibliography were selected as outstanding children's science trade books published in 1997. They are intended primarily for kindergarten to eighth grade. They were selected by a book review panel appointed by the National Science Teachers Association (NSTA) and assembled in cooperation with the Children's Book Council (CBC). NSTA and CBC have cooperated on this bibliographic project since 1973.

The panel looks at both content and presentation. Selection is generally based on the following criteria: the book has substantial science content; information is clear, accurate, and up-to-date; theories and facts are clearly distinguished; facts are not oversimplified so that the information is misleading; generalizations are supported by facts, and significant facts are not omitted; and books are free of gender, ethnic, and socioeconomic bias. The panel also uses rigorous selection guidelines relating to the presentation of material, including the following: presentation is logical and sequence of ideas is clear; content level is appropriate for the intended audience; text and illustrations are compatible; illustrations enhance the presentation and are accurate representations in size, color, and scale; trim size and format are appropriate to the subject and audience; and layout is well organized and advances the text. In addition, the panel gives attention to the quality of binding, paper, reproduction, and to the appropriateness of typeface. Each annotation is initialed by the person who wrote it. All panel members read the books, but annotations do not necessarily reflect the appraisal of the entire panel.

Publishers' names appear in abbreviated form; complete names and addresses are available in such standard reference works as Literary Market Place (Bowker) and from the Children's Book Council (CBC). To obtain CBC's Members List, send $2 and a self-addressed 6" x 9" envelope with 78 cents postage to CBC, Attn.: Members List, 568 Broadway, Suite 404, New York, NY 10012.

Titles are arranged by subject category. Although some titles are appropriate for more than one category, they have been placed where their usefulness in science education appears greatest. Panelists have also indicated the National Science Content Standards (see box on opposite page) to which the book relates. Where more than one standard is listed, the most applicable standard is given first.

The Children's Book Council is a not-for-profit association encouraging the use and enjoyment of children's books and related literacy materials. Its members are publishers of trade books for children and producers of book-related materials for young people. CBC is the official sponsor of National Children's Book Week and cooperates on reading development projects with several national associations, including NSTA. To receive a brochure of CBC's reading encouragement materials, write to CBC, Attn: Catalog, 568 Broadway, Suite 404, New York, NY 10012. The National Science Teachers Association is an organization of science education professionals and has as its purpose the stimulation, improvement, and coordination of science teaching and learning. For further information on NSTA membership and services, telephone (800) 722-NSTA. Visit NSTA's and CBC's websites at www.nsta.org and www.cbcbooks.org, respectively.
Current members of the book review panel are

ROBERT J. KEARNEY (Panel Chair)
    professor of physics
    University of Idaho
    Moscow, Idaho (RJK)

CHARLES R. BARMAN
    professor of science and environmental education
    Indiana University and Purdue University
    Indianapolis, Indiana (CRB)

MICHAEL B. COWAN
    director of science and social sciences
    Mesa Public Schools
    Mesa, Arizona (MBC)

DONNA M. DIECKMAN
    first-grade teacher
    Greenwood Elementary School
    Brookeville, Maryland (DMD)

KATHLEEN B. HORSTMeyer
    first-grade teacher
    Gladwyne School, Lower Merion School District
    Gladwyne, Pennsylvania (KBH)

GERRY M. MADRAZO, JR.
    executive director and clinical associate professor
    Mathematics and Science Education Network
    University of North Carolina at Chapel Hill (GMM)

MARGARET McINTYRE
    professor emeritus
    George Washington University
    Washington, D.C. (MM)

LAMOINE L. MOTZ
    coordinator of science, health, and outdoor education
    Oakland County Schools
    Waterford, Michigan (LLM)

JUDY R. WILLIAMS
    library media specialist
    Greenwich High School
    Greenwich, Connecticut (on leave);
    currently working at the High School Library
    The American School Foundation
    Mexico City, Mexico (JRW)
About the Annotations

1 Titles marked with * are Selectors' Choices—books that individual panel members responded to with particular enthusiasm. Titles marked with *** are Committee's Choices—books that the entire panel responded to with particular enthusiasm.

2 Title: Subtitle

3 Author

4 Illustrator

5 Publisher

6 Number of pages

7 International Standard Book Numbers (ISBNs) are included for all available editions (trade, library, and paperback). The symbol "F" indicates that a paperback edition is forthcoming.

8 Price as of January 1998

9 Reading Level:
   - P primary
   - I intermediate
   - A advanced

10 Brief descriptive annotation

11 Code indicating reviewer responsible for the annotation (see reviewer list above)

12 National science content standards, in order of applicability
   - I Unifying Concepts and Processes
   - II Science as Inquiry
   - III Physical Science
   - IV Life Science
   - V Earth and Space Science
   - VI Science and Technology
   - VII Science in Personal and Social Perspectives
   - VIII History and Nature of Science

(sample)