(Books published in 1995)

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:

- Biography
- Earth Science
- Environment and Ecology
- Fiction
- Life Science
- Medicine and Medical Research
- Paleontology
- Physical Science
- Technology and Engineering

About the Books and the Selection Process

Biography


adults, Vicki Van Meter accomplished her dream of piloting a plane across the continent when she was 12 years old, and flying across the Atlantic Ocean when she was 14. Her inspiring story addresses the obstacles she had to overcome and integrates related fields such as mathematics, science, geography, and meteorology. Author's Note. BtB

**Earth Science**

Outstanding, closeup photographs portray the geological features and development of caves. This descriptive book is certain to stimulate the imaginations of future scientists. Glossary. Index. Metric Conversion Chart. RJK

**THE CHILDREN'S ATLAS OF NATURAL WONDERS.** Joyce Pope. Illustrated with photographs and maps. Millbrook. 96pp. ISBN library: 1-56294-564-5, $19.40; paperback: 1-56294-886-5, $12.95. (I) This visually stimulating book covers all the major land masses and describes 36 natural "wonders" in terms of their geological evolution. It provides an excellent overview and can be used to initiate an in-depth study of how the Earth evolved. Glossary. Index. RJK

**ORION, THE HUNTER.** Necia H. Apfel. Illustrated with photographs and diagrams. Clarion. 48pp. ISBN 0-395-68962-7. $16.95. (I) Color photographs from the Hubble Space Telescope portray the splendor of the constellation Orion, its nebula, and other nearby constellations. Origins of stars such as blue-white giants and red supergiants are explained in easy-to-understand terms. Index. PSB

Verbal and visual details offer a most pleasant excursion through present-day plate tectonic theory. This book can be reread a number of times with the reader gaining more understanding and appreciation of our dynamic planet. Index. Further Reading List. RJK

**SCIENCE ON THE ICE: AN ANTARCTIC JOURNAL.** Rebecca L. Johnson. Illustrated with photographs. Lerner. 128pp. ISBN library: 0-8225-2852-5. $19.13. (I,A) This journal filled with breathtaking color photographs accurately depicts life at the research stations in Antarctica. Marginal notes provide interesting informational tidbits. This personalized account makes readers feel as if they have visited this frozen continent and its inhabitants. Index. Metric Conversion Chart. PSB

**Environment and Ecology**

**AN AMERICAN SAFARI: ADVENTURES ON THE NORTH AMERICAN PRAIRIE.** Jim Brandenburg. Illustrated with photographs by the author. Walker. 48pp. ISBN trade: 0-8027-8319-8, $16.95; library: 0-8027-8320-1, $17.85. (I,A) Both history and wildlife come alive in this portrayal of America's grasslands. Striking color photographs highlight the beauty and ecology of the prairie as well as the changes that have occurred as civilization has encroached upon the prairie's delicate ecosystem. Author's Note. Index. Address List. PSB

THE CASE OF THE MUMMIFIED PIGS: AND OTHER MYSTERIES IN NATURE. Susan E. Quinlan. Illustrated by Jennifer Owings Dewey. Boyds Mills. 128pp. ISBN 1-878093-82-7. $15.95. (I,A) A wildlife biologist describes 14 real-life science adventures, all of which start with puzzling observations. Readers follow the steps of scientists as they track down the clues and discover some of the amazing ways that nature works. Author's Note. Index. Further Reading List. RJK


I SEE ANIMALS HIDING. Jim Arnosky. Illustrated by the author. Scholastic Hardcover. 28pp. ISBN 0-590-48143-6. $12.95. (P) Strikingly beautiful watercolors in soft hues highlight animals in their environment. Readers are challenged to find 20 deer on a hillside and to locate an owl and a moth hidden on a tree limb. A delightful introduction to animals' natural camouflage. PSB


*RICHARD ORR'S NATURE CROSS-SECTIONS. Moira Butterfield. Illustrated by Richard Orr. DK Publishing. 30pp. ISBN 0-7894-0147-9. $17.95. (I) Amazing double-page artwork reveals an incredible view of the natural world using cross-sectional detail of an oak tree, tide pool, woodland, ocean, arctic ecosystem, and rain forest. The large pages will captivate readers of all ages, kindling a long-lasting interest in the natural world. Metric and English measure are used. Index. BAZ


observing the life-forms on a fragile sand dune. After the dune is destroyed by a storm, recycled Christmas trees are used as a base to help rebuild it. Author's Note. RJK


**THE THREATENED FLORIDA BLACK BEAR.** Margaret Goff Clark. Illustrated with photographs. Cobblehill. 64pp. ISBN 0-525-65196-9. $15.99. (I) Colorful photographs and interesting text provide information about how biologists and government agencies are working to keep the Florida black bear from becoming an endangered animal. Includes a section of black bear statistics and Florida black bear milestones. Index. CRB


**WOODS.** Donald M. Silver. Illustrated by Patricia J. Wynne. Scientific American. 48pp. ISBN 0-7167-6610-8. $14.95. (I) Within a small square of forest, children explore an ecosystem of animals, plants, rocks, and soil. Encouraged to use scientific processes, readers learn how different seasons influence the forest community. Index. Further Reading List. Also recommended in the *One Small Square* series:


**Fiction**

**MARTA'S MAGNETS.** Wendy Pfeffer. Illustrated by Gail Piazza. Silver Burdett. 32pp. ISBN trade: 0-382-24931-3, $13.95; library: 0-382-24930-5, $15.95; paperback: 0-382-24932-1, $5.95. (I) Marta's collection of magnets, which her sister calls junk, provides the vehicle for Marta's acceptance into her new multicultural neighborhood. Directions for making a refrigerator magnet. A magnet in the back can be removed without detriment to the story or the book. JRW

**RETURN OF THE WOLF.** Dorothy Hinshaw Patent. Illustrated by Jared Taylor Williams. Clarion. 80pp. ISBN 0-395-72100-8. $15.95. (I,A) Based on the author's firsthand observations, this dramatic story is realistic and fast-paced. Many intriguing details of animal communication, wolf pups' birth and training, and a pack's hunting and survival techniques enliven this unforgettable story of two wolves who meet and begin a family. BAZ
Life Science


ALL ABOUT OWLS. Jim Arnosky. Illustrated by the author. Scholastic Hardcover. 28pp. ISBN 0-590-46790-5. $14.95. (P) For young readers and nature observers, the author-artist uses vivid illustrations to present an interesting glimpse of where owls live, what they eat, how they care for their young, and how they see so well at night. GMM

APES. Eric S. Grace. Illustrated with photographs. Sierra Club. 64pp. ISBN 0-87156-365-7. $15.95. Paper ed., Sierra Club (F). (I) This book explores the evolution of apes and examines their similarities to humans. Readers will discover differences among the primates' parenting, communication, social bonding, dexterity, and eating habits. Index. NPS

BIGGEST, STRONGEST, FASTEST. Steve Jenkins. Illustrated by the author. Ticknor/Houghton Mifflin. 32pp. ISBN 0-395-69701-8. $14.95. (P) Using cut-paper collage, the author presents animals holding the record in such areas as size, speed, strength, and height. A chart organizes additional information regarding the animals' habitat, diet, and size. NPS


THE BOOK OF NORTH AMERICAN OWLS. Helen Roney Sattler. Illustrated by Jean Day Zallinger. Clarion. 64pp. ISBN 0-395-60524-5. $15.95. (I,A) Owls are mysterious, nocturnal animals that intrigue young readers. This clear and accurate book includes owl classification and history, hunting and habitat, courtship and nesting, and the complex relationship between owls and humans. The comprehensive glossary includes all of the 21 North American species. Bibliography. Index. GMM


BUTTERFLY STORY. Anca Hariton. Illustrated by the author. Dutton. 32pp. ISBN 0-525-45212-5. $14.99. (P) The red admiral's life cycle is so descriptively portrayed, readers can almost hear the "crunch" of the caterpillar eating leaves. Delicate illustrations show the organisms in the habitat as the butterfly's metamorphosis occurs. Includes detailed teacher information on butterflies and moths. PSB

THE CONCISE ENCYCLOPEDIA OF THE HUMAN BODY. David Burnie. Illustrated with photographs and prints. DK Publishing. 160pp. ISBN 0-7894-0204-1. $19.95. (I,A) Four hundred full-color illustrations and more than 2,000 key words provide a rich source of information and an invaluable "first stop" reference guide to answer readers' questions about the world of the human body. Includes tables on infectious and noninfectious diseases and a biographical index of over 100 scientific pioneers. Index. BAZ


*EAGLES OF AMERICA. Dorothy Hinshaw Patent. Illustrated with photographs by William Mu? Holiday. 40pp. ISBN 0-8234-1198-2. $15.95. (I) Eagles have long been an important symbol for the United States and for many Native American tribes. Wonderful photographs and concise text help readers learn more about the similarities of and differences between the bald and golden eagles of North America. Index. GMM


PUFFINS CLIMB, PENGUINS RHYME. Bruce McMillan. Illustrated with photographs by the author. Gulliver. 36pp. ISBN 0-15-200362-2. $14. (P) Travel to both of Earth's polar regions to experience the behavior and lives of two amazing and unique birds. Two-word, rhyming sentences and large, vivid photographs will captivate young readers. Notes. Author's Note. DAD


SEA TURTLES. Gail Gibbons. Illustrated by the author. Holiday. 32pp. ISBN 0-8234-1191-5. $15.95. (P) One of the oldest surviving creatures, the sea turtle is examined in this colorfully illustrated book. Readers learn about the size, habitat, and diet of the eight kinds of sea turtles and efforts environmentalists are making to protect them. Notes. NPS

SHARKS. Seymour Simon. Illustrated with various photographs. HarperCollins. 32pp. ISBN trade: 0-06-023029-0, $15.95; library: 0-06-023032-0, $15.89; paperback: 0-06-446187-4, Harper Trophy, $5.95. (P,I) An award-winning author explores the fascinating undersea life of sharks, examining the truths and myths about these amazing creatures. Astounding close-up photographs enhance the informative and exciting text. DAD

*SKY TREE: SEEING SCIENCE THROUGH ART. Thomas Locker with Candace Christiansen. Illustrated by Thomas Locker. HarperCollins. 40pp. ISBN trade: 0-06-024883-1, $15.95; library: 0-06-
024884-X, $15.89. (P) This treasure combines the seasonal changes of a tree perched atop a hill near a riverbank with lyrical text and delicately muted color drawings. A must volume for integrating science and the arts. PSB

**TREES.** Jonathan Pine. Illustrated by Ken Joudrey. HarperCollins. 48pp. ISBN trade: 0-06-021468-6, $15; library: 0-06-021469-4, $14.89. (I) This guide introduces readers to seven North American trees, discussing their history and characteristics. The author's love for trees is evident throughout as he extends an invitation to explore and study them. Author's Note. NPS

**THE VISUAL DICTIONARY OF THE SKELETON.** Richard Walker. Illustrated with photographs and prints. DK Publishing. 64pp. ISBN 0-7894-0135-5. $16.95. (I,A) This comprehensive and exquisitely illustrated treasure trove of anatomical terms provides clear and instant access to the skeletons of humans, trees, amphibians, sea mammals, and others. Index. BAZ


**WHO LIVES HERE?** Maggie Silver. Illustrated by the author. Sierra Club. 20pp. ISBN 0-87156-371-1. $10.95. (P) Describing the habitat of eight animals and using clues about family patterns and nest building, this lift-the-flap book invites readers to discover wildlife. NPS

**Medicine and Medical Research**


**LIVING WITH ASTHMA.** Margaret O. Hyde and Elizabeth H. Forsyth. Illustrated with photographs and prints. Walker. 96pp. ISBN trade: 0-8027-8286-8, $14.95; library: 0-8027-8287-6, $15.85. (I,A) Questions are answered and myths dispelled as children learn what asthma is and what life is like for the six million people in the United States living with this disease. Readers will gain insight and empathy. Glossary. Index. Further Reading List. Address List. DAD
MEDICINE. Steve Parker. Illustrated with photographs and prints. DK Publishing. 64pp. ISBN 1-56458-882-3. $15.95. (I,A) This lavishly illustrated resource book presents the discoveries, tools, and practice of medicine and health through history and around the world. Begins by defining medicine and ends with a projection into the future. Some graphic illustrations and descriptions may not be suitable for all readers but will interest many. Index. JRW

THE VOICES OF AIDS. Michael Thomas Ford. Morrow. 240pp. ISBN 0-688-05322-X, $15; paperback: 0-688-05323-8, Beech Tree, $4.95. (A) Twelve sections of facts concerning AIDS are interspersed with personal stories about how this disease changed several young people's lives. The book speaks frankly about sensitive issues related to HIV/AIDS and, therefore, would be most appropriate for middle school and older students. Author's Note. Index. Address List. CRB

Paleontology


*THE SEARCH FOR THE ORIGIN OF BIRDS. Lawrence M. Witmer. Illustrated by Kit Mather. Watts. 64pp. ISBN library: 0-531-11232-2. $21.90. Paper ed., Watts (F). (I,A) This book demonstrates how the methods of a scientist can be similar to those of a detective. Readers are provided with the data scientists have used to construct their current explanation for the origin of birds. Glossary. Index. Further Reading List. CRB

Physical Science

IT'S ALL IN YOUR BRAIN. Sylvia Funston and Jay Ingram. Illustrated by Gary Clement. Grosset. 64pp. ISBN library: 0-448-40940-2, $13.99; paperback: 0-448-40939-9, $9.95. (I) Senses, emotions, memory, and thinking are the major categories featured in this interactive tour through the brain. The activities in each category are an excellent introduction to concepts not often discussed in the classroom. Author's Note. Index. RJK

WHAT'S SMALLER THAN A PYGMY SHREW? Robert E. Wells. Illustrated by the author. Whitman. 32pp. ISBN library: 0-8075-8837-7, $13.95; paperback: 0-8075-8838-5, $6.95. (P) Using humorous illustrations, this volume facilitates readers' understanding of the relative term "small." Beginning with the eight-centimeter pygmy shrew, the author depicts a diminishing progression from ladybug to protozoa, bacteria, and finally to the atom and its constituent parts. Glossary. PSB

Technology and Engineering

try to look for and then to eliminate anything that can lead to failure in their designs. Pictures, diagrams, and text explain both failures and corrective measures. Index. Epilogue. Further Reading List. NPS


### 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 1995. 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; the 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. Appropriate reading levels for titles are given in parentheses and are as follows:

- **P** = Primary
- **I** = Intermediate
- **A** = Advanced

These levels are general guidelines only and are not meant to be prescriptive. International Standard Book Numbers (ISBNs) are included. Prices are accurate as of January 1996, but are subject to change. Information on paperback editions is given when known. The symbol "F" indicates that there are firm
plans for a paperback edition in the future. Some titles on this list are appropriate for more than one category, and they have been placed where their usefulness in science education appears greatest.

The titles marked with an asterisk (*) are Selectors' Choices—books that individual panel members responded to with particular enthusiasm.

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 and a sample of its newsletter, send a self-addressed 6x9 envelope with 78 cents postage to CBC, Attn.: Dept. S96CF, 568 Broadway, Ste. 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 800-830-3232. Visit NSTA's and CBC's websites at www.nsta.org and www.CBCbooks.org, respectively.

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