

Outstanding Science Trade Books for Students K–12: 2012 (Books published in 2011)



OSTB home

From east to west, from the depths of the ocean to the farthest reaches of the universe, good science trade books take us on journeys of the imagination. Each year for the past 39, experienced NSTA educators have joined with the Children's Book Council to identify the very best, selecting from hundreds of nominees and then meeting to consider their accuracy, creativity and the way in which they convey the practices of science. To be called truly *outstanding* a book must not only excel in those criteria, but also grab the heart of the reader.

Each of this year's winners has special value for teachers and their students. Some are ideal for sharing to inspire exploration. Some are perfect for the sort of personal reading that inspires future careers. The list includes outstanding poetry and graphic design—components that lure diverse learning styles to science. There are selections for the very youngest preprimary readers and long, luxurious science fiction novels for young adults. And in the spirit of STEM, there are books that model integration with history, cultures and engineering.

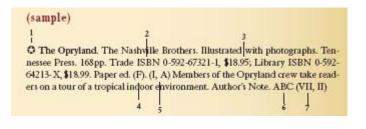
Once again we invite you to join us in journeying through the pages of these outstanding science books, and then to share your adventure in them again and again. We congratulate these authors, artists and publishers for their role as tour guides through the natural world.

Juliana Texley, Lead Reviewer, NSTA Recommends

About the Reviews

In addition to standard publishing information, the annotations indicate the following:

 Titles marked with ³ are Selectors' Choices—books that individual panel members responded to with particular enthusiasm.



- 2. International Standard Book Numbers (ISBN) are included for all available editions (trade, library, and paperback).
- 3. The prices are current as of January 2012.
- 4. The notation Paper ed. (F) indicates that a paperback edition is forthcoming and whether the publisher is different from the hardcover edition.
- 5. Reading levels (K–2, 3–5, 6–8, and 9–12) are provided by the reviewers. They are intended as guidelines and are not meant to limit the potential use of titles.
- 6. The reviewer's initials follow each description (see Members of the Book Selection Panel, below).
- 7. The most relevant National Science Content Standards are indicated by Roman numerals (see below).

National Science Content Standards: (I) Unifying Concepts and Processes, (II) Science as Inquiry, (III) Physical Science Perspectives, (IV) Life Science, (V) Earth and Space Science, (VI) Science and Technology, (VII) Science in Personal and Social, (VIII) History and Nature of Science

Book List

Earth and Space

<u>B is for Blue Planet: An Earth Science Alphabet</u>. Ruth Strother. Illustrated by Bob Marstall. Sleeping Bear Press. 40pp. Trade ISBN 978-1-58536-454-1, \$16.95. (3–5) The simple poetic text and colorful illustrations provide an engaging entrée into the earth science topics addressed in the book while sidebars provide in-depth information on each topic. Facts Page. (RMM) V

<u>How The Weather Works: A Hands-On Guide to Our Changing Climate</u>. Christiane Dorion. Illustrated by Beverley Young. Templar books, an imprint of Candlewick Press. 20pp. Trade ISBN 978-0-7636-5262-3, \$17.99. (3–5) This engaging pop-up book provides students with many interactive models that cover all types of weather topics such as fronts, hurricanes, wind, and much more. (CMB) V

Tornado! The Story Behind These Twisting, Turning, Spinning, and Spiraling Storms. Judith Bloom Fradin and Dennis Brindell Fradin. National Geographic Society. 64pp. Trade ISBN 978-1-4263-0779-9, \$16.95. Library ISBN 978-1-4263-0780-5, \$26.90. (3–8) This book in the *National Geographic Kids* series uses amazing and timely photographs and first-person accounts to tell the story of this devastating weather phenomenon and the people who study and chase them. Bibliography, Glossary, Index, Websites, Survivors & Witnesses, Tornado Scientists. (BCC) V, VII, II

History and Nature of Science

<u>Biomimicry: Inventions Inspired by Nature</u>. Dora Lee. Illustrated by Margot Thompson. Kids Can Press. 40pp. Trade ISBN 978-1-55453-467-8, \$18.95. (6–8) Ever looked at something made by humans and think it resembled nature? It's no coincidence that some of nature's most brilliant "designs" have been copied by humans. Learn about a variety of inventions from robots that have "whiskers" to help them feel their way to slithering, snake-like search devices that crawl into earthquake rubble to search for survivors. Rich illustrations blend the natural and the man-made, highlighting how nature has informed the achievements of humans. Glossary. (SAR) I, IV, VI

<u>Deadly</u>. Julie Chibbaro. Simon & Schuster. 304pp. Trade ISBN 978-0-689-85738-6, \$16.99. (9–12) Through a fictionalized diary of high interest, social science and science research combine to present an accurate biographical portrait of Mary Mallon, an Irish immigrant who became known as Typhoid Mary. (BCC) VIII, VII

<u>Eco Dogs</u>. Judith Bauer Stamper. Illustrated with full-color photographs. Bearport Publishing. 32pp. Library ISBN 978-1-61772-152-6, \$18.95. (3–5) High-interest book about dogs who work to identify endangered animals in collaboration with ecoscientists. Table of Contents, Glossary, Bibliography, Read More, Learn More Online, Index. (SKD) II, IV, VII

Sear From Shore: Chronicles of an Open Ocean Voyage. Sophie Webb. Houghton Mifflin Harcourt. 80pp. Trade ISBN 978-0-618-59729-1, \$17.99. (4–8) What a wonderful way to introduce science notebooks to students! This book tells the story of an ocean journey from the scientist's perspective using text, watercolors and other pertinent information. Glossary, Index. (KAR) II, VIII

• For the Birds: The Life of Roger Tory P eterson. Peggy Thomas. Illustrated by Laura Jacques. Calkins Creek. 40pp. Trade ISBN 978-1-59078-764-9, \$16.95. (3–5) Visually stunning illustrations tell the story of how an interest sparked in a child named Roger Tory Peterson led him to an artful scientific career. Author's note, Bibliography. (SKD) IV, VIII

<u>Meadowlands: A Wetland Survival Story</u>. Thomas F. Yezerski. Farrar Straus Giroux BYR, an imprint of Macmillan Children's Publishing Group. 40pp. Trade ISBN 978-0-374-34913-4, \$17.99. (K–2) This true story of recovery tells about the wetlands of New Jersey, the Meadowlands. After years of near destruction, efforts to restore parts of these wetlands have brought this area back to its natural habitat. Author's Note, Selected Biography, Selected Web Sites. (CMB) VIII

<u>Swirl by Swirl: Spirals in Nature</u>. Joyce Sidman. Illustrated by Beth Krommes. Houghton Mifflin Harcourt. 40pp. Trade ISBN 978-0-547-31583-6, \$16.99. (K–2) The simple evocative text and stunning illustrations combine to create a memorable picture book that adds to young readers' understanding of the natural world. Spirals, from bull snakes to lady ferns to tornados, unfold on every beautiful page. Author's note. (RMM) VIII

<u>Trapped: How the World Rescued 33 Miners from 2,000 Feet Below the Chilean Desert</u>. Marc Aronson. Simon & Schuster. 144pp. Trade ISBN 978-1-4169-1397-9, \$16.99. (6–8) A true story of team work, collaboration, problem solving, and hope, not only as engineers and scientists worked ceaselessly to rescue the miners, but as the miners below worked together to ensure their survival. Afterword, The 33 Miners, Timeline, Glossary, The World of the Miner, How I Wrote this Book, Notes and Sources, Bibliography, Interviews, Useful Websites, Acknowledgements, Index. (CMB) VIII

<u>The Voyage of Turtle Rex</u>. Kurt Cyrus. Houghton Mifflin Harcourt. 40pp. Trade ISBN 978-0-547-42924-3, \$16.99. (K–5) Ancient creatures are featured prominently in children's literature, but not often with the skillful writing that will help children understand this predecessor of the modern sea turtle. Illustrations that will spark imagination among readers support the factual aspects of the narrative and

the author's note relates the story to current science and contemporary creatures. Author's Note. (SAR) IV, VIII

Life Science

<u>About Habitats: Grasslands</u>. Cathryn Sill. Illustrated by John Sill. Peachtree Publishers. 48pp. Trade ISBN 978-1-56145-559-1, \$16.95. (K–2) Beautiful watercolor plates are enhanced by the annotations which make valuable distinctions among major grasslands of the world. Identification of wildlife depicted in individual plates adds valuable information for young readers. Clear, concise text. Range maps of world grasslands inside front cover. Afterword provides additional information for parent, teachers, or advanced readers. Glossary, Bibliography. (SKD) I, IV

<u>About Hummingbirds: A Guide for Children</u>. Cathryn Sill. Illustrated by John Sill. Peachtree Publishers. 48pp. Trade ISBN 978-1-56145-588-1, \$16.95. (K–2) Reading*About Hummingbirds* is a wonderful way for young children to be introduced to these intriguing birds. Clear, sharp illustrations next to short but complex sentences about the hummingbirds invite the reader. Afterword, Glossary, Suggestions for further reading and additional resources. (KAR) IV

<u>After the Kill</u>. Darrin Lunde. Illustrated by Catherine Stock. Charlesbridge. 32pp. Trade ISBN 978-1-57091-743-1, \$16.95. Paperback ISBN 978-1-57091-744-8, \$7.95. (K–5) Wonderful and accurate impressionistic drawings help provide a new slant on predation without being too graphic. This double-book provides an on-going story line in one font-size and includes interesting supporting facts in a smaller font. (BCC) IV

<u>At the Sea Floor Café</u>: Odd Ocean Critter Poems. Leslie Bulion. Illustrated by Leslie Evans. Peachtree Publishers. 48pp. Trade ISBN 978-1-56145-565-2, \$14.95. (3–5) Using poems to look at what unusual sea creatures eat, this book lends itself to the integration of language arts and science. It contains amusing informative poems and explains each type of poetry used. Glossary, Poetry Notes, Websites to Explore, Books You Might Enjoy, Acknowledgments. (VJR) IV

<u>At This Very Moment</u>. Jim Arnosky. Dutton Children's Books, a division of Penguin Young Readers Group. 32pp. Trade ISBN 9780525422525, \$16.99. (K–2) The beautiful art work depicted in this book demonstrates what the wildlife kingdom is doing at each single moment of a day. Jim Arnosky does an excellent job showing the reader what might be happening with different organisms throughout one 24 hour time period. Author's note. (KAR) IV

<u>Butterflies</u>. Seymour Simon. Collins, an imprint of HarperCollins. 32pp. Trade ISBN 978-0-06-191493-5, \$17.99. (K–5) Beautiful close up photographs of moths and butterflies taken in various stages of their life cycles. Accompanied by informative text about body parts, adaptations, life cycles, and how to attract butterflies and moths for observation. Glossary, Index, Websites. (VJR) IV

<u>A Butterfly is Patient</u>. Dianna Hutts Aston. Illustrated by Sylvia Long. Chronicle Books. 40pp. Trade ISBN 978-0-8118-6479-4, \$16.99. (3–5) In this amazingly illustrated book, find out more about the many characteristics of butterflies including their life cycle, and the role they play in the ecosystems which they inhabit. (CMB) IV

Can We Save The Tiger? Martin Jenkins. Illustrated by Vicky White. Candlewick Press. 56pp. Trade ISBN 978-0-7636-4909-8, \$16.99. (K–2) Learn about endangered species, how they became endangered, and ways people are trying to prevent their extinction. The illustrations in this book are amazingly detailed. Find out More, Index (CMB) IV

<u>Caterpillars</u>. Marilyn Singer. EarlyLight Books. 40pp. Trade ISBN 978-0-9797455-7-7, \$14.95 (K–5) A dual narrative and great photography make this book stand out among books on caterpillars. The large print verse is a read aloud perfect for lower grades, and the additional informative text is appropriate for upper elementary and middle grades. Packed full of all the practical facts of a field guide, the book crawls close-up into a world filled with the colorful larval stage of moths and butterflies. Index. (SAR) IV

Coral Reefs. Jason Chin. Roaring Brook Press, an imprint of Macmillan Children's Publishing Group. 40pp. Trade ISBN 978-1-59643-563-6, \$16.99. (K–5) A young girl visits a library and in opening a book about coral reefs finds herself instantly transported; getting an up close and personal look at the organisms that live, hunt, and hide there. Information is highly accurate and the lavish illustrations are yet another reason to give this book as a gift or purchase a copy for yourself or classroom. (CSW) IV

Desert Elephants. Helen Cowcher. Farrar Straus Giroux BYR, an imprint of Macmillan Children's Publishing Group. 40pp. Trade ISBN 978-0-374-31774-4, \$16.99. (K–5) This is a beautifully illustrated story of the longest migration route used by elephants. It includes strong cultural connections and the value of cooperation and collaboration. There are wonderful analogies used to clarify these points. Author's Note, Acknowledgements. (BCC) IV, VII, VIII

<u>Even an Octopus Needs a Home</u>. Irene Kelly. Holiday House. 32pp. Trade ISBN 978-0-8234-2235-7, \$16.95. (K–5) This is an awesome picture book about animal and their habitats. Intriguing illustrations invite the reader into each animal's home. In the home, you will even find the real name of the habitat. (KAR) IV

<u>Family Pack</u>. Sandra Markle. Illustrated by Alan Marks. Charlesbridge. 32pp. Trade ISBN 978-1-58089-217-9, \$15.95. Paperback edition forthcoming from Charlesbridge. (3–5) This beautifully illustrated picture book is based on the story of the first naturally formed wolf pack that resulted from efforts to reintroduce wolves to Yellowstone National Park. A young female wolf finds a mate and they establish the Leopold Pack, which has become one of the most successful packs in the park. Author's Note, Resources. (RMM) IV

First Garden : The White House Garden and How It Grew. Robbin Gourley. Clarion Books/Houghton Mifflin Harcourt. 48pp. Trade ISBN 978-0-547-48224-8, \$16.99. (3–5) Inspired by the story of the latest vegetable garden at the White House, this book gives the historical account of a variety of garden projects taken on by Presidents, First Ladies, and their families. Citizen science takes center stage when First Lady Michelle Obama and the White House chefs invite public school students to plant a garden at the White House. As the story unfolds, gardening tips and recipes are shared and the vegetables end up on the menu. A great book to read as a prelude to gardening with students. Recipes, Web Resources. (SAR) IV, VII CFriends: True Stories of Extraordinary Animal Friendships. Catherine Thimmesh. Illustrated with photographs. Houghton Mifflin Harcourt. 32pp. Trade ISBN 978-0-547-39010-9, \$16.99. (3–8) True stories of extraordinary animal friendships are presented in the beautifully photographed double-level book. The large-font information provides the running commentary of the traits of a friend. The smaller font details the location and circumstances of these unusual animal pairings. Acknowledgments. (BCC) II, V

<u>The Honeybee Man</u>. Lela Nargi. Illustrated by Kyrsten Brooker. Schwartz & Wade. 40pp. Trade ISBN 978-0-375-84980-0, \$17.99. Library ISBN 978-0-375-95695-9, \$20.99. (K–5) A wonderful story demonstr ating that gardens and interactions with them do not only occur out in the country but are very doable in the city. *The Honeybee Man* takes the reader through the process of keeping bees and making honey in a rooftop apartment in New York City. Author's note, Scientific diagrams included on the front and back inside covers. (KAR) IV

How Did That Get In My Lunchbox? The Story of Food. Chris Butterworth. Illustrated by Lucia Gaggiotti. Candlewick Press. 32pp. Trade ISBN 978-0-7636-5005-6, \$12.99. (K–2) Colorfully illustrated journey of the making of a child's lunch. Each food in a lunchbox is followed first to farms and orchards, through harvesting, and finally to the factory processing the foods. Food Facts, Index. (VJR) IV

<u>The Manatee Scientists: Saving Vulnerable Species</u>. Peter Lourie. Illustrated with photographs. Houghton Mifflin Harcourt. 80pp. Trade ISBN 978-0-547-15254-7, \$18.99. (3–8) Follow Dr. Fernando Rosas and his team to the Amazon River as they work to conserve manatees. This is a great example of the nature of science; it shows the value and styles of research that are used in the study of the endangered manatee. Young readers will come away with a stronger appreciation of manatees and the scientists who straddle the traditional and modern worlds to gather important information about endangered species. Spectacular Photos! Resources include a book list and website list, Author's Notes, Glossary, Photo Credits& Index. (SKD) IV, VIII

<u>Over and Under the Snow</u>. Kate Messner. Illustrated by Christopher Silas Neal. Chronicle Books. 44pp. Trade ISBN 978-0-8118-6784-9, \$16.99. (K–2) In this delightful picture book, as a child cross-country skis with her dad, she learns that a secret world of animals survives the winter under the snow. Author's Note, Suggestions for Further Reading. (RMM) IV

A Place for Fish. Melissa Stewart. Illustrated by Higgins Bond. Peachtree Publishers. 32pp. Trade ISBN 978-1-56145-562-1, \$16.95. (3–8) Examples as geographically varied as Florida's spotted trunkfish and the Atlantic salmon provide a unique look at fish, the ecosystems that support them, and how humans can affect their populations. Excellent illustrations accompany text written on two levels. Endplate Range Maps, Fish Facts, Suggestions to Protect Fish and Habitats, Suggested Websites and Readings. (CSW) IV

<u>Planting the Wild Garden</u>. Kathryn O. Galbraith. Illustrated by Wendy Anderson Halperin. Peachtree Publishers. 32pp. Trade ISBN 978-1-56145-563-8, \$15.95. (K–2) This charming picture book about seed dispersal helps young children understand that people, wind, water, plants and other animals can all have a part in helping seeds find a place to grow. Bibliography. (RMM) IV <u>Polar Bears</u>. Mark Newman. Henry Holt BYR, an imprint of Macmillan Children's Publishing Group. 32pp. Trade ISBN 978-0-8050-8999-8, \$16.99. (K–2) Stunning photography and simple accurate text makes this beautiful book suitable for all ages. It works for both an elementary school class room and as a coffee table read at home. Author's Note, Additional Facts, Contact Information for Conservation Organizations. (CSW) IV

Star of the Sea: A Day in the Life of a Starfish. Janet Halfmann. Illustrated by Joan Paley. Henry Holt BYR, an imprint of Macmillan Children's Publishing Group. 32pp. Trade ISBN 978-0-8050-9073-4, \$16.99. (K–2) This is a brief look at the life of an ochre sea star, the most common starfish of the Pacific Coast. From movement, to feeding, to resting, and more, her fascinating life is revealed. Detailed information, Glossary, Suggested Readings. (CSW) IV

<u>Time for a Bath</u>. Steve Jenkins and Robin Page. Houghton Mifflin Harcourt. 24pp. Trade ISBN 978-0-547-25037-3, \$12.99. (K–2) Some soak in volcanic hot springs, some like a mud bath, and others dust with dirt or visit an anthill. Explore the strange ways animals keep themselves clean. Readers who want to know more will find a detailed description of each 'technique' at the back of the book. (CSW) IV

^{CO}What's for Dinner? Quirky, Squirmy Poems from the Animal World. Katherine B. Hauth. Illustrated by David Clark. Charlesbridge. 48pp. Trade ISBN 978-1-57091-471-3, \$16.95. Paperback ISBN 978-1-57091-472-0, \$7.95. (3–5) A delightfully illustrated book of poetry. The poems bring out giggles while describing the relationships of plants and animals in food chains. More Words About Poems, More Words About Animals, Where to Learn More About the Animals in This Book. (VJR) IV

Physical Science

Energy Island. Allan Drummond. Farrar Straus Giroux BYR, an imprint of Macmillan Children's Publishing Group. 40pp. Trade ISBN 978-0-374-32184-0, \$16.99. (3–5) An inspiring true story about how citizens of Samso, an island in Denmark, drastically reduced their carbon emissions and became almost completely energy-independent. The witty illustrations by the author tell a story that exemplifies the impact of collaboration as they built wind turbines, erected solar panels, and built a biomass furnace. Sidebars provide teachers, parents, or advanced readers with additional information about energy topics such as nonrenewable and renewable energy, energy independence, global warming, wind energy and saving energy. Samso is now the home of Samso Energy Academy, where scientists and scholars come to exchange ideas about energy conservation. (SKD) VI, VII

<u>Michael Vey: The Prisoner of Cell 25</u>. Richard Paul Evans. Simon & Schuster. 336pp. Trade ISBN 978-1-4516-5650-3, \$17.99. (6–8) First in the series, this intriguing science fiction story is about a special group of kids whose bodies conduct electrical current. Of course, there's a villain who is trying to gain control of their powers. Web page, Facebook, Twitter. (VJR) III

Science as Inquiry

<u>Animal Eyes</u>. Beth Fielding. EarlyLight Books. 36pp. Trade ISBN 978-0-9797455-5-3, \$14.95. (3–5) A very simple presentation of a complex concept with excellent compare-and-contrast examples supported by outstanding photographs. Each topic includes additional detailed information presented in

varying formats such as "Test It Out", "Did You Know?", and "Check It Out". Glossary, Index, Guess Who!, How Our Eyes Work. (BCC) II, IV

Baby Mammoth Mummy Frozen in Time! A Prehistoric Animal's Journey into the 21st Century. Christopher Sloan with the generous cooperation of Bernard Buigues. Illustrated with photographs by Francis Latreille. National Graphic Society. 48pp. Trade ISBN 978-1-4263-0865-9, \$17.95. Library ISBN 978-1-4263-0866-6, \$26.90. (6–8) A true story about the finding of a baby wooly mammoth, Lyuba, in the tundra of Siberia. Follow the journey from her discovery through the investigation to learn more about how she and other mammoths lived. Resources, Glossary, Index. (CMB) II

<u>Bug Shots: The Good, the Bad, and the Bugly</u>. Alexandra Siy. Illustrated by Dennis Kunkel. Holiday House. 40pp. Trade ISBN 978-0-8234-2286-9, \$16.95. (3–8) Join the FBI (Fellow Bug Investigators) examining the good and bad about insect habits, and discover that these amazing creatures bite, drink blood, steal food, and can kill plants, animals and even people! Amazing photographs provide close up views of astonishing claws, jaws, and specialized insect parts. Glossary, List of Sources, Index, Suggested Readings. (CSW) II, IV

Butterfly Tree. Sandra Markle. Illustrated by Leslie Wu. Peachtree Publishers. 32pp. Trade ISBN 978-1-56145-539-3, \$16.95 (K–5) This is more than another butterfly book. It's really about looking at something and not knowing what it is—then making a discovery. The rich narrative builds suspense, and will help children understand how nature produces unexpected phenomena from which they can learn. Author's Note. (SAR) II, IV

<u>The Case of the Vanishing Golden Frogs: A Scientific Mystery</u>. Sandra Markle. Millbrook Press, a division of Lerner Publishing Group. 48pp. Library ISBN 978-0-7613-5108-5, \$29.27. (3–5) This true who-done-it investigates the reason Panamanian golden frogs began disappearing. Pollution? Habitat loss? Climate change? Predators? Something else? Follow scientists as they work to save the frogs and solve this real-life mystery. Author's Note, How to Help Local Frogs, Global Rescue Efforts, Glossary, Index, Suggested Websites and Readings. (CSW) II

<u>Dinosaur Discovery: Everything You Need to Be a Paleontologist</u>. Chris McGowan. Illustrated by Erica Lyn Schmidt. Simon & Schuster. 48pp. Trade ISBN 978-1-4169-4764-6, \$17.99. (3–5) The perfect book for the dinosaur lovers. Twenty-five experiments have readers exploring dinosaur movement, body structure, and discovery. Tidbits of interesting information accompany general information about each dinosaur. Glossary, Index. (VJR) II

<u>The Elephant Scientist</u>. Caitlin O'Connell and Donna M. Jackson. Illustrated with photographs by Caitlin O'Connell and Timothy Rodwell. Houghton Mifflin Harcourt. 80pp. Trade ISBN 978-0-547-05344-8, \$17.99. (3–8) Part of the excellent *Scientists in the Field* series with challenging readings and beautiful photographs that provide insight about research methods, collaboration between scientists, and division of tasks by career scientists. Author's Note, Bibliography, Glossary, Index, Explorations. (BCC) II, VIII, VII

Elephant Talk: The Surprising Science of Elephant Communication. Ann Downer. Twenty-First Century Books, a division of Lerner Publishing Group. 112pp. Library ISBN 978-0-7613-5766-7, \$33.26. (6–8) Scientists study the many forms of communication used by elephants to better understand elephant behavior in hopes of saving this species from extinction in the wild. Author's Note, Elephant Dictionary, Source Notes, Selected Bibliography, Further Reading and Websites, Index, Acknowledgments. (CMB) II

Can you guess whose eggs these are? In this colorful picture book, the author poses the question and provides clues before the reader turns the page to find the answer. Further information about each bird and the other animals who share its habitat is included. Additional Resources, Glossary. (RMM) II

<u>Polar Bear: Shrinking Ice</u>. Stephen Person. Illustrated with full-color photographs. Bearport Publishing. 32pp. Library ISBN 978-1-61772-129-8, \$18.95. (3–5) Look inside to find out how Arctic researchers solved the mystery of the starving polar bears of Churchill, Canada. You'll also discover how these amazing animals are built to survive in one of the coldest places on Earth, how they hunt and raise their young, and how humans can help save them and their icy habitat. This book presents information about polar bears and a partnership between the author and scientists in an interesting format. Glossary, Bibliography, Online Resources (including a crossword to accompany the glossary), Index. (SKD) IV, VII

<u>Thomas the T. Rex: The Journey of a Young Dinosaur to Los Angeles</u>. Michael Smith. Illustrated by Gayle Garner Roski. Photographs by Natural History Museum of Los Angeles County. East West Discovery Press. 44pp. Trade ISBN 978-098216753-3, \$19.95. (3–5) Based on the true story of discovering a Tyrannosaurus Rex, this story recreates the steps needed to take fossils from field to museum. In the classroom, this story would be good preparation for a field trip to a fossil dig, or before a mock dig at school. The story and rich illustrations are supported by the section at the end of the book that tells the factual story in words and photographs. Team Discovery Section. (SAR) II, IV, VIII

<u>The Watcher: Jane Goodall's Life with the Chimps</u>. Jeanette Winter. Schwartz & Wade. 48pp. Trade ISBN 978-0-375-86774-3, \$17.99. Library ISBN 978-0-375-96774-0, \$20.99. (K–3) The book clearly depicts observation as one of the critical skills of inquiry. Observation is introduced through a description of Jane watching, listening and becoming intimate with the chimps. Jane kept notes about all the work she did with the chimps. Author's Note (KAR) II

Members of the Book Selection Panel

Betty Crocker (BCC), Chair College of Education (Retired) University of North Texas Denton, Texas

Carla Billups (CMB) Fifth Grade Teacher Jonathan Valley Elementary School Maggie Valley, North Carolina

Sharla Dowding (SKD)

Science Teacher, NBCT Newcastle High School Newcastle, WY

Rebecca Monhardt (RMM)

Associate Professor Loras College Dubuque, IA

Kathy Renfrew (KAR)

K–4 Math & Science Assessment Coordinator Department of Education Montpelier, VT

Steve Rich (SAR) K–8 Science Specialist Georgia Department of Education Atlanta, GA

Vana Richards (VJR) 5th Grade Teacher Kenneth J. Elementary School Emmett, ID

Cindi Smith-Walters (CSW)

Professor of Biology and Co-Director of the MTSU Center for Environmental Education Murfreesboro, TN

Visit CBC's and NSTA's websites <u>atwww.cbcbooks.org</u> and <u>www.nsta.org</u>. Expanded reviews of these award-winning books are available at <u>www.nsta.org/recommends</u>.

Call for Submissions for 2012 Outstanding Science Trade Books for Students K–12

Deadline for submissions: June 20, 2012

Eligibility

- Titles should be for grades K–12.
- All titles must originate from a children's publishing company or division and must be published (not simply distributed) by a publisher incorporated in the United States.
- Titles must be published in 2012.
- Titles originally published abroad are eligible only if they have a 2012 U.S. publication date; reprints or licensed editions of titles initially published in the United States before 2012 are not eligible.

- Original paperbacks are eligible; paperback reprints are not. If a book is published simultaneously in hardcover and paperback, either edition may be submitted. If both editions are submitted, they constitute separate entries.
- Revisions are eligible only if the book has been newly illustrated or if substantial text, constituting at least 25% of the book, has been changed or added.
- Math books are not eligible unless the mathematical principles are applied to scientific functions such as measuring for experiments, using statistical models for scientific research, and so on.
- Textbooks, workbooks, kits, experiment-only books, and activity books are not eligible.
- Spanish-language editions of titles published in English before 2012 are not acceptable. Spanish-language editions published simultaneously with English-language editions in 2012 are eligible.
- Fiction is eligible if the book has substantial science content.

Number of titles you may submit

Each participating publisher may submit an unlimited number of titles.

Submission guidelines

Books should have value for both classroom studies and library collections supporting students' work.

Full submission guidelines are available at <u>www.cbcbooks.org</u>.

About the Books and the Selection Process

The books that appear in this annotated bibliography selected as Outstanding Science Trade Books were published in 2011. They are intended primarily for grades K–12. They were selected by members of 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 based generally 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 to the point that the information is misleading.
- Generalizations are supported by facts, and significant facts are not omitted.
- 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: logical presentation and a clear sequence of ideas; appropriate content level for the intended audience; compatible text and illustrations; illustrations that are accurate representations in size, color, and scale; appropriate trim size and format of the book for the subject and audience; and well-organized layout that advances the text. The panel also gives attention to the quality of binding, paper, reproduction, and the appropriateness of typeface. Each panel member reads all the books, but

annotations reflect only the appraisal of the individual panelist whose initials appear at the end of each entry.

Publishers' names appear in abbreviated form; complete names and addresses are available from the CBC and in standard reference works such as Children's Books in Print. CBC's Member List is available at <u>www.cbcbooks.org/about/members.html</u>.

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

About CBC and NSTA

The Children's Book Council (CBC) is a nonprofit trade organization that encourages the use and enjoyment of books and related literacy materials for young people. The official sponsor of Children's Book Week, the CBC supports reading-encouragement programs both independently and with other national and international organizations. The CBC's members are U.S. publishers and packagers of trade books for children and young adults and producers of book-related materials for young people. For more information, visit <u>www.cbcbooks.org</u>. The National Science Teachers Association (NSTA) 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, visit <u>www.nsta.org</u> or call 800-722-NSTA.