



## Outstanding Science Trade Books for Students K–12: 2011 (Books published in 2010)



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Science is passion, science is wonder. The best books about science stir the minds and hearts of readers in very special ways; and when they do, the impressions they make can last for years. To make sure the treasures we share in this list are truly wonderful, for each of the last 38 years an intent group of science educators and bibliophiles has gathered to identify the best in science trade books for young readers. Our panel members found inspiration in the outstanding selections they have identified.

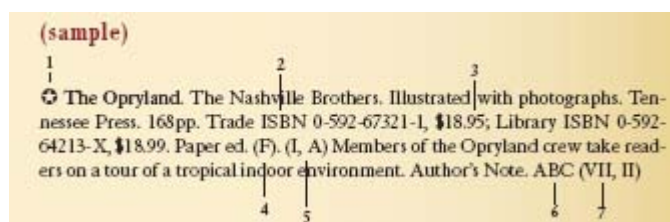
This year's award winners represent an eclectic array of treats. Some (like Caldecott winner *Dark Emperor and Other Poems of the Night* and *Poetrees*) invoke readers' aesthetic sense as they explore and explain in lyric poetry. Readers of *Growing Patterns* will never walk through a flower garden again without counting petals. Visual feasts like *I Dreamed of Flying Like a Bird* offer opportunities for vicarious inquiry. *The Robin Makes a Laughing Sound* will inspire artists and diarists to find their own muse. Teen readers will love the graphic novel style of *How to Clean a Hippopotamus*. Others will recognize the traditional page-turning appeal of a mystery in *Case Closed* and *Every Bone Tells a Story*. The youngest readers will find an invitation to explore the world in new ways in books like *Newton and Me*.

Yes, there's a common element among the honorees—their ability to inspire readers to look beyond their pages to the world around. This year's committee invites you to join them in another celebration of outstanding reading and great science.

*Juliana Texley, Lead Reviewer, NSTA Recommends*

### About the Reviews

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



1. Titles marked with ★ 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 2011.
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

### Unifying Concepts and Processes in Science

★ *Growing Patterns*. Sarah C. Campbell. Illustrated with photographs by Sarah C. Campbell and Richard P. Campbell. Boyds Mills Press. 32pp. Trade ISBN 978-1-59078-752-6, \$17.95. Paper ed. (F). (3–8) What a beautiful way to explain Fibonacci numbers using photographs of natural objects, simple text, and labeled photographs to increase clarity. It is clear that nature is ordered by mathematics. Glossary, Acknowledgments, More About Fibonacci Numbers. (BCC) I, VIII. Supplemental Material: [Developmentally appropriate activities](#), including pattern finding (PBS)

*If Stones Could Speak: Unlocking the Secrets of Stonehenge*. Marc Aronson with Mike Parker Pearson and the Riverside Project. Illustrated with photographs. National Geographic Children's Books. 64pp. Trade ISBN 978-1-4263-0599-3, \$17.95. Library ISBN 978-1-4263-0600-6, \$26.90. (6–12) Explore the mysterious circle of stones while new questions are raised and new ideas are shared from unusual sources. Experience archaeology at its best, along with maps, illustrations, personal observations, and photos. Narrative Fact-Finder Index, Archaeologists and Their Theories, Chronology of Digs, and the Ever-Changing Timeline of Stonehenge. (SMF) I, II, V. Supplemental Material: [Secrets of Lost Empires I—Stonehenge](#) (NOVA)

★ *Just One Bite*. Lola M. Schaefer. Illustrated by Geoff Waring. Chronicle Books. 32pp. Trade ISBN 978-0-8118-6473-2, \$17.99. (K–5) From butterflies to giraffes, 11 animals from around the world are illustrated in this book. Their wide range in size and eating habits is depicted, with life-size illustrations that give perspective to young readers. Science Notes. (SAR) I, IV, VII. Supplemental Material: [Interactive scaling activities](#) (Howard Hughes Medical Institute)

[\*S is for Scientists: A Discovery Alphabet\*](#). Larry Verstraete. Illustrated by David Geister. Sleeping Bear Press. 32pp. Trade ISBN 978-1-58536-470-1, \$16.95. (3–8) Science process skills—like the abilities to prove, question, and record—are each described in a poem. Brief descriptions of the work of both ancient scientists, such as Archimedes (265 BC), and present-day scientists, such as Katy Payne (1984), serve as examples of the skills in action. Suggestions for Hands-On Activities. (NHM) I. Supplemental Material: [On Being a Scientist](#), video (National Academies of Science)

## Science as Inquiry

[\*Case Closed? Nine Mysteries Unlocked by Modern Science\*](#). Susan Hughes. Illustrated by Michael Wandelmaier. Kids Can Press. 88pp. Trade ISBN 978-1-55453-362-6, \$17.95. (3–8) These nine mysteries have a great mix of science and anthropology. Readers will enjoy the narrative tone and the additional questions that result from good science. Glossary, Index. (BCC) II, IV, VI, VIII. Supplemental Material: [Report on Amelia Earhart](#) (NASA)

[\*Every Bone Tells a Story: Hominin Discoveries, Deductions, and Debates\*](#). Jill Rubalcaba and Peter Robertshaw. Charlesbridge Publishing. 192pp. Trade ISBN 978-1-58089-164-6, \$18.95. (6–12) This book tells interesting stories about the discoveries of four different hominins, the deductions made by the archaeologists and scientists who studied these hominins, and the debates spurred on in the world of science about our ancestors. Introduction, Conclusion, For Further Reading, Timeline, Glossary, Hominins and Friends, Bibliography. (CMB) II, IV, VIII. Supplemental Material: [Information on forensics](#) (National Library of Medicine)

[\*The Robin Makes a Laughing Sound\*](#). Sallie Wolf. Illustrated by Micah Bornstein. Charlesbridge Publishing. 48pp. Trade ISBN 978-1-58089-318-3, \$11.95. (3–8) Delightfully written and exquisitely illustrated, this book gives children and adults a glimpse of a birder's journal, not to mention the addition of poetry. This is not only a great tool for teaching science and communication arts, but also a book that one will want to hug. Resources. (JCL) I, II, IV, VII, VIII. Supplemental Material: [Begin your own journal or participate in the Great Backyard Bird Count](#) (Audubon)

## Physical Science

[\*Newton and Me\*](#). Lynne Mayer. Illustrated by Sherry Rogers. Sylvan Dell Publishing. 32pp. Trade ISBN 978-1-60718-067-8, \$16.95. Paperback ISBN 978-1-60718-078-4, \$8.95. (K–2) A young boy and his dog Newton explore the laws of motion in everyday activities like rolling a ball, riding a bicycle, and pulling a wagon. Questions, Science Notes. (SAR) III, VII. Supplemental Material: [Developmentally appropriate activities](#) (PBS Zoom)

## Life Science

★ [\*At Home With the Gopher Tortoise: The Story of a Keystone Species\*](#). Madeleine Dunphy. Illustrated by Michael Rothman. Web of Life Children's Books. 32pp. Trade ISBN 978-0-9777539-6-3, \$16.95. Paperback ISBN 978-0-9777539-5-6, \$9.95. (K–8) This book gives a simple yet in-depth look at the importance of an unassuming and often overlooked animal. Surprisingly, the gopher tortoise significantly affects more than 360 different kinds of animals that depend upon its burrows for shelter, food, or a place to raise young. This is a fascinating look at how one species can affect the fate of many.

Author's Note, Selected Bibliography. (CSW) IV. Supplemental Material: [Student workbook](#) (The Charlotte Harbor National Estuary Program)

[\*The Buffalo Are Back\*](#). Jean Craighead George. Illustrated by Wendell Minor. Dutton Children's Books, a division of Penguin Young Readers Group. 32pp. Trade ISBN 978-0-525-42215-0, \$16.99. (K–5) Read the amazing history about the near extinction of the buffalo in the American Great Plains and conservation efforts to protect them. The interrelationship between the buffalo and the tall prairie grass is clearly explained. Bibliography, Websites. (NSC) IV. Supplemental Material: [Lesson plan on buffalo and prairies](#) (The Agriculture in Montana Schools Foundation)

[\*The Buzz on Bees: Why Are They Disappearing?\*](#) Shelley Rotner and Anne Woodhull. Illustrated with photographs by Shelley Rotner. Holiday House. 32pp. Trade ISBN 978-0-8234-2247-0, \$16.95. (3–5) Easy-to-read text and eye-catching photos help capture bees at work as pollinators and their alarming Colony Collapse Disorder. What is the mystery of disappearing bee colonies and their effect on our food sources? End notes called “Bee active” provide conservation ideas. A “Find out more!” section suggests many websites that will teach readers to take proactive measures. (SMF) IV, VII. Supplemental Material: [Colony Collapse Disorder update](#) (PBS)

★ [\*The Chiru of High Tibet: A True Story\*](#). Jacqueline Briggs Martin. Illustrated by Linda Wingerter. Houghton Mifflin Harcourt. 40pp. Trade ISBN 978-0-618-58130-6, \$17.99. (3–5) From the northern plains of Tibet comes this true story, written in free verse, about the quest of scientist George Schaller and four other men to prevent the extinction of the chiru—an antelope-like creature that cannot survive captivity. Author's Notes, Illustrations and Photographs. (NSC) IV. Supplemental Material: [Video illustrating the uniqueness of the species](#) (uscites.gov)

[\*The Complete Human Body: The Definitive Visual Guide\*](#). Alice Roberts. DK Publishing. 512pp. Trade ISBN 9780756667337, \$50. (6–12) DVD enhanced, this ambitious volume examines human evolution, anatomy, function, reproduction, and disease in an orderly, up-to-the-minute visual format. Glossary, Index. (NHM) IV. Supplemental Material: [Virtual labs on cardiology, neurology and other topics](#) (The Howard Hughes Medical Institute)

[\*Dark Emperor and Other Poems of the Night\*](#). Joyce Kilmer. Illustrated by Rick Allen. Houghton Mifflin Harcourt. 32pp. Trade ISBN 978-0-547-15228-8, \$16.99. (K–5) Listening for noises in the night? Come explore the shadowy sights and muffled sounds of the night as poetry blends artfully together with illustrations and scientifically correct explanations. (SMF) II, IV. Supplemental Material: [Watch the “Dark Emperor” on an owl cam](#) (Washington Department of Fish and Wildlife)

[\*Face to Face With Manatees\*](#). Brian Skerry. Illustrated with photographs by Brian Skerry. National Geographic Children's Books. 32pp. Trade ISBN 978-1-4263-0616-7, \$16.95. Library ISBN 978-1-4263-0617-4, \$25.90. (3–5) This book contains firsthand information and photographs provided by the author, who has observed manatees “face-to-face.” Conservation messages about manatees and their habitats are included. Author's Note, Glossary, Further Sources for Reading, Index. (NSC) IV. Supplemental Material: [Student-centered activities on Florida](#) (Earthwatch Institute)

[\*Great Migrations: Whales, Wildebeests, Butterflies, Elephants, and Other Amazing Animals on the Move\*](#). Elizabeth Carney. Illustrated with photographs. National Geographic Children's Books. 48pp.

Trade ISBN 978-1-4263-0700-3, \$17.95. Library ISBN 978-1-4263-0701-0, \$27.90. (3–8) This book captures the motion of migrating animals in photographs and describes how these incredible journeys are driven by the animals' survival mechanisms. Index. (KLO) IV, VII. Supplemental Material: [Video, links, and more information on migrations](#) (National Geographic)

[\*Hip-Pocket Papa\*](#). Sandra Markle. Illustrated by Alan Marks. Charlesbridge Publishing. 32pp. Trade ISBN 978-1-57091-708-0, \$15.95. (K–2) Threatened by drought in Australia's temperate rain forest and predation by skinks, quolls, and spiders, a father frog no bigger than a thumbnail protects his brood of 12 tadpoles in pouches on his hips. Author's Note, Resources, Glossary. (NHM) IV. Supplemental Material: [Information on Australian frogs from New South Wales](#) (NSW.gov)

[\*The Hive Detectives: Chronicle of a Honey Bee Catastrophe\*](#). Loree Griffin Burns. Illustrated with photographs by Ellen Harasimowicz. Houghton Mifflin Harcourt. 80pp. Trade ISBN 978-0-547-15231-8, \$18. (6–12). Learn about honeybees, the honey they make, bee keepers, and the scientists who research Bee Colony Collapse Disorder (CCD). Follow along from the beekeepers who noticed the collapse of their hives in 2006 to the researchers and scientists who started looking for the cause of CCD. Appendix, Glossary, Acknowledgments, Select References, Index. (CMB) IV, VII, VIII. Supplemental Material: [Colony Collapse Disorder update](#) (PBS) \*Editor's Note: To learn more about the author, hear her read, find teacher resources, and more, visit [www.loreegriffinburns.com](http://www.loreegriffinburns.com).

[\*Honey Bees: Letters From the Hive\*](#). Stephen Buchmann. Delacorte Press, an imprint of Random House Children's Books. 224 pp. Trade ISBN 978-0-385-73770-8, \$16.99. Library ISBN 978-0-385-90683-8, \$19.99. (6–12) A bee expert and renowned entomologist shares the history of bees and their relationship with humans throughout history, and looks at the current role of bees as pollinators. Author's Notes, Appendices. (SAR) IV, VIII. Supplemental Material: [Colony Collapse Disorder update](#) (PBS)

★ [\*How to Clean a Hippopotamus\*](#). Steve Jenkins and Robin Page. Illustrated by Steve Jenkins. Houghton Mifflin Harcourt. 32pp. Trade ISBN 978-0-547-24515-7, \$16. (K–5) Find out how animals form partnerships to help each other through the process of symbiosis. Rich illustrations enhance the explanations of a variety of unusual but important partners. End notes explain illustrations in detail. (CMB) IV. Supplemental Material: [Lesson plan on animal partnerships](#) (NOAA)

[\*It's Harvest Time!\*](#) Jean McElroy. Illustrated with photographs by Tilde. Little Simon, an imprint of Simon & Schuster Children's Publishing. 14pp. Trade ISBN 978-1-4424-0352-9, \$7.99. (K–2) This durable board book uses photographs and fold-out pages to show how five different types of seeds grow into unique plants and ultimately into fruits and vegetables that people eat. (NSC) IV. Supplemental Material: [Cool Science for Curious Kids \(including salad activities\)](#) (Howard Hughes Medical Institute)

[\*Kakapo Rescue: Saving the World's Strangest Parrot\*](#). Sy Montgomery. Illustrated with photographs by Nic Bishop. Houghton Mifflin Harcourt. 80pp. Trade ISBN 978-0-618-49417-0, \$18. (6–12) Have you ever seen a nine-pound green-and-yellow parrot that doesn't fly? Follow the scientists, rangers, and volunteers hard at work on a remote island near New Zealand to protect this uniquely loveable bird and bring it back from the brink of extinction. P.S. The Story Continues, Acknowledgments, Bibliography,

Index.(CMB) IV, VII, VIII. Supplemental Material: [Kakapo Recovery \(information, news, and ways to help\)](#) (Department of Conservation, Forest and Bird, and Rio Tinto Alcan)

★ [Kingdom: Micro Monsters: Extreme Encounters With Invisible Armies](#). Nam Nguyen. Kingfisher. 48pp. Trade ISBN 978-0-7534-6455-7, \$14.99. (6–8) The incredible photographs in this book zoom in on tiny insects and nearly invisible creatures to illustrate the amazing adaptations that allow these animals to survive and thrive. Glossary. (KLO) IV. Supplemental Material: [Classify Insects: Zoom in on True Bugs](#) (Scholastic)

[Looking Closely in the Rain Forest](#). Frank Serafini. Illustrated with photographs by Frank Serafini. Kids Can Press. 40pp. Trade ISBN 978-1-55337-543-2, \$16.95. (K–5) This book’s nine close-up, full-size photographs and text set in a riddle format make you want to read this book again. How wonderful to find a book that fosters inquiry. (BCC) II, IV. Supplemental Material: [Activities for Kids](#) (Rainforest Alliance)

[Mammoths and Mastodons: Titans of the Ice Age](#). Cheryl Bardoe. Illustrated with color illustrations and photographs. Abrams Books for Young Readers. 48pp. Trade ISBN 978-0-8109-8413-4, \$18.95. (3–8) Mammoths and mastodons are extinct, but their stories aren’t over. This book is an account of how real-life CSI techniques are being used to study a recently discovered, fully frozen baby mammoth, and how we are adding to our knowledge of these unique creatures. Glossary, Selected References, Index. (CSW) II, IV, VIII. Supplemental Material: [Ice Age Animals of Utah](#) (Utah Geological Survey)

[Nat Geo Wild Animal Atlas: Earth’s Astonishing Animals and Where They Live](#). National Geographic. Illustrated with photographs. National Geographic Children’s Books. 64pp. Trade ISBN 978-1-4263-0699-0, \$18.95. Library ISBN 978-1-4263-0727-0, \$27.90.(K–5) This large-format book serves both science and geography with contents arranged first by continent and then subdivided by biome. Stunning photos, easy-to-read maps, informative graphics, and fast-facts about everything from the rock ptarmigan to Eurasian otters will appeal especially to young readers. Resources, Glossary, Index. (NHM) IV. Supplemental Material: [Classifying Critters](#) (Howard Hughes Medical Institute)

[National Geographic Kids: The Ultimate Dinopedia](#). Don Lessem. Illustrated by Franco Tempesta. National Geographic Children’s Books. 272pp. Trade ISBN 978-1-4263-0164-3, \$24.95. Library ISBN 978-1-4263-0165-0, \$34.90. (3–8) This is not your typical dinosaur book. It offers kids a look at familiar dinosaurs like *Tyrannosaurus Rex* and *Diplodocus* while using kid-friendly text and stunning art work to give complete coverage of all the known dinosaurs. This book is a real treat and a must have for the dinosaur lover on any gift list. Dino Dictionary (thumbnail sketch of each dinosaur), Glossary, Recommended Books, Websites and Videos, Suggested Places to Visit, Index. (CSW) IV. Supplemental Material: [Fossil Sites and Activities](#) (Bureau of Land Management)

[National Geographic Little Kids First Big Book of Animals](#). Catherine D. Hughes. Illustrated with photographs. National Geographic Children’s Books. 128pp. Trade ISBN 978-1-4263-0704-1, \$14.95. Library ISBN 978-1-4263-0721-8, \$21.90. (K–5) Broken down into habitats, this delightful book features common animals from around the world. Stunning photography, quick facts, and attention-grabbing trivia will keep youngsters entertained while they learn (and big kids will like it too!). Parent Tips to Extend Learning, Animal Map, Glossary, Index. (CSW) IV. Supplemental Material: [Classifying Critters](#) (Howard Hughes Medical Institute)

[Nic Bishop Lizards](#). Nic Bishop. Illustrated with photographs by Nic Bishop. Scholastic Nonfiction. 48pp. Trade ISBN 978-0-545-20634-1, \$17.99. (K–5) This book contains amazing photographs of lizards from around the world, with explanatory text. The author explains the multiple steps and the variables manipulated to capture some of the shots. Author’s Note, Glossary, Index, Further Reading. (BCC) IV, VII. Supplemental Material: [Nic Bishop Biography](#) (Scholastic)

★ [Pierre the Penguin: A True Story](#). Jean Marzollo. Illustrated by Laura Regan. Sleeping Bear Press. 32pp. Trade ISBN 978-1-58536-485-5, \$15.95. (K–5) In an enchanting true story told in rhyme, *Pierre the Penguin* overcomes obstacles that make him an outcast to the rookery. A biologist named Pam finds a way to make Pierre fit in with the other penguins in the California aquarium. Questions for Kids to Answer. (JCL) I, II, IV. Supplemental Material: [Live Penguin Cams](#) (California Academy of Sciences)

[Poetrees](#). Douglas Florian. Beach Lane Books, an imprint of Simon & Schuster Children’s Publishing. 48pp. Trade ISBN 978-1-4169-8672-0, \$16.99. (K–5) More than a dozen species of trees are the subject of the poems in this illustrated anthology. It covers everything from leaves to seeds, roots, and tree rings—all of which might inspire writing about nature. Glossary. (SAR) IV, VII. Supplemental Material: [Alaskan Tree Activity](#) (USDA)

[Project Seahorse](#). Pamela S. Turner. Illustrated with photographs by Scott Tuason. Houghton Mifflin Harcourt. 64pp. Trade ISBN 978-0-547-20713-1, \$18. (6–12) Scientists off an island in the Philippines work to help the dwindling numbers of seahorses and to protect their coral reef ecosystem. In working with the local fishing community to protect this fragile ecosystem, a way of life is also being preserved. Glossary, Acknowledgments, Resources, Index, How to Help Seahorses. (CMB) IV, VII, VIII. Supplemental Material: [Biography of Amanda Vincent \(Director of Project Seahorse\) and Links to Her Research](#) (The University of British Columbia)

[Slow Down for Manatees](#). Jim Arnosky. G.P. Putnam’s Sons. 32pp. Trade ISBN 978-0-399-24170-3, \$16.99. (K–2) In this story, an injured manatee is rescued and taken to a recovery center where it gives birth. After rehabilitation, the mother and baby are released, giving readers an example of how scientists can work successfully with wild animals. Afterword. (SAR) IV, VIII. Supplemental Material: [Manatee Activities](#) (EarthWatch)

[Survival at 40 Below](#). Debbie S. Miller. Illustrated by Jon Van Zyle. Walker Books for Young Readers. 40pp. Trade ISBN 978-0-8027-9815-2, \$17.99. Library ISBN 978-0-8027-9816-9, \$18.89. (3–5) Within the Gates of the Arctic National Park and Preserve, located in Alaska, animals with amazing adaptations survive the brutal winters. The author describes these animals and the way they live in this harsh environment. Author’s Note, Glossary, Further Sources for Reading. (NSC) IV, VIII. Supplemental Material: *Editor’s Note: To learn more, hear the sounds the animals make, and view fantastic photos, go to [www.debbiemilleralaska.com/SurvivalAt40Below.htm](http://www.debbiemilleralaska.com/SurvivalAt40Below.htm).*

[Turtle, Turtle, Watch Out!](#) April Pulley Sayre. Illustrated by Annie Patterson. Charlesbridge Publishing. 32pp. Trade ISBN 978-1-58089-148-6, \$17.95. Paperback ISBN 978-1-58089-149-3, \$7.95. (K–2) The challenges and dangers that sea turtles face are dramatized in this story; the illustrator beautifully captures the vulnerability and splendor of these endangered animals. (KLO) IV. Supplemental Material: [Educational Activities Related to Sea Turtle Migration-Tracking](#) (Sea Turtle Conservancy)

★ *Ubiquitous: Celebrating Nature's Survivors*. Joyce Sidman. Illustrated by Beckie Prange. Houghton Mifflin Harcourt. 40pp. Trade ISBN: 978-0-618-71719-4, \$17. (K–5) Fresh, stylized poetry joins with information-dense paragraphs and appealing illustrations to illuminate the survival skills of some of nature's most ubiquitous life forms. Arranged in the order of their appearance in evolutionary time, the story begins with bacteria and ends with humans. Author's Note, Illustrator's Note, Glossary. (NHM) IV. Supplemental Material: [Educational Activities Related to Sea Turtle Migration-Tracking](#) (Sea Turtle Conservancy)

*What in the Wild? Mysteries of Nature Concealed... and Revealed*. David M. Schwartz and Yael Schy. Illustrated with photographs by Dwight Kuhn. Tricycle Press. 44pp. Trade ISBN 978-1-58246-310-0, \$16.99. Library ISBN 978-1-58246-359-9, \$19.99. (3–5) Ear-tickling poems and eye-tricking photography lead the reader to attempt to solve the mystery of “What is it?” This is the third book in the What in the Wild? series, and it takes readers on a remarkable tour of the world of nature. There are resources for further reading, including websites and books. (CSW) II, IV. Supplemental Material:

## Earth and Space Science

*Come See the Earth Turn: The Story of Léon Foucault*. Lori Mortensen. Illustrated by Raúl Allén. Tricycle Press. 32pp. Trade ISBN 978-1-58246-284-4, \$17.99. Library ISBN 978-1-58246-361-2, \$20.99. (3–8) The life of Foucault is beautifully yet simply presented, as is the connection between science and history. The historically accurate illustrations are supportive of the story. Author's Note, Bibliography, Glossary, Pronunciation Guide. (BCC) I, V, VIII. Supplemental Material:

★ *Dinosaur Mountain: Digging Into the Jurassic Age*. Deborah Kogan Ray. Frances Foster Books, an imprint of Farrar, Straus and Giroux BYR. 40pp. Trade ISBN 978-0-374-31789-8, \$16.99. (3–8) Step back 100 years to join Earl Douglass on his Utah quest to find, excavate, and preserve dinosaur bones. Science + History = “The Bone Wars.” Glossary, Bibliography, Diary Notes. (SMF) I, II, V. Supplemental Material:

*Earth: Feeling the Heat*. Brenda Z. Guiberson. Illustrated by Chad Wallace. Henry Holt Books for Young Readers, an imprint of Macmillan Children's Publishing Group. 32pp. Trade ISBN 978-0-8050-7719-3, \$16.99. (K–2) Elegantly illustrated and providing a rich display of animals, this book reveals the devastation that global warming has on these critters in different biomes throughout the world. Each page asks readers, “Who can help?” Map, Facts. (JCL) V, VII. Supplemental Material:

*Earth Heroes: Champions of Wild Animals*. Bruce and Carol Malnor. Illustrated by Anisa Claire Hovemann. Dawn Publications. 144pp. Trade ISBN 978-1-58469-123-5, \$11.95. Paperback ISBN 978-1-58469-123-5, \$11.95. (6–12) Meet eight animal conservationists as young people who grew into adults passionate about saving animals from extinction. Each chapter has Fast Facts, Ripples of Influence, Personal Timeline and Historical Timeline, End Notes about Becoming a Citizen Scientist, and Index. (SMF) II, V, VII. Supplemental Material:

*Erased by a Tornado!* Jessica Rudolph. Illustrated with photographs. Bearport Publishing. 32pp. Library ISBN 978-1-936087-52-5, \$18.95. (3–8) The stories of tornado survivors are accompanied by explanations of what causes these natural disasters, where they occur, and how to stay safe. Selected Bibliography, Glossary, Index. (KLO) V, VII. Supplemental Material:



[Global Warming](#). Seymour Simon. Collins, an imprint of HarperCollins Children's. 32pp. Trade ISBN 978-0-06-114250-5, \$17.99. (3–8) In the brilliant Seymour Simon format, this book is a photo essay examining global warming and the devastating facts regarding this enormous world issue. The lesson, that this problem affects each and every one of us, is powerfully conveyed through text and photos. Glossary, Index. (JCL) I, II, IV, V, VII. Supplemental Material: *Editor's Note: Learn more about Seymour Simon, read his blog, find teaching materials and more at [www.seymoursimon.com/](http://www.seymoursimon.com/)*.

[I Dreamed of Flying Like a Bird: My Adventures Photographing Wild Animals From a Helicopter](#). Robert B. Haas. Illustrated with photographs by Robert B. Haas. National Geographic Children's Books. 64pp. Trade ISBN 978-1-4263-0693-8, \$17.95. Library ISBN 978-1-4263-0694-5, \$27.90. (3–8) With amazing photographs taken from a helicopter, this book provides us with aerial views of wild animals. Each photograph will engage students and give them opportunities to use their inquiry skills. Proceeds from the sale of this book go to the Humane Society of the United States. Glossary, Index, Resources. (JCL) I, VI, VII, VIII. Supplemental Material:

[Oceans: Dolphins, Sharks, Penguins, and More!](#) Johnna Rizzo. Illustrated with photographs. National Geographic Children's Books. 64pp. Trade ISBN 978-1-4263-0686-0, \$14.95. Library ISBN 978-1-4263-0724-9, \$24.90. (3–8) Beautiful photographs depict the many organisms that thrive in oceans around the globe and increase our understanding of why the oceans are so important to us all. Author's Note, Glossary, Index. (KLO) IV, V. Supplemental Material:

## **Members of the Book Selection Panel**

**Nancy McDonough** (NHM), Chair

Second-Grade Teacher, Walter Stillman School, Tenafly, New Jersey

**Carla Billups** (CMB)

Fifth-Grade Teacher, Jonathan Valley Elementary School, Maggie Valley, North Carolina

**Nancy Chesley** (NSC)

Elementary Science and Literacy Specialist, Maine Mathematics and Science Alliance, Augusta, Maine

**Betty Crocker** (BCC)

College of Education (Retired), University of North Texas, Denton, Texas

**Suzanne Flynn** (SMF)

Professor, Cambridge College, Carver, Massachusetts

**J. Carrie Launius** (JCL)

Science Coordinator, Hazelwood School District, Florissant, Missouri

**Karen Ostlund** (KLO)

Retired Professor, The University of Texas at Austin, Austin, Texas

**Steve Rich** (SAR)

K–8 Science Specialist, Georgia Department of Education, Atlanta, Georgia

**Cindi Smith-Walters (CSW)**

Professor of Biology and Co-Director of the MTSU Center for Environmental Education, Middle Tennessee State University  
Murfreesboro, Tennessee

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

*Deadline for submissions: June 15, 2011*

### *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 2011.
- Titles originally published abroad are eligible only if they have a 2011 U.S. publication date; reprints or licensed editions of titles initially published in the United States before 2011 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 2011 are not acceptable. Spanish-language editions published simultaneously with English-language editions in 2011 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 will be available in late April, 2011 at [www.cbcbooks.org](http://www.cbcbooks.org).

## About the Books and the Selection Process

The books that appear in this annotated bibliography selected as Outstanding Science Trade Books were published in 2010. 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 [www.cbcbooks.org/about/members.html](http://www.cbcbooks.org/about/members.html).

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 [www.cbcbooks.org](http://www.cbcbooks.org). 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 [www.nsta.org](http://www.nsta.org) or call 800-722-NSTA.