

A Standards-Aligned Educator Guide for Grades 2 - 5

RARE & BLUE: FINDING NATURE'S TREASURES

About the book:

Age Range: 7 - 10 years Grade Level: Grades 2 - 5 Publisher: Charlesbridge ISBN-10: 1623540976 ISBN-13: 978-1623540975 Travel across Earth to discover eight species that are blue in color and are either naturally rare, threatened, or endangered. Panoramic illustrations and a playful main text prompt a search for the blue species at hand, while the pageturn and informative sidebars zoom in to reveal a closer look at the species. There's a lot to uncover about the Karner blue butterfly, blue black bear, blue whale, Quitobacquito pupfish, Cerulean warbler, blue lobster, Eastern Indigo snake, and big bluestem grass. A surprise ending celebrates that planet Earth is the rarest and bluest and must be protected for the sake of all.

About the author-Constance Van Hoven:

Constance Van Hoven lives and writes in Montana, where each and every day she admires Earth's natural wonders—from the great Rocky Mountains in the distance to chattering birds in her backyard. Connie is the author of *Hello*, *Minnesota!* and *The Twelve Days of Christmas in Minnesota*. She and her husband, along with their children and grandchildren, enjoy hiking, birding, and traveling the back roads to explore ghost towns. Find out more about Constance by accessing her website at www.constancevanhoven.com.



About the illustrator-Alan Marks:

Alan Marks' favorite color is blue — a blue that changes with the light, like the sea or the sky. He used at least two shades of blue watercolor paint for each animal in this book. His deep appreciation for wildlife and nature shines through in his elegant and dynamic images. Alan is the illustrator of several books for children, including *Behold the Beautiful Dung Beetle*, *High Tide for Horseshoe Crabs*, and *Daring Dozen: The Twelve Who Walked on the Moon*. He lives in the United Kingdom. Observe more of Alan's amazing work by accessing www.marksonpaper.co.uk.



Pre-Reading Discussion:

- Study the illustrations on the front and back cover. Identify any creatures you are familiar with. Describe those that you are not.
- Consider the questions listed on inside the jacket flap. What does it mean to be rare, threatened, or endangered? What does being rare, threatened, or endangered have to do with illustrations featured in the front and back covers? Explain your answers.
- Predict what this story is going to be about.

Post-Reading Discussion:

How do you find nature's treasures, both rare and blue? Set off on a hunt.

- Define the word *treasure*. List treasures that are found in nature. Tell what makes the treasures listed so valuable.
- How should treasures be cared for? Explain your answer.
- The word *rare* means excellent and exceptional, as well as limited and scarce. Consider both interpretations of the same word. Discuss how a treasure can be both excellent, yet limited.
- How can something in nature can be exceptional, yet scarce? Explain your answer.

To find iridescent blue, rumble into the desert into an oasis pond. Peer beneath algea clumps...

- An ecosystem is a biological community of animals, plants, or other organisms that exists together to form a natural home called a *habitat*. A pond ecosystem is made of four habitats the shore, surface film, open water, and bottom water. Tell how each aspect of the pond ecosystem depends on the other.
- Considering the interconnectedness of the pond habitats, explore reasons why the Quitobaquito fish has become endangered.

To find steely blue, go to where bison roam. Cast your eyes across an endless field . . .

- For an ecosystem to thrive, all elements of its habitat must be equally balanced and cared for. Examine the importance of one aspect of an ecosystem, such as the big bluestem prairie grass. What might happen to the entire biological community should this grass become extinct?
- Determine reasons why big bluestem prairie grass has become threatened. Do you think there might have been a way to save it as a species? If so, how?

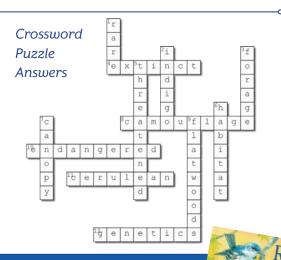
Finally, to find a breathtaking brilliant blue, BLAST into space.

- Earth is home to all ecosystems and habitats, each being created by different climate patterns, types of soil and the sorts plants and animals that exists there. Being that the survival for every habitat is carefully balanced to assure the survival of its species, do you think the Earth, as a whole, might require the same careful balance? Explain your answer.
- Consider how the Earth is considered to be *rare* and blue. List ways that the Earth is excellent and exceptional, as well as being limited and scarce.

Take Action:

Create a campaign dedicated to teaching others how to responsibly care for the Earth's precious ecosystems. Start by studying the list of Recreational Ethics, as presented by the state of Montana's Fish, Wildlife & Parks department. Choose one topic that interests you. Make a poster suggesting ways that humans can engage in and appreciate Earth's natural habitats in responsible ways. Share your work with the class.

Website reference: http://fwp.mt.gov/recreation/ethics/

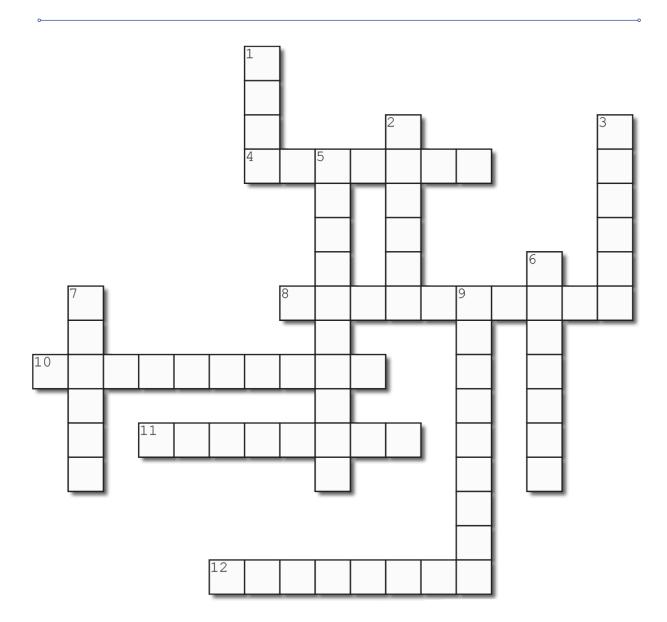




Crossword Puzzle: Words to Know

The clues found at the bottom of the page are comprised from key elements in all three of the Kinzie books.

Answers to the crossword puzzle are found on page 2 of the educator guide.



Across:

- 4. When the members of a species are officially all gone
- 8. To hide by disguise
- 10. Members of a species are declining quickly
- 11. Resembling the blue of the sky
- 12. The study of heredity or how living things pass on characteristic

Down:

- 1. Not often found or seen; uncommon
- 2. A color between blue and purple
- 3. To search for food
- 5. Members of a species are likely to become endangered
- 6. The place where a plant or animal normally lives and grows
- 7. The uppermost spreading branches of trees forming a layer of leaves
- 9. Dry, low-lying timberland with lots of pine tree



