

A Standards-Aligned Educator Guide for Grades 5–7

# BACK FROM THE BRINK: SAVING ANIMALS FROM EXTINCTION



"Readers will be moved by Castaldo's appreciation for these animals."--Booklist

"Challenging but important reading for the intended audience."--Kirkus

### About the book:

Age Range: 10 – 12 years Grade Level: Grades 5 – 7 Publisher: HMH Books for Young Readers

ISBN-10: 0544953436 ISBN-13: 978-0544953437 How could capturing the last wild California condors help save them? Why are some states planning to cull populations of the gray wolf, despite this species only recently making it off the endangered list? How did a decision made during the Civil War to use alligator skin for cheap boots nearly drive the animal to extinction?

Back from the Brink answers these questions and more as it delves into the threats to seven species, and the scientific and political efforts to coax them back from the brink of extinction. This rich, informational look at the problem of extinction has a hopeful tone: all of these animals' numbers are now on the rise.

## About the author-Nancy Castaldo:

Nancy Castaldo has been writing books about the planet for over 20 years. Her award-winning titles have been Bank Street College of Education Best Books selections, National Science Teachers Associations Notable titles, and winners of the Green Earth Book Award. Nancy loves writing books that inform, inspire, and empower her young readers. She loves sharing her research and writing in schools and libraries. Learn more about Nancy by accessing her website at <a href="https://www.nancycastaldo.com">www.nancycastaldo.com</a>.



## Pre-Reading Discussion:

- Consider the photograph featured on the front cover. Explain the relationship between the animals featured there. Describe their surroundings. Predict the animals' connection with their environment.
- Indentify the animal featured on the back cover of the book. List ways that both species of animals are
  physically similar and different.
- The word *extinct* means lost, terminated, dead and gone. Explore the feeling of finality the word suggests. Are there ways to prevent the onset of something becoming extinct? If so, how?
- Read the title of the book. The primary similarity the wolves on the front cover and the California condor on the back share is that, as the title suggests, they are on the *brink of extinction*. Describe what that phrase means to you.
- Define the terms *habitat* and *ecosytem*. Identify how those terms relate to the wolves and the condor depicted on the book covers being endangered species.
- Tell all you know about environmental change and animal adaptation.
- Describe the role humans have in keeping animals from the *brink of extinction*?
- Predict what this book is going to be about. Identify something that you hope to learn as a result of reading it.

## Post-Reading Discussion:

Biologists explored a process based on the idea that when eagles breed, they return to the habitat where they were hatched (pg. 55).

- Explore reasons why studying and protecting a species' reproduction cycle is critical to preservation and restoration.
- Consider the eagle hacking project conducted by the New York State Department of Environmental Conservation.
   Identify aspects of the project that were predictable, elements that were under the researchers' control.
- Examine aspects of the project that were unpredictable.
   Tell how those elements of the project were adjusted for over time.
- Determine how, while the hacking project was a great success, keeping the bald eagle from the brink of extinction is a never-ending process.

The motivation for such drastic measures was supported by the belief that if you break something, you must fix it (pg. 76).

- Explore how Project Isabella (pg. 79) provided a solution to a problem caused by changes in the environment in which tortoises once thrived. Identity which problems were created by humans, as well as those established by nature.
- Examine the ethics of the question "Was the answer to kill one species to save another (pg. 79)?" Do you think there situations in which such actions are warranted? Explain your answer.

Microtrash isn't just a condor problem (pg. 103).

- The author describes the heart-break she experienced while watching a video featuring a "...parent condor feeding a bottle cap to a nestling (pg. 101)." Describe how an animal's behavior or physical traits can be influenced by environmental elements, both in detrimental and beneficial ways.
- The term "micro" means small, tiny, and almost undetectable. Determine how the effects of microtrash are anything but small, tiny, and undetectable.

Condors survived mostly because they were able to foriage on marine life, whereas their peers could not (pg. 109).

- Discuss how comprehending the pre-historical nature of a species contributes to its restoration.
- Define the term "fragile populations (pg. 111)." How does the term make you feel?
- Species survival depends upon consistency in their natural habitats. Identify how toxins from chemicals threaten the cycle of the condor ecosystem.

Nobody understood that the survival of the buffalo was intermingled with the survival of the Great Plains itself, not just of its Native people (pg. 132).

- Discuss how drastic changes in the ecosytem caused by humans has threatened the bison's existence throughout history.
- Examine the lasting effects of William Hornaday, visionary and conservationalist. Consider how his efforts, which he embarked upon in the early 1900's, have served to perserve the bison species today.
- What about you? What can be done to continue to support Hornady's efforts? Not only for the bison species, but for all living creatures.

Vertical Puzzle Answers (found on following page)

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#### Vertical Puzzle

*Use the clues listed below to solve the puzzle. Answers to this puzzle are printed on the preceeding page.* 

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#### **CLUES:**

- 1. Efforts focused on managing and caring for game populations
- 2. U.S. President who signed the Endangered Species Act
- 3. Small trash items such as bottle caps, glass and bits of plastic mistaken for food by animals
- 4. Meat-eating animals that are at the top of the food chain
- 5. This type of bird is affectionately known as "Whoopers"
- 6. Chemicals intended to kill insects, yet are quite harmful to natural habitats
- 7. Reeds in this habitat protect protection for cranes
- 8. Scientist that cares for birds
- 9. Recovery efforts to help ensure healthy environment for endangered species
- 10. Eagles' claws



