COUNTING BIRDS

THE IDEA THAT HELPED SAVE OUR FEATHERED FRIENDS

By Heidi E.Y. Stemple • Illustrated by Clover Robin



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ABOUT THE BOOK:

Everyday kids learn how they can help protect bird species, near and far, with *Counting Birds*—the real-life story of bird counting and watching.

What can you do to help endangered animals and make a positive change in our environment? Get counting! *Counting Birds* is a beautifully illustrated book that introduces kids to the idea of bird counts and bird watches. Along the way, they will learn about Frank Chapman, who used his bird knowledge and magazine *Bird-Lore* to found the first annual bird count.

Bird counting helps professional researchers collect data, share expertise, and spread valuable information to help all kinds of birds around the world, from condors to crows to chickadees and more.

Counting Birds introduces kids to a whole feathered world that will fascinate and inspire them to get involved in conservation and become citizen scientists.





Build background knowledge. Think and discuss:

- 1. What is a bird?
- **2.** What are the different parts of a bird?
- 3. How do the parts of a bird help them to survive?
- **4.** Where do birds live?
- 5. What kinds of birds live near you?
- 6. What sounds do birds make and why?
- 7. What is biodiversity? How do humans affect biodiversity?
- **8.** What other plants and animals live near birds?
- 9. What threatens the lives of birds and other organisms in an ecosystem?
- **10.** What happens to ecosystems when the environment changes?
- **11.** How does the environment influence populations of organisms over a long period of time?
- **12.** How do we measure bird populations?

Preview the book & make predictions:

- 1. Read the title and discuss the cover illustration.
- 2. Who is the author referring to in the title; "Our Feathered Friends?"
- **3.** What kind of ideas might be used to save birds?
- **4.** How do you think people can count birds? Can you count them all or just part of all the birds?
- 5. What are some of the problems you may encounter while counting birds?
- **6.** Who would count birds? Why would someone count birds?
- 7. Do you think birds need to be saved? Explain.
- **8.** What do you think this story is going to be about?







NEW KEY VOCABULARY

Use context clues to predict the word that fits in the blank.

DO NOT SHOW STUDENTS NEW KEY VOCABULARY WORDS YET (see below).



1. Preventing wasteful use of a resource is	called
2. A car	build nest.
3. Going trick-or-treating in costume is a _	in my family.
4. I like to	nature around me.
5. The graph showed me the	
6. The government takes a	to figure out how many people
live in an area.	
7. We need to be good	in our community.
8. My favorite museum	is the bird habitats.
9. The American Eagles were in danger of	becoming extinct because they
were	
10. The hunters went out to find and kill $_$	
11. The rainforest is the	of the parrot.
12. An	is a scientist who studies birds.
13. The Red Cross will supply	to people in need.
14. The scientists will	data for the experiment.
15. The oil spill caused	in the oceans.
16. The article was	in the newspaper.
17. If not helped.	species may be gone forever!

Endangered
Bird
Birder
Exhibit
Habit
Habitat
Ornithologist
Published
Pollution

Wildlife
Overhunted
Hunter
Game
Tradition
Census
Aid
Retire

Observe
Compile
Data
Conservation
Citizens





Introduce the new vocabulary words and have students predict their meanings. Pull out a set of cards with a new vocabulary word written on each one. When introducing each new word, say it clearly and have your students repeat it. Clap the syllables together. Ask your students what the word means. As you do this, draw attention to the parts of the word as appropriate. Does it have a prefix or suffix that can help you with the word's meaning? Is there a familiar root? Is it a compound word?



Have students predict which vocabulary word fit in each sentence above. Now it's time to pair the words with those sentences above. Start with the first sentence. One by one, try each vocabulary word in the blank. Read the sentence together and discuss.

Find each word in the story.

Write the page number. Read the word in context. Decide how the context clues help you understand the meaning of the word.

Add the words to a vocabulary journal.

Keep it simple – do not copy definitions from a dictionary.

- Write a simple definition
- Draw a picture
- Give synonyms and antonyms
- Write a sentence that communicates the meaning of the word.



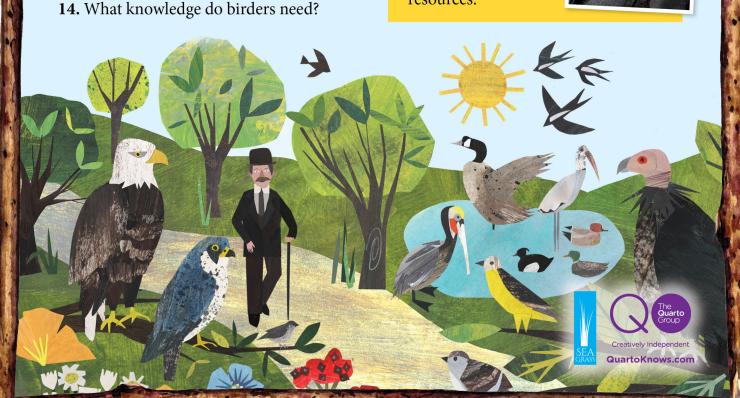
Read to find out:

- 1. Who is this story mostly about?
- **2.** What is the problem in the story? Solution?
- **3.** What were some of the questions people asked that began the Conservation Movement?
- **4.** Who asked these questions?
- 5. When did the movement begin?
- **6.** Why is Frank Chapman a hero?
- 7. What is his legacy?
- 8. How did he create awareness and make changes in the world?
- **9.** Why did hunters count birds?
- **10.** Compare and contrast the counting of birds between hunters and birders.
- 11. Why is data important to scientists?
- **12.** Explain the job of a birder.
- **13.** What is most important to birders?

- 15. What is the Audubon Christmas Bird Count? Why is it important?
- **16.** How does the story change from the beginning to the end of the book?
- 17. A cause-effect relationship is a relationship in which one event (the cause) makes another event happen (the effect). Find examples of cause and effect relationships from the book.
- **18.** What does this mean in the story? "Count them, but don't kill them."
- **19.** Would you want to participate in the **Christmas Bird Count?**

20. What made Frank Chapman creative, inventive, and notable?

Create a character web of Frank Chapman using information from the story and other resources.





EXTENSION ACTIVITIES



- 1. Draw a bird and label its parts.
- 2. Listen to bird sounds and use mnemonic devices to reproduce them.
- 3. Create a unique bird call and say what it is used for. Teach others the call and practice it.
- **4.** Plan, design, and create a diorama of a specific habitat. Include the type of birds and other plants and animals that live together in the ecosystem.
- **5.** More than one hundred years ago, Frank Chapman realized that many types of birds were disappearing forever. Choose one endangered or extinct bird and research its history. Make a timeline.
- **6.** All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air. Compare and contrast birds from two different habitats and create a presentation.
- 7. Look at pictures of birds and discuss the adaptations of birds such as beaks, feathers, feet, hard-shelled eggs, and hollow bones.
- **8.** Go on an exploratory walk. Listen for bird calls and try to identify birds in the field. Look at what other living things share the habitat. Record your findings in a journal.

9. The Audubon Christmas Bird Count isn't the only wildlife citizen science project. Research other projects (like Nest Watch, Connecticut

Turtle Atlas, or Journey North) to find out how to become a citizen scientist yourself.

- **10.** As a class, explore ways to inform, inspire and unite diverse communities in conservation action.
- **11.** Create a persuasive poster encouraging the protection of birds and their habitats.
- **12.** Become a birder! Use the form on the next page.



BECOME A BIRDER! LEARN HOW TO IDENTIFY DIFFERENT BIRD SPECIES.

Try to put the bird in a basic family. What is its size? Compare it to a familiar bird, a crow, a sparrow, etc. When you have established that the bird is smaller than a crow, but slightly larger than a sparrow, you have already narrowed down the field. What is its shape? Is it slender like a cuckoo or chunky like a robin? What do the wings look like, how long are the legs, what is the shape and length of the bill? Is the tail long or short-is it notched, forked, wedge-shaped, rounded? How does the bird behave? Does it pump its tail, does it wag its tail, does it dart out from a perch to eat insects, does it feed on the ground, does it hover, or is it a glider? Does it wade in the water or teter or bob while it walks near water? Does it walk or hop, or both? Observe its flight characteristics. When it flies, is it a straight trajectory, lurching, soaring? Does it travel in flocks, in pairs, or alone? What are the specific field marks? Plain, streaked, or spotted breast? Stripes over the eye, through the eye, around the eye? Does it have a crest or wear a black mask? Does it have a whisker stripe or a red throat patch? What is its voice like? A long melodic warble, a hoarse caw? Does it say its name chickadee-deedee-dee, etc.? Does it have a distinctive call? Does it rustle dead leaves when it forages on the ground, does it drum like a woodpecker, or make whistling sounds with its feathers? One of the most important questions is, where was the bird observed? At the beach or near fresh water? In a field, rocky area, or in the woods?

Creatively Independent

	Data	
	DateLocation	_
	· · cather	
	Skies	
	Draw a picture of a bird that you see.	
1	Describe your bird's characteristics: Color:	
-	ino.	
	hana	
I	Beak Shape:	
7	ail Shape:	
F	eet:	
F	light:	1
	ehaviors:	
S	ong:	
	ood:	
	est:	

ABOUT THE AUTHOR

Heidi Elisabet Yolen Stemple didn't want to be a writer when she grew up. In fact, after she graduated from college, she became a probation officer in Florida. It wasn't until she was 28 years old that she gave in and joined the family business, publishing her first short story in a book called Famous Writers and Their Kids Write Spooky Stories. The famous writer was her mom, author Jane Yolen. Since then, she has published more than twenty-five books as well as numerous short stories and poems, mostly for children including Fly With Me, You Nest Here With Me, and Kite for Moon. Heidi got her love of writing from her mother, but her love of birds came from her father who brought her birding with him before she could even walk. You may have heard of their adventures owling in a book called Owl Moon which was written by Heidi's mom.



Heidi lives and writes on a big old farm in Massachusetts that she shares with two cats who lives inside, and a dozen deer, a family of bears, three coyotes, two bobcats, a gray fox, tons of birds, and some very fat groundhogs who live outside. Once a year she gets up at midnight and braves the freezing temperatures to call owls for the Count.

ABOUT THE ILLUSTRATOR

Clover Robin is a surface pattern designer, collage artist, and illustrator. She grew up in glorious Devon before training at and graduating from Leeds College of Art and Design in 2007, and then earning a master's degree from Central Saint Martins in 2009. Clover delights in nature and all things botanical, inspired by a childhood of woodland walks, countryside rambles, and fossil hunting by the sea. She is currently based in Greenwich, London, where all of her artwork is lovingly handcrafted and created. She is the illustrator of the books *Cut Paper Pictures* and *Counting Birds*.



