Bird Count

Will Ava count a raven this year?

What is STEAM? Learning through science, technology, engineering, the arts, and mathematics. Through STEAM, children problem solve, innovate, create, and collaborate.

STEAM Topics in this Book: biology, ornithology, citizen science, data collection, observation, counting

Activities To Do Together: Ava and her mom are citizen scientists. You and your child can participate in citizen science too. With citizen science, ordinary people volunteer to work with scientists to collect data, report observations, and learn more about real life questions and situations. Citizen scientists help advance our understanding of the world while increasing their own knowledge and understanding of science.

Before you read the book with your child:

- Discuss what it means to be a citizen scientist together.
- Look at the cover of the book and read the title. Ask your child what they think the story will be about.
- Binoculars are a tool used by the citizen scientists in this book to observe birds from afar. Binoculars make objects appear closer and allow for observation of details. Ask your child what they would look at with a pair of binoculars.

While reading the book with your child:

- Notice the different habitats of the birds in the story.
- Notice how Ava keeps tally of the birds she counts.

When you have finished reading the story:

- Learn about the birds that live in your neighborhood. What do they look and sound like? When and where are they seen? By what characteristics are they identified?
- Ask your child if they would like to be a citizen scientist. Why or why not? Look for citizen science opportunities together.
- Nocturnal animals are active at night. Learn about the nocturnal birds that live near you.
- Go on a bird walk. Count the birds that you and your child see or hear. Keep a tally sheet.

AUTHOR:
Susan Edwards Richmond

ILLUSTRATOR:
Stephanie Fizer Coleman

Citizen Scientist Ava counts the birds she sees and hears for the annual Christmas Bird Count.

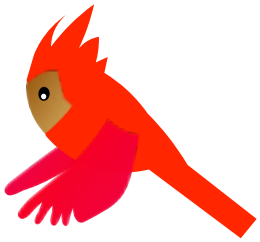
Ages: 3 to 10 years

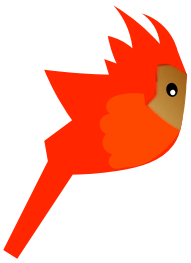
ATOS Level: 3.0

Lexile: 550L

ISBN: 9781561459544

Copyright: 2019





Conversations During Daily Routine with Toddlers:

1. Outside Time - Listen for birds together. Notice the differences in the bird sounds you hear. Count the other animals you notice. How many dogs? How many squirrels?
2. Story Time - Notice the animals in stories that you read. Talk about their similarities and differences together. Which animals fly? Which animals swim? Which animals walk? Which animals do all of these things?
3. Play Time - Talk about what makes a toy animal different from a real animal. What do real animals do that toy animals do not?
4. Bed Time - Recall the animals you've seen throughout the day. Talk about the animals that are waking up as you are going to sleep.

Questions for STEAM Thinking:

1. What are some of the different ways that Ava, her mom, and Big Al identify birds?
2. When Ava counts the goldfinches she made one bundle of five and three straight marks on her tally sheet. Why did she do that and what did it represent?
3. Why do you think that two people have to hear or see a bird in order for it to be counted?
4. Ava's mom notices a red-tailed hawk and describes where it is located as "two o'clock." What do you think this means?
5. The birds in the story made many different sounds. Which sound was your favorite and why?
6. What did you notice about the foods the birds ate?

Vocabulary

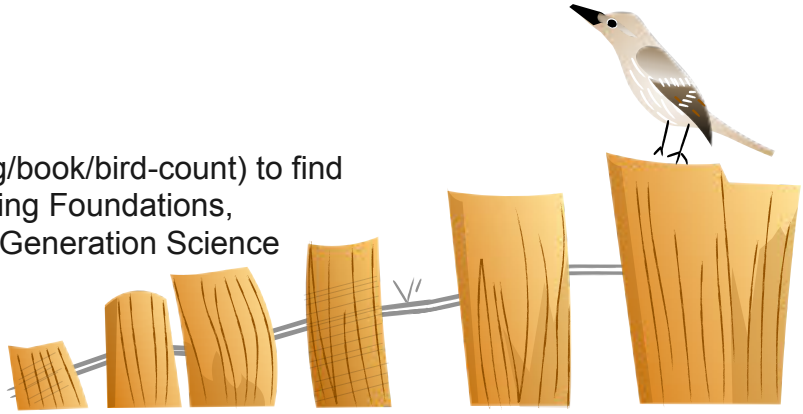
STEAM words found in the story: average, binoculars, bundle, calls, census, citizen scientists, count, field guide, fields, investigate, research, scientist, single, tally, twice, wetlands, woods

Related STEAM words: behavior, conservation, habitat, migration, ornithology

Words to build reading comprehension: Antarctica, area, bundle, cattails, familiar, feeders, flash, flock, ordinary, potluck, quiver, rare, route, scan, scatter, shooing, veer, whoosh, wingbeats

Related Books: *Bat Count: A Citizen Science Story* by Anna Forrester

Click this link to the World Catalog or enter bit.ly/3kz0v7G in your browser, to find *Bird Count* in the public library.

Early Math Project Resources:

Visit Bird Count (countplayexplore.org/book/bird-count) to find activities and related California Learning Foundations, Mathematics Standards, and/or Next Generation Science Standards for this book.