



*Revised 4/16/20
Neal Smith National Wildlife Refuge*

What is Prairie?

Kindergarten

45 Minutes

Fall

Summary

As an introduction to the prairie, a field leader reads “In the Tall, Tall Grass” by Denise Fleming. Afterwards, the field leader facilitates a hike and helps students investigate the answer to the question, “what is a prairie?” Students use detailed observations and field notes as evidence to communicate in their own words the definition of a prairie.

Next Generation Science and Iowa Core Standards

Next Generation Science

- **K-LS1-1**
 - Use observations to describe patterns of what plants and animals (including humans) need to survive.

Literacy

Reading and Literature

- **RL.K.10**
 - Actively engage in group reading activities with purpose and understanding.

Speaking and Listening

- **SL.K.1**
 - Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
- **SL.K.2**
 - Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions



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about key details and requesting clarification if something is not understood.

- **SL.K.6**
 - Speak audibly and express thoughts, feelings, and ideas clearly.

Materials and Resources

- Book- *In the Tall, Tall Grass*, Fleming, D.
- Data Collection Sheet (one per group)
- Marker (one per group)
- Clip board (one per group)

Presentation

Explain to students that today, they will be learning about the prairie. Have the students say the word with you to practice pronunciation. “What is prairie?” today students will investigate the answer to this question by listening to a book and going outside to investigate. If possible, have students view the refuge film, “Return to Wildness.” This film shows different parts of the prairie. Ask students to find something in the film that they liked or thought was interesting.

Directions

1. Gauge students’ background knowledge by asking students, “What do you already know about the prairie?” If students need extra guidance, ask them specific questions such as: “What plants live in the prairie? What animals live in the prairie? What did we see in the film that we liked?”
2. Now they are going to listen to a story about the prairie. It is called, “*In the Tall, Tall Grass*.” Explain that as they listen, they should be thinking of how to answer the question, “What is a prairie?” Engage students by having them repeat after the leader, count the number of animals on each page, or acting out the animals in the story. When finished with the book, ask students what animals live in the tall, tall grass. What plants did they see in the tall, tall grass book? Was it only grasses or were there flowers too? Do they think they will be able to find the same animals and plants outside today in our tall, tall grass? Will the prairie at NSNWR be the same or different than the prairie in the book?



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3. Explain to the students that in a few minutes they will be going outside to find and explore a very special prairie. They will be looking to see if they can find the same animals and plants that were in the book in our prairie. They will also be asking themselves the question, “What is a prairie?”
4. Have students work in groups of 2-4. Hand out a datasheet, markers, and clip-board to each group leader. Review and read the entire data sheet to the students. Tell the students that when they see a plant or animal that is on the data sheet, they should circle or cross it off. If they see a plant or animal that is not on the data sheet, they should write or draw a picture of what they see. Show them a completed data sheet. If they see more than one of an animal, they can count how many. Walk around the room to make sure that everyone had a chance to see it.
5. Assign groups to adult leaders. Depending on chaperones, try to make the adult to child ratio as small as possible. Make eye contact with the adult chaperones and teachers. Explain to them that they will each get a small group of students. When the class gets outside, they should talk to their students and ask them if they are seeing any of the animals or plants on their data sheet.
6. Once the groups are divided, have all the groups form a single file line to get ready to head outside. Make sure that the students have all their materials. Remind students that naturalists are happy outside, explorers, adventurers, respectful, and quiet. They ask questions, use words, numbers and pictures, and share their discoveries.
7. Direct adult chaperones to split up with their groups and see if they can find the plants or animals on their data sheet. Make sure that groups are fairly close to one another. Rotate among the groups to assist in the investigation.
8. After about 10 minutes, ask students and adult chaperones to come together. Line up to head back inside. Instruct students that while they are walking to go back inside, they should think about the discoveries they made and get ready to share them with the other naturalists.
9. Once inside, walk around the room and look at the students’ data sheets. Ask students what discoveries they made about the prairie. What did they learn by looking closely at prairie? What animals and plants did they find? Record their answers on the board, under the question, “What is a prairie?” The



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prairie has animals and plants which have needs. What do these plants and animals need? Water? Sun? Do the plants and animals depend on each other to survive? Ask students if there were some animals or plants on their data sheet that they did not find. Why didn't they find them? (The book has nocturnal animals like fireflies, and some animals like snakes and rabbits might be hard to see.) Leave students with more questions rather than answers. What does the prairie look like at night? How many times would they need to come to the prairie before they see a rabbit? What time of year do frogs croak? Does the answer to the question, "What is a prairie?" always stay the same?

10. At the end of the lesson, explain to students that today they discovered how magical the prairie can truly be if they just look close enough. Tell students to keep returning to the prairie and investigating the question, "What is a prairie?"

Background information

Tallgrass prairie is a fire-dependent ecosystem distinguished by tall grasses (up to 10 feet tall), and deep, rich soils. It is characterized by tall grasses and few trees. Tallgrass prairie once covered parts of 14 states in the Midwest, including about 85% of Iowa. Today, less than 0.1% of the original tallgrass prairie remains in Iowa. Tallgrass prairie plants have extremely deep roots, reaching up to 12 feet below the surface. These roots created the rich soil that is now valued as crop land. The deep roots hold the soil, preventing erosion where prairie plants have become established.

Some common grasses of the tallgrass prairie include big bluestem, Indian grass, switchgrass, and little bluestem. But prairies are much more than just grasses. A diverse variety of forbs, or wildflowers, are vital parts of the tallgrass prairie, too. During the growing season, each flush of bloom tends to be taller than the previously blooming species.

Neal Smith National Wildlife Refuge (NWR) is a reconstructed (or replanted) prairie for the most part, more than 200 species of prairie plants have been seeded into former farm fields. After planting, invasive plants may be mowed or sprayed with herbicides to prevent their spread. Prairie plantings are burned to invigorate the growth of fire-adapted prairie plants and to control the plants that aren't



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adapted to fire, and therefore don't belong on the prairie.



Resources

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Prairie Data Sheet

What is in the tall, tall grass?



Circle what you find in the tall, tall grass.

Write down any animals you find that are not on the data sheet.



Caterpillars



Birds



Bees



Ants



Rabbits



Frogs



Animal Holes



Snakes



Bats



Flowers



Tall, Tall Grass