

Greater Prairie-Chicken and Prairie

K-3 Lessons

By Kelly Preheim

Estimated Time

Two - 30 minute class periods

Objectives

Students will be able to:

1. Identify Greater Prairie-Chickens by field marks.
2. Compare the male to the female.
3. Be aware of its unique behavior.
4. Identify what the Greater Prairie-Chicken needs are.
5. Identify its predators.
6. Discuss camouflage and how it helps the Greater Prairie-Chicken.
7. Name the other animals that live on the prairie.
8. Understand the prairie habitat and how it is disappearing.
9. Discuss solutions that will reduce the impact of humans on the prairie.

Next Generation Science Standards Addressed

K-LS1-1.	Use observations to describe patterns of what plants and animals (including humans) need to survive.
K-ESS3-1.	Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.
1-LS1-2.	Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive. [Clarification Statement: Examples of patterns of behaviors could include the signals that offspring make (such as crying, cheeping, and other vocalizations) and the responses of the parents (such as feeding, comforting, and protecting the offspring).]
1-LS3-1.	Make observations to construct an evidence-based account that young plants and animals need appropriate conditions to grow. [Clarification Statement: Examples of

patterns could include features plants or animals share. Examples of observations could include leaves from the same kind of plant are the same shape but can differ in size; and, a particular breed of dog looks like its parents but is not exactly the same.] *[Assessment Boundary: Assessment does not include inheritance or animals that undergo metamorphosis or hybrids.]*

- 2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.** *[Clarification Statement: Emphasis is on the diversity of living things in each of a variety of different habitats.] [Assessment Boundary: Assessment does not include specific animal and plant names in specific habitats.]*
- 3-LS2-1. Construct an argument that some animals form groups that help members survive.**
- 3-LS3-1. Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.** *[Clarification Statement: Patterns are the similarities and differences in traits shared between offspring and their parents, or among siblings. Emphasis is on organisms other than humans.] [Assessment Boundary: Assessment does not include genetic mechanisms of inheritance and prediction of traits. Assessment is limited to non-human examples.]*
- 3-LS4-3. Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.** *[Clarification Statement: Examples of evidence could include needs and characteristics of the organisms and habitats involved. The organisms and their habitat make up a system in which the parts depend on each other.]*
- 3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.*** *[Clarification Statement: Examples of environmental changes could include changes in land characteristics, water distribution, temperature, food, and other organisms.] [Assessment Boundary: Assessment is limited to a single environmental change. Assessment does not include the greenhouse effect or climate change.]*

Common Core Language Arts Standards Addressed

- R.K.1** With prompting and support, ask and answer questions about key details in a text. (K-ESS2-2)
- W.K.1** Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book. (K-ESS2-2)
- W.K.2** Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. (K-ESS2-2),(K-ESS3-3)
- W.K.7** Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them). (K-LS1-1)
- SL.K.5** Add drawings or other visual displays to descriptions as desired to provide additional detail. (K-ESS3-1)

Materials

Art supplies: Large poster paper, construction paper, crayons or other medium, scissors and glue

Internet Access is very helpful for these activities.

Helpful Links:

Birdman Productions - A Valuable Resource on the Greater Prairie

http://lastdanceoftheprairiechicken.com/Resources/Gr._Prairie_Chicken_flyer.pdf

All About Birds – Cornell Lab of Ornithology

http://www.allaboutbirds.org/guide/Greater_Prairie-Chicken/id

ARKive

<http://www.arkive.org/greater-prairie-chicken/tympaichus-cupido/>

Enchanted Learning – Prairie Animal Information and Prairie Animal Printouts to Color

<http://www.enchantedlearning.com/biomes/grassland/prairie.shtml>

Procedure

Ask students:

What do they already know? Ask the following questions:

1. What is a Greater Prairie-Chicken?
2. What does the word prairie mean?

How do we find out what we want to know?

1. Books
2. Internet
3. Ask someone

Lessons

Day 1 – What is a Greater Prairie- Chicken?

1. Use a Smart Board or computer demonstrate how to find out information on the Greater Prairie-Chicken. Check out the attached links at the beginning of the lesson plan.
2. Look at images and watch videos of the Greater Prairie-Chicken.
3. Always preview videos and sites ahead of time. Be aware that there may be videos of the birds being hunted, which would be very upsetting to some students.
4. Select an image of the Greater Prairie-Chicken. Discuss with students what they observe.
 - Medium to large chicken like bird
 - Short, short rounded tail
 - Wings are rounded in flight
 - Males inflate orange air sacs on the sides of their neck
5. Discuss the behavior of the males at the lek/booming ground.
6. Show online videos of this behavior. Discuss what is happening and why the males are behaving as they do. Point out the sound of their call. Have the students mimic the Greater Prairie-Chicken dance. Have them imitate their call. {This is a lot of fun!}
7. Research their predators and discuss how their camouflage helps to protect these birds.
8. Teach the students a step-by-step drawing lesson on how to draw the Greater Prairie-Chicken or print the coloring page of this bird at the Enchanted Learning Link at the beginning of this lesson plan. They could draw it in their journal, science journal or on construction paper. Have them do free writing or write about it together as a class.

Day 2 – What is the prairie?

1. Review what a habitat is.
2. Ask the students what they know about the prairie. Research whether there is prairie near your area.
3. Use a Smart Board or individual computers to demonstrate how to find out information on the prairie:

- A large open area of grassland
- Composed of grasses, herbs and shrubs rather than trees
- Moderate rainfall and temperatures
- In the U.S. prairie can be found in ND, SD, NE, KS, OK and in parts of MT, WY, CO, NM, TX, MS, IO, ILL, IN, WI, and MN

Show images of the prairie and inform students that the prairie area is shrinking due to human impact. Explain that Greater Prairie-Chickens need large areas of prairie to live as do other prairie animals. Explain how people need to consider animals and plants when making decisions. Science standard K-ESS3 states, “Communicate solutions that will reduce the impact of humans on the land.”

4. What animals live on the prairie? Search together as a group.
 - Greater Prairie-Chicken, Bison, elk, white-tailed deer, Badger, Black-footed Ferrets, coyote, fox, wolves, jackrabbits, Prairie Dogs, skunks, Pronghorn Antelope, Western Meadowlarks, Lark Buntings, Horned Larks, Red-tailed Hawks, a variety of other birds and insects
5. Divide the class into small groups. Have them collaborate to create a prairie scene.
 - On a large piece of poster paper have one group draw the grassy prairie using crayons, paints, or whatever medium you choose.

- Other groups are in charge of either drawing freehand, coloring pictures or printing photos of prairie animals.
 - Cut out the animals {or print photos from the internet} and place them on the habitat poster.
 - Label the pictures.
6. Have another group of students create a large drawing of a Greater Prairie-Chicken with labels pointing out its distinctive features.

Demonstrate Learning

Have students practice telling about the prairie poster that they created and Greater Prairie-Chickens.

Demonstrate learning by taking the poster to another classroom and tell what they have learned. Have them explain the problems facing the Greater Prairie-Chickens.

Display the poster in the hallway or other public viewing area to make others more aware of Greater Prairie-Chickens and the prairie habitat.

Technology Connection – Have the students help you make a Prezi presentation about Greater Prairie-Chickens. Share the presentation with another group of students.