

Oh Deer!*

*adapted from Project Wild

Subject: Science

Grade Level: 6th

Rational or Purpose: Students will learn that food, water, and shelter are parts of a good habitat and the key to wildlife survival. The major purpose of this activity is for students to understand the importance of suitable habitat as well as factors that may affect wildlife populations in constantly changing ecosystems.

Upon completion of this lesson, the students will be able to:

- 1. Identify and describe food, water, and shelter as three important parts of habitat.
- 2. Describe the importance of a good habitat for animals.
- 3. Give examples of what might limit growth of a group.
- 4. Describe possible fluctuations in population based on specific changes in the environment.

TEKS:

112.22. Science, Grade 6 (b) (8)

Concepts:

- 1. Food, water, and shelter are three essential components of habitat. (Space is also important, but not discussed in this lesson.)
- 2. Food, water, and shelter are essential for wildlife (and human) survival.
- 3. A group will continue to grow in number until limited by lack of food, water, or shelter.
- 4. Nature is constantly changing.

Focus vocabulary:

Deer, food, water, shelter, environment, habitat, and ranger.

Materials:

Area large enough for students to move freely;

Bulletin board;

Butcher paper with a graph showing the seasons on the x-axis and number of deer on the y axis;

2" x 2"squares of brown paper representing deer;

Labeled signs illustrating food, water and shelter and displaying the appropriate sign to make for that item.

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Readiness/Anticipatory Set:

As a class, briefly discuss what a deer is, what it eats, where it lives, etc. Ask students to think about their own lives and what they know about animals in general. Then, ask what are some things that without which no living thing can live. (Answers will definitely vary. If students come close to food, water, or shelter you may want to narrow them or just accept their answers.) As discussion develops, students should mention food, water, and shelter (home). Display the appropriate signs as the words are discussed.

Procedure:

- 1. Explain to the students that the class is going to play a game about the habitat of the deer. Some of the students will be deer and some will be food, water, or shelter. It is important that the students understand that there are no winners or losers. It is equally important to be food, water and shelter as to be deer. This will decrease competitiveness.
- 2. Select a few students to demonstrate the fundamentals of the game. (Do procedure items 4-7.) Explain that the deer are looking for food, water, or shelter and each student in the other group will provide only one of these components each time. Only between rounds can students change components. Demonstrate the symbols for the elements: food is symbolized by a hand rubbing the stomach; water by a hand raised to the mouth as if to drink from a cup; and shelter by arms raised over the head, hands together forming a roof. Play a few practice rounds with the small group. Check frequently for understanding.
- 3. Divide the class roughly in half. Be careful to create heterogeneous groups in terms of English language development, behavior, and science experience. One group are deer and the other group are components of the habitat. If necessary, select some children (perhaps the most aggressive) to be rangers who will monitor the game.
- 4. Put a line of tape down the middle of the playing area. Designate one side for deer, the other for habitat. Ask students to line up on the appropriate sides with their backs to the other group.
- 5. Each student should choose a sign to make for the first round. Each deer should make a sign of what it is seeking. Each member of the habitat should make the sign of what it is providing.
- 6. When all are ready, say, "Go!" Each deer and each member of the habitat should turn to face each other. Students should continue to hold their signs clearly.
- 7. When deer see a student in the habitat making the sign they need, they should walk quickly but calmly to get that student and take them back to the deer side. This represents the deer successfully meeting its needs and reproducing. Those deer who do not meet their needs remain in the environment to provide habitat for the



other deer in the next round.

- 8. Each student on the deer side (original deer and those newly produced) receives a brown square of paper to add to the class graph. The squares should be placed in a column above the current round or season on the x-axis. (Use a glue stick to make the paper sticky and each student added his/her square.) Discuss what the graph means.
- 9. Ask the students to make predictions about what will happen in the next round. What will the graph look like? Each round will lead to new predictions as students start to see a pattern. Continue play until a pattern is clearly represented on the graph. If students catch on quickly, you may want to introduce a draught or famine by limiting the availability of water or food in the habitat. Simply tell all the students in the habitat to make the sign for shelter. Or introduce a predator (mountain lion or human hunter) who stands between the deer and their habitat and may "eat" one deer each round. Eaten deer can then become predators.

Assessment:

At the end of play, gather all students together. Encourage students to discuss what they experienced during the game. Ask the students to make observations from the graph. Ask students to summarize what they learned from this activity. What do all living things need to survive? What can affect their survival? Is nature always the same or does it change? How can human interference affect the habitat of the deer?