

51. OH COYOTE!

Overview: This lesson helps students to understand the interdependence of animal life with their environment and the need to preserve and protect resources. Without essential habitat components, animals cannot survive.

Objective: Students will describe food, water, space and shelter as essential components of habitat and the need for a good habitats for animals. Students will identify limiting factors and trends by analyzing fluctuations in populations in response to habitat changes like drought, flooding and human activity.

Time Needed: 1 hour to do the activity and another hour to process collected data.

Group Size: 1 or 2 classes

Age Appropriateness: 4th and up

Site: Any open area

Background: As food and water resources become more available in a habitat, animal populations increase. If those resources diminish due to drought, flooding or human activity, animal populations diminish.

Materials:

Provided at the Garden

Signs for student labels (coyote, food, water, shelter, space)

Rope for marking lines

Provided by the classroom teacher

Preparation: Make signs to hang on students to label them as coyote, food, water, shelter and space. Locate a large open area at the Garden and mark of two parallel lines about ten to twenty yards apart.

Pre Activity: Students should know how the components of food, water, shelter and space are needed by animal populations to survive in a habitat.

Procedure:

1. Have students count off in fours.
2. All the “ones” line up behind one of the lines and will be “coyotes”.
3. The other three groups get behind the other line (habitat side). Facing away from the “coyotes”, each child will choose and get a matching label for one of the habitat components of “food”, “water”, “space” or “shelter”.
4. Coyotes will need to choose to look for food, water, space and shelter. To look for food, they will put their hands over their stomachs. For water, they will put their hands over their mouths. For shelter, they will put their hands together over their heads. For

space, they outstretch their arms. With their backs to the component group, “coyotes” should choose a component and display the appropriate hand signal.

5. The students must keep their choice for this round. A teacher or leader needs to be prepared to keep track of the number of deer at the beginning and ending of each round.
6. The game starts with all players lined up on their respective lines and with their backs to the students at the other side. The leader asks all students to pick their sign. When they are ready, count: "One...two...three." At the count of three, the students turn and face each other showing their signs.
7. The deer run to the habitat component they are looking for and take that component back to the deer side of the line. (This represents the deer's successfully meeting its needs and reproducing as a result.) Any deer that fails to find the component it was seeking dies and becomes part of the habitat, joining the students on the habitat side.
8. At the end of fifteen rounds discuss the activity; encouraging the students to talk about what they experienced and saw. Share the collected data of number of deer in each round. Make a line graph of the number of deer alive at the end of each round to show that it is naturally cyclical.

Follow with a discussion about what excessive limiting factors are: drought, fires, deforestation, uncontrolled hunting. Play the game again, and include the limiting factors. For example, if there is a drought no student on the habitat side can choose water as their symbol. Have the students summarize what they have learned from the activity. A new graph can be made to show the difference made in the natural cycles. When students have played the "Oh Deer" game it helps them to understand the interdependence of animals on their environment. Hopefully, they will see that as human beings they can be a part of the limiting factors which effect our environment. With this knowledge they may become more responsible in taking care of our ecological systems.

Modifications:

Extensions:

Reference List: Adapted from the “Oh Deer!” Project WILD Activity

Time of Year: Any