

Backyard Habitats

THEME

Creating a backyard habitat for wildlife is more important than ever.

SUB THEMES

- 1) Habitat loss is the leading cause of species extinction.
- 2) Wildlife has four basic needs: food, water, shelter, and space.
- 3) Building a backyard habitat is easy, fun, and important for the long-term survival of suburban wildlife.

VOCABULARY

Habitat, competition, predator, prey, consumer, producer, biodiversity, habitat

ACTIVITY MATERIALS

Colored chips, bird feeders, bird seed, bird bath, bluebird boxes, bat box, wildflower seed, stop watch, clipboards, pencils, data sheets

INTRODUCTION

Introduce yourself and state the title of the activity. Preview the main points of the activity and give students an idea of what they will be doing. Conversationally state the theme and sub themes. Explain that the 1,200 acres at BVNC have been set aside for education and wildlife habitat, but it's not always so easy to do that. Encourage students to think about where they live and the places they have visited. Ask: **How are humans contributing to habitat loss** (residential development, commercial development, industrial development, logging, road building, agriculture, etc)? Explain that these aren't bad things, but we need to also think about how we can help wildlife. Explain the importance of biodiversity.

Explain that wildlife has needs just like people do. Encourage the group to think about the things they need every day in order to survive (not the television!). Ask: **What are the four basic requirements for wildlife to live and thrive** (food, cover, water, and space)? Explain that as habitat decreases, competition for these basic requirements increases.

ACTIVITY

To better understand this concept, the students are going to play a game. Explain that they are deer competing with other deer for their basic requirements. The basic requirements are represented by different colored chips: **Red for cover**, **blue for water**, black for space, and **white for food**. Students will have 30 seconds to collect as many chips as they can. Throw the chips around and then give the students the go ahead to collect. After 30 seconds, have the

Teacher's Corner

Grade Level(s)

6th, 7th, and 8th

State Performance Indicators

GLE 0607

-2.1: Classify organisms as producers, consumers, scavengers, or decomposers according to their role in a food chain or food web.

-2.3: Identify the biotic and abiotic elements of the major biomes.

-2.4: Identify the environmental conditions and interdependencies among organisms found in the major biomes.

GLE 0707

-7.7: Analyze and evaluate the impact of man's use of earth's land, water, and atmospheric resources.

GLE 0807

-5.4: Identify several reasons for the importance of maintaining the earth's biodiversity.

Backyard Habitats

ACTIVITY (cont.)

students tally their chips. To survive until the next season, they will have to have collected 10 white chips, 10 blue chips, 10 red chips, and 5 black chips. The students who do not collect enough of each chip have to sit out because that means they would not be able to survive until the next season. Collect all the chips. Next, present students with a scenario: a clearcut of the forest where they deer live has occurred in the fall. The deer are faced with a long hard winter soon. Ask: **Which of the basic requirements do they think will be affected by the clearcut** (cover, space, and food)? While the other students are sitting out, have the remaining students compete for limited cover, space, food by removing some of the red, black, and white chips. Students will have 30 seconds to collect as many chips as they can. Throw the chips around and then give the students the go ahead to collect. After 30 seconds, have the students tally their chips. To survive a winter, they will need twice as much food, which means they will need 20 white chips! Collect all the chips. Remind them of the clearcut right before winter and how some deer died. Explain that now it is spring and many of the deer have had babies. But the forest is having trouble recovering from the clearcut so there are even fewer resources. Allow all the students to participate in this round and cut the number of chips in half. Students will have 30 seconds to collect as many chips as they can. Throw the chips around and then give the students the go ahead to collect. After 30 seconds, have the students tally their chips. To survive until the next season, they will have to have collected 10 white chips, 10 blue chips, 10 red chips, and 5 black chips.

Next, the students are going to help Butternut Valley become a better habitat for wildlife. Explain that they are going to inventory how Butternut Valley meets the basic needs of wildlife. Put students in groups of two or three and give each group a clipboard, pencil, and data sheet. Explain how to complete the data sheet. Allow students to inventory the yard area that is enclosed by the road (including the house, pond, concession stand, and tall grass area). Nothing outside of this area will be considered. Give students 10-15 minutes to complete their inventories.

Bring the group back together and have each group provide their assessment. Ask: **How can we help the wildlife in our backyards get enough food? Water? Cover? Space?** As the students explain their ideas, pass around the different props associated with each basic requirement.

WRAP-UP

Let the group know that the activity is coming to an end. Conversationally review the theme and sub themes. Give the teachers any of the materials that students are able to take home with them.

BRINGING IT TO THE CLASSROOM

Have each student draw a map of their property, complete with their home, driveway, fence, shed, and any trees or shrubs located there. Have them circle the things that meet any of the four basic requirements for wildlife. Now, look at the map and have them determine what is missing (i.e. is there a water source, food, etc.). Have the students draw in the different elements that are missing from their map.

ACKNOWLEDGEMENTS

- Copyright © 2008 Healing Stones Foundation. All rights reserved.
- Activity developed by Melissa Squirlock; February 2008 and updated August 2009.
- Harper, Craig A. Improving Your Backyard Wildlife Habitat. Agricultural Extension Service, The University of Tennessee. Forestry, Wildlife and Fisheries.