HABITAT LAP SIT

OBJECTIVES

Students will: 1) identify the components of habitat; 2) recognize how humans and other animals depend upon habitat; and 3) interpret the significance of loss or change in habitat in terms of people and wildlife.

METHOD

Students physically form an interconnected circle to demonstrate components of habitat.

BACKGROUND

NOTE: This activity was inspired by a "New Game," and adapted to teach concepts related to wildlife.

See "The Beautiful Basics," "Everybody Needs A Home," "What's That, Habitat?," "Habitracks" and "Habitat Rummy" for activities with similar purposes. People and other animals share some basic needs. Every animal needs a place in which to live. The environment in which an animal lives is called "habitat." An animal's habitat includes **food, water, shelter** and **space** in an **arrangement** appropriate to the animal's needs.

If any of these components of habitat is missing or is affected significantly so that the arrangement for the individual animal or population of animals is no longer suitable, there will be an impact. The impact will not necessarily be catastrophic, but can be. There are a great many additional limiting factors beyond those of suitable food, water, shelter and space. For example, disease, predation, pollution, accidents and climatic conditions are among other factors which can have impact.

All things are interrelated. When we look at a biological community, we find interrelationships and interdependencies between plants and plants, plants and animals, as well as animals and animals. These interrelationships and interdependencies are important.

The major purpose of this activity is for students to become familiar with the **components of habitat,** and to recognize that it is not sufficient for there to be **food, water, shelter** and **space** in order for animals to survive—those components of habitat must be in a suitable **arrangement.**

Age: Grades 4-9 (also younger and older)
Subjects: Science, Physical Education
Skills: discussion, generalization, kinesthetic concept development, small group work
Duration: 20 minutes
Group Size: 15 to 45 students
Setting: outdoors preferred; indoors possible
Conceptual Framework Reference: I.A., I.A.2., I.A.4., I.C., I.C.1., I.C.2., I.C.3., I.C.4., I.D., III.B.
Key Vocabulary: habitat, food, water, shelter, space, arrangement
Appendices: Simulations

MATERIALS

none needed

PROCEDURE

1. This activity takes very little time—but has a lot of impact! Ask the students to number off from "one" to "four." All the "ones" go to one corner of the room, the "twos" to another, etc.
2. As the students move to their corners, clear a space in the center of the room. Better still, go outside to a clear, grassy area. The "ones" should sit or stand together, "twos" together, etc.
3. Assign each group a concept as follows: "ones"=food, "twos"=water, "threes"=shelter, "fours"=space.
4. Now, it's time to form a circle! This is done by building the circle in chains of food, water, shelter and space. A student from each of the four groups walks toward the cleared area. The four students stand next to each other, facing in toward what will be the center of the circle. Four more students—one from each group—join the circle. Keep adding to the circle in sets of four until all the students are in the circle.
5. All students should now be standing shoulder to shoulder, facing the center of the circle.
6. Ask the students to turn toward their **right,** at the same time taking one step toward the center of the circle. They should be standing close together, with each student looking at the back of the head of the student in front of him or her.
7. Don't panic—this **will** work! **Ask everyone to listen carefully**. Students should place their hands on the shoulders of the person in front of them. Students slowly sit down as you count to three. At the point of three, you want the students to sit down—on the

knees of the person behind them, keeping their own knees together to support the person in front of them. You then say, **"Food, water, shelter and space**—in the proper **arrangement** (represented by the students' intact, "lap-sit" circle)—are what is needed to have a suitable (good) **habitat."**

8. The students at this point may either fall or sit down. When their laughter has subsided, talk with them about the necessary components of suitable habitat for people and wildlife.

9. After the students understand the major point—that food, water, shelter and space are necessary for any animal's survival, and in their appropriate arrangement comprise a suitable habitat—let the students try the circle activity again! This time ask them to hold their lap sit posture. As the students lap-sit—still representing food, water, shelter and space in their appropriate arrangement—identify a student who represents "water." Then say, "It is a drought year. The water supply is reduced by the drought conditions." At this point, have the student who was identified as representing "water" remove himself or herself from the lap-sit circle—and watch the circle collapse, or at least suffer some disruption in arrangement. You could try this in several ways—removing one or more students from the circle. Conditions could vary: pollution of water supply, urban sprawl limiting availability of all components, soil erosion impacting food and water supplies, etc. Since animals' habitat needs depend upon food, water, shelter and space, in their appropriate arrangement, "removal" of any will have an impact.

10. Ask the students to talk about what this activity means to them. Ask the students to summarize the main ideas they have learned. They could include: a) food, water, shelter and space, in their appropriate arrangement, can be called habitat; b) humans and other animals depend upon habitat; c) loss of any of these elements of habitat will have impact on the animals living there; and d) the components of habitat must be in an arrangement suitable to the needs of the individual animals or populations of animals in order for the animals to survive.

VARIATION

Have the students form a circle, holding hands. Walk around the circle, first naming one student as an animal of a particular ecosystem. Name the next four students in the circle as food, water, shelter and space for that animal. Repeat the process until all the students are involved. Any "extras" can be identified as elements of habitat, e.g., resulting from a particularly good year for habitat needs for the last animal named. When all of the students have been designated as an animal or as components of an animal's habitat, comment on the fact that they are holding hands. This represents the idea that all things in an ecosystem are interrelated. Briefly discuss the idea of interrelationships. Then move the students into position to the "lap sit" described in the Procedure above.

EVALUATION

1. What are the five essential components of habitat?
2. Explain how the arrangement of food, water, shelter and space is important to humans and other animals.
3. What would probably have the greater long-term impact on the wildlife living on a farm in Iowa? A severe winter which killed many animals or the development of part of the farm into a commercial shopping center?