

Can I Live Here? – Changing Habitats

Grades 3 – 7

Learning objectives:

To understand that animals require certain habitats to survive.

Habitat change can occur suddenly or slowly over time.

Materials:

19 Animal/habitat cards

12 Habitat squares

Visit a habitat

Choose one of the following habitats: Pond, Wetland – Jungle Trail, or Forest – end of Hickory Trails.

Introduce the topic of **habitat** by asking the students to describe a typical day that is spent at home. For example: You get out of bed, eat breakfast and have something to drink, get dressed play with some toys or use some sort of electronics. Maybe go outside and ride your bike then drink some water. Maybe you go swimming. Eat lunch then do some sort of chores or homework. Eat dinner and take a bath or shower. Then get ready for bed. Lots of the things we do or have enrich our lives, but what do we need for survival? How many families share your home? Why don't 10 more families live with you?

What in your daily life is needed to live?

The **shelter** of your home and clothing.

The **food** from your meals.

The **water** in your drinks and water for washing.

The **space** around you, and in your neighborhood from which to get and keep all these things.

Show the group the chosen habitat and ask them to share what plants and animals might live there.

What resources would they use? What would they eat and drink? Where would they find shelter? How much space would the organism need to have all these things? The four parts of a habitat; food, water, shelter and space all have to be present for an organism to thrive in this area.

Move the group to an appropriate space to introduce the activity.

Background for Activity:

On each piece of cardboard is the name of a habitat and how many animals that habitat can support. Each student is assigned an animal that must live in one of the habitats. The number under the habitat name is the maximum number of students that can stand at that habitat card. To start out, we don't want to have more than two animals per square. The small number in the corner is the number assigned to the card in the story.

You may read the following information or put it in your own words.

A habitat can be lost in many ways. Natural causes of habitat loss or degradation include fire, storms, flooding and succession. Succession is when change happens slowly such as a grassland or field filling with trees to become a forest. This kind of change gives animals lots of time to adjust and move on if needed. Fast changes like fire, pollution or land clearing, do not allow animals much time to find a new home. Many of them die because of the rapid destruction.

Each of you will be an animal and you share space in your habitat with other animals. Different things will happen to change the habitat you are in. When a change occurs, turn over your square and you must determine if you can still live there or if you need to move to another habitat. If a suitable home can not be found, you must move to the side. You did not survive the change. Remember, the habitat does not have enough space to support more animals than the number printed under the habitat name.

Activity:

Place the habitat squares randomly on the ground with 3-4 feet of space between them.

Pass out one card to each student. Please ask the adults to also participate until all the cards are given out. (If not enough people, give two of the same animal to some students, they are then two animals and must move accordingly).

Activity instructions:

Stand next to a square that is the right home for your animal. Suitable habitats are printed on the cards. There can be no more people than the big number on the square. If you have two cards count yourself twice. You cannot enter a habitat that is full. You can only change habitats if your card is turned over. Or, if another suitable habitat is right next to you, you may choose to go there at any time. If all suitable habitats are full then your animal will die and you must stand to the side. Look for the small number in the upper right corner of the habitat card. When the story indicates, turn over the correct habitat and move if you need to. Does everyone understand the instructions?

Read the story and have the students move around as the story requires.

Many years ago, wetlands were seen as just a source of mosquitoes. These lands needed to be drained so that we could use this “soggy useless” land for farms and homes. Canals were dug to drain the water away and specific tree species that were known to draw large quantities of

water out of the soil were seeded to help dry out the land. Some of our wetlands were changing. Turn over square #8 and #11.

Now that there is more dry land, more people want to move into the area. They need more homes, more offices, and more stores. People start clearing habitats for construction. Turn over squares #1, #5 and #7.

A really bad hurricane moves over the area. It brings heavy rain and very high winds. Trees fall and the waters rise, flooding homes and changing habitats. Turn over squares #3 and # 9.

A short time later, a terrible drought occurs. It lasts for years. Many grasses can not adapt and die out. Turn over square #6.

Without rainfall, people need to drill deeper wells to find more water. The water table drops because water is being withdrawn from the ground faster than it is being replenished by rain. Trees and shrubs fill the habitat that was once wet but is now dry. Turn over square #12.

People buy and use a lot of stuff, which creates a lot of trash. Habitats are taken over to create a landfill so the trash can be collected, piled up, and buried. Turn over square #2.

There is a terrible chemical spill that finds its way into the river. It spreads out over the area and washes into habitats, contaminating them. Turn over square #10.

Fewer and fewer people are hunting deer, turkey, and other animals for food. And the human population has reduced the numbers of their predators. These grazing animals grow fast without hunting or predators. They start to eat faster than the plants can grow and cause damage to the habitat. Turn over square #4.

Closing

In this activity some of you were able to move between different habitats. But some of you were restricted to a single type of habitat. Now you can identify and understand some different causes of habitat loss and degradation and see how those changes impact wildlife.

(This activity was adapted from "Habitat destruction and succession and its effects on wildlife" created by Laura LaBella, Graduate Student Intern for Camp Chowenwaw County Park 2012.)