

You will need:

- Habitat page (page 3)
- Animal cutouts (page 4)
- White paper
- Coloring utensils
- Scissors

Objectives: Students will analyze how animals adapt for specific habitats and how loss of that habitat effects them.

**Directions:**

Animals are adapted and specialized to live best in certain habitats. Just like the red wolf, sometimes things happen to their natural habitat and they must adapt to a new habitat or possibly face extinction!

1. Cut out all of the animals on the last page and place them in the habitats where you think they belong.
2. Adult: Read the brief stories below (or create your own) that will alter a particular habitat. After reading the story, move the animals appropriately. If a habitat is destroyed, they must find a new habitat (if they can!). If they cannot find a new habitat, that animal doesn't survive. If a habitat has been restored, animals best suited for that habitat may move back. However, extinct animals must remain extinct. An animal may move multiple times as long as the habitat it moves to provides what the animal needs.
3. Stop the game once most of the animals have lost their habitats.

Any animals still in their original habitats are safe, any that only had to move once are threatened, any animals that had to move multiple times are endangered, and any that couldn't adapt went extinct!

Just as in nature, when one habitat goes away, others become more crowded, tension grows in the other habitats, and resources become more scarce.

Helpful Vocabulary:

Endangered—a species of animal or plant that is seriously at risk of extinction

Extinct—a species, family, or other larger group having no living members

Generalist— a species that is able to thrive in a wide range of environments and makes use of a variety of resources

Habitat—the natural home or environment of an animal, plant, or other organism

Resource—items such as food, water, and shelter that an animal needs to survive

Specialist—a species that thrives only in a narrow range of environments or has a limited diet

Threatened—a plant or animal species generally perceived as likely, in the near future, to become endangered within all or much of its range

Extra Fun—Create the ultimate animal!

Can you invent your own animal that could adapt to ALL or most of the habitats in this game? Keep in mind what each animal needs to live in each habitat! Thick fur? Big ears? Webbed feet? Use your imagination!

Habitat alteration Scenarios (You can mix them up, or even create your own!)

- 1) What was that loud noise?! The animals living in the forest have been hearing loud gunshots a lot more frequently! The animals here are being deemed as “nuisances” and people are hunting them to keep them away, even though the animals were here first. They must find another home because theirs isn’t safe anymore.
- 2) Climate change has caused the world to warm up and has started to melt the ice and snow in the Arctic Tundra! It is too difficult for animals to find food and shelter, they need to find somewhere else to go!
- 3) Oh no! Somebody has started an illegal campfire on their camping trip out to the prairie! They left it unattended and now it is spreading rapidly through the tall, dry grass! The animals must quickly find somewhere else to live to escape the fire!
- 4) You have done some research and see that your local forest has diminished in size. Maybe this is why those animals were getting close to people! To help fix this problem, you ask your community to help you plant 200 more trees! This gives the animals more places to hide, and brings their habitat back! Some animals can start moving back to the forest!
- 5) Ew, the water is getting hard to see through and hunt in. The fish are starting to die in the swamp and the air is getting harder to breathe. Pollution in the water and air has made the swamp too hard to live in now. Find somewhere else or risk starvation!
- 6) Climate change strikes again! It has been drier than ever in the desert these last couple of years. Not only are the animals having a hard time staying hydrated, but so are the plants. Wildfires have destroyed the bigger plants and all that is left are grasses that don’t provide enough nutrition. It’s time for the animals to move on!
- 7) There are some really nice trees in the mountains! Unfortunately, logging companies think the same thing and they are quickly chopping down the trees in the mountains! The animals have no shelter now! They must move to stay safe!
- 8) You research and learn that water pollution is often caused by runoff, the drainage of water from land. Sometimes bad substances get caught in the runoff and end up in our water. To fix this, you notify your community to stop using pesticides/herbicides and clean up after their pets. The swamp is now healthier for animals to live in and can move back!



Desert



Mountains



Swamp



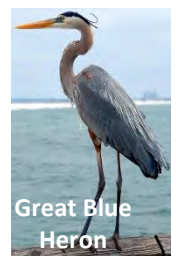
Prairie



Forest



Tundra



Animal	Ideal Habitat	Habitats they could potentially move to
Arctic Fox	Tundra	High elevation mountains—terrain may make it difficult to hunt for food
Harbor Seal	Tundra	None: Other habitats would be too warm and wouldn't provide the right food
Coyote	Desert	Forest, Prairie, Mountains—Coyotes are very adaptable!
Blue Tongued Skink	Desert	Forest, Prairie—If it gets too cold in these areas, they won't do well though!
American Alligator	Swamp	None: Alligators need a lot of water for hunting and a lot of warmth to survive
Great blue Heron	Swamp	Forest, lower mountains—both would need a water source for hunting though!
White Tailed Deer	Forest	Prairie, Lower mountains—Little protection in the prairie, may get too cold in mountains
Red Wolf	Forest	Lower Mountains—May get colder than what they're used to though
Prairie Dog	Prairie	Mountains, Forest—Dense forests may not provide enough food
Bison	Prairie	Forest, Lower Mountains—May not be enough space or food in either area for a whole herd!
Elk	Mountains	Prairie, Forest—Not as much protection on the prairie
Mountain Goat	Mountains	Tundra—though it may be harder to find food!