



# Stake a Claim

Grade Level: 4-8

Length: 30-45 Minutes

[www.pwsrcac.org/lessons](http://www.pwsrcac.org/lessons)

## NGSS Standards

**3-LS4-3** Construct an argument with evidence that in a particular habitat, some organisms can survive well, some survive less well, and some cannot survive at all.

## Crosscutting Concepts

**Systems & System Models** A system is an organized group of related objects or components. Models can be used for understanding and predicting the behavior of systems.

## Related Resources

**Supporting Materials** Small Animal Cards

**Pair With** Oh Moose Survival Game; Habitat Models Lesson

## Overview

Animals need food, water, and shelter to survive.

## Objectives

- Students will be able to name three habitat necessities for animal survival: food, water, and shelter.
- Students will understand that different animals acquire these habitat necessities in different ways.

## Materials

- Small Animal Cards (1 per group)
- 3 Popsicle Sticks or Other “Marking” Material (1 per group)
- 3 Triangles of Paper or Fabric (1 per group)
- Stapler, Safety Pins, or Tape
- Paper or Science Notebooks
- Pens or Pencils
- Colored Pencils

## Background

This exploratory, outdoors activity introduces students to the concept that animals need certain habitat resources, specifically food, water, and shelter. It also highlights that different animals acquire these resources in different ways and that each habitat has its own arrangement of resources. This activity pairs well with “Oh Moose Survival” and “Habitat Models.”

## Notes

## Preparation

1. Prepare small animal cards for the habitat you will be working with. For example, if you are taking students to a grassy area of the playground, animals might include spiders, worms, bumblebees, mosquitoes, beetles, robins, flies, etc. Exploration for this activity is even more fun if you have access to a forest, marsh, field, or beach.
2. Choose fairly small animals – no smaller than a mosquito, no larger than a fox. Each card should have a picture or photo of the animal and a description of the animal's food and shelter preferences. If the animal gets water in a unique way, be sure to include that on the card as well (for example, seals don't need access to fresh water because they get all of their water from their prey).

## Introducing the Lesson

Ask students to think about what they need to survive. Brainstorm a list that includes water, shelter, and food. Explain that all animals require some sort of food, water, and shelter to survive.

## Activity

1. Divide students into groups of 3-5. Explain that each group is going to select a card.
2. They will become that animal and must search for appropriate habitat. Remind students that a good habitat needs to include easy access to the animal's food sources and freshwater and needs to include a place or way for the animal to create shelter.
3. Provide each group with three flags to stake out where the animal will find water, food, and shelter. Also provide each student with their science notebook/paper, pencils, and colored pencils to sketch or map their habitat and label the locations of food, water, and shelter.
4. Send groups out to stake their claim on a habitat. Depending on the size of the area you are working with, it may be important to set boundaries and/or separate groups from each other.

## Wrap-up

Bring students back together. Tour all of the habitats, with each group presenting their animal and where it would find food, shelter, and water. Collect the flags and habitat sketches from students. Ask students what other sorts of animals might be able to survive in these habitats.

## Assessment

Have students revisit the sketch or map they made of their habitat. First, ask them if there are any changes, they would like to make so that their animal could survive well in the habitat. They should annotate these changes on their map. Then, have each student respond to the following prompts in writing or verbally:

- List a small animal that would not survive very well in this habitat. Explain your reasoning.
- List a small animal that could not survive at all in this habitat. Explain your reasoning.

Students who demonstrate understanding will be able to explain (at an age-appropriate level) why the animals they have chosen would be able to survive less well than the one they designed the habitat for. They will be able to differentiate between an animal that would survive less well and animal that would not be able to survive at all in that specific habitat, providing explanations related to the animal's basic needs and the resources available in the habitat.

## Pair With

- Oh Moose Survival Game
- Habitat Model Lesson Plan

## Stake A Claim Animal Cards

Red-Backed Vole



- nests built beneath vegetation, rocks, and roots in underground burrows
- eat berries, leaves, twigs, buds, and mosses

Boreal Chickadee



- nest in a hole in a tree, digging it out or using a natural cavity or abandoned woodpecker nest
- eat seeds and insects off of evergreen branches and bark

Wood Frog



- hibernate under soil and leaf litter in dryer upland habitats
- take summer shelter in moist forests and bogs
- eat beetles, flies, caterpillars, spiders, slugs, and snails

American Red Squirrel



- create grass and twig nests in tree branches
- eat mostly spruce cones, which they store in large underground caches