

**Grade Levels:** 2 - 8

**Time:** 45 Minutes



# Habitat Engineers

**Goal:** Provide an introduction to diverse habitats around the world and the amazing engineering abilities of the animals who live there.

**Objectives:**

- Students will understand an animal must have food, water, shelter and a safe space in order to survive.
- Students will discover adaptations not only help an animal survive but they use these unique adaptations to create incredible feats of engineering.
- Students will recognize how our actions can alter an ecosystem and learn what can be done to assist in conservation efforts.

Animals survive in many different types of habitats around the world. We will explore these habitats, the adaptations needed to survive, and how animals are some of the world's best engineers.

**Curriculum Alignment:**

SC.2.N.1.3; SC.2.N.1.5; SC.2.L.17.1; SC.2.L.17.2; SC.3.N.1.4; SC.3.N.1.6; SC.3.L.17.1; SC.4.N.1.7; SC.4.L.16.2; SC.4.L.16.3; SC.4.L.17.2; SC.4.L.17.4; SC.5.L.15.1; SC.5.L.17.1; SC.5.E.7.5; SC.6.N.2.2; SC.6.E.7.6; SC.7.L.17.3; SC.7.E.6.6; SC.8.N.4.1

***Where education and conservation collide!***

This program, presented by Brevard Zoo Education staff, is an enhanced experience of the distinct and unique wildlife habitats found at Brevard Zoo. Students delve into the concept through fun, interactive activities, questions and participatory responses, and hands-on animal encounters. Programs are designed to supplement in-class learning. Depth and structure vary depending on grade and age range.

**Keywords:**

Adaptation, Camouflage, Climate, Invasive Species, Desert, Ecosystem, Environment, Habitat, Ocean, Rain Forest, Savanna, Survival, Woodlands

**How do animals find shelter within their habitat?**

There are many different types of habitats around the world. Habitats range from tropical rainforests to deep oceans to the driest of deserts in the world. Habitats provide animals with the food, water, shelter, and space they need for survival. All animals have unique adaptations which help them survive in their habitat.

Many animals will find shelter within their habitats, such as a white tail deer finding shelter amongst the plants which will provide camouflage or a jaguar sheltering on a low tree limb in order to rest or pounce on their prey. Others are amazing engineers who will build their shelter from the living and non-living things found in their environment. Meerkat build intricate tunnel systems underground called burrows, grizzly bears will dig a den and line it with bedding material such as spruce boughs in order to allow air pockets to capture body heat, ants construct amazing anthills without a blueprint in total darkness, and spiders not only construct spectacular webs for their shelter but also to capture their prey for food.

These animals, known as the world's best engineers, have physical adaptations which allow them to survive in their habitats. Physical adaptations are physical parts of the body that increase an animal's chances for survival. The claws of a meerkat, the spinnerets of a spider, or the incisors of a beaver are all physical adaptations for survival.

**PLANNING YOUR RESERVATION**

\*Fall and spring fill quickly  
**PLEASE REGISTER EARLY**

\*Groups must register  
**2 WEEKS IN ADVANCE**

\*Programs require a  
**MINIMUM OF 15 PEOPLE**

\*Programs are available  
**ON AND OFF-SITE**

\*Visit our website for  
**EDUCATIONAL RESOURCES**

\*Proper adult supervision  
**REQUIRED AT ALL TIMES**

