

Animal Homes: Who lives there?**Pre- and Post-Visit Activities:
Animal Homes: Who lives there?****Overview:**

These activities, which support the Staten Island Museum's lesson "Animal Homes: Who lives there?", introduce students to animals and their habitats.

Background Information for Educators:

Habitats are places where various species get what they need in order to survive by providing for each animal food, water, cover or shelter, and a place to raise their young. Essentially, habitats are the homes of plants and animals. Scientists who study the homes of plants and animals are called ecologists, and ecologists consider a habitat to encompass the entire area an animal or plant receives the things it needs to survive. This means that humans can actually have huge habitats that consist of their home and also the market or stores they shop at to support their lives. Since different animals and plants require different things to live, they each have adapted to a specific habitat. Basic types of habitats include forests, grasslands, deserts, wetlands, arctic tundra, oceans, and mountains. Typically, there are two different variables that determine the geographical distribution of Earth's habitats: precipitation and temperature. This creates immense diversity within animal habitats; for example, there are no two forests that are the same but rather they are heterogeneous.

Although each individual habitat is very unique, there are qualities that their basic categories share. For forests, the defining feature becomes a dense growth of trees. The types of trees are dictated by temperature ranges, soil nutrients, and altitude. Grasslands share the qualities of being vast areas dominated by grass with relatively dry soil that is prone to fires and high winds. Wetlands are in general areas that have water for part of the year and feature hydric soils (soils that are wet, have low oxygen, and black in color) and hydrophyte plants. Ocean, or marine habitats, are areas featuring saltwater with varying degrees of salinity and are highly affected by ocean currents.

Adaptations are critical changes a plant or animal may go through in order to better survive a particular habitat or certain environmental circumstances. An adaptation might be behavioral or an adaptation might be structural. Structural (physical) changes include instances where the size or shape of an animal's body changes or even the way an animal's body is used. Desert plants have made physical changes that allow for them to store water over long periods of time. Whereas a behavioral change affects the way an animal acts. Migration is an example of a behavioral change. However, if drastic changes occur within a habitat, how quickly an animal or plant species can adapt will often determine whether it survives.

Animal Homes: Who lives there?**Vocabulary:**

Adaptation— a change an organism goes through in order to become better suited to its environment

Biodiversity— the variety of all plant and animal life we find on Earth, in environments, and even in smaller habitats

Beach— a pebbly or sandy shore especially by the ocean or where water meets land

Camouflage—blending in with one's surroundings

Ecology— the study of the relationships between living thing and their surroundings

Forest— a large area covered chiefly with trees and undergrowth

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

Hibernation— the period an animal spends in a dormant state during the winter months

Meadow— a large, open area covered with grass, bushes and small trees

Migrate—to move to a new living area, usually seasonal

Ocean— a very large expanse of sea, in particular, each of the main areas into which the sea is divided geographically

Predator— an animal that naturally preys on others

Prey— an animal that is hunted and killed by another for food

Shell— the hard protective outer case of a mollusk or crustacean

Specimen— an individual, part, or item of a plant or animal used for further study and analysis

Wetlands— land consisting of marshes or swamps

Before Your Visit:

1. Create a mind map or word web with your students to understand their background knowledge.
2. Read a book of your choice on animal homes. At the museum we read *Crinkleroot's Guide to Knowing Animal Habitats*, by Jim Arnosky

After Your Visit:

1. Have students begin to list animals that they see living around their home and think about how they share their habitat with these other animals.

Animal Homes: Who lives there?

- a. Do you see many animals around your home?
 - b. Do you hear animals around your home?
 - c. How can you be a good neighbor to these animals?
2. What animals might have adapted to an urban habitat?
 3. Encourage students to start thinking about what happens to a group of animals if certain aspects of their habitat begin to disappear. What happens to the forest wildlife when we chop down trees? What happens to the ocean wildlife when we dump chemicals into the water?

Animal Homes: Who lives there?

Animals live everywhere on earth--in every kind of terrain and every kind of climate. An animal's living place is called its habitat. Animals need **3 things** in order to live there. Can you name them? Most animals are only adapted to live in one or two habitats. Staten Island has several different habitats so it has many different kinds of plants and animals. This is a picture of a habitat. Can you name it? What makes it a good place for animals to live? List as many different kinds of animals that you think could live here. After each animal's name, write down what you think it eats. **Draw what is under the water. Don't forget to show what animals are there!**



A large, empty rectangular box intended for drawing and writing.