

CHAPTER 06

Habitat

When we consider life on Earth, we notice that different regions contain unique plants and animals that are adapted to local conditions. Scientists have attempted to group these regions into categories called habitats.

A habitat is the natural environment where an animal, plant or other organism lives. A habitat can be as large as a continent or as small as a cell.

Habitat is the place where a plant or animal gets all the things it needs to survive (food, water, shelter and space for having and raising offspring).

Habitat is the natural area inhabited by an animal, plant or other type of organism. The basic elements of habitat include food, water, and shelter. Habitat is also a function of the physical environment related to factors such as temperature, elevation, soil condition and hydrology.

A habitat is a place where an organism makes its home. A habitat meets all the environmental conditions an organism needs to survive. For an animal, that means everything it needs to find and gather food, select a mate and successfully reproduce.

Habitat is of two types:

Aquatic habitats – Plants or animals that live in water such as a pond, ocean, etc. are called aquatic plants or aquatic animals and the ponds or oceans that provide habitat for this aquatic life is said to be aquatic habitat.



Terrestrial habitats - Plants and animals that live in different places on the land like those living on trees, in our houses, fields, forests etc. are said to belong to terrestrial habitat. All habitats on land such as desert, forest, grassland, etc. are collectively known as terrestrial habitats.



The two main types of habitats are land habitats and water habitats. Among the many types of land habitats are rainforests, deserts, and mountains. Because of their moist

climate, rainforests support more kinds of plant and animal life than any other habitat. In contrast, deserts support only animals and plants that can live without much water. Mountain habitats have thin soil and cold temperatures. Only hardy plants and animals live there. Other types of forests, grasslands, and tundras provide other land habitats.

Water habitats may contain freshwater or salt water. Freshwater habitats include streams, rivers, swamps, marshes, ponds, and lakes. Saltwater habitats include oceans, seas, salt lakes, salt marshes, and saltwater swamps. Some animals and plants, such as fish and seaweed, live entirely in the water. Others, such as river weeds live partly in and partly out of the water.

For a plant, a good habitat must provide the right combination of light, air, water and soil. For example, the prickly pear cactus which is adapted for sandy soil, dry climates and bright sunlight, grows well in desert areas like Rajasthan. It would not thrive in wet, cool areas with a large amount of overcast (shady) weather, like in Jammu and Kashmir.

The main components of a habitat are shelter, water, food, and space. A habitat is said to have a suitable arrangement when it has the correct amount of all of these. Sometimes, a habitat can meet some components of a suitable arrangement, but not all.

For example, a habitat for a lion could have the right amount of food (deer, porcupine, rabbits, and rodents), water (a lake,

river, or spring), and shelter (trees or dens on the forest floor). The lion habitat would not have a suitable arrangement, however, if it lacks enough space for this large predator to establish its own territory. An animal might lose this component of habitat—space—when humans start building homes and businesses, pushing an animal into an area too small for it to survive.

A habitat is an ecological or environmental area that is inhabited by a particular species of animal, plant or other type of organism. The term typically refers to the zone in which the organism lives and where it can find food, shelter, protection and mates for reproduction. It is the natural environment in which an organism lives.

A habitat is the home of an animal or a plant. Almost every place on Earth—from the hottest desert to the coldest ice pack—is a habitat for some kinds of animals and plants. Most habitats include a community of animals and plants along with water, oxygen, soil or sand and rocks.

Adaptation

Over a long period of time, animals adapted to fit their habitat. This means that they develop traits that help them to survive where they live. Animals adapt so that they can stay safe, travel well and find food in their habitat.

Many animals that live in cold habitats grow thick coats of fur to keep them warm. Their fur may also be white so that their enemies cannot see them when the ground is covered with snow.

The hard shell of the desert tortoise keeps in moisture and protects it from enemies. Dolphins have sleek bodies for swimming in the ocean. Giraffes have long necks so that they can nibble tender leaves from the tops of trees.

Try to observe different habitats around you when you go to school from your home. Based on your previous observations can you guess the habitat of different animals you see every day?

Under the ground	On the ground	In/on water	Some other place
Snake	Snake	snake	Sparrow (in homes)
Earthworm	Cat	lotus	Crow (a nest on trees)
Ground squirrels	Dog	Fish	Insects (skin of animals)
Moles	Frog	Frog	Lice (hair of humans)

We find animals living on trees, in our houses, in different areas in the ponds, in a small pool of water after rains and several other places. As the area increases, the type and number of organisms living there usually increase.