Indicators: 3-2.3 [K-2.1, 1-2.1, 1-2.5, 2-2.1, 2-2.3]

Habitats Large and Small

Key Word • habitat

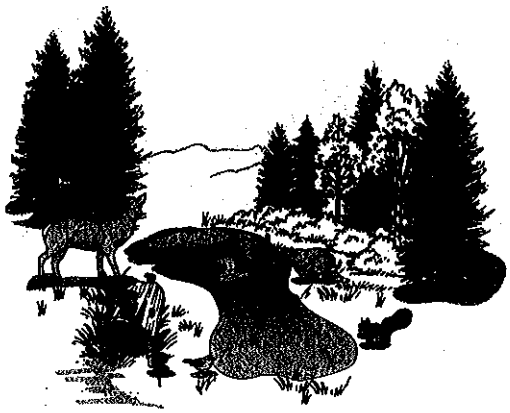
Getting the Idea

What do plants and animals need to stay alive? All living things need water. Plants need sunlight and room to grow. Animals need food and shelter. Plants and animals must find everything they need in the places where they live.

Needs of Living Things

A **habitat** is a place where a plant or animal lives. The habitat can be big or small. It can be in nature, or it can be a human-made place. A living thing finds everything it needs to stay alive in its habitat. All plants and animals need some of the same things, such as water and space to live in. But the habitat for one plant or animal may be different from the habitat for another plant or animal.

A cactus does not need much water. A cactus grows well in a dry habitat. A willow tree needs a lot of water. It grows well in a habitat near a river. A camel can go a long time without water. The camel can live in a desert. A deer needs a lot of water. The deer cannot live in a desert. A deer might find all it needs in a forest, such as the one shown below.



Look again at the forest habitat shown on page 65. The trees and other plants have water and sunlight. The deer, raccoon, squirrel, and bird can all drink water from the pond. They can also find food in the forest. Deer eat grass, leaves, and tree bark. Raccoons eat crayfish and frogs, which may live in the pond. Raccoons also eat fruit and other parts of plants. Squirrels eat nuts from trees. Birds such as the one shown in the picture eat seeds.

Large Habitats

Some plants and animals have large habitats. An oak tree needs space to grow and spread its branches. The tree needs a lot of water. Its roots spread over a large area and reach deep into the ground.

Animals can move about to find food, so they often have large habitats. A deer's habitat may include fields as well as a forest. Remember that moose migrate in winter to find food. Moose need a large habitat to stay alive. Birds often fly from place to place over a large area.

Small Habitats

Some plants and animals live in small habitats. A fern may find soil and water in one tiny crack in a rock. A water lily may live in a small pond with shallow water. A spider may live in a fallen log. Other insects may live under the log.

The picture below shows a small habitat. Different kinds of animals share this habitat.

Small habitats are part of larger habitats. A squirrel that makes its nest in an oak tree has a small habitat. But that small habitat may be part of a large forest. There are many other trees in the forest. There are other squirrels in the forest, too. All the squirrels share their small habitats with other living things. All the living things and small habitats are part of the same large forest habitat.

Discussion Question

Describe your habitat. Is it large or small? Is it part of a larger habitat?

Lesson Review

1. A turtle eats insects and lives mostly in water. Which kind of habitat would help this turtle stay alive?

   A. desert

   B. pond

   C. tree

   D. field

2. Which animal would MOST LIKELY need a large habitat?

   A. frog

   B. mouse

   C. deer

   D. spider

3. Animals tend to have larger habitats than plants because

   A. animals can move.

   B. animals need more water than plants do.

   C. animals are larger than plants.

   D. animals need more sunlight than plants do.

Indicators: 3-2.4 [1-2.5, 2-2.3]

When Habitats Change

Key Words • resource • flood • drought • extinct

Getting the Idea

In Lesson 12, you learned about habitats. A habitat is the place where a plant or animal lives. A living thing finds everything it needs in its habitat. But a habitat can change.

Resources Can Change

A **resource** is something a living thing uses to stay alive. Living things need food, water, sunlight, and air. They also need space. Most plants need soil, and animals need shelter. These all are resources. Any habitat has only enough resources for a certain number of plants and animals.

When a habitat changes, resources can change. Then plants and animals may no longer have the resources they need to stay alive in that place.

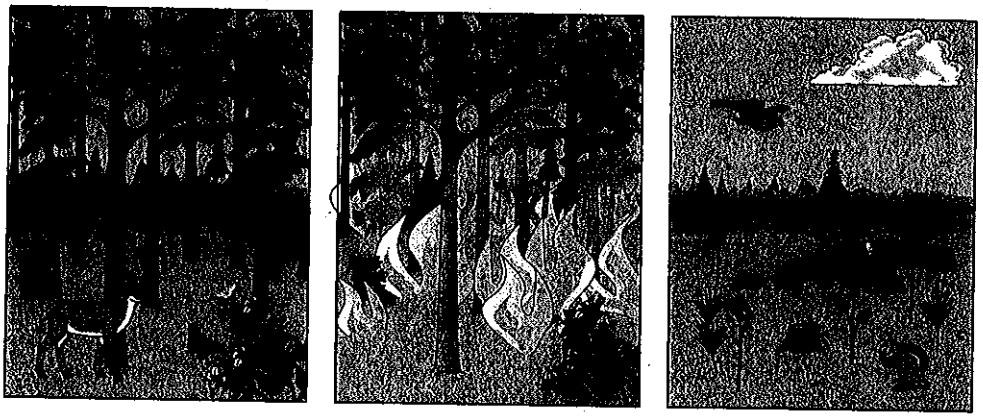
Fast Changes in Habitats

Some changes happen in a short time. Storms such as hurricanes can knock down trees and wash away beaches. Hurricanes can also cause floods.

A **flood** is an overflow of water onto land that is usually dry. A flood changes a habitat quickly. Heavy rain can make rivers and streams overflow. Water flows over land that was dry before. A flood can wash away the homes of plants and animals. It can make the soil too muddy for plants to stay alive. Then animals that eat those plants cannot find enough food. Animals may leave the habitat to look for food and shelter. Some animals may die.

A fire can change a habitat in a few hours. A forest fire kills animals. It also kills trees and other plants. Many animals make their homes in trees. Many animals eat seeds and other parts of plants. When the trees and plants are gone, the animals do not have shelter or food.

Animals that live through a forest fire must leave the area to stay alive. The pictures below show how a fire changes a forest.



Some kinds of plants grow quickly after a forest fire. Grass and other small plants soon cover the burned area. Animals find food and shelter there again. But they are not the same kinds of animals that lived in the forest.

Slow Changes in Habitats

It takes many years for a forest to grow back after a fire. Other changes in habitats happen slowly, too.

A **drought** is a long period of time when very little rain falls. A drought can last for months or years. It can cause big changes in a habitat. The soil becomes dry. Many plants die because they do not have water. Animals die, too, if they cannot find water to drink or plants to eat. Animals that do not die may move away to look for resources.

Other changes happen even more slowly, over hundreds of years. Think about a lake. Plants, fish, and other animals live in the lake. They are food for animals that live on the shore. Plants grow around a lake. The lake and the land around it are a habitat.

Suppose small trees begin to grow by the lake. Slowly the lake fills up with soil and fallen leaves. As time passes, the lake turns into an area of wet land called a marsh. The plants that grow in the marsh are different from the plants that grew near the lake. The water becomes too shallow for many fish. Animals that ate those fish must leave or die. Different animals come to live in the marsh.

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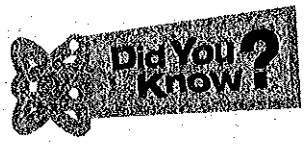
Over time, the marsh dries up. Tall pines and oak trees fill the area. They block the sun so some smaller plants can no longer survive there. Ferns grow near the ground instead. Squirrels, deer, and other forest animals move into the area. They take up space and use resources that other living things need. What was once a lake habitat is now a forest habitat.

People Change Habitats

People cause many changes in habitats. One way is by clearing land for roads, homes, and farms. That land was once home to plants and animals. Sometimes people remove soil, so plants cannot grow. Then animals cannot find food and shelter. The animals must move to another habitat in order to survive.

Living Things Become Extinct

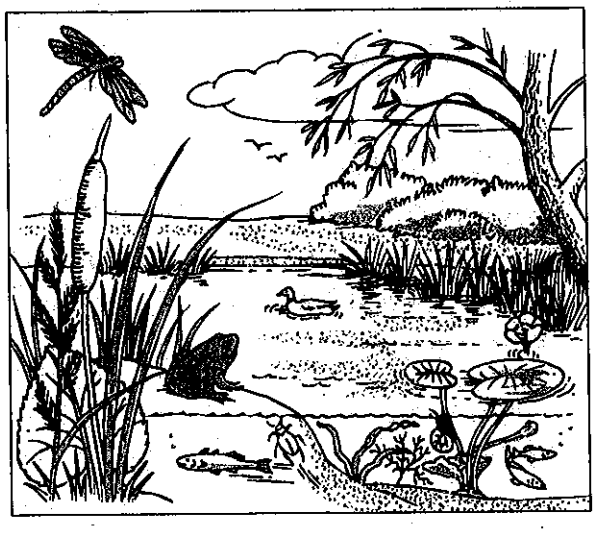
Most often, when a habitat changes, some plants and animals die. But the same kinds of plants and animals survive in other places. That does not always happen, though. Sometimes a whole group of plants or animals dies out. The group becomes **extinct**. It is no longer found living on Earth. Most scientists think that changes in habitats caused the dinosaurs to become extinct.



Carolina parakeets once lived in your state. But farmers hunted the birds because they ate crops. Farmers shot so many Carolina parakeets that the birds became extinct.

Discussion Question

Study the picture below. How is a drought likely to change this habitat?



Lesson Review

1. Which of these resources do all living things need?

   A. soil

   B. seeds

   C. water

   D. trees

2. How does a fire affect a forest habitat?

   A. It carries away soil.

   B. It kills only plants.

   C. It kills only animals.

   D. It kills plants and animals.

3. Suppose a flood flows over a meadow habitat. What will MOST LIKELY happen to the insects that live in the meadow grasses?

   A. They will learn to live underwater.

   B. They will grow gills.

   C. They will lose their homes.

   D. They will find more food.

4. A drought is a long period of time without

   A. rain.

   B. air.

   C. sunlight.

   D. soil.