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Carrion Beetles Scavenge Organic Remains

What Are Scavengers?

Look carefully at the natural world around you. Wherever you live, you will see organisms eating and breaking down organic remains. Some of these organisms are animals we call **scavengers**.

Scavengers are animals that eat dead animals and plants they did not kill themselves. They often eat other animals' leftovers. For example, vultures flock to another animal's kill. They also find animals that have died naturally.

Scavengers also eat organic remains that people have left. Humans' leftovers are often very different than what scavengers would eat in the wild.



Raccoons search for leftovers in garbage cans.



Gulls eat organic waste they scavenge from landfills.

Some scavengers are big, like vultures, raccoons, and gulls. But most scavengers are small **invertebrates**, like beetles and earthworms. Big or small, scavengers break down organic remains into smaller pieces and eat them.

Word Connection

Vertebrates refers to animals that have a backbone, such as fish, amphibians, reptiles, birds, and mammals.

What do you think **invertebrates** means? (Hint: remember, the prefix *in-* means "not.")

Carrion Beetles

One day near a pond in South Carolina, a **naturalist** discovered the body of a small green frog. What caught his eye was the activity of scavengers that had come to live on the frog's remains.

This photograph shows what he saw.

Word Connection

A **naturalist** is a scientist who studies plants and animals in nature.



Bill Hilton, Jr.

Carrion beetles on a dead frog.

Carrion beetles, following the smell of the dead frog, had laid their eggs in its body. After the eggs hatched, the beetle **larvae** would feed on the meat.

Even before the beetles arrived, flies had found the dead frog and laid their eggs in it. Within hours, their eggs had hatched and fly larvae crawled around the meat of the frog.

The adult beetles did not eat the frog meat. They ate the larvae of the flies, so there would be frog meat left over for their own larvae to eat.

The beetles got some additional help in making sure their young survived. The naturalist noticed that some of the beetles had tiny mites on their backs. The mites had caught a ride to the dead frog. Once the beetles landed, the mites crawled off and feasted on fly eggs, creating more space for the beetle larvae to grow. Getting rid of some of the fly larvae also meant more of the frog meat for the beetle larvae to feed on.



Bill Hilton, Jr.

A carrion beetle with mites on its back.

Within a few weeks, the beetle larvae finished eating the frog meat. Smaller organisms then decomposed the rest of its body. Nutrients that had been in the frog's body became part of the bodies of the organisms that fed on it. The rest of the frog's remains decomposed and became part of the soil.

When the naturalist walked by the same area a month later, he saw young green plants growing where the frog once was.



Bill Hilton, Jr.

Milkweed plants grow near the pond.

People Doing Science

Using Beetles as Scientific Tools

People use the services of all sorts of animals, such as horses, guide dogs, and lab rats. Some scientists even use beetles to help them do their work.

Most natural history museums collect animal skeletons for scientific research and for public display. These skeletons need to be very clean. The tool that many museums use for cleaning bones is a kind of carrion beetle called dermestids.

Dermestid beetle larvae eat away the bits of meat or tissue, and leave the hard bones. After a few days or a week with the larvae, an animal skeleton is clean and ready to display.



Guy Hanley

A duck skeleton after it has been cleaned by dermestid beetles.