## **Encyclopedic Entry**

# scavenger

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A <u>scavenger</u> is an organism that mostly consumes <u>decaying</u> biomass, such as <u>meat</u> or rotting plant material. Many scavengers are a type of <u>carnivore</u>, which is an organism that eats meat. While most carnivores hunt and kill their prey, scavengers usually consume animals that have either died of natural causes or been killed by another carnivore.

Scavengers are a part of the food web, a description of which organisms eat which other organisms in the wild. Organisms in the food web are grouped into trophic, or nutritional, levels. There are three trophic levels.

Autotrophs, organisms that produce their own food, are the first trophic level. These include plants and algae.

Herbivores, or organisms that consume plants and other autotrophs, are the second trophic level. Scavengers, other carnivores, and omnivores, organisms that consume both plants and animals, are the third trophic level.

Autotrophs are called producers, because they produce their own food. Herbivores, carnivores, and omnivores are consumers. Herbivores are primary consumers. Carnivores and omnivores are secondary consumers.

Scavengers play an important role the food web. They keep an ecosystem free of the bodies of dead animals, or carrion. Scavengers break down this organic material and recycle it into the ecosystem as nutrients.

Some birds are scavengers. Vultures only eat the bodies of dead animals.

Vultures have many biological adaptations that make them well-suited to being scavengers. Most have excellent eyesight and a strong sense of smell. They use these keen senses to locate rotting carrion while they are soaring high over land. Unlike raptors, or birds that hunt, vultures have weak talons and beaks. Raptors use sharp talons and beaks to kill, while vultures do not need to overpower or secure their prey. Many vultures are also bald, meaning they have no feathers on their head. This prevents bits of carrion, which can carry toxic bacteria, from sticking to feathers and infecting the bird.

Lammergeiers, or bearded vultures, have more specialized feeding habits than other vultures. Rather than eating meat, they survive almost entirely by eating bones. Lammergeiers drop the bones from great heights to break them into smaller pieces, then chew them up to get at the marrow, the soft tissue inside the bones.

Many insects are scavengers. Animals do not always have to be dead for these scavengers to feast on their decaying flesh. Blowflies often feed on the wounds in sheep, cattle, and other <u>livestock</u>. The dead flesh around the wound is eaten, while the animal itself remains relatively healthy.

Some mammals are scavengers. Hyenas are often thought of as scavengers, but are also traditional carnivores. A lone hyena feeds mostly on dead animals. Hyenas may consume an animal that has died of injuries, or it may steal meat from another carnivore, such as a lion. A pack of hyenas, however, will work together to hunt antelope and

other creatures.

Like the hyena, few scavengers eat decaying flesh exclusively. In addition to the area around wounds of livestock, blowflies also feed on plant matter such as rotting garbage. Cockroaches feed on dead animals, but they also eat plants, paper, and other material.

Sea creatures such as crabs and lobsters will eat carrion and most anything else they find. Eels eat dead fish. In addition to hunting, great white sharks feast on dead whales, fish, and pinnipeds such as sea lions.

## Scavengers in the Food Chain

Many animals will scavenge if they have the chance, even though carrion is not their preferred food source. Lions, leopards, wolves, and other <u>predators</u>—animals that hunt other animals—will eat carrion if they come across it. Black bears feed mostly on fruit, nuts, and berries, but they, too, will eat dead animals. Foxes and coyotes are more likely to eat carrion in the winter when they cannot find other food.

Because most scavengers are flexible about what they eat, they have an easier time finding food than creatures with more restricted diets. This sometimes makes scavengers better at adapting to new environments than other organisms.

Urban development, the process of clearing land for homes, businesses, and agriculture, destroys animal habitat, the places where animals live in the wild. Herbivores such as elephants cannot survive without a lot of trees and grasses to eat, for example. In developed areas, carnivores such as the mountain lion often do not have enough prey to survive.

Scavengers, however, can usually adapt well to an <u>urban area</u> or <u>farmland</u>. In the wild, the American crow will eat mice, eggs, seeds, and nuts. However, in developed areas, one of its most common meals is <u>roadkill</u>, or the remains of animals that have been hit by cars. Scavengers such as opossums, seagulls, and raccoons thrive on food in garbage cans.

Sometimes, scavengers can pose a danger to people or themselves. The <u>polar bears</u> around Churchill, Canada, for instance, adapted to life near a developed area by seeking out food from the town dump. These large carnivores became a major threat to the community. Some of the food the bears scavenged also <u>poisoned</u> them. In 2006, Churchill closed its dump to protect the bears and the community.

#### **VOCABULARY**

Term	Part of Speech	Definition
adapt	verb	to adjust to new surroundings or a new situation.
agriculture	noun	the art and science of cultivating the land for growing crops (farming) or raising livestock (ranching).
algae	plural noun	(singular: alga) diverse group of aquatic organisms, the largest of which are seaweeds.
autotroph	noun	organism that can produce its own food and nutrients from chemicals in the atmosphere, usually through photosynthesis or chemosynthesis.
bacteria	plural noun	(singular: bacterium) single-celled organisms found in every ecosystem on Earth.
biological adaptation	noun	physical change in an organism that results over time in reaction to its environment.

noun blowfly type of insect that lays its eggs on meat or in wounds. noun carnivore organism that eats meat. noun carrion flesh of a dead animal. noun cockroach type of flat-bodied insect. noun consumer organism on the food chain that depends on autotrophs (producers) or other consumers for food, nutrition, and energy. verb decay to rot or decompose. development noun construction or preparation of land for housing, industry, or agriculture. noun ecosystem community and interactions of living and nonliving things in an area. noun farmland area used for agriculture. adjective flexible able to bend easily. food chain noun group of organisms linked in order of the food they eat, from producers to consumers, and from prey, predators, scavengers, and decomposers. noun food web all related food chains in an ecosystem. Also called a food cycle. noun habitat environment where an organism lives throughout the year or for shorter periods of noun herbivore organism that eats mainly plants. noun hyena predatory mammal native to Africa and Asia. verb infect to contaminate with a disease or disease-causing organism. adiective keen sharp. noun lammergeier type of bird (vulture) that mostly eats bones and bone marrow. Also called a bearded vulture. noun, plural livestock animals raised for sale and profit. noun mammal animal with hair that gives birth to live offspring. Female mammals produce milk to feed their offspring. noun marrow soft tissue inside bones, where blood cells are produced. noun animal flesh eaten as food. meat noun nutrient substance an organism needs for energy, growth, and life. noun omnivore organism that eats a variety of organisms, including plants, animals, and fungi. adjective composed of living or once-living material. organic noun organism living or once-living thing. pinniped noun marine mammals that also live on land and have flippers, such as seals. noun plant organism that produces its own food through photosynthesis and whose cells have walls. noun poison substance that harms health. noun large mammal native to the Arctic. polar bear

predator	noun	animal that hunts other animals for food.
prey	noun	animal that is hunted and eaten by other animals.
primary consumer	noun	organism that eats plants or other autotrophs.
producer	noun	organism on the food chain that can produce its own energy and nutrients. Also called an autotroph.
raptor	noun	bird of prey, or carnivorous bird.
recycle	verb	to clean or process in order to make suitable for reuse.
restrict	verb	to limit.
roadkill	noun	animals killed by vehicles on a highway or other road.
rot	verb	to decay or spoil.
scavenger	noun	organism that eats dead or rotting biomass, such as animal flesh or plant material.
secondary consumer	noun	organism that eats meat.
talon	noun	claw of a bird, especially a bird of prey or raptor.
toxic	adjective	poisonous.
trophic level	noun	one of three positions on the food chain: autotrophs (first), herbivores (second), and carnivores and omnivores (third).
urban area	noun	developed, densely populated area where most inhabitants have nonagricultural jobs.
vulture	noun	bird that mostly eats dead animals.
wound	noun	injury usually resulting in the breaking of skin.

# For Further Exploration

## Websites

• National Geographic Ocean: Marine Food Chain



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