Illustration
MEDIA SPOTLIGHT

African Savanna

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The African savanna ecosystem is a tropical grassland with warm temperatures year-round and with its highest seasonal rainfall in the summer. The savanna is characterized by grasses and small or dispersed trees that do not form a closed canopy, allowing sunlight to reach the ground. The African savanna contains a diverse community of organisms that interact to form a complex food web.

A community is a group of organisms interacting in a specific region under similar environmental conditions. A food chain is a group of organisms linked in order of the food they eat, from producers to consumers, prey to predators, and scavengers to decomposers. The arrows in a food chain represent the flow of energy and matter between feeding (trophic) levels. Food chains show only one path of food and energy through an ecosystem. In most ecosystems, organisms can get food and energy from more than one source, and may have more than one predator.

Healthy, well-balanced ecosystems are made up of multiple, interacting food chains, called food webs. Carnivores (lions, hyenas, leopards) feed on herbivores (impalas, warthogs, cattle) that consume producers (grasses, plant matter). Scavengers (hyenas, vultures) and decomposers/detritivores (bacteria, fungi, termites) break down organic matter, making it available to producers and completing the food cycle (web). Humans are part of the savanna community and often compete with other organisms for food and space.

The following list defines and provides examples of the feeding (trophic) levels that comprise food webs:

- Producer: organism on the food chain that can produce its own energy and nutrients. Examples: grasses, Jackalberry tree, Acacia tree
- Primary consumer/herbivore: organism that eats mainly plants. Examples: cows, impalas, warthogs, zebras
- Secondary consumer/carnivore: organism that eats meat. Examples: leopard, lion
- Omnivore: organism that eats a variety of organisms, including plants, animals, and fungi. Examples: humans, aardvarks
- **Decomposer/detritivores:** organisms that break down dead plant and animal material and waste and release it as energy and nutrients in the ecosystem. Examples: bacteria, fungi, termites
- Scavenger: animal that eats dead or rotting animal flesh. Examples: vultures, hyenas
- Insectivore: organism that mostly eats insects. Example: Red-billed oxpecker

VOCABULARY

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Big Cats Initiative	noun	National Geographic Society program that supports on-the-ground conservation projects, education, economic incentive efforts, and a global public-awareness campaign to protect big cats and their habitats.
carnivore	noun	organism that eats meat.
community	noun	group of organisms or a social group interacting in a specific region under similar environmental conditions.
consumer	noun	organism on the food chain that depends on autotrophs (producers) or other consumers for food, nutrition, and energy.
decomposer	noun	organism that breaks down dead organic material.
detritivore	noun	organism that consumes dead plant material.
ecosystem	noun	community and interactions of living and nonliving things in an area.
environment	noun	conditions that surround and influence an organism or community.
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.
food web	noun	all related food chains in an ecosystem. Also called a food cycle.
herbivore	noun	organism that eats mainly plants.
insectivore	noun	organism that mostly eats insects.
omnivore	noun	organism that eats a variety of organisms, including plants, animals, and fungi.
organism	noun	living or once-living thing.
predator	noun	animal that hunts other animals for food.
producer	noun	organism on the food chain that can produce its own energy and nutrients. Also called an autotroph.

For Further Exploration

Interactives

• Food Webs: African Grasslands

Websites

Blue Planet Biomes: African Savanna PlantsAfrican Wildlife Foundation: Wildlife Gallery

• Biodiversity Explorer: The Web of Life in Southern Africa



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