

# 13.4 Food Chains And Food Webs

## KEY CONCEPT

**Food chains and food webs model the flow of energy in an ecosystem.**



# 13.4 Food Chains And Food Webs

- ▶ **A food chain is a model that shows a sequence of feeding relationships.**
  - A food chain links species by their feeding relationships.
  - A food chain follows the connection between one producer and a single chain of consumers within an ecosystem.

GRAMA GRASS



DESERT COTTONTAIL



HARRIS'S HAWK





# 13.4 Food Chains And Food Webs

- Consumers are not all alike.
  - Herbivores eat only plants.
  - Carnivores eat only animals.
  - Omnivores eat both plants and animals.
  - Detritivores eat dead organic matter.
  - Decomposers are detritivores that break down organic matter into simpler compounds.



carnivore



decomposer

## 13.4 Food Chains And Food Webs

- Specialists are consumers that primarily eat one specific organism or a very small number of organisms.



- Generalists are consumers that have a varying diet.

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- Trophic levels are the nourishment levels in a food chain.
  - Primary consumers are herbivores that eat producers.
  - Secondary consumers are carnivores that eat herbivores.
  - Tertiary consumers are carnivores that eat secondary consumers.
  - Omnivores, such as humans that eat both plants and animals, may be listed at different trophic levels in different food chains.





# 13.4 Food Chains And Food Webs

- ▶ **A food web shows a complex network of feeding relationships.**
  - An organism may have multiple feeding relationships in an ecosystem.
  - A food web emphasizes complicated feeding relationships and energy flow in an ecosystem.

