Science 14

Unit D: Matter and energy in the environment

Food webs and population size

A grassland food chain

- One chain is a single path: grass to grasshopper to meadowlark.
- A web adds the other meals those animals also eat and the animals that eat them.



Food web and energy pyramid

- A food web shows several feeding paths through an ecosystem.
- An energy pyramid stacks those levels, with less available energy toward the top.

Key terms

food web

A set of feeding links that shows several paths of matter and energy through an ecosystem.

energy pyramid

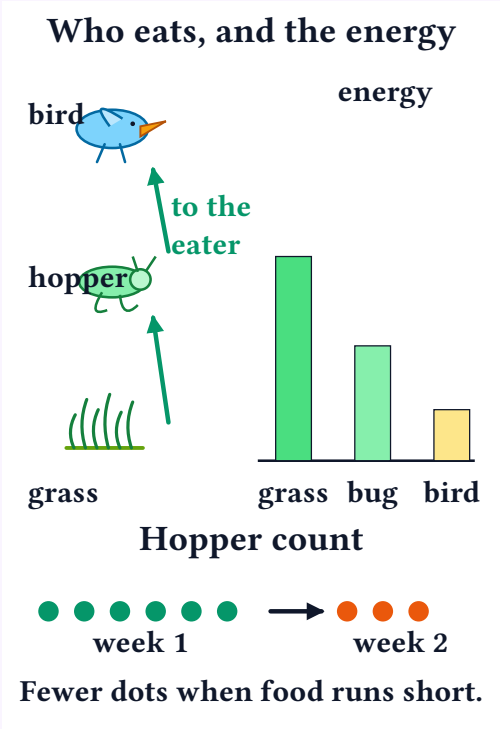
A diagram that stacks feeding levels, with less available energy at each higher level.

population

The individuals of one species living in a stated place at a stated time.

Food webs and pyramids

- Arrows in a food web point toward the eater, along the path of matter.
- When a count rises or falls, name a cause such as births, deaths, or food running short.



A grassland food chain

- Grass is the base, then the grasshopper, then the meadowlark.
- Available energy is smaller at each higher level.

The wide bar

- The bar shows available energy.
- The meadowlark level has less because energy was used and released as heat below it.

Web and pyramid

- A meadow has grass, grasshoppers, and meadowlarks.
- Say what a food web adds and what an energy pyramid shows about available energy.

Diagram the links, then the counts

- Draw who eats whom, and draw a pyramid that gets smaller toward the top.
- On the jar graph, write the reason beside the rise or the fall, such as food running short.

Image credits

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