

13.6 Pyramid Models

KEY CONCEPT

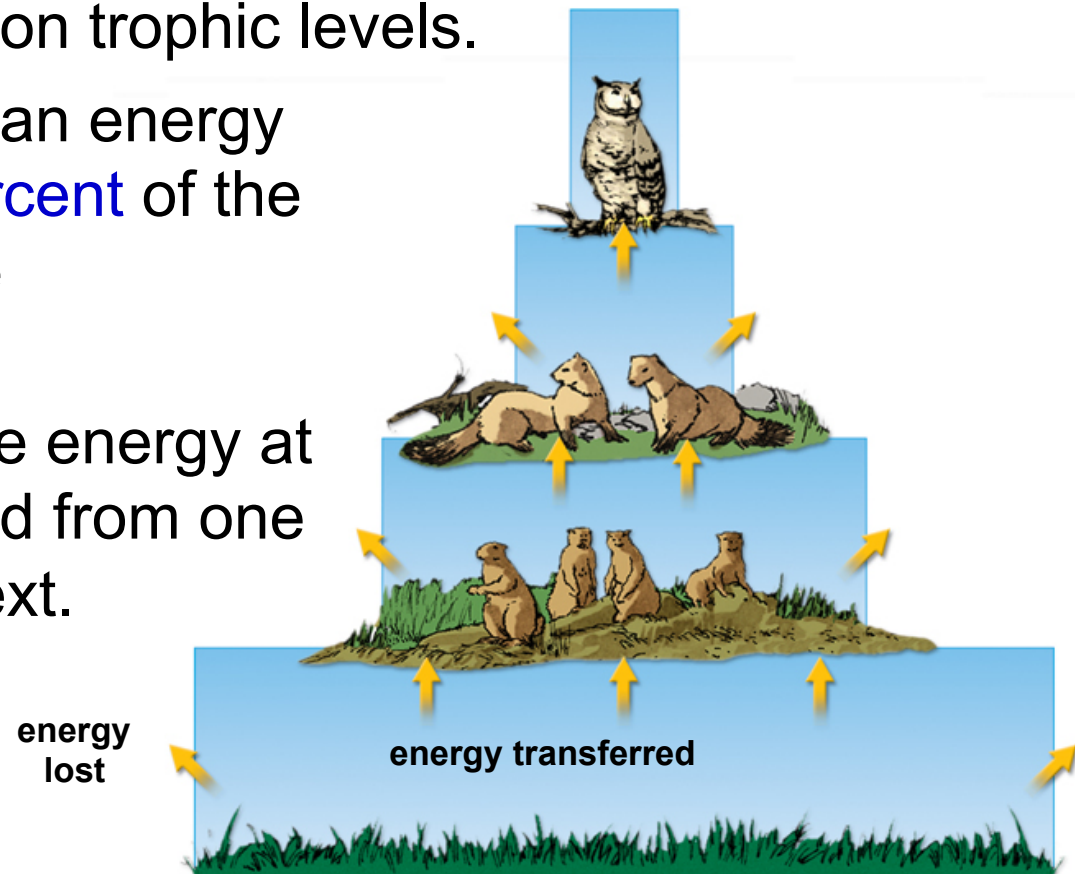
Pyramids model the distribution of energy and matter in an ecosystem.



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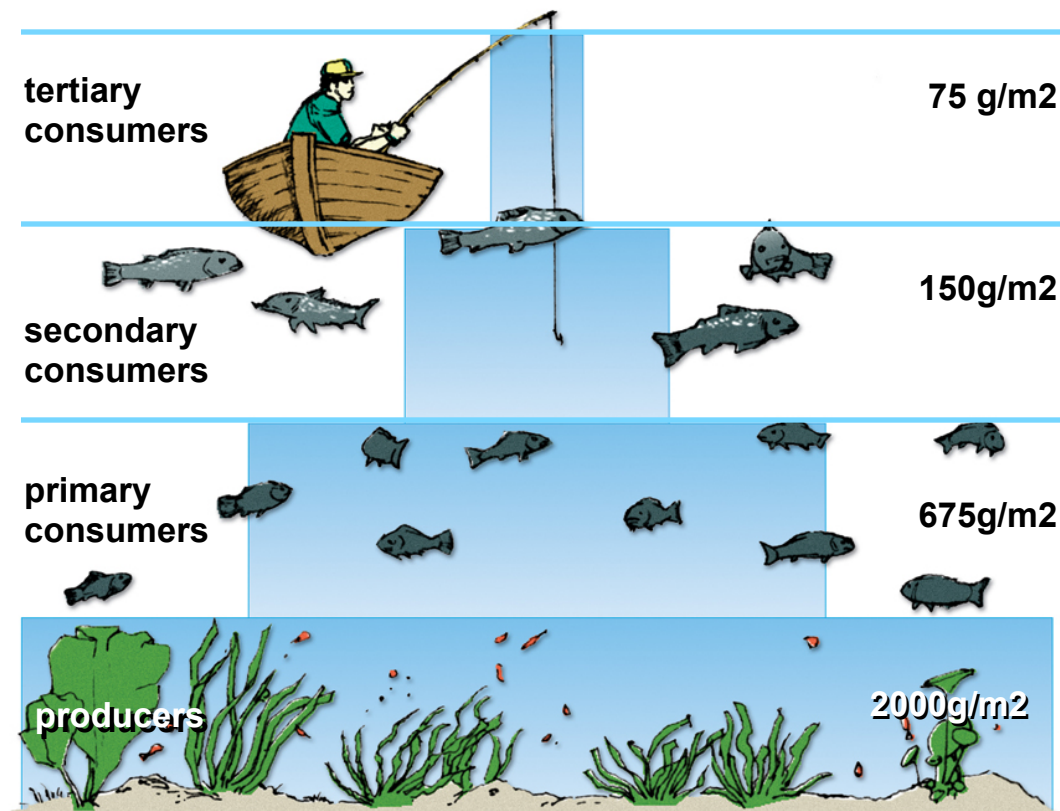
► An **energy pyramid** shows the distribution of energy among trophic levels.

- Energy pyramids compare energy used by producers and other organisms on trophic levels.
- Between each tier of an energy pyramid, **up to 90 percent** of the energy is lost into the atmosphere as heat.
- **Only 10 percent** of the energy at each tier is transferred from one trophic level to the next.



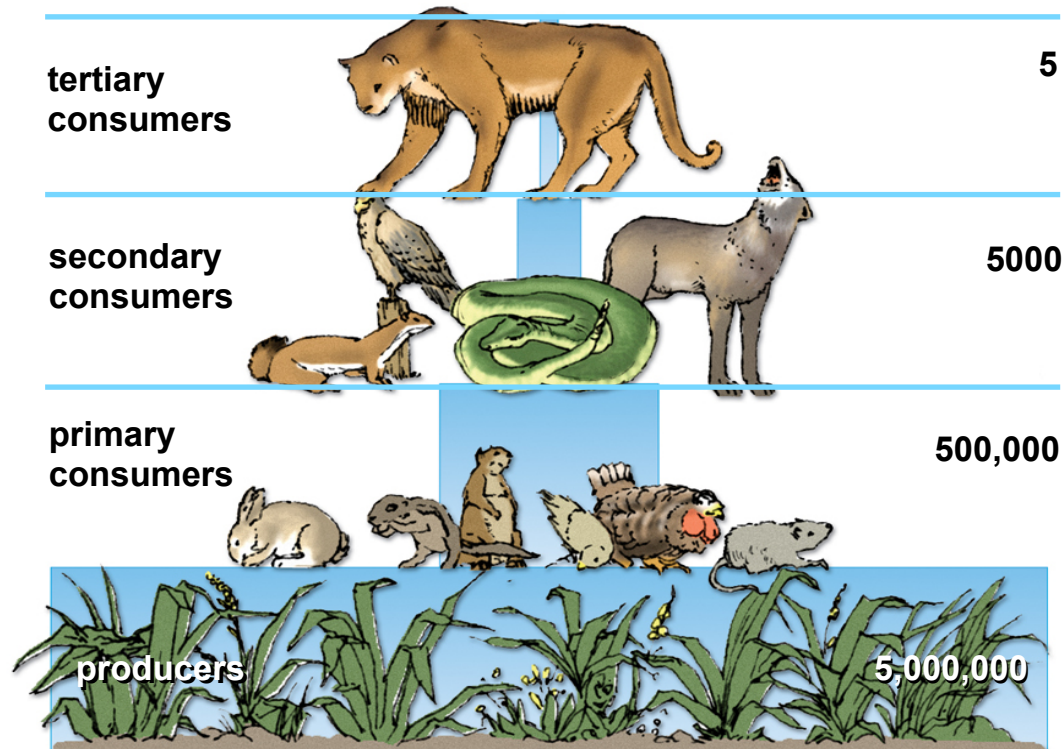
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- ▶ Other pyramid models illustrate an ecosystem's biomass and distribution of organisms.
- **Biomass** is a measure of the total dry mass of organisms in a given area.



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- A **pyramid of numbers** shows the numbers of individual organisms at each trophic level in an ecosystem.



- A vast number of producers are required to support even a few top level consumers.