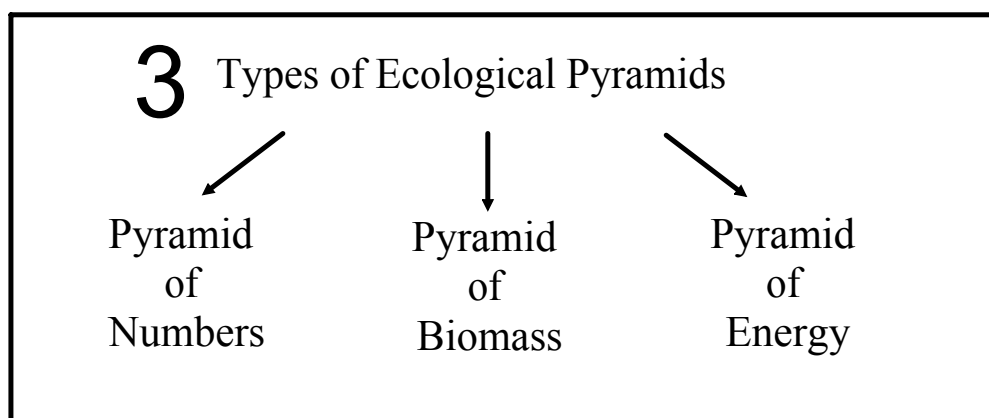


Ecological Pyramids

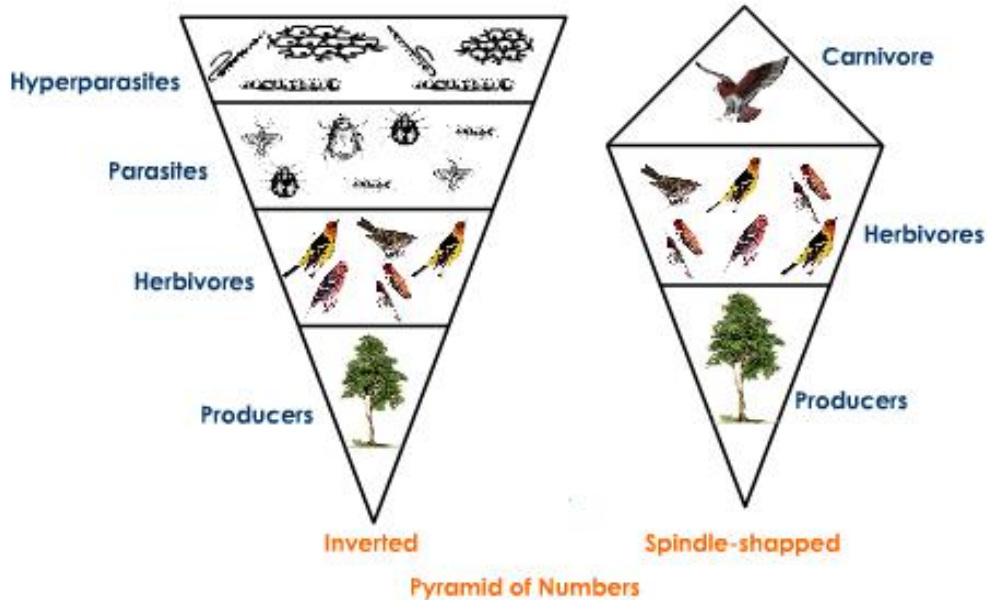
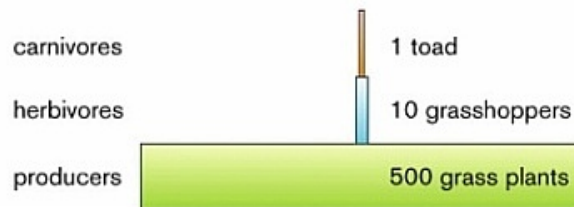
Ecological pyramids are graphical representations of the trophic structure of ecosystems.



Pyramid of Numbers

- the graphic representation of the number of individuals at various trophic levels
- usually shows a large number of producers with diminishing numbers of consumers

For a food chain
(grass → grasshopper → toad)

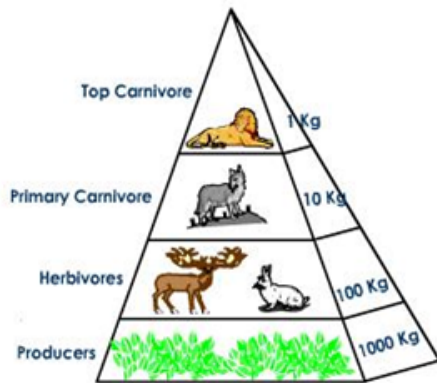


hyperparasite - an organism that is parasitic on or in another parasite

Pyramid of Biomass

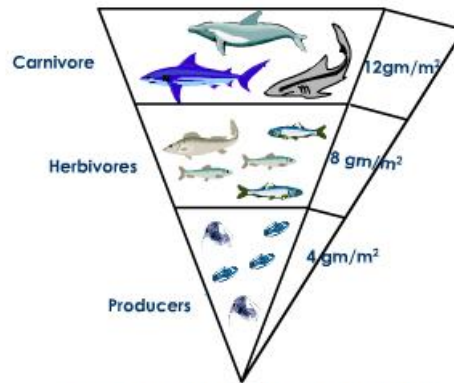
- the graphic representation of the relationship between the amounts of biomass* at different trophic levels

*biomass - the total mass of all the living organisms in a given area



Upright Pyramid of biomass in a Terrestrial Ecosystem

Maximum mass occurs in producers.

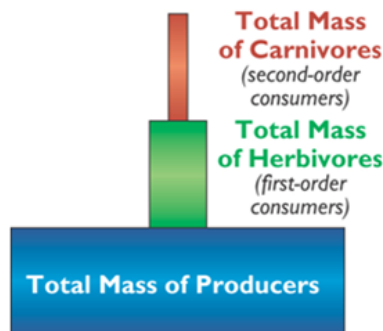


Inverted Pyramid in an Aquatic Ecosystem

Biomass of trophic levels depend upon the reproductive potential and longevity of the members.

Pyramid of Biomass

The biomass of the producers is always greater than the biomass of the herbivores, and the biomass of the herbivores is always greater than the biomass of the carnivores. The biomass decreases with each additional step in a food chain. A diagram that shows this decrease in biomass is a pyramid of biomass.



Pyramid of Energy

- a graphic representation that shows the amount of energy that is available at each trophic level

Can an energy pyramid be inverted?

Never

[Notes - Pyramids of Energy.pdf](#)



Attachments

Notes - Pyramids of Energy.pdf