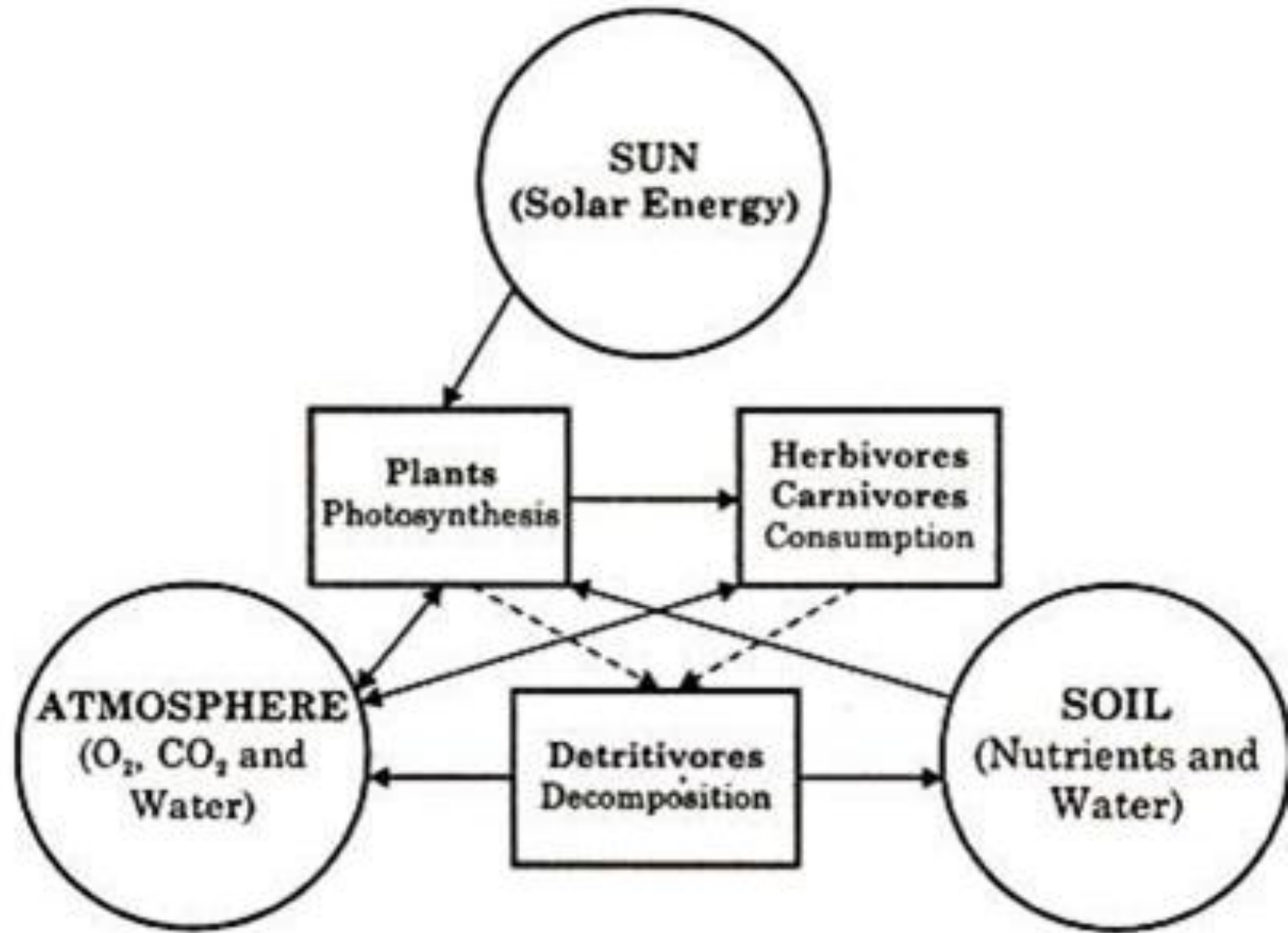


Ecosystem

Submitted by: Dr, Monica Singh Chauhan(Department of Botany)
DDU College

Class B.Sc.(life science) Sem:2

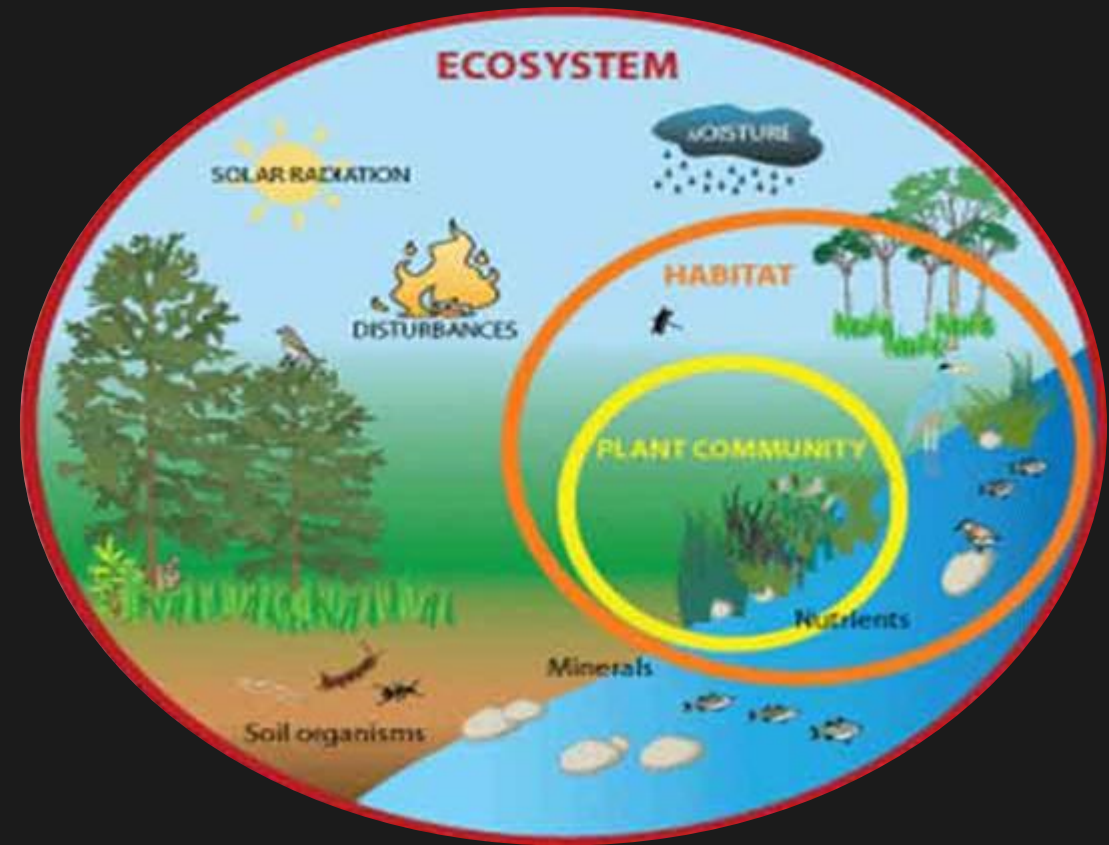
Paper name : Plant Ecology and taxonomy



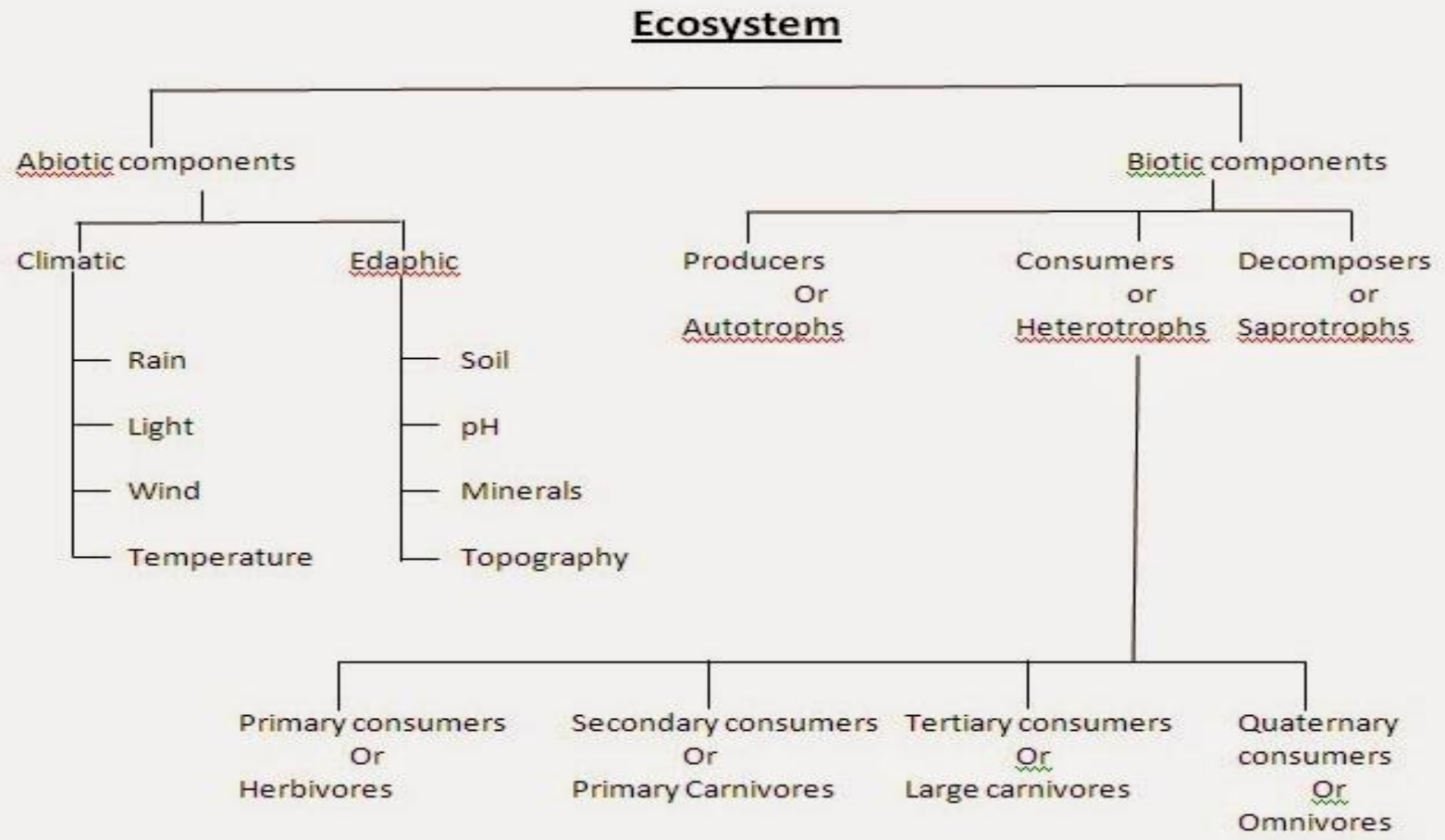
Relationship within an Ecosystem.

What is an Ecological System?

- Ecosystem = an Ecological System
- Ecosystem = A community and its physical environment treated together as a functional system.

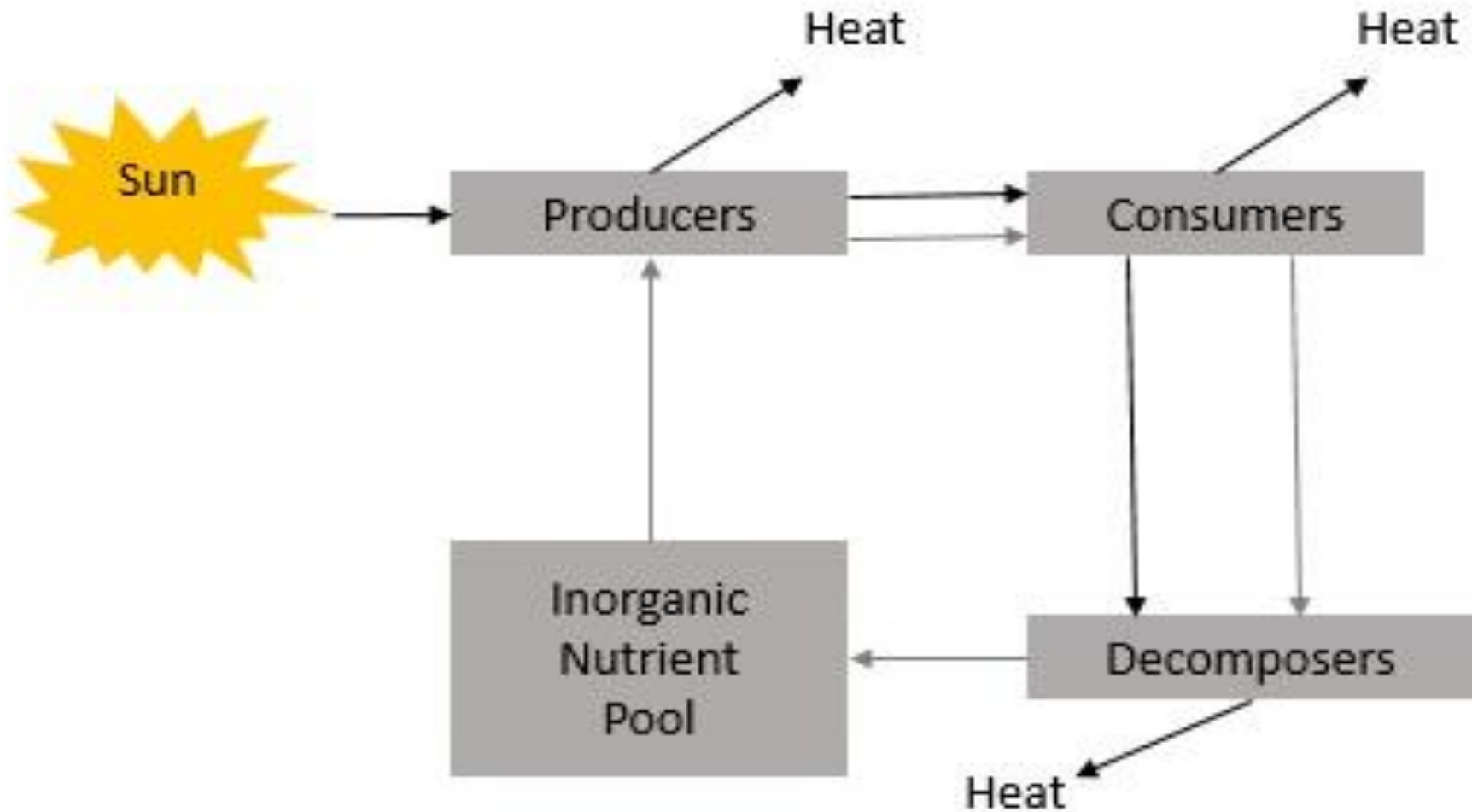


Structure of Ecosystem

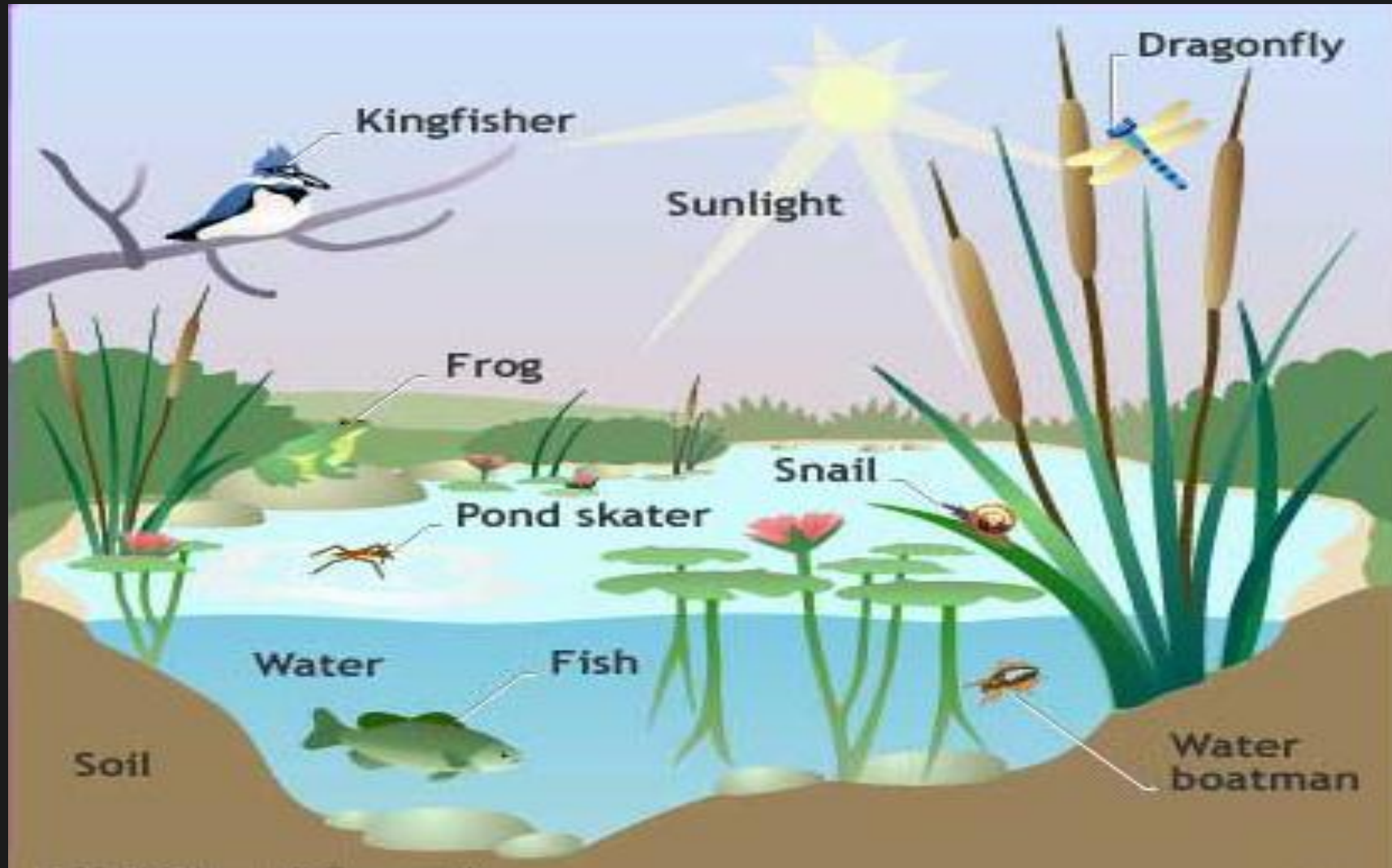


Schematic representation of the Structure of an Ecosystem

Ecosystem - Flow



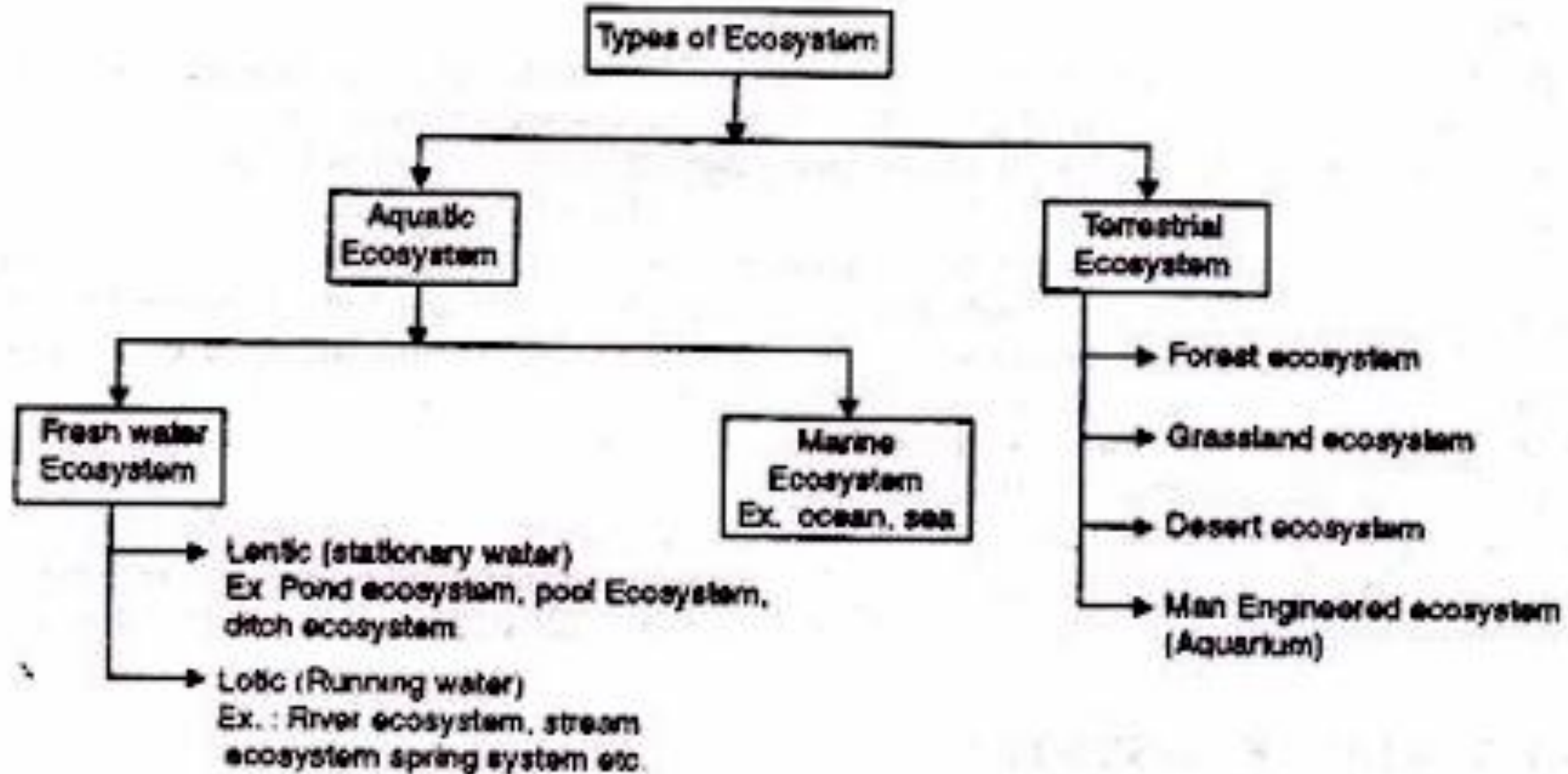
Changes that affect an ecosystem



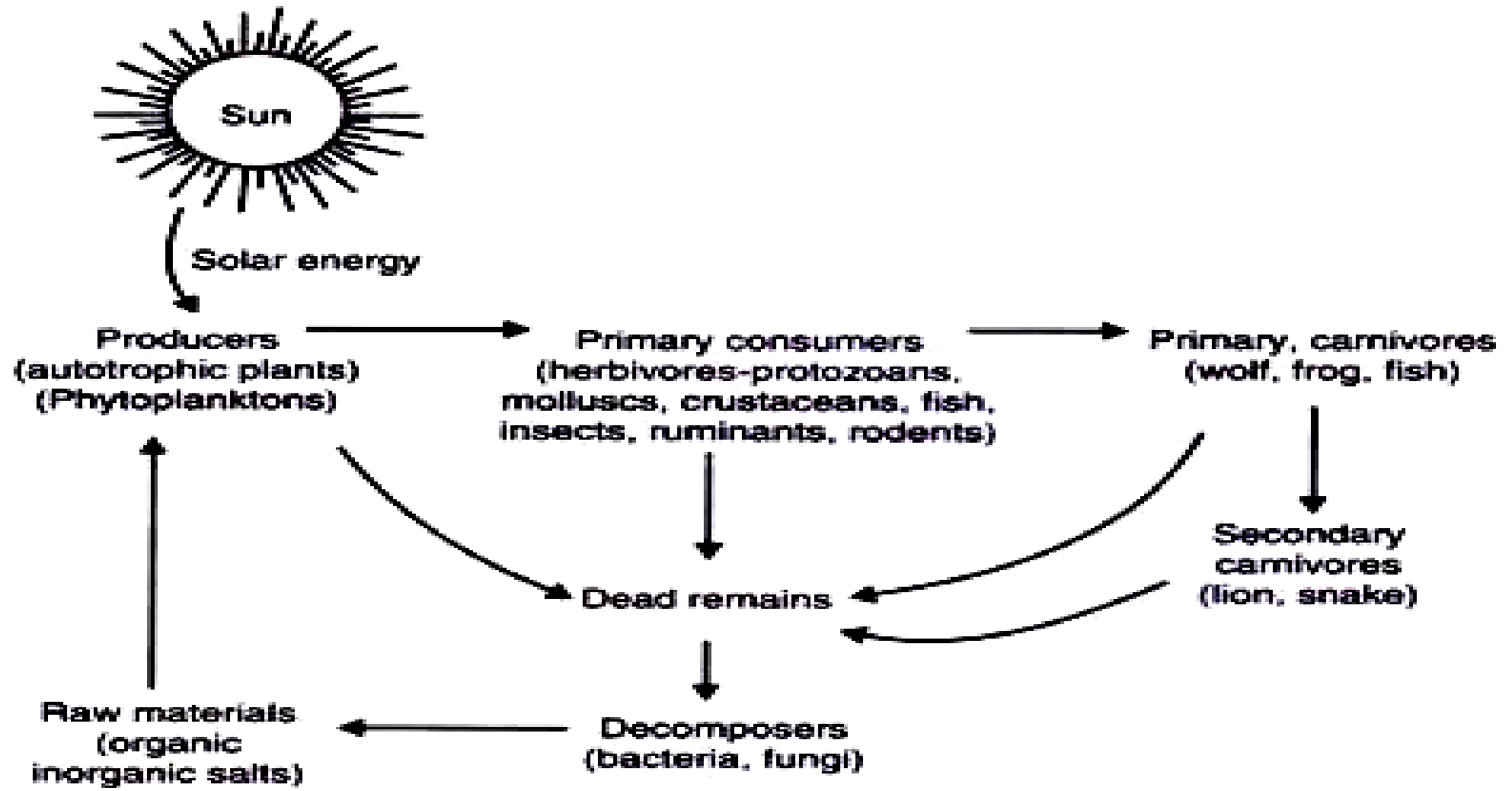
Changes That Affect an Ecosystem

An ecosystem's physical environment and living community are so tightly connected that just one change can alter the ecosystem. For example, if a lake becomes polluted or dries up during a drought, this may harm the fish or insects that live in the lake. If just one type of living thing in an

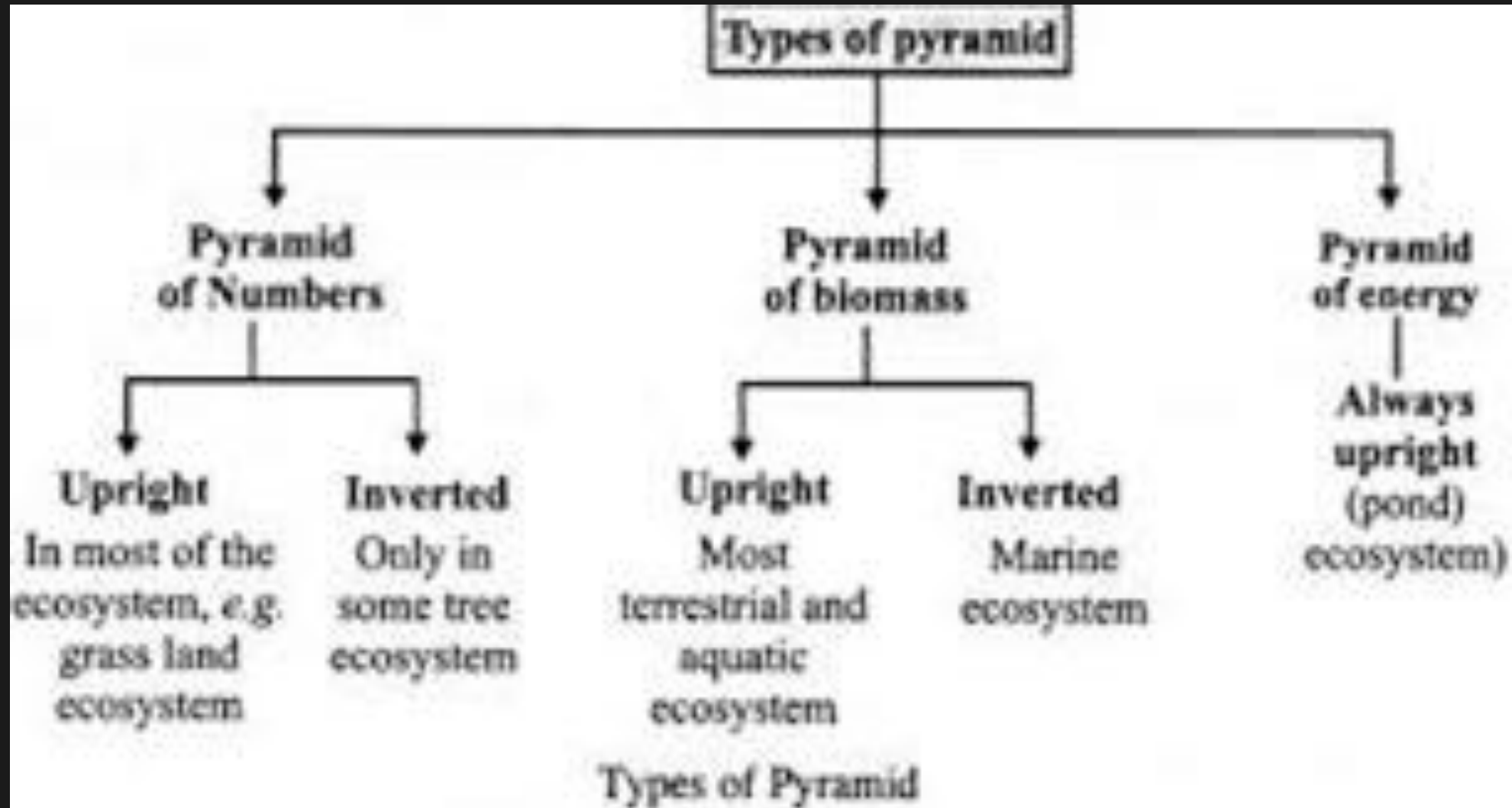
Types of Ecosystem



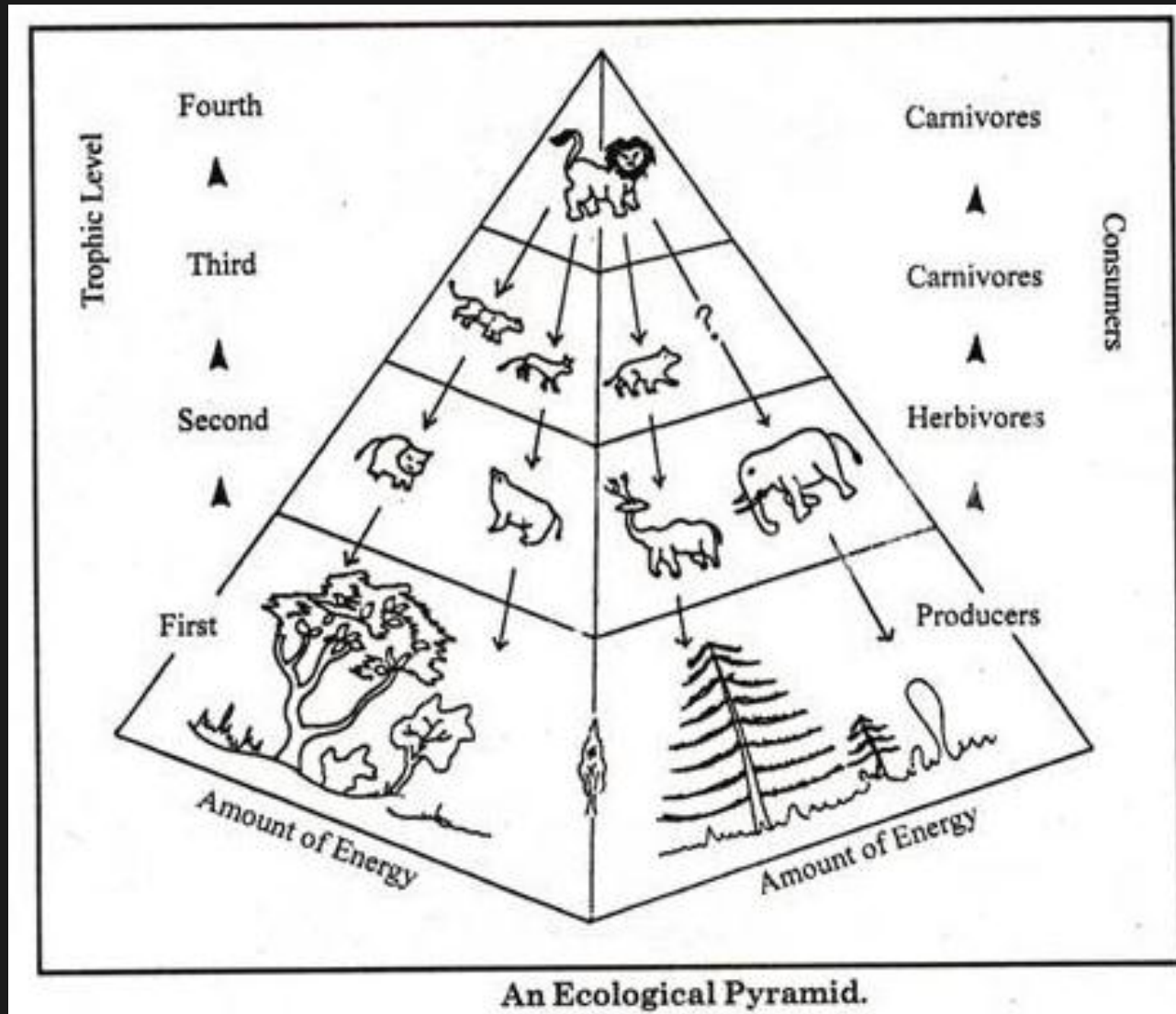
Flow of energy at different levels of Ecosystem



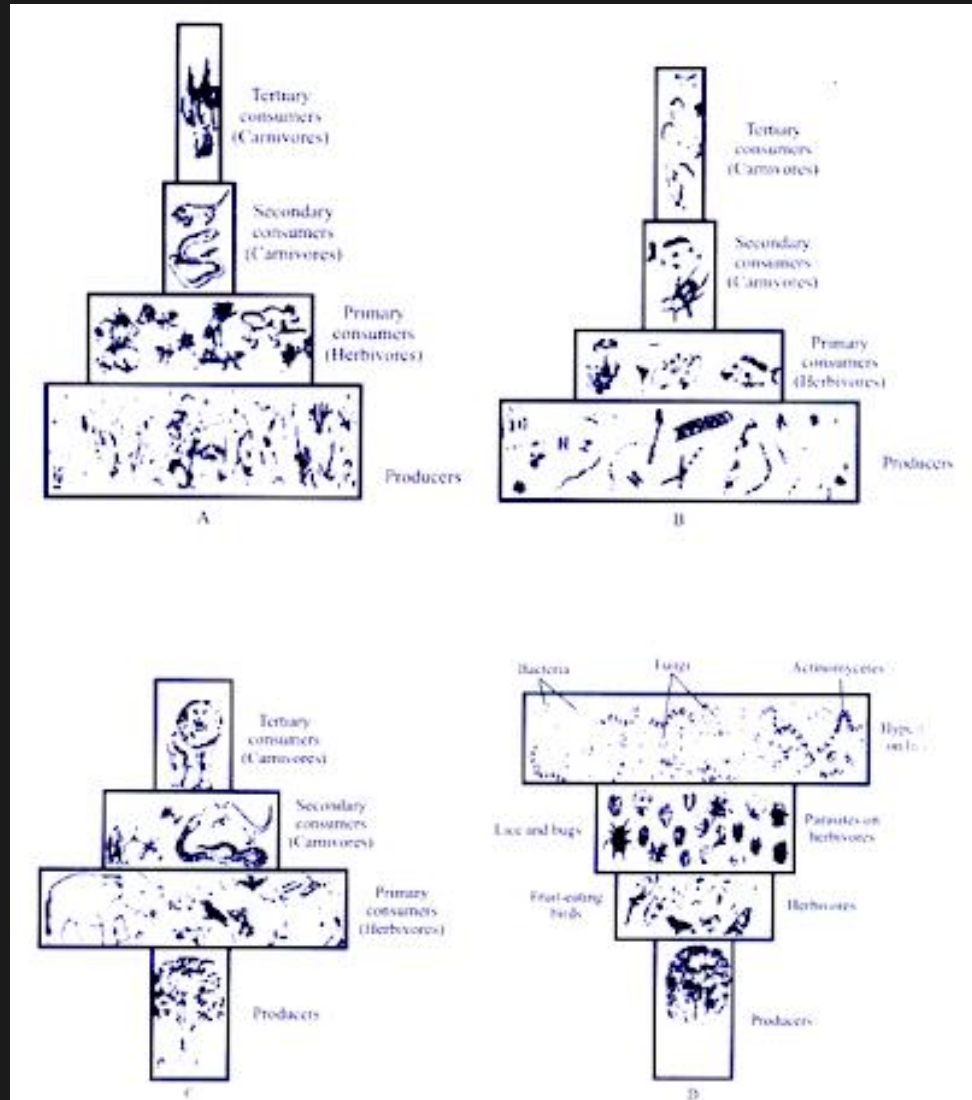
Types of Pyramid



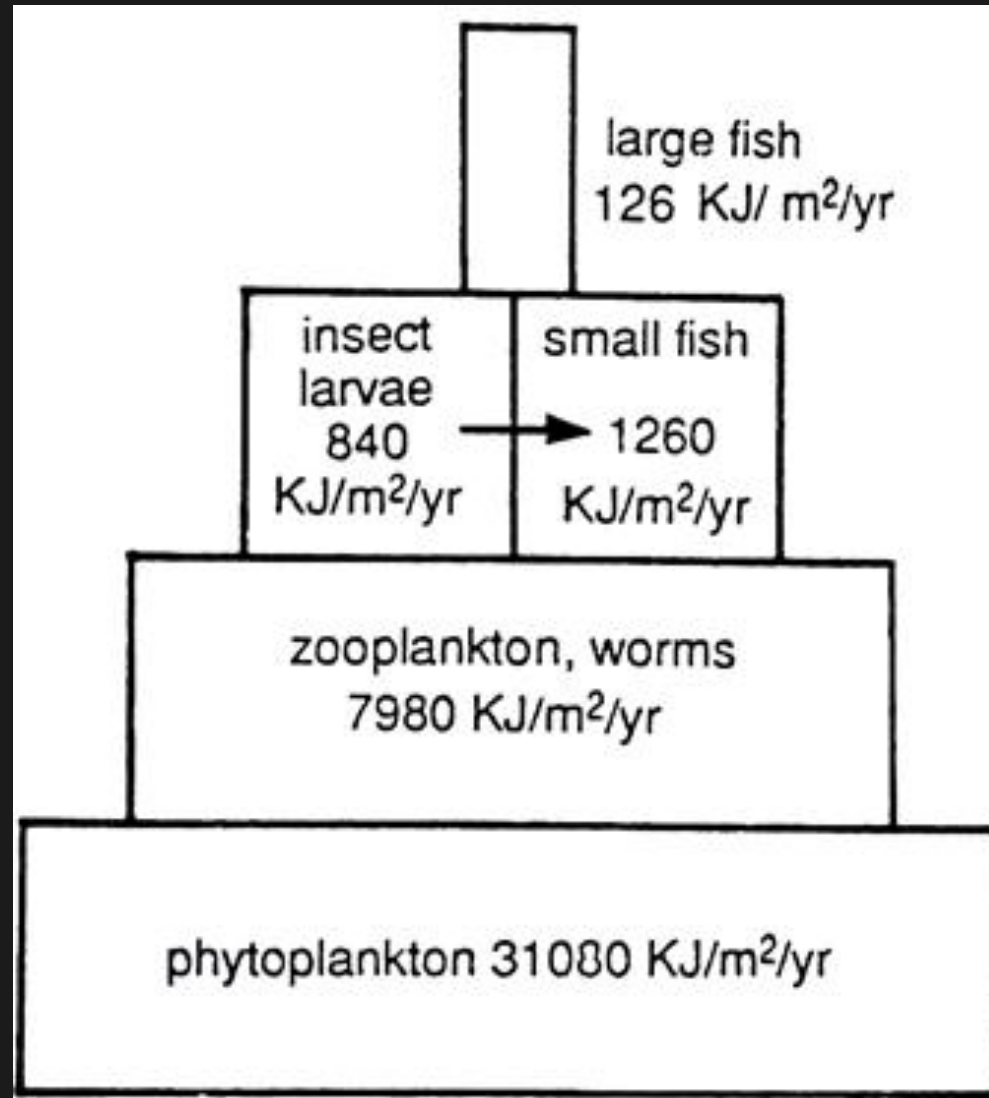
An Ecological Pyramid



Types of Ecological Pyramid – Pictorial view



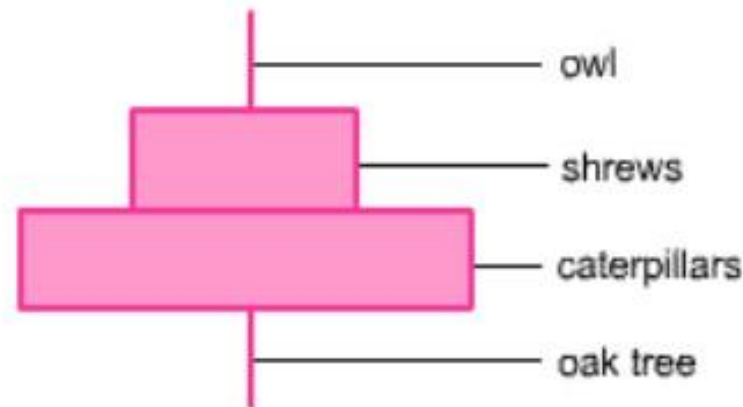
Pyramid of Energy



Pyramid of Biomass

Drawing pyramids

This pyramid is different because there is only one oak tree with lots of caterpillars living off it.



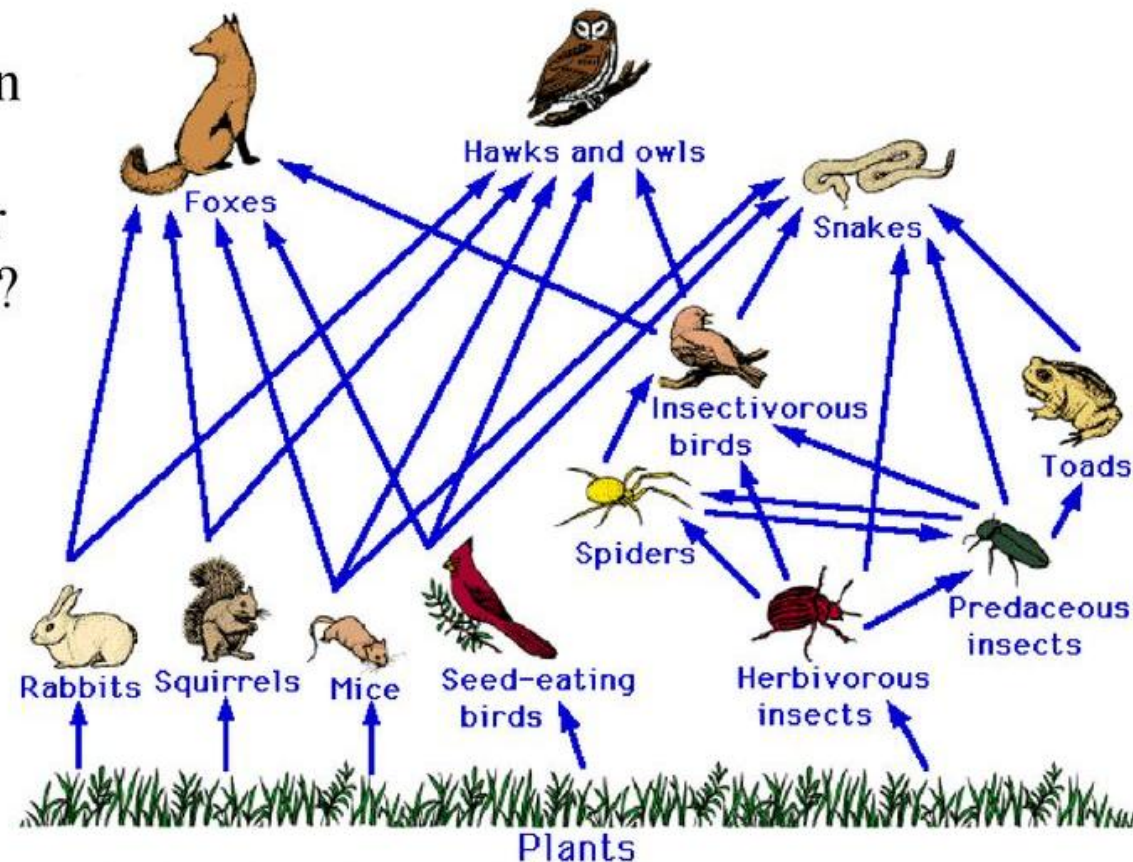
The oak tree is one organism, but it is very large. To give a more realistic idea of the feeding relationship we use another pyramid called a **pyramid of biomass**.

Food Chains and Food Webs

KEY CONCEPT

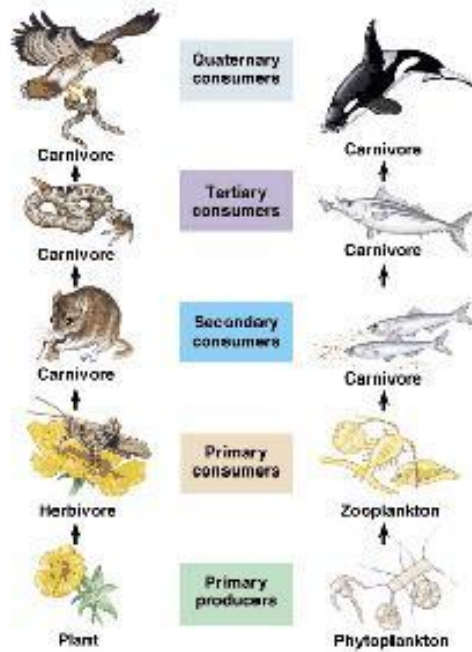
Food chains and **food webs** model the **flow of energy** in an ecosystem.

Is this a food chain or food web?
What can we infer from this diagram?

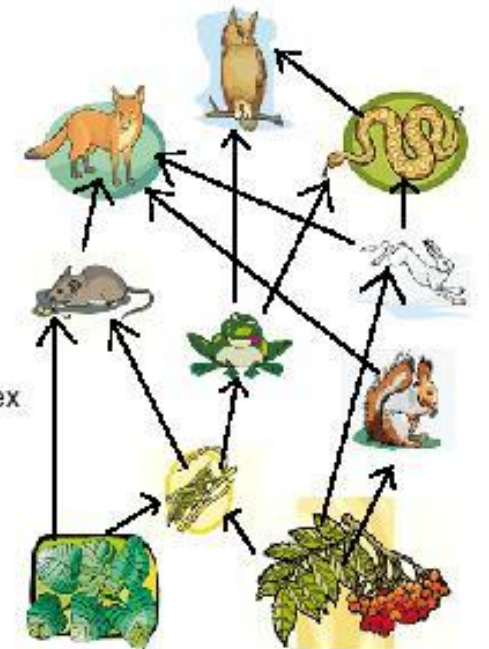
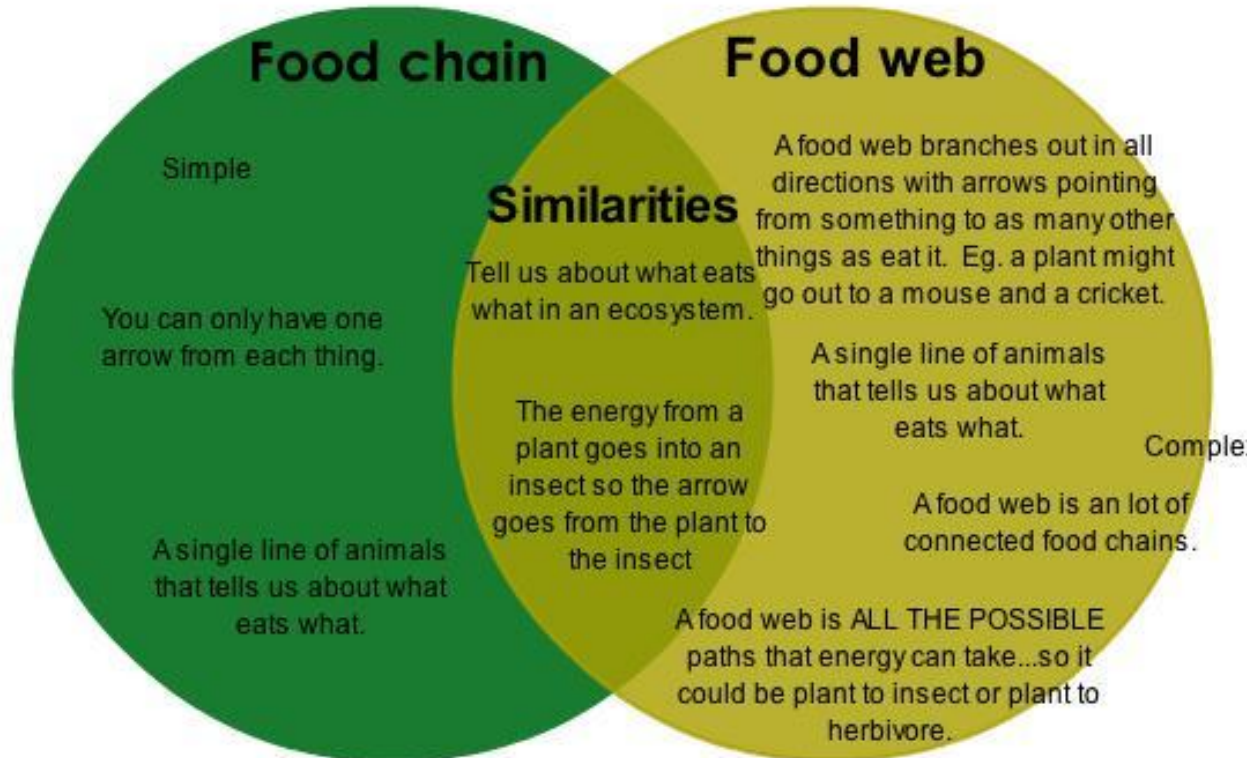


Difference and Similarities: Food Chains and Food Webs

What's the differences and similarities between Food Chains and Food Webs?



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Energy Flow – Food Chains

- The sequence of food transfer from one **trophic level** to another is called a **food chain**
- A food chain is a series of organisms through which energy is transferred in the form of food
- A food chain always begins with a producer

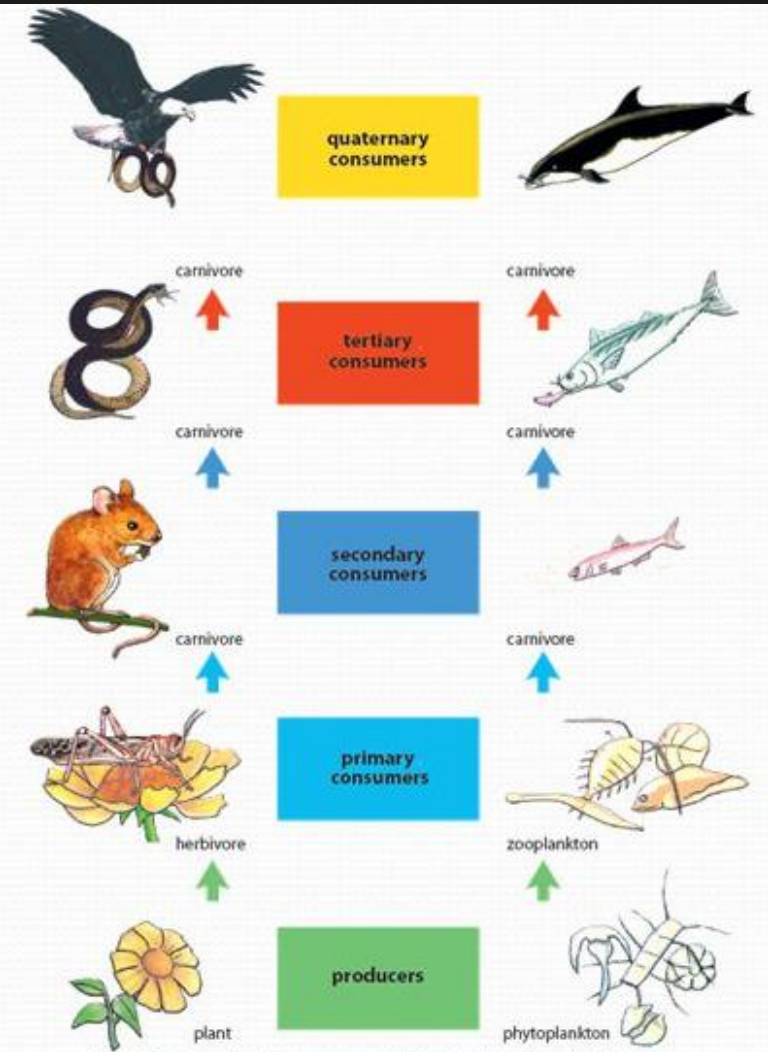
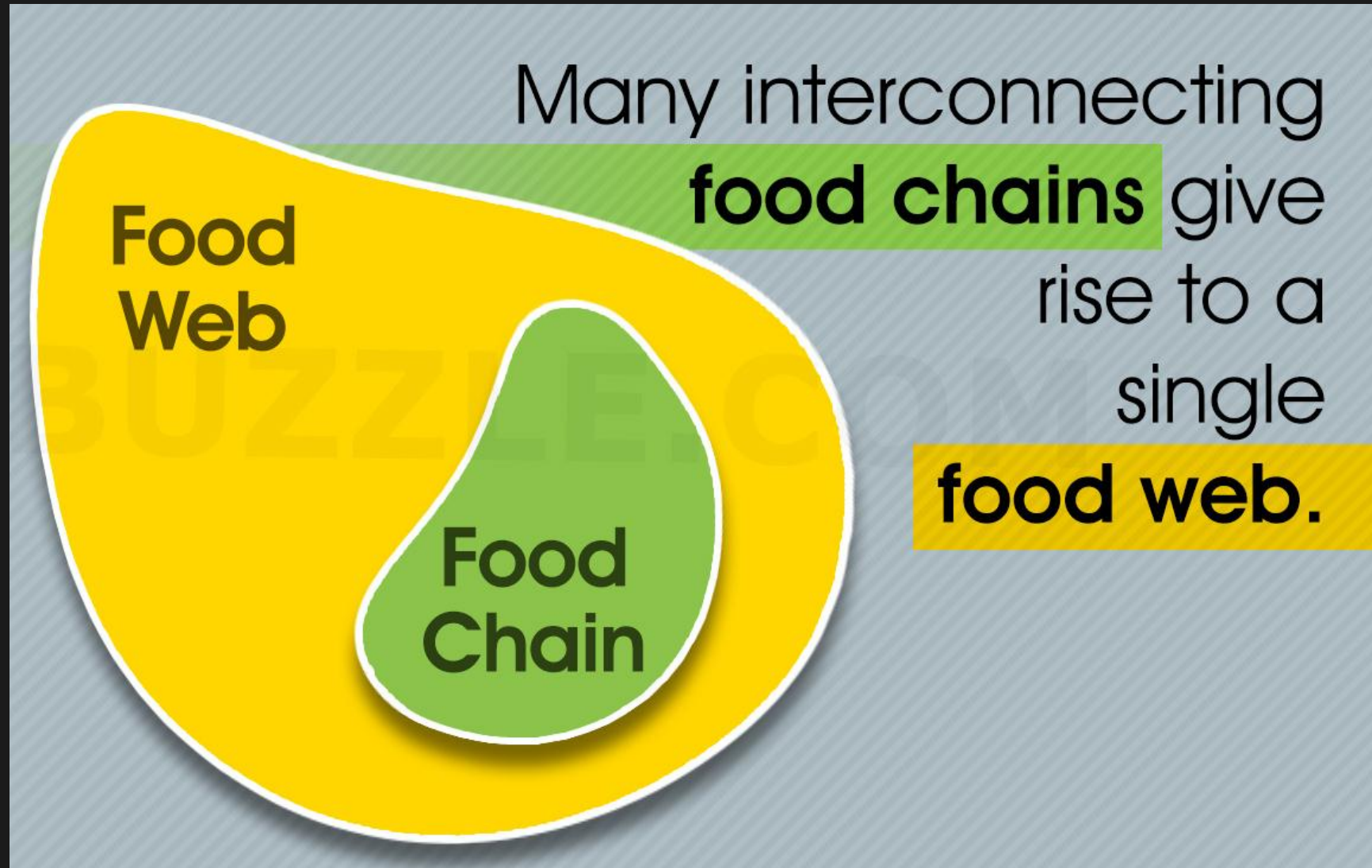


Figure 17.3. Comparison between a terrestrial food chain and a marine food chain

Food Web and Food Chain



Many interconnecting **food chains** give rise to a single **food web.**

Q & A Session

- Thank you all...!