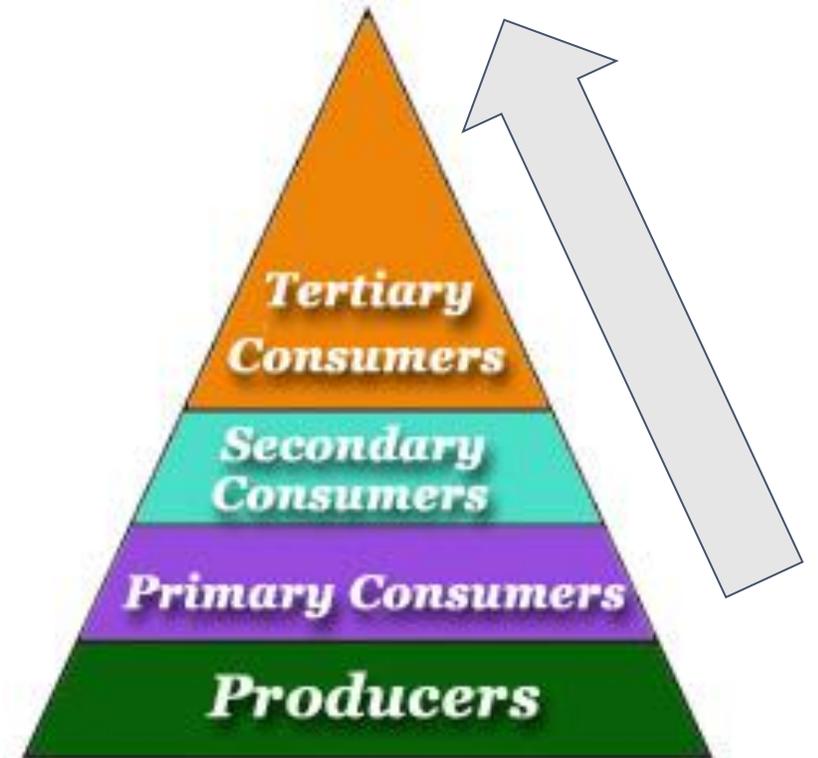


# Food Chains and Food Webs

**Trophic Level** - step that an organism occupies in the food chain

The flow of energy in an ecosystem flows from one trophic level to another, in a single direction



# Food Chains and Food Webs

- Food Chain - is a linear representation of the flow of energy
  - illustrate basic relationships between organisms

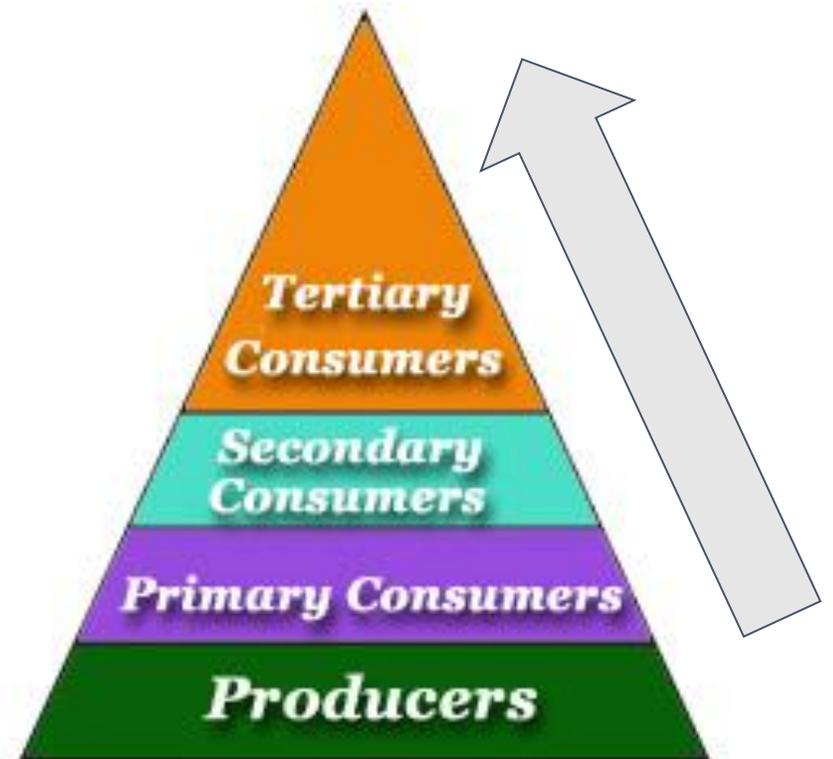
Communities usually consist of more complex relationships than a food chain, because some organisms get energy from different trophic levels

- Food web - shows all of the feeding relationships and connects different food chains

# Food Chains and Food Webs

Some energy is lost each time it is transferred from one trophic level to the next.

Organisms use energy for their life processes.



# Food Chains and Food Webs

From one trophic level to the next, only about 10% of the energy is passed along.

Ex: A squirrel eats 1,000 calories, but if a hawk ate the squirrel, it would only get about 100 calories

The result of this is that there is more energy available at lower trophic levels than higher ones

This energy difference is why there are more squirrels than hawks, more gazelles than lions.