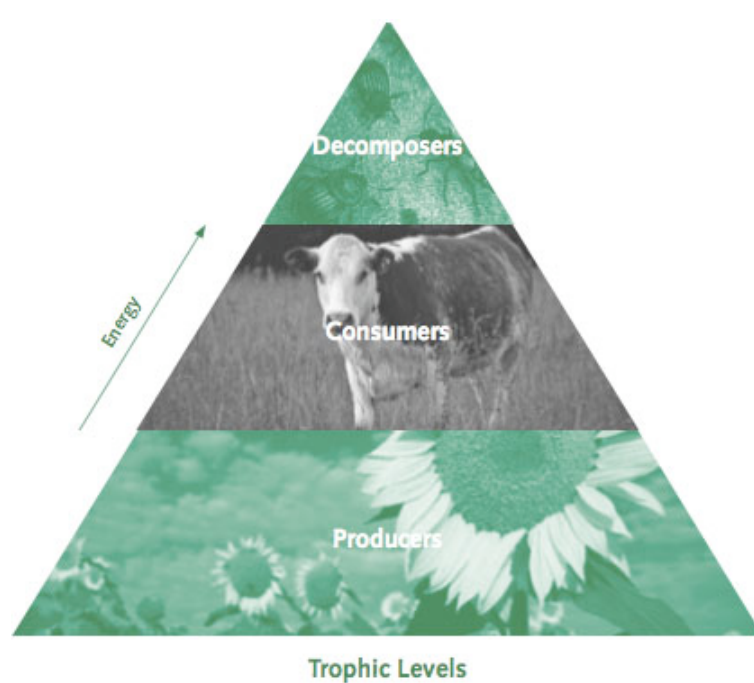


The Missing Link

Natasha Paris

Have you ever heard of a **food chain**? Well, if you have not, a food chain shows what each living thing eats and how energy is passed from organism to organism. A food chain always starts with the sun. For example, the sun gives its energy to a rosebush, and then a rodent eats the rosebush, then a snake eats the rodent, the fox eats the snake, and finally when the fox dies insects and fungus eat him. During all this eating, energy is being transferred to each organism, so instead of humans asking where the best food is in town, some organisms are asking where the most energy is in town.

Living organisms are categorized into different levels based on what they eat. These levels are called **trophic levels**. The three main trophic levels are producers, decomposers, and consumers. **Producers** are any organism that is capable of producing its own food, usually through photosynthesis. **Photosynthesis** is the process by which plants and some bacteria use



the energy from sunlight and nutrients from the soil to produce sugar which is their food. Trees, grass, flowers, and bushes are examples of producers which are the beginning of the food chain or the lowest trophic level.

Consumers are organisms that cannot make their own food. They have to eat other organisms to survive. Consumers are the middle part of a food chain or the middle trophic level. Some consumers are bears, rats, and even little mice that might be in your house. Humans are consumers too, because they have to eat plants and animals to survive. **Decomposers** are

organisms that eat dead organisms such as animals, plants, and the leftovers from your dinner or the trash you throw out. They are the last part of the food chain or the top trophic level. Decomposers break down, or decompose, dead plants and animals into simple substances such as nutrients, which nourish the soil.

Humans have a huge impact on food chains and most of their impact has to do with altering an organism's **habitat** (home where they get everything they need to survive – food, water, shelter, space). These alterations are harvesting too many organisms from their habitat, polluting their habitat, destroying their habitat, and introducing new organisms into their habitat.

Hunting animals is one way humans take too many animals. If a human hunted all the rabbits in a forest, the animals that hunt those rabbits for food, the **predators**, would have no

food. This predator, such as a fox, would have to move to another area to try and find food, or it will starve.

Pollution is a major cause in the destruction of habitat. Pollution can make the organisms in that area sick and unhealthy which means the other organisms that eat them will also get sick. Water, air, soil, plants, and animals can all be affected by pollution.

Many times humans destroy habitats by clearing land to develop it. This clearing takes the entire habitat away from the organisms that live there and they can die if there is nowhere else for them to go. Can you imagine a tree getting up and moving itself to a new place to live?

When a new species is introduced to an area, this new species can harm the food chain that already exists there, because this new species throws things off balance. For example, if a person introduces goldfish to a small pond, these goldfish would eat all the other fish's food and grow large, very large. Then the other fish would die because their food is gone and the goldfish are too large to compete against.

Habitats of organisms are changing everyday because of human actions such as killing animals, cutting down trees, polluting, and introducing new species. Just beware of your actions because you can be destroying an organism's home or harm its food supply. That could alter the food chain which you are a part of.