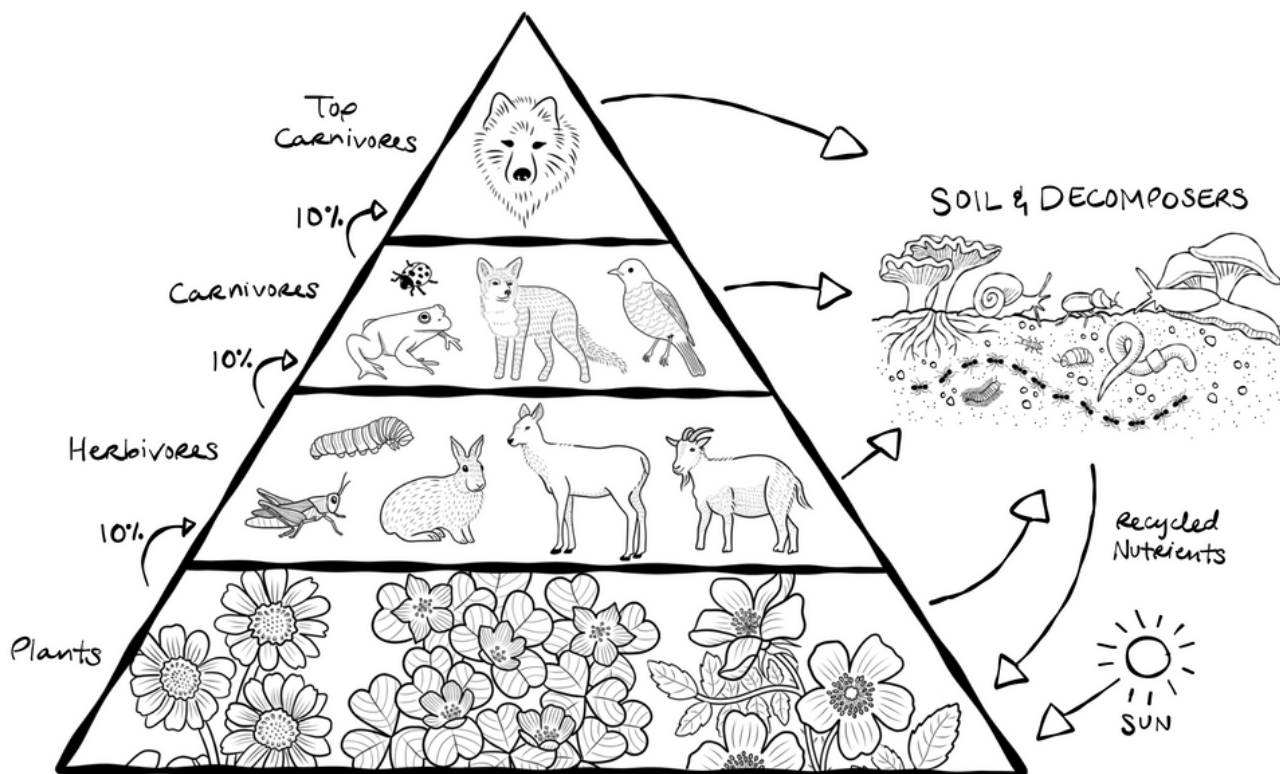


The Ecological Pyramid

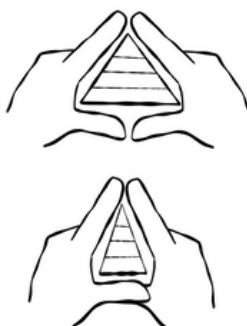


Plants	Herbivores	Carnivores	Top Carnivores
PRIMARY PRODUCERS	PRIMARY CONSUMERS	SECONDARY CONSUMERS	TERTIARY CONSUMERS
Flowers, shrubs, trees and other plants are special because they are able to convert sunlight into energy.	Primary consumers – like caterpillars, grasshoppers, bunnies, deer and goats – eat only plants.	Secondary consumers – such as ladybugs, frogs, foxes, and many birds – mostly eat other animals and insects.	Tertiary consumers, like wolves and eagles (and some omnivores like humans and bears), are near the top.

The Ecological Pyramid

An *ecological pyramid* can help us understand how different members of the ecosystem rely on each other to survive. The lower levels of the pyramid support everything above them.

Each time energy is transferred between levels (e.g. an animal eats a plant), only 10% of the energy is passed along and the rest is lost to heat.¹ This means that, in general, the closer a diet and lifestyle is to the bottom of the pyramid, the less energy it takes to generate those resources.



Try this:

Make a triangle with the tips of your thumbs and pointer fingers. When the base of the pyramid is wide, it can support lots of plants and animals!

Next, slide your thumbs past each other, making the bottom of the pyramid narrower. See how the middle and top of the pyramid became smaller, too? When we neglect our soil and native plants, the upper levels decline as well. Supporting your local ecosystem begins with supporting your soil!