

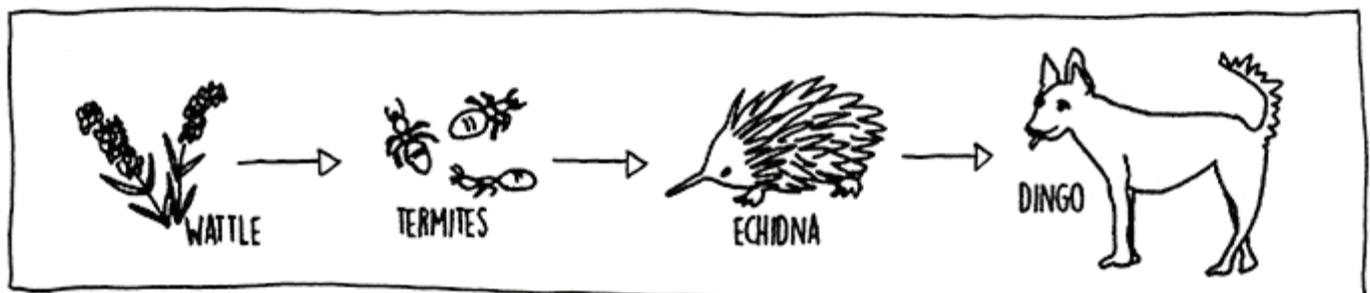
Food Chains And Food Webs Factsheet

A food chain shows the feeding relationships between plants and animals. A food chain shows the flow of energy between organisms. Plants are at the beginning of the food chain and they get their energy from sunlight. Herbivores get their energy from eating the plants. Carnivores get their energy from eating other animals. Omnivores get their energy from both plants and animals.

There are a number of relationships between organisms in food chains, including:

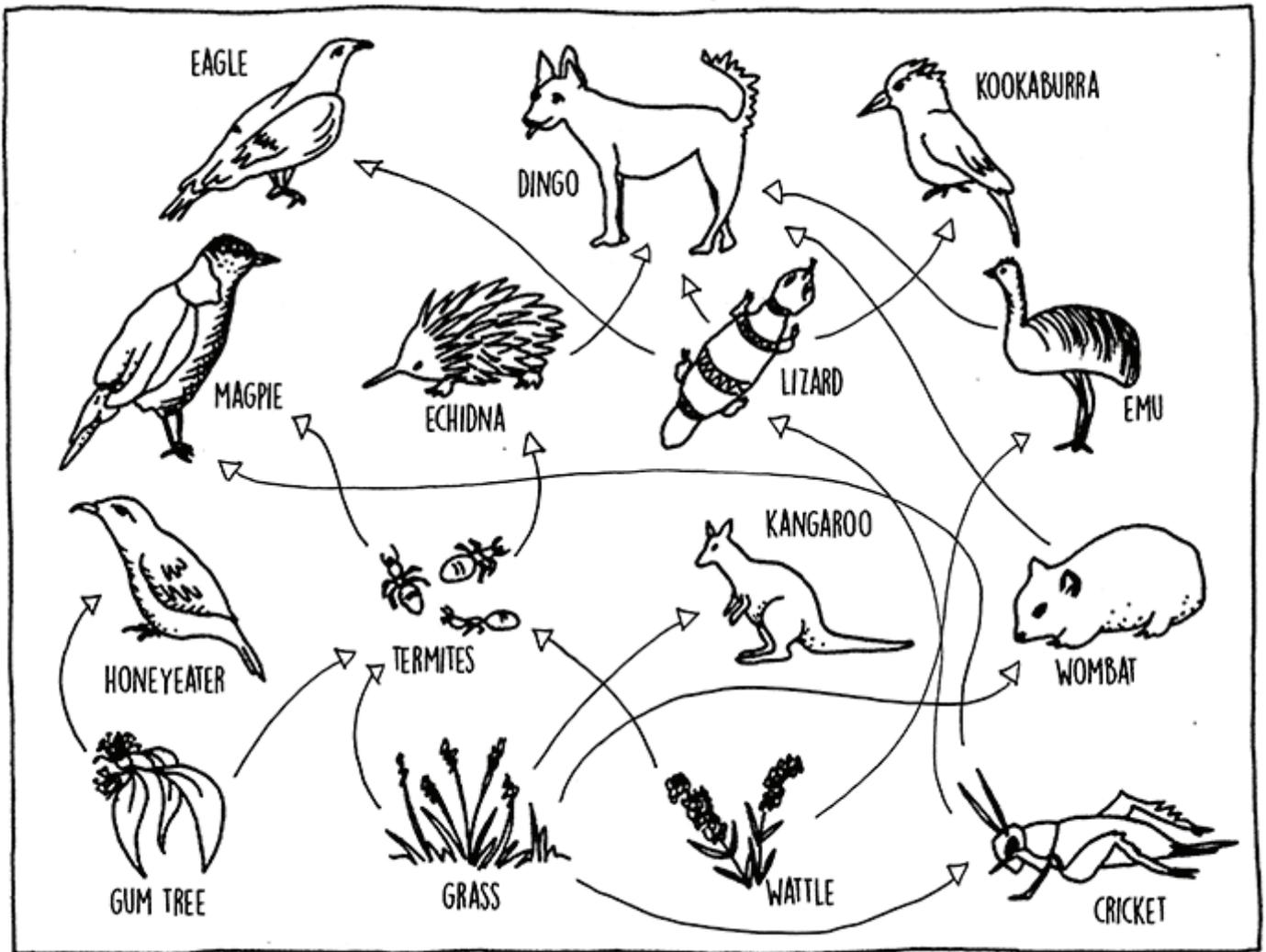
- Producer – producers are organisms that make their own food (also known as autotrophs). They get their energy from chemicals or the sun and are able to convert this energy into food. Plants are the most common type of producers. Through photosynthesis, green plants are able to convert sunlight and water into food. Producers are at the beginning of the food chain; they produce and provide nutrients and compounds for other organisms in the food chain.
- Consumer – Organisms that need to eat food to obtain their energy (also known as a heterotroph). Consumers often eat other organisms or organic matter.
- Decomposer (or Detritivore) – Organisms who feed on dead or decaying material, and in doing so perform the natural process of decomposition. Examples of decomposers include fungi and bacteria.
- Herbivore – An animal that feeds on plants.
- Carnivore – An animal that feeds on other animals.
- Omnivore – An animal that feeds on both plants and other animals.
- Predators – An animal that naturally preys on other animals.

Below is an image of a food chain:



When creating a food chain you use arrows to show these relationships. It is important to note that the arrow always points to the animal that has just eaten something, as this shows the flow of energy. For example, the herbivore the plant so the energy from the plant flows to the herbivore, thus the arrow would point at the herbivore.

But nature isn't as simple as a food chain. Relationships in nature are complex and involve all sorts of interconnections and energy flows that are best shown as a food web. The picture below shows an Australian food web.



You can see from this food web that the flows of energy go in all sorts of directions and weave and wind around each other. You can also see that generally the smaller animals at the bottom of the food web have a greater number of predators, and the number of predator-prey relationships decreases the further up the food web you go.