

Edible Ecosystems 2016 Glossary of terms, part 2

- **Aggregate:** a clump of stuff stuck together. A clump of dirt stuck to roots is called a soil aggregate. One of these clumps that's too small to see is a microaggregate.
- **Ammonia:** a simple liquid form of nitrogen. Soil bacteria produce ammonia from air, and fish and other animals in the water produce it from their food. Ammonia is poisonous to most living things.
- **Bacteria:** a type of microbe. There are bacteria everywhere on earth, but each type can only live in very limited conditions.
- **Berm:** the opposite of a ditch. A long pile of dirt.
- **Biochar:** charcoal with microbes growing in it. Biochar has many of the good properties of humus, but can be made very quickly from unwanted wood and brush, plus compost.
- **Compost:** decomposing plant matter, full of bacteria and fungi, made to improve soil.
- **Condensation:** water vapor that turns into water from touching a cold surface.
- **Contour:** an imaginary line on a landscape such that every point on the line is at the same height. A ditch dug on contour will not have water flowing either direction.
- **Deciduous:** trees that drop their leaves in the winter. Opposite of evergreen.
- **Decomposition:** the breakdown of dead things. Bacteria and fungi are the main decomposers.
- **Evaporation:** water that turns into water vapor, for example from a puddle drying up.
- **Hardpan:** a hard layer of salt that forms in the soil just below where a tiller or plow can reach.
- **Hügelkultur:** a technique for building humus quickly by burying rotten wood under the garden.
- **Humus:** a spongy substance made by mycorrhizae that improves soil quality.
- **Keyline design:** a technique for spreading water out across a landscape where it would normally concentrate into gullies.
- **Legume:** a type of plant famous for having symbiotic bacteria in its roots that "fix" nitrogen directly into nitrate. Not all legumes do this, and not all plants that do this are legumes, but in general, legumes can make their own fertilizer!
- **Lichen:** a symbiotic relationship between algae and fungus. The algae makes sugar by photosynthesis, and the fungus mines nutrients (including water) out of the rock.
- **Microbe:** any creature too small to see without a microscope.
- **Microclimate:** a spot where the living conditions are different from other places nearby. The inside of your house is a microclimate compared to outdoors, but the bathroom after a shower is another microclimate compared to the house!
- **Microfauna:** animals that are too small to see without a microscope.
- **Mycorrhizae:** hair-shaped fungi that live symbiotically in the roots of plants.
- **Nitrate:** the form of nitrogen that plants consume. Some bacteria can make nitrate directly from air, but more common soil bacteria make it from ammonia. Nitrate is much less poisonous than ammonia, but you can still get sick from too much of it.

- **Nitrogen:** the most abundant element in air and an important part of protein. Only a few kinds of bacteria can “fix” nitrogen from the air and make it available to other creatures.
- **Photosynthesis:** the chemical reaction, powered by sunlight, that makes sugar out of air.
- **Protein:** a type of chemical important for life. All proteins contain nitrogen.
- **Symbiosis:** a relationship where two (or more) different creatures support each other.
- **Transpiration:** water that turns into water vapor in the leaves of plants.
- **Vermicompost:** compost made by worms. Worms breed bacteria in their guts that do most of the work: most of the worm’s stomach is in the soil!