

## Decomposers

All living things make waste. Liquid urine from an animal's excretory system, the oxygen that plants release into the atmosphere as a result of photosynthesis, and the tissue that makes up a dead plant or animal's body are all examples of waste that enter an ecosystem every day. If there were not ways to take care of this waste, it would accumulate and could possibly become toxic to an ecosystem. Some waste products like the oxygen, are used by other organisms. Others, like the urine and dead tissue, are broken down into nutrients and other elements by organisms called decomposers. Examples of decomposers are fungi (like mushrooms), single-celled animals called protists, and bacteria. Like consumers, decomposers are considered to be heterotrophs because they rely on other organisms for energy. Decomposers are sometimes considered to be in their own trophic level because they change the energy in decaying matter into a form usable by primary producers. Decomposers are usually shown at the bottom of a food chain or food web, and are not generally found in energy pyramid models.

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