

**This document was made to explain the roles that each insect plays in the ecosystem. This will assist with round 2 of the activity.**

<b>Insect Name</b>	<b>Category</b>	<b>Other notes</b>
butterfly	pollinator	Caterpillars (immature form) may be a food source for other animals or voracious herbivores and potential crop pests. Most adults are beneficial pollinators.
bee	Pollinator, bioindicator	Honey bees are a very important human managed pollinator. They are responsible for helping produce 1 of every 3 bites of food we eat. Bees in general are also bioindicators. This means that the more abundant and diverse they are, the healthier the environment.
mosquito	Food source, pest	Mosquitos are a food source that many many animals rely on for energy. They can be considered a pest to humans because of the itchy welts they create as well as their potential to spread diseases such as the west nile virus.
praying mantis	predator	Praying mantis got their name from their front legs that make them look like they are "praying." This modified pair of legs is what allows the mantis to catch it's prey.
fly	Decomposer, pollinator	Many different animals eat flies as part of their diet. The immature maggot form are also important decomposers
wasp	Predator, pollinator	Wasps can be either a predator or pollinator. Some hunt other insects while others feed off of nectar and pollen from flowers similar to what bees do.

aphid	Food source, herbivore	Aphids are a food source for many different insects and other creatures. In large numbers they can be a crop pest.
ant	Predator, decomposer	Ants are extremely adaptable and feed on many different things from nectar to other dead insects and animals.
moth	Food source, pollinator	Moths can also be important pollinators because they visit flowers that only bloom during dusk or at night when most bees and butterflies are not active.
dragon fly	Predator, bioindicator	Having a diverse population of dragonflies and other aquatic insects is a good sign that water systems are healthy.
beetle	Predator, decomposer, pollinator	Beetles play many different roles in the ecosystem as they are the most diverse group of insects documented by humans
Lady bug	predator	Actually a beetle but something students will possibly think of specifically
cicada	Herbivore, food source	Both the adult and larvae consume plant juices. The larvae develop completely underground until they are ready to change into an adult.
maggot	decomposer	Larval form of fly, completely different role in the ecosystem
caterpillar	Herbivore, food source, pest	Almost all caterpillars feed on leaves and other plant matter with few exceptions. They are a food source for other animals but can be considered a pest to humans in large numbers.

stink bug	predator	This is called a "true bug". This predator stabs its prey with piercing/sucking mouthparts.
flea	pest	Fleas are considered pests because they infest pets and other livestock animals. They can spread diseases and harm their host.
lice	pest	Lice are considered pests because they spread diseases and cause harm to humans
cockroach	decomposer	Cockroaches are typically seen as a health hazard but in reality the conditions that attract them are the health hazard. In nature they are important decomposers that help get rid of decaying plant and animal matter.
Walking stick	herbivore	Walking sticks are very unique because of their camouflage as a stick. They graze on leaves and even sway in the wind to mimic tree movements.
crickets	Predator, decomposer, food source	Crickets eat a variety of things. They are very recognizable because of their hind legs that are used for jumping
Grasshoppers	herbivore	Grasshoppers are herbivores and sometimes considered a pest when in large numbers. They are recognizable because of their hind legs that are used for jumping
termites	decomposer	Termites are very important decomposers, however they may be a pest if they are found in human made structures.

mayflies	Food source, bioindicator	Mayflies are an important food source for many fish and other aquatic animals. Having a healthy population of them also indicates a healthy water ecosystem.
<b>Other non insects (see explanation)</b>		
Pill bug/ roly poly	Decomposer, food source, bioindicator	None of these are insects but they are arthropods, which are closely related to insects. These were included as they may be common creatures that students list as insects but actually aren't. One way that these arthropods are different is that they have more than 6 legs which is characteristic of insects only.
spider	predator	
millipede	predator, decomposer	
centipede	Predator, decomposer	
tick	pest	
scorpions	predator	