

# Meet The Pollinators

## Bees

Bees are the only pollinators that specialize in collecting pollen and nectar, making them the major pollinators. Ninety percent of native North American bees are solitary; a single female bee does all the work of building and provisioning the nest. Social bees like bumble bees and honey bees live in colonies. Native bees are passive and rarely sting, especially when collecting food from flowers. Bees use a variety of materials for nesting sites. Nests are usually divided into brood chambers; each chamber contains a fertilized egg and a food packet. Mining bees dig multiple tunnels underground for nesting sites. Mason bees nest in hollow stems and build mud walls to separate brooding chambers. Leaf Cutter bees cut leaves or flower petals to line the walls of their brood chambers.



## Hummingbirds

Hummingbirds have excellent eye sight, but a poor sense of smell. When hummingbirds thrust their beak deep into the flower for nectar, pollen lands on their head. Hummingbirds glean insects from flowers for protein. A hummingbird's heart can beat 1200 times per minute. To survive, hummingbirds must eat several times their weight in nectar each day.



## Flower Flies (Hover Flies)

Flower flies are harmless flies that look like small bees. By looking like a bee, flower flies avoid being eaten by predators. The easiest way to identify a flower fly is to look for large, fly-like eyes and to watch their flying behavior. Flower flies dart rapidly from plant to plant and hover above flowers before dropping down to feed and getting dusted with pollen. Flies are second to bees as pollinators.



## Butterflies and Moths

Butterflies and moths are the jewels of the flower garden. Butterflies lack a mouth, instead they extend a long tube, called a proboscis, to suck up nectar. Butterflies taste with their feet. If you see a butterfly dancing on a leaf, it may be tasting the leaf to determine the food quality of the leaf for egg laying. Butterflies are poor pollinators because their long legs keep their body above the flower structures containing pollen.



## Beetles

Beetles were the first insects to visit flowers for food. Most beetles pick up pollen on their bodies while crawling around the flower looking for food. A few beetles steal pollen by chewing holes on the side of the flower, avoiding a dusting of pollen on their bodies.

