

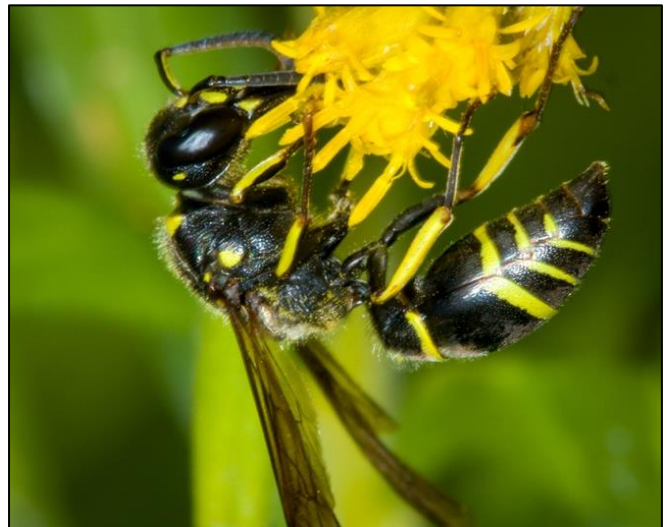
Three Reasons to Love Flower Flies

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Before I present my case, we should define terms. Flower flies are insects in the family Syrphidae. Like bees, flower flies forage on pollen and nectar, providing pollination service for many plants. Many species feature black-and-yellow coloration that suggests wasps or bees that visit the same flowers. But they are cosplaying, projecting the threat of a defensive sting they don't possess. A close look reveals the features that differentiate a flower fly (in the order Diptera, or true flies) from a bee or wasp (in the order Hymenoptera, or bees, wasps, and ants). Flower flies have stubby antennae, a broad connection between the thorax and abdomen, and huge eyes that cover most of the head. Wasps and bees have long elbowed antennae and a constriction between the abdomen and thorax. Like all flies, flower flies have a single pair of wings held flat; other insects have 2 pairs (although fore and hind wings may be linked and function as one). Another stand-out feature: flower flies (also known as hoverflies) can pause mid-air, like a hummingbird.



Flower fly: stubby antennae, broad waist, single pair of wings held flat, huge eyes.



Potter wasp: elbowed antennae, narrow waist, two pairs of wings folded at rest.

1. Flower flies are important pollinators. Generally considered second only to bees, flower flies contribute to the pollination of 70% of crop and wildflower species. A few are robust and fuzzy like bees, pollen magnets who carry pollen loads as effectively as honey bees. Others are tiny and largely hairless but can move lots of pollen through sheer force of numbers. Some flower flies do more than shuttle pollen between plants in a meadow; unlike bees, they migrate, carrying pollen long distances, a benefit to isolated plant populations.



Drone fly on aster. One of the fuzzier flower fly species, with dense hairs that accumulate and disperse pollen.

2. Flower flies are also predators. Insects with complete metamorphosis (think caterpillars to butterflies) can inhabit two very different lifestyles. Some flower fly larvae are aquatic or associated with manure. For many others, the larval stage is predaceous on aphids. They can often be found on aphid-infested garden plants like roses or milkweeds, if you know what you're looking for: a grub-like green larva that you might mistake for a caterpillar. Watch it for a while, and you will see it grope about on the leaf surface until it encounters an aphid, which it then sucks dry, discarding the exoskeleton.



Larva of *Eupeodes* sp. Common name: aphideater.



Flower fly larva and oleander aphid prey.

3. Flower flies are ... beautiful? Although they are unlikely to win a beauty contest with butterflies, flower flies have a certain charisma (so says an entomologist!). Consider a few of the flower flies you might see in a garden or park:



The eastern calligrapher is one of several species in the genus *Toxomerus*; here showing why they're known as hoverflies.



Calligraphers are sometimes the most abundant pollinators in a garden.



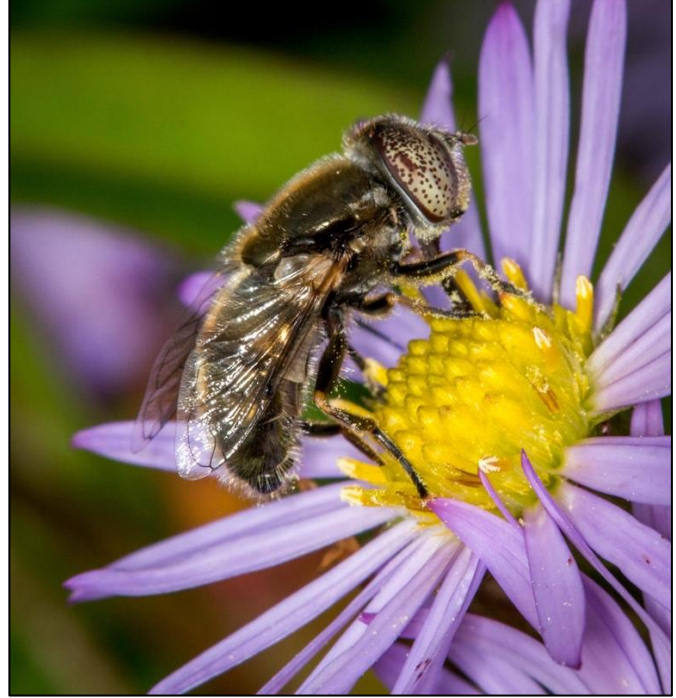
Marsh flies have longitudinal stripes on the thorax and cross-wise stripes on the abdomen.



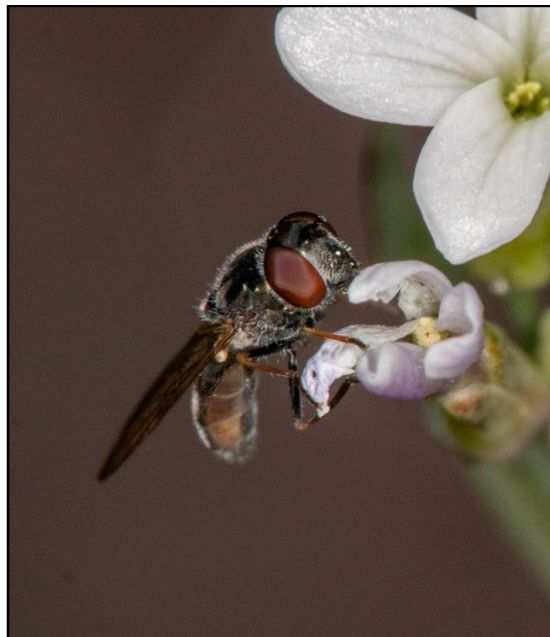
Eristalis flavipes, a drone fly species that mimics a bumble bee.



Another example of a mimic, a hornet fly that is a spot-on imitation of a vespid wasp.



Lagoon fly, distinctive for the spotted eyes. Like the marsh fly, it is named for the larval aquatic habitat.



Some flower flies are tiny, like this sedgesitter. Note the broad space between the eyes at the top of the head: a feature of females.



Pond fly, yet another species named for the aquatic habitat of the larvae. Eyes that meet at the top of the head: a feature of males.

If you look for flower flies in a nearby garden or park, you may find any of the species shown here. The community science project iNaturalist can tell you how many species your neighbors have seen. A few examples: Phoenix, 44; Miami, 40; Minneapolis, 100. Look up your own community ([iNaturalist.org](https://www.inaturalist.org)) to see the flower flies recorded for your area. Expect to be surprised!