Bee, Fly, or Wasp?

Besides native bees, numerous other pollinating insects will be attracted to your wild bee garden. Members of two of these groups – flies and wasps – are often confused with bees. Following are some tips to assist you in distinguishing bees from flies and bees from wasps.

Distinguishing bees from flies

Very few of us would mistake the common housefly for a bee. However, there are a number of pollinating flies that closely resemble bees or wasps, a clever adaptation to protect against predators. In particular many flies belonging to the families, Syrphidae and Bombyliidae (which include flower, hover, and bee flies) are excellent mimics. But if you pay attention to a few key features, you'll quickly develop an instinct for recognizing the imposters.



Eristalis sp. Fly mimic of a bee. Photo by Rollin Coville.



Syrphid fly, Chrysotoxum sp. Fly mimic of a wasp.
Photo by Rollin Coville.

The "eyes" have it – The eyes are the first thing I look for in spotting a bee mimic, no matter how clever the costume. Compared to bees, most flies have distinctly larger eyes, which can meet or nearly meet on the top of the head – a dead giveaway! In most flies the contour and character of the eyes also appears distinctly different from what is observed in bees. Some flower-visiting flies have obviously faceted eyes, while the eyes of others have a rather rectangular appearance or have one or more straight edges. The eyes of many fly species can also have a somewhat opaque or cloudy character. In contrast, bees have shiny, almond- or oval-shaped eyes on the sides of their heads.



Syrphid fly with obvious fly eyes. Photo by Rollin Coville.

The antennae – The second thing I generally look for are the antennae (or apparent lack thereof). Flies do have antennae, but they are so much shorter and stubbier than those of bees, that they are often difficult to see. The very apparent antennae of bees are long and cylindrical, and the antennae of female bees often have a noticeable "elbow".



Fly. Eristalis arbustorum.



Bee. Colletes sp.



Fly. Mallota bautias.



Bee. Bombus impatiens.

Flies have larger eyes than bees, often nearly meeting at the top of the head. Fly antennae are much shorter and stubbier than those of bees, and are sometimes even difficult to see. Photos by Rollin Coville.

The wings – Flies only have one pair of wings, whereas bees have two. The two pairs of wings on bees are, however, often difficult to discern. In flight, the two pairs of wings are hooked together, and at rest bees generally lay their forewings over their hindwings, across their backs. The good news is that, in contrast, flies typically hold their wings *out to the side* when resting or drinking nectar. This difference in the position of the wings when at rest or foraging often makes this an easy way to distinguish bees from flies.

Flies don't collect pollen – Flies don't collect pollen to feed their offspring, so you won't see a fly - male or female - carrying a load of pollen. True, male bees don't collect pollen either, but if you do see a load of pollen on the hind legs or the underside of the abdomen, then you'll know it is a female bee.

Distinguishing bees from wasps

Bees are often mistaken for wasps and vice versa. Although descended from wasps, bees went strictly vegan, collecting only pollen as a protein source for their offspring. Most wasps, on the other hand, are carnivorous, carrying insect prey (or part of your hamburger!) back to the nest for their offspring. Those lunch-stealing yellowjackets aside, there are numerous species of wasps which can be beneficial to your garden, as they help to control plant pests. As adults many wasps will, like bees, drink nectar for their own nourishment from the flowers in your garden. Here are some helpful hints for distinguishing flower-visiting wasps from bees.

Body type – Wasps tend to have more elongated bodies than bees, with more apparent waists. And, unlike most bees, wasps have relatively little body hair. An exception to this rule occurs in the case of cuckoo bees – bees that lay their eggs in the nests of other bees. Because many species of cuckoo bees have very little body hair (and often have wasp-like colorations), they are easily confused with wasps.





Wasp from the family Vespidae.

Cuckoo bee from the genus Nomada.

Cuckoo bees are sometimes difficult to distinguish from wasps, as they often have very little body hair.

Photos by Celeste Ets-Hokin.

Color – The coloration and markings seen in wasp species are typically more bright and bold than those of bees. Striking patterns, in various combinations of black, yellow, orange, metallic blue, green and white, are found in flower-visiting wasps.



Bicyrtes quadrifasciatus wasp. Photo by Rollin Coville.



Bembix wasp. Photo by Celeste Ets-Hokin.

Compared to bees, wasps typically have more elongated, tapered abdomens, and more striking color patterns.

Wasps don't carry pollen – While a very few species of wasps do feed pollen to their offspring, they don't carry it in specialized hair structures on their bodies, the way that female bees do. So if you notice a distinct load of pollen being carried on the hind legs or the underside of the abdomen, you'll know that you're observing a female bee, and not a wasp.