



Yellowjackets

Vespula spp.

Field Notes



Western yellowjacket (*Vespula pensylvanica*) drinking water. Katja Schulz, Creative Commons.

General Description

Yellowjackets are taxa that need no introduction. These unwelcome intruders at summer picnics are also known as “Meat Bees,” (although they are actually wasps) for their love of consuming protein at our picnic table. They clearly have a sweet tooth, as well.

Several species form the group collectively known as yellowjackets. They are instantly recognizable by their yellow and black coloration, and are among the 4000+ species in the family Vespidae—the hornets and wasps.

The length of the typical yellowjacket species in our area (the western yellowjacket; *V. pensylvanica*) is between 1.3 to 1.8 cm (0.5 and 0.7 in). Be thankful that we do not have the Japanese giant hornet, which reaches 4.5 cm (1.8 in)!

While there are a number of species in our area, one very common species, *V. germanica* (also known as *Paravespula germanica*) is an invasive species. It came from Europe originally and is now on every continent except Antarctica.

Stings

Hornet, wasp, and yellowjacket stingers differ from bee stingers in that they are not barbed. Rather, they are a set of smooth shafts that alternately “pump” deeper into the sting bite before injecting the venom. Like bee stings, people can experience anaphylactic shock from a yellowjacket sting, creating a medical emergency. However, individuals allergic to bee stings may not be allergic to wasp stings, and vice versa.

Particular care should be given in late summer/early fall when colony size can reach hundreds to thousands of individuals who will defend the queen and nest vigorously.

Diet

The diet of the yellowjacket is strictly omnivorous. They feed on other insects, nectar (but don’t do much pollination), fruit, and our picnic meats and sweets.

Reproduction

The yellowjacket’s reproductive and life cycle strategies are typical for a social insect. A single fertilized female, which has survived the winter, builds a nest in a protected site (sometimes underground in rodent burrows). Early workers are sterile females, and the colony rapidly grows. By late summer and early fall, males and fertile females are reared. Mating then occurs, after which the males, sterile females, and the old queen succumb to old age. The fertilized females (new queens) start all over by taking refuge for the winter months.

As a side note, the male yellowjackets are without stingers. Why? Stingers on female bees/wasps/hornets are derived evolutionarily from structures for laying eggs in objects (wood, ground, and other

insects). Because males never needed to lay eggs, they never developed stingers!

In Gardens

Pest or friend? Although built by what we consider pests, yellowjacket nests in the yard are best left until winter, when they are abandoned and not reused. If in an area where stings are likely, the nest or colony may need removal. Options for removal do exist, but treating nests after dark is recommended to reduce stings.

Before you remove a nest, however, make sure they are not members of a sister genus, *Dolichovespula* (bald-faced hornets and aerial yellowjackets). Although they also pose a stinging threat, they rear their larvae on living insects, especially caterpillars. As such, they offer important services for other pest control.



Southern yellowjacket (*Vespula squamosa*). US Geological Survey.

Where to See

In the Klamath Network, yellowjackets occur throughout all of the parks, and probably also in your backyard.

More Information

<http://extension.oregonstate.edu/gardening/node/467>

https://en.wikipedia.org/wiki/Vespula_germanica