



Bugs Around Your House

Yellowjackets

(Scientific name: *Vespula* spp;
Family: Vespidae; Order: Hymenoptera)

MICHIGAN STATE
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Description There are several yellowjacket species in the Midwest states. The most common three in Michigan are German yellowjackets (*V. germanica*), common yellowjackets (*V. vulgaris*) and eastern yellowjackets (*V. maculifrons*). Most people confuse yellowjackets with honey bees, because they are about the same size and both sting. Yellowjackets (shown in right) have black and yellow patterns; honey bees are often more gray and hairy. Yellowjackets can sting multiple times (a honey bee can sting only once because its sting will stuck in the flesh). Yellowjackets often nest underground in soil, though German yellowjacket also nest inside wall cavities.



Entrance to yellowjacket nest in a vegetable garden. Photo by Zachary Huang



A yellowjacket nest with the envelope removed to show multiple layers of brood cells. Photo by Zachary Huang.

Behavior and biology Yellowjackets have an annual cycle similar to that of paperwasps and bumble bees. Fertilized females (queens) from the previous year construct new nests in April and May in Michigan. The queens overwinter in protected areas such as wall crevices and underneath sidings. A queen will forage for food (mostly caterpillars) and take care of her first batch of "brood" (a term used for larvae and pupae of social insects). Once the workers (which are sterile as in honey bees) emerge, she retires from foraging and stays home as a full time mother. Workers will forage for nectar, fruit juices, and other insects. The population of yellowjackets peaks around early September. At that time a nest can contain 800 to 3000 workers. When weather gets colder (September-October), food resources get scarce. This is when yellowjackets come to your picnic, trying to take a sip from your coke or a bite from your burger meat (honey bees never show these behaviors). Some people call them "meat bees" even though they are not bees. Stinging incidents are highest during this time of the year. They are often seen feeding on fallen apples and other fruits.

Control and prevention Because these wasps prey on other insects, if they are not bothering you or nesting close to your house, they might be doing a good job getting rid of pest insects in your garden. Commercial bait traps are available for \$3 to 10 (Oak Stump Farm Inc sells a trap, ph: 973-812-7070), most attract wasps with a bait and drown them in liquid underneath when they become exhausted. To kill a nest underground or inside structure near your house or garden, wait till after dark for all workers to return home, then pump dusts (e.g. Sevin), inject sprays (general bugspray or resmethrin), or pour water containing insecticides (e.g. Baygon, containing propoxur) into the entrance hole. Cover the hole with soil afterward to prevent unpoisoned wasps from escaping the next day. Some report success with pouring lots of soapy water (10 gallons) into nests at night and packing the entrance with soil. If you are allergic to insect stings, have someone help you, or call a pest control firm listed in your yellow pages.

Disclaimer: This fact sheet is for information only. Mention of products does not indicate endorsement. Prepared by Zachary Huang, Department of Entomology, Michigan State University, East Lansing, MI 48824, USA. Email: bees@msu.edu.

url: <http://cyberbee.msu.edu/column/stinging/yellowjacket.shtml>
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