

Most people know and fear the yellow- and black-striped yellow jacket that invite themselves to late summer picnics. Yellow jackets are a type of wasp, which are often mistaken for bees. Bees, especially honey bees, are hairy/fuzzy and only feed on flower nectar, while yellow jackets have shiny bodies and feed on almost anything including insects, nectar, sap, sugary liquids, meat, and garbage. Paper wasps, yellow jackets, and hornets all belong to the insect family, Vespidae. The most common species of yellow jackets in the United States are the western yellow jacket (*Vespula pensylvanica*), the eastern yellow jacket (*V. maculifrons*), the southern yellow jacket (*V. squamosal*), and the non-native German yellow jacket (*V. germanica*).



Yellow Jacket



Yellow Jacket Underground Nest



Aerial Nest



Exposed Underground Nest

Yellow jackets are beneficial plant pollinators and voracious predators of caterpillars, flies, and other insects. Unfortunately, yellow jacket stings are painful. Sensitive and/or allergic individuals can experience serious reactions from a single sting. Small numbers of stings are not life-threatening unless an individual is allergic to yellow jacket venom, but large numbers of stings are dangerous for everyone. Normal reactions to stings include swelling, redness, and pain at the site of the sting; some individuals may experience a mild headache or fever. Yellow jackets are easily provoked and will attack in force if their nest is disturbed. Unlike honey bees, yellow jackets can sting more than once. Mowing the lawn near an underground nest or disturbing a nest in a wall void can provoke an attack by one or more yellow jackets. This is especially true if the nest has been disturbed recently.

Yellow jackets build nests in abandoned rodent burrows and other holes in the ground but may also build nests in attics, wall voids, shrubs, and trees. Sometimes they build their nest under the eaves of porches. Yellow jacket nests are spherical in shape and are enclosed in a papery envelope with a small entrance hole at the bottom. In contrast, bald-faced hornet nests are very large. These nests can reach up to 24 inches high and 18 inches across and are usually located in brush and shrubbery at least 3 feet off the ground; but these nests may be as high as 60 feet off the ground in trees. They are sometimes found under the eaves of a building or on other man-made structures. Like the yellow jacket and bald-faced hornet nests, paper wasp nests are also built under building eaves or in porch ceilings. They look like tiny umbrellas filled with hexagonal cells.

Yellow jackets are most frequently encountered while they are scavenging for food, and they can become a nuisance because of their appetite for nectar and sugar. They frequent places where sweet food products are served such as picnic facilities, waste containers, and ice cream or shaved-ice stands. These locations have high yellow jacket populations in the fall because their natural food supplies are becoming scarce.

You can avoid being stung by following a few rules:

Prevention: The best way to prevent unpleasant encounters with yellow jackets and other social wasps is to avoid them. Be on the lookout for nests when outdoors, and do not go near them. Yellow jackets flying directly in and out of a single location are probably flying to and from their nest.

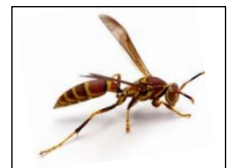
- Avoid wearing perfumes, hair spray, and cosmetics because yellow jackets are attracted to sweet and floral scents.
- Avoid bright-colored clothing such as red, light blue, yellow, and orange. Wear light-colored clothing such as white and tan instead of bright colors.
- Remove all outdoor food sources. Feed pets indoors, keep garbage cans tightly covered, and wash cans regularly to remove spilled food. Bury fallen fruit and table scraps deep in compost piles, and don't compost meat scraps or bones.



Honey bee



Bald-faced hornet and nest



Paper Wasp and Nest

- Watch where you sit or step (don't go barefoot!).
- Remain calm in the presence of yellow jackets because rapid movements may make the yellow jacket become aggressive. You reduce your chances of being stung if you gently brushed them off your body instead of swatting them. If the colony is disturbed, walk away slowly with both hands covering your face. It is best to walk toward dense vegetation or enter a vehicle or building to avoid the stinging insects.

To reduce yellow jacket problems at picnics and barbecue events:

Protect food and drinks: Scavenging yellow jackets will not become a problem if there is no food around to attract them. Prevent yellow jackets from accessing food and drinks by keeping outdoor food tightly covered until ready to serve. Clear away scraps and dirty plates as soon as possible, store waste containers away from the food service area, and maintain tight-fitting lids on all waste containers. Serve sweet drinks in soda fountain-style covered cups with drinking straws through the lids so yellow jackets cannot get inside and sting you in the mouth as you drink. Once wasps discover food, they continue hunting around that location long after the source has been removed.

Trapping yellow jackets: Long-term trapping with an appropriate bait may reduce yellow jacket populations in an area. Trapping is not suggested for other social wasp species. A variety of ready-made, reusable, and disposable traps with a wide range of effectiveness are available commercially. To get the best results—

- Set up baited yellow jacket traps around the edge of the picnic area to attract them away from the food and picnic gathering.
- Set the traps a few hours before bringing food outdoors so the insects change their foraging patterns.
- Set out canned chicken, white fish, ham, cat food, or meat scraps for much of the season. Sweet baits such as jam, honey, or rotting fruit are often more attractive later in the summer. Change the bait and the location of the traps if you are not attracting yellow jackets.
- Ensure the yellow jackets are dead before cleaning out reusable traps. Adding a few drops of dish soap to the liquid traps will help keep yellow jackets in the trap.

Removing yellow jacket nests:

If yellow jackets do build a nest in a location that causes problems for people, the best time to remove it is early in the season while it is still small. Nest removal can be dangerous, and it is recommended to hire a professional pest control operator to remove the nest. Although the number of yellow jackets in late summer prompts many pest-control requests, there is usually little that can be done by this time of year. Eliminating a nearby nest may not have the desired effect because yellow jackets can fly in from up to a mile away. All yellow jackets in the colony (except for the queen) will die when the temperatures drop in the fall. It is never advisable to put out poison baits because children and pets may accidentally ingest them. Other beneficial insects may also be attracted to the bait and be killed.

Nests in wall voids and underground:

Never block up the opening of an active yellow jacket nest in a wall void; yellow jackets can chew through wood and may find their way into the interior of the house. In the fall, when the nest is vacant, caulk or repair the crack to prevent them from re-entering the wall and recolonizing the next year. Yellow jackets also nest below ground and inside tree trunks or other cavities. These nests are inaccessible and cannot be removed.

Nest spraying:

A variety of insecticidal aerosol formulations are available for eliminating yellow jackets and other wasps and can be effective if used properly. Use extreme caution. Always follow all the directions on the label when using insecticides. Wear protective clothing that covers the entire body, including a veil over face, and wear gloves to protect against stings. You may also need to wear protective eyewear and other clothing if directed. Spray the nest at night since yellow jackets are less active and will be inside the nest at that time.

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