



# WASP (Yellowjacket)

## PREVENTION & CONTROL

### MEET THE PEST

Yellowjackets can become a nuisance to homeowners when nests are built near dwellings or outdoor living areas (e.g. decks, patios, play areas). Occasional foraging yellow jackets may sting if disturbed, but problems usually occur when the wasp nest is disturbed. Yellowjackets have a hollow stinger located at the rear of their body. When this stinger penetrates the skin, a venom is injected. Stings can be quite painful and are also a potential health threat to people who are allergic to wasp venom. Unlike bees, wasps will sting more than once.

People often mistake bees for yellow jackets because of their colouring, however they are very different. Adult yellowjackets are small, ranging in size from 2 to 3/4 inch (12-18 mm) long. They have smooth, almost glossy bodies with a pattern of yellow and black or occasionally white and black stripes. Wasps have clear wings that they can fold lengthwise along their body when resting. Bees, which are often a similar size and color, are covered in fine fuzzy hairs and cannot fold their wings.

While yellowjackets can be a pest when living near outdoor areas that people use, it is important to remember that they are also beneficial insects and valuable garden predators who capture huge numbers of insects, including flies and many pest species.

### MONITORING

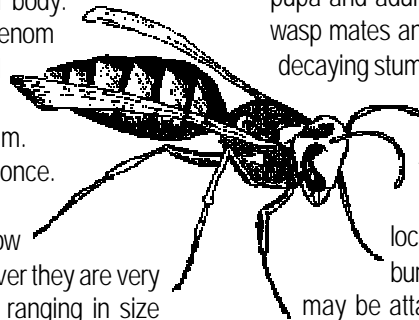
Look for wasps nests on the sides of buildings near the roof line, under decks, near outdoor play structures and on fences near outdoor living areas in the early to mid-summer. Looking for wasps at this time will allow you to take any required action while the nests are still small and before the late summer period when yellowjackets tend to

be more aggressive. High numbers of wasps foraging around compost bins, green carts or garbage cans can also indicate that a nest is nearby.

### LIFE CYCLE

The life cycle of the yellow jacket consists of the egg, larva, pupa and adult life stages. Just before winter, the queen wasp mates and finds a suitable place to overwinter (e.g. decaying stumps). The queen is the only one of the colony to overwinter. When spring arrives, the queen comes out of dormancy, begins feeding and searches for a site to begin a nest for her new colony. The nest may be located underground e.g. in old rodent burrows, landscape timbers or rock walls or may be attached to trees, buildings, under eaves, in wood piles or other structures. Yellow jacket nests are constructed from a paper-like material which is actually a mixture of chewed wood pulp and/or vegetable fibres mixed with saliva.

Each nest can contain anywhere from 20-45 cells. The queen lays her eggs in the cells and protects them until the larvae emerge. The larvae are fed until they pupate and adult wasps emerge from the pupal cases approximately three weeks later. Sterile female workers, the first adults to emerge, take over most of the duties of the queen. Adults feed on nectar and pollen and capture insects to feed the developing larvae. The nest is continually expanded throughout the season as eggs are laid and succeeding broods of larvae are reared. As a colony becomes larger, the sole responsibility of the queen is to reproduce. Nests vary in size, but, by late summer, a large nest may contain up to 4000 workers. At this time the overwintering queens and males are produced, mating occurs and the queens seek out protected areas to overwinter. The first hard frost usually kills the remaining colony and the old nests usually disintegrate over the winter. Nests are not used the following year.



## CONTROL

### Physical

The best method of control is to avoid attracting yellow jackets or any other kind of stinging insects. Because they are attracted to sweet food and strong scents, avoid leaving food or drink uncovered when eating outside, and wearing scented products such as perfume and hair spray. Keep garbage and compost in closed bins or solid construction (no mesh designs) until it can be properly discarded. Do not overfill garbage bins or compost green bins. This may prevent the lids from closing properly and allow wasps to enter the container. Wash down outdoor tables, seating areas and garbage cans periodically to remove spilled food and food odors that attract yellowjackets.

If a wasp lands on you, remain calm and wait for it to fly off or brush it off gently. Otherwise, you run the risk of threatening the wasp and experiencing a sting. Seek medical attention when the reaction to a sting includes swelling, itching, dizziness or shortness of breath.

Trapping is a direct control method. Various commercial traps are available at garden centres and department stores. Bait (e.g. jam or rotting fruit) can be used with these traps to make them more attractive to wasps. If using traps, make sure traps are in areas where they are not accessible to children who may be curious and want to investigate or play with them. Ensure that captured wasps are dead before cleaning or re-using traps. Clean the traps outdoors by immersing them in soapy water to kill any captured wasps.

The removal of a wasp nest may be necessary if it is located near human activity or near a residence. Although the homeowner can remove a nest, professional help is advised. Nest removal can be dangerous and extreme caution must be used because of the danger of attack by a large group of wasps. It is recommended that the nest be removed just before dark. It is also recommended that it be removed in the spring when the wasps are small and populations are low. **Removing large nests in the late summer is not a good idea.** Wasps will often swarm if the nest is disturbed, this is especially true in the late summer when colonies are large and often aggressive due to crowding. Always wear protective clothing to avoid being stung and do not shine a light directly on the nest as this will alarm the wasps and increase their activity. Place a bag around the nest, blocking the entrance and then cut the nest off. Dispose of the nest contents.

The removal of underground nests and nests inside the

walls of dwellings or other buildings is best left to a professional pest control operator. Never plug the entrance hole of a healthy colony nesting on or in the wall of a building. Wasps can have strong chewing mouthparts and if their normal exit from the nest is plugged they may chew through the wall and emerge inside the building. Do not attempt to destroy underground nests by pouring gasoline, kerosene or other flammable liquids into the nest opening. This dangerous practice not only contaminates the soil but can cause explosions or serious burns.

### Chemical

If physical control measures are not effective, use a pesticide which will have a minimal impact on both you and the environment. Wear protective clothing when applying pesticides to a nest. Aerosols containing pyrethrin, rotenone and pyrethrin are available.

The best time to treat yellowjacket nests is late at night when the insects are inside and less active. When approaching the nest ensure that light does not shine directly into the nest opening as this may startle the wasps. If the nest is attached to a building or other structure above eye level do not stand directly underneath the nest when applying control treatments as this may increase the chance of being stung. Always wait at least a day to ensure that all of the yellowjackets have been destroyed before handling the nest. If yellowjacket activity is observed around the nest, the application should be repeated before removing the nest.

If the above measures are not effective, consult with an expert at a garden centre for additional pesticides available. It may be necessary to seek professional help from a licensed applicator to achieve control.

**Always use a registered domestic class pest control product labelled for wasp control and carefully follow the label directions.**

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