

WASP AND YELLOWJACKET CONTROL

IDENTIFICATION

Wasps are beneficial insects that eat harmful insects and pollinate flowers. The most common species are the solitary and paper wasps, yellow jackets, and hornets.

Species	Description	Habits	Nests	Feeding Behavior
Solitary wasps	Thin- or thick-waisted	Visit flowers and other vegetation; relatively docile	In mud or in holes in the ground	Predators; provision nests with prey for young to feed upon
Yellowjackets and Hornets	Stout, colorful; mostly black and yellow or black and white	Rapid fliers; aggressive individuals capable of inflicting multiple stings; social in large colonies, which they defend vigorously	Multi-layered, papery nests, mostly in ground, although some aerial or in structures; nests have an outer papery covering called an "envelope"	Mostly beneficial predators, but scavenger species becomes pestiferous
Paper (umbrella) wasps	Long bodies with thin waists, long dangling legs	Social; search vegetation for prey, visit flowers for nectar; not very aggressive	Single-layered, papery nests without an envelope; attached to fences, eaves, boards, branches; shaped like an umbrella	Beneficial predators; feed prey to developing young in nest

HABITAT

Wasps and yellowjackets are attracted to protein foods in the early months of summer, and sweet foods and drinks at the end of their life cycle. When a protein or sugar food source is generated by humans and readily available, it may be discovered early in the season by the queen, and the extra nutrients may be used to increase the size of her colony beyond what she could sustain on naturally available foods.

Nests tend to be underground, in hollow trees, or in the eaves, attics, and inside wall cavities of buildings.

PREVENTION

Structural

- ~~✍~~ Inspect and repair the exterior surfaces of the structure, looking for cracks, splintered or rotten wood, holes in stucco or the foundation, unscreened vents, loose shingles, open plumbing cuts into the basement, and loose fascia boards. Duct tape, copper mesh, spackle, caulk, and cement patch are effective exclusion materials.
- ~~✍~~ Cover attic and crawl space vents with fine mesh insect screen.
- ~~✍~~ Seal open ends of fences with foam.

~~✍~~ During springtime, seal all holes in pipes and around screws with caulk or aerosol foam insulation in playgrounds.

Cultural

- ~~✍~~ Avoid wearing scents, such as perfumes, hair spray, suntan lotions, cosmetics, deodorants and shaving lotions.
- ~~✍~~ Don't wear brightly colored, patterned clothing, but do wear shoes.
- ~~✍~~ Don't squash wasps or yellow jackets – it releases a chemical alarm that signals other wasps and yellowjackets in the area to attack.
- ~~✍~~ Use a lid and straw with soft drinks and juices; carry sugary or meat snacks in closed containers.
- ~~✍~~ Feed pets indoors or in a screened enclosure.
- ~~✍~~ Clean recyclables before storing them.
- ~~✍~~ Keep garbage cans clean and tightly covered, or seal all food garbage in plastic bags. Equip outdoor garbage cans with removable domed tops that have vertical, spring-loaded swinging doors or with spring-fitted lids. Periodically clean the lids of food wastes. Empty the cans frequently, especially during the most severe period of infestation, and monitor them daily, disposing of misplaced materials.
- ~~✍~~ Empty and clean dumpsters frequently. Dumpster lids should seal tightly and be kept closed when not in use. The area around the dumpster should be monitored daily, and all misplaced materials should be disposed of properly.

Biological

- ~~✍~~ Skunks, raccoons and badgers prey upon yellowjacket nests for the honey in the larval chambers.

INSPECTION

Spring is the best time for inspection. Nests are just forming and can be easily controlled. Don't wait until fall! If there is a chronic problem with yellowjackets; inspect the area methodically to locate the nests. Nests can be found in the ground, under eaves and in wall voids of buildings. Ground nests are frequently located under shrubs, logs, piles of rocks, and other protected sites. Entrance holes sometimes have bare earth around them. Nest openings in the ground or in buildings can be recognized by observing the wasps entering and leaving.

Inspect monthly to ensure that nests do not become large enough to be problematic.

CONTROL

Non-toxic

- ~~✍~~ If the wasp or yellowjacket lands on you, stay calm and do not move quickly. If you can't sit still until it flies off on its own, gently brush it off with a piece of paper using slow, deliberate movements.

- ✂ If the insect enters your vehicle and is moving, slowly and deliberately guide it out with a piece of paper or invert a cup over it, slip a piece of stiff paper under the open end, trapping the insect inside, carry it outside, and free it, pointing the opening away from you as you slowly pull the paper away.
- ✂ Drip honey over the entrances of nests at night when no one will be around the nests. In the morning, a helpful skunk or raccoon may have enjoyed a good meal and taken care of your nest for you.
- ✂ Traps can be used to reduce wasp and yellowjacket populations and monitor the effectiveness of ongoing control programs. Baits, placed in the saucer or plate at the bottom of the trap (dog food, ham, fish and meat scraps early in the season, sugar syrups, spoiled fruit and jelly late in the season), attract the insects. Once flying in, they can't escape. Commercially available fly traps are effective for wasp and yellowjacket control, with the appropriate bait.
- ✂ Another method of destruction is physically removing the nest. However, any mass disturbance to a nest will trigger a mass attack, so hiring a professional is highly recommended if this is the route you choose. If you are daring, you will need special protective clothing to ensure your safety.
- ✂ Vacuuming can be effective, for nests in wall voids and underground. You should first consult a professional experienced in handling stinging insects. Use a lightweight, powerful vacuum with a removable bag that can be stuffed closed with cotton or a rag while the machine is running. Vacuuming underground nests is a two-person job, with one person operating the vacuum and the other excavating the nest with a trowel. First check for auxiliary nest openings in a 40- to 50-foot area around the main opening, and fill any found with soil. Wear protective clothing. The vacuum should be held about 3 to 4 inches from the entrance of the nest so that the wasps are sucked in as they fly from the nest. Before the vacuum bag is full, vacuum up two tablespoons of cornstarch to incapacitate the wasps. Once the nest is empty, with no more wasps entering or leaving, dig out the underground nest structure. With the vacuum still running, open the canister and tape over the bag opening with duct tape. With the motor off, take out the bag and place it in a cardboard box. Seal the box and place it in a freezer at least overnight. Aerial nests and ground nest fragments that contain living larvae, should be placed in thick plastic bags and put in a freezer at least overnight.
- ✂ When necessary, you can use an enzyme solution such as Super C Professional to help loosen and remove the nest. Such a product will also remove pheromones associated with the nest. Lemon Joy or peppermint soap available from EnviroSafe will also work. Apply early morning or late evening and throw the comb away afterwards.

Least-toxic

- ✂ Silica aerogel is a desiccating dust that can be used to destroy underground nests or a nest in a wall void. The dust abrades the outer waxy coating on insects, causing them to dry up and die. Choose a desiccating dust that it is

not combined with a pyrethrin. **Avoid breathing in desiccating dusts, as they can cause lung irritation, and always wear a mask and goggles when applying.**

Olkowski, Helga, Daar, Shiela, and Olkowski, William, *Common -Sense Pest Control*, Newtown: The Taunton Press, Inc., 1991.

Quarles, W. 1999. "Identifying Ants in the House." *Common Sense Pest Control*. 15(2):3-6.
Northwest Coalition for Alternatives to Pesticides, Eugene, OR.