

Appendix 1h

Yellowjackets, Paper Wasps and Honey Bees

Renowned for their painful sting, these insects often produce an unreasonable amount of fear. The sting venom can cause a violent histamine reaction, but only in a very small percentage of the population. Most bee and wasp species are actually quite docile and stinging usually occurs when their nest is disturbed.

One exception is the yellow jacket wasp; however, paper wasps can also be aggressive when their nest is disturbed. In the warmer summer months yellow jackets become more attracted to sweet food and meat products and can become troublesome, lingering around garbage cans and picnic tables. Bees and wasps are actually a highly beneficial group of insects. Bees pollinate food plants and provide us with honey, wax and other readily used substances.

Wasps can be helpful in removing other unwanted insects by parasitizing or hunting them. Unless an individual is allergic to bee or wasp stings, homeowners should not be concerned if they find one or two solitary bees or wasps nesting in their yards. A large population, however, or a colony of honeybees should be removed by a professional.

Identification



Paper Wasp



Yellowjacket



Honey Bee

Paper wasps are 1-inch-long slender wasps with long legs and a distinct slender waist. Background colors vary, but most Western species tend to be golden brown or darker with large patches of yellow or red. Preferring to live in or near orchards or vineyards, they hang their paper nests in protected areas, such as under eaves, in attics, or under tree branches or vines. Each nest hangs like an open umbrella from a pedicel (stalk) and has open cells that can be seen from beneath the nest. Sometimes white, legless, grublike larvae can be seen from below.

Yellowjacket wasps are about 1/2 inch long with distinct yellow and black markings. Compared to honey bees, yellowjackets are sparsely haired. Wings are folded lengthwise, similar to paper wasps and hornets. They make an enclosed paper nest, usually located underground.

Honey bees are about 1/2 inch in length with an orange to yellowish-brown color and black intersegmental bands on the abdomen. The legs, antenna and eyes are black and the thorax, abdomen and legs are densely covered with hairs. They build their nest of wax and nests may be located inside of structures (walls) or trees or hanging from protected locations on trees or other structures. Whether in walls or exposed, the nest is a series of double sided wax sheets that are arranged in patterns.

MANAGEMENT

Most social wasps provide an extremely beneficial service by eliminating large numbers of other pest insects through predation and should be protected and encouraged to nest in areas of little human or animal activity. Although many animals prey on social wasps—including birds, reptiles, amphibians, skunks, bears, raccoons, spiders, praying mantids, and bald-faced hornets—none provides satisfactory biological control in home situations.

The best way to prevent unpleasant encounters with social wasps is to avoid them. If you know where they are, try not to go near their nesting places. Wasps can become very defensive when their nest is disturbed. Be on the lookout for nests when outdoors. Wasps that are flying directly in and out of a single location are probably flying to and from their nest.

Usually, scavenging wasps won't become a problem if there is no food around to attract them. When nuisance wasps are present outdoors, keep foods including pet food and drinks covered or inside, and keep garbage in tightly sealed garbage cans. Once wasps discover food, they will continue to hunt around that location long after the source has been removed.

Monitoring and Inspection

Stinging insect nests can be located in a variety of places including in the ground, in masonry or other wall voids, on the eaves of buildings, on fences or in trees. In environments where these species occur frequently, a monthly inspection of buildings and grounds for nests during the active season may be warranted, with more frequent inspections during nesting seasons for problem species. Generally, new nests are established in the spring or early summer. This is true for both wasps and honey bees.

Honey bees become defensive when people and animals approach colonies with brood present. In regions where Africanized honey bees are present, specific instructions should be provided for avoiding and responding to attacks. These include a set of guidelines on what to do if bumped or stung by a bee. For example, guidance can include if you find yourself bumped by a bee, stop and cover your head with clothing or at least cover your nose and mouth with your hands, look through your fingers or clothing to see if you can determine where the colony is and move in the opposite direction; if you are stung by a bee carefully run away in a straight line at least the length of a football field, seek shelter in a building or vehicle, and avoid other people unless they are offering you aid.

Swarms of bees occur when a new queen is in transition and searching for a new nest with her colony. Swarms are most common in the spring or early summer. In most cases this swarm is harmless. In most cases you can wait 24 hours to see if the swarm moves on and keep children away from the site. Otherwise, seek removal by qualified individual or company. Make a list of available beekeepers for assistance, with names and phone numbers.

Discouraging or Eliminating Nests

Early in the season, simply knocking down newly started paper wasp nests will cause the founding female to go elsewhere to start again or to join a neighboring nest as a worker. As there is little activity around newly started wasp nests, they are very difficult to find. Wasps are more likely to be noticed after nests and populations grow. Nest removal for controlling subterranean or cavity-dwelling yellowjackets isn't practical, because the nests are underground or otherwise inaccessible.

PROTOCOL FOR TREATING PAPER WASPS, YELLOWJACKETS, or HONEY BEES

Threshold: 5 or more wasps observed in areas where children are present

A. When staff observe a small number of bees (5 or less):

- 1st) Spend two minutes trying to determine what type of pest you have
- 2nd) Spend two minutes trying to determine where the pest is coming from/going to
- 3rd) Remove any source of attraction for the pest (fruit, spills, standing water)
- 4th) Jot down any action(s) they take in the Pest Log

B. When staff observe more than 5 bees:

- 1st) Spend two minutes trying to determine what type of pest you have
- 2nd) Spend two minutes trying to determine where the pest is come from/going to
- 3rd) Remove any source of attraction for the pest (fruit, spills, standing water)
- 4th) Remove any small nests or hives when safe to do so. Inform Team Leader/Site Supervisor that a maintenance staff needs to be called to remove a nest that staff cannot reach or they feel is unsafe to remove themselves
- 5th) Inform Team Leader/Site Supervisor to contact the Health & Safety Coordinator if the problem persists in order to obtain a trap
- 6th) Jot down any action taken in the Pest Log

C. When more than 5 bees are observed Maintenance Staff will:

- 1st) Survey the site and verify the type of pest and location of any nests or hives
- 2nd) Remove any source of attraction for the pest (fruit, spills standing water)
- 3rd) Honeybee swarms or hives will be reported to the Health & Safety Coordinator for professional removal
- 4th) Remove or knock down any nests when safe to do so and children are not present outside
- 5th) Will use soapy water (poured down nest holes or sprayed/hosed onto a wasp nest. This method allows you to vacuum up the wasps and remove the nests.
- 6th) Set traps to help draw pests away from buildings, entries and high traffic areas
- 7th) Jot down action taken in Pest Log

PESTICIDE APPLICATIONS

Pesticide applications will only be used if all of the above steps have been followed and been unsuccessful.

Additional Exclusion Measures

- Place outdoor trash cans, recycle bins and dumpsters away from building entrances.
- Do not plant flowering trees, shrubs or flowers immediately adjacent to building entrances, walkways or playground areas.
- Fix plumbing leaks, gutters that hold water, etc. to eliminate access to water.
- Eliminate harborage areas by sealing openings in exterior surfaces including walls, masonry steps, bleachers, fences, playground equipment, etc