

Yellowjackets, Hornets, and Paper Wasps



The Master Gardener office receives numerous calls during the year regarding stinging insects. Most of these calls are about Yellowjackets, Hornets, and Paper Wasps, which are members of the social wasp family (Vespidae). Social wasps differ from solitary wasps, in that they will attack if they believe that their nest or colony is being threatened. Solitary wasps usually sting only when mishandled and therefore are rarely a problem for people.

All wasps fall under the beneficial insect category in that they pollinate flowers and are predators of flies, caterpillars, aphids, and other insect pests. However, for people who are allergic to the stings, the problems far outweigh the benefits, and proper means must be taken to avoid being stung. That is not to say that those of us who are not allergic should be casual about getting stung. Not allergic does not mean you won't be in pain after a bite. It is best for people who are known to be sensitive to stings to consult a professional to rid homes and yards of pests.

In order to identify these pests it is helpful to understand each pest's nature and lifecycle. The social wasps (i.e. Yellowjackets, Hornets, and Paper Wasps) are ones that we see most frequently. The best and easiest way to tell wasps apart is to look at the size of the wasp and the pattern on the abdomen.

Yellowjackets are the smallest of the common social wasps. They are relatively short and stout compared with other wasps. They are either yellow and black, or white and black, and are aggressive. Yellowjackets can be divided into ground nesters (frequently using old rodent holes) and aerial nesters. However they are also found in concealed areas of walls and attics. Locating the nest is essential to eliminating them.

After mating in the fall, the female hibernates. Only the fertilized queen survives the winter and emerges in the spring to start a new colony. The queen lays and raises the first batch of eggs. These are workers, which when mature take over the role of feeding the queen, tending the new eggs, and enlarging the hive. In the fall sexual activity begins with the hatching of males and new potential queens.

Late summer is the time when Yellowjackets create the greatest problems. The colonies have increased and population may be outstripping the natural food supplies. As a result these wasps are particularly attracted to fruits, sweets, and decaying matter. They can be found around garbage cans, overripe fruit on or around fruit trees, and most annoyingly at your outdoor meal. Bright clothing and perfumes also can attract late season Yellowjackets.

As nests are only used once, it may be best to ignore them, unless they are located in your house or an outdoor area that you frequently use. Nests in houses should be removed because they can serve as bases for other household insects (such as carpet beetles and other pests).

Paper Wasps are the most docile of the three main social species. They tend to only become problems when they build their umbrella shaped nests directly over doorways or other areas (such as under a picnic table) where close human interaction cannot be easily avoided. The nests, in which the egg cells open down, usually range in size from 15 to 50 cells. These wasps are long legged, elongated, and slender waisted. To the casual observer they may appear to be black but are most likely golden brown, or darker, with large red or yellow patches. As they are not usually aggressive and are beneficial, (helping to control fruit destroying insects and flies) eliminating the nests is usually not necessary.

Hornets are the largest of the wasps and include the European and Bald Faced Hornets. They are typically somewhat smaller than a bumblebee, black and white, have distinct white facial markings. They are very aggressive and simply passing within 10 feet of a nest may cause an attack. The nests, which can hold thousands of hornets, are typically gray, and large ones can resemble papier-mâché footballs. They are usually built around tree branches or on the side of a house. In a tree the nests may easily go unnoticed until an attack.

Hornets may be noticeable around compost piles and garbage cans. If you see them you should begin to carefully look for the nest or call for expert assistance. Many times nests are high in trees, out of reach, and therefore best left to professionals.

Controlling Wasps, if necessary, should be done with great care or through specialists.

While Paper Wasp nests may be destroyed early in the season, causing the female to move on, by the time Yellowjacket or Hornet nests are visible, caution is required.

If you find it necessary to destroy an occupied Yellowjacket or Hornet nest the following precautions should be considered as minimum requirements.

Make sure that there are no other people or pets in the area. These angry aggressive insects will not be particular whom they attack once the nest is clearly threatened.

Dress in protective attire. Typically these are commercially available or can be approximated as follows: heavy insect proof material (such as leather) boots, trousers, jacket and gloves, sealed at the wrist, ankle, and neck, so that the insects can not crawl between boot and trousers, gloves and jacket, or into the collar. A hat with a large brim should be draped with a heavy see-through cloth (such as burlap or a bee veil) so that the insects can't sting through the hat or crawl under the burlap. The cloth should be away from the skin.

Remember that wasps can sting more than once, so before you remove protective clothing make sure that any remaining insects are dead or gone.

Approach the nest only when temperatures are below 50° F. This will tend to slow the insects and make them groggy.

Postpone taking action until the insects are all in the hive – either at night or dawn.

Use a spray designed specifically for the insects you have. Typically these will allow you to spray the nest from a distance. If you can't spray the nest from the ground you will want to seriously consider professional help. Should you be on a ladder, and in spite of all of the precautions, get into trouble you will be just that much worse off.

Use caution when approaching the site after you have sprayed. If some wasps have survived, they will be very unhappy to see you and react accordingly.

Given all of the above, remember that all of the wasps eat pest insects. Co-existence, if possible, may be the best thing for you, your home, and garden.

Bibliography

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[EB0643 Yellowjackets and Paper Wasps](#)

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University of California, Statewide Integrated Pest Management Project. [Yellowjackets and other Social Wasps](#)