

LivingWithBugs Guide

identification, life cycles and management

Yellowjacket Wasps

updated: 4/06

Yellowjacket wasps can be serious outdoor pests during late summer and fall. By early fall these pesky critters seem to be everywhere, especially if there's open food around. These wasps get more aggressive and dangerous late in the summer. Be particularly cautious about disturbing nests late in the summer as they are fiercely defended.

Yellowjackets are heavy-bodied wasps, black with yellow or white markings, about 1/2 inch long (Fig. 1). They live in grey, papery nests located either below-ground, or suspended aboveground. The nests have only a single opening. Hunting "workers" search for prey, carrion or rotting fruit. Workers are attracted to any meat or sugary item. Food is carried back to the nest where it is fed to nestmates. Stings usually occur through accidental contact with the nest or nest entrance. Workers *vigorously* defend the nest and queen against intruders.

Yellowjacket nests are dominated by an egg-laying *queen*. Queens start nest building in the spring. A few workers are reared that then provision, build and defend the nest. The queen may not leave the nest again—as her role now is to

lay eggs. By the end of summer, nests may contain hundreds or even thousands of workers and this is when they are most dangerous.

By fall the nest has produced male (drone) and female (queen) reproductives. The queens and drones mate and by first frost, most workers and male wasps have died, only new, fertilized queens remain. New queens find a protected spot to spend the winter.



Figure 1. Western yellowjacket. Original photo by Ken Gray.

Insecticidal Treatment of Problem Nests. It may be necessary to eliminate a nest that is located where people might come into contact with it. If problem nests can be located, usually by worker activity around nest entrances, treat *at dusk* with an aerosol insecticide. At dusk workers

are inside and relatively calm. Use one of the "**wasp & hornet**" aerosols that propel a stream of insecticide so that you can stand off a safe distance. Treat directly into the nest opening. For ground nests, seal the nest entrance, after treatment, with a rock or soil. *It is illegal* to pour other flammable liquids into nests. Some pest control companies will locate and treat nests for you.

Using Traps. Non-toxic yellowjacket traps are available. The most effective traps use a synthetic attractant called *n-heptyl butyrate* to lure worker yellowjackets into a trap from which they cannot

escape. Fruit juice or various meats can be used as attractants but are not as effective. Traps can provide some temporary relief by drawing workers away from people, but are not effective for area-wide nest control even though many yellowjacket workers may be captured.

Some people are allergic to the venom of yellowjacket and/or honey bee stings. Both reactions can be life-threatening. If you are sensitive to yellowjacket venom be cautious in late summer and early fall when the insects are most numerous. Also, enlist help if you need to spray a nest!

“Only queens survive the winter. Old nests are abandoned and not re-used the following spring.”

Because honey bees are beneficial insects, and usually not threatening, *never attempt to remove or destroy a honey bee hive*. Call a local beekeeper or your county Extension office for help with honey

bees.

Mud daubers and paper wasps (Fig. 2) frequently nest around houses. You’ll see mud daubers at wet soil, collecting bits to take back to their mud-tube nests. Most paper wasps (*Polistes sp.*) build small, open (cell exposed) nests suspended vertically from tree branches or the eaves of roofs. Paper wasps

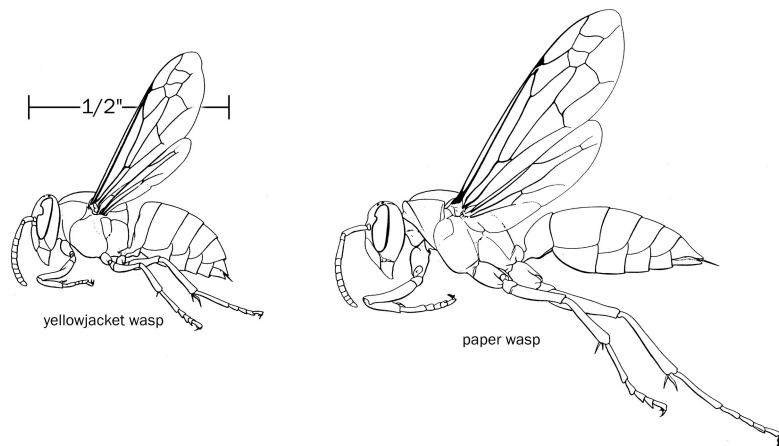


Figure 2. Differences in size and shape between yellowjacket wasps and paper wasps. Note the relatively long legs and thin waist of paper wasps. Coloration is similar between the two. Adapted from Akre et al. 1980.

are distinguished by their long legs. Both mud daubers and paper wasps are less aggressive and

“Never pour flammable liquid (gasoline, kerosene, paint thinner) into nests. It’s dangerous and illegal.”

normally will not sting or swarm. A newcomer to the US, *Polistes dominulus*, or European paper wasp, makes a relatively large, open nest and is more aggressive than native paper wasps.

For additional information about wasps and wasp control see www.LivingWithBugs.com.

spring	summer	late summer/fall	winter
Queens come out of overwintering sites and start to build new nests. A warm, dry spring favors nest survival, especially ground nests.	Nests grow as colonies add new individuals. Queens remain in nest.	Nests at maximum size and colonies may be aggressive (defensive). Later, toward winter, nests begin to decline. New queens produced.	Most nests are vacated. New queens find overwintering sites. Only queens survive to the next season. ¹

¹A few species make perennial nests that grow year after year. This is especially true for species associated with structures.

Table 1. Life cycle of annual yellowjacket nests