

A Few Bad Wasps Spoils the Whole Bunch



Cicada killer (a digger wasp)



Eastern yellowjacket worker



Golden paper wasp nest

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Like many bees, wasps have bright warning coloration which serves them well to keep predators away. Many wasps may look dangerous, but in fact, are not aggressive and rarely sting.

Many wasps have thin waists, but others, like yellowjackets, are more robust and their waist is not obvious. Wasps are beneficial insects because they are predators or parasites of other insects and spiders. Of the wasp species, only yellowjackets and hornets are exceptionally aggressive.

Digger Wasps

Digger wasps belong to the family Spicidae. The largest wasp in Nebraska, the two-inch cicada killer wasp, is a digger wasp. It is black with yellow markings on the thorax and abdomen and has rust-colored wings. Another species, the steel-blue cricket hunter is about one-inch long and is dark, metallic blue with black antennae and wings.

Digger wasps are solitary wasps. Instead of living in colonies, individual females supply underground burrows with paralyzed insects which become food for their offspring. Cicada killer wasps capture annual cicadas and place them in cells located at the ends of the tunnels they have dug in the ground. Tunnels are about the size of a quarter and extend 24 inches or more into the ground.

People are often alarmed when they see these large wasps for the first time.

But, they are not dangerous. To get stung, you would have to pick up one of these wasps. They are not aggressive and do not attack.

Mud Daubers

Mud daubers are black and yellow, thread-waisted solitary wasps which also belong to the family Spicidae. They build a hard mud nest, often on ceilings and walls, attended by a single female wasp. Like other solitary wasps, they do not defend their nests and rarely sting.

Yellowjackets, Hornets and Paper Wasps

Yellowjackets, hornets and paper wasps belong to the family Vespidae. Of these, yellowjackets and hornets are similar because they are very aggressive. Paper wasps are less defensive and rarely cause a problem, unless their nest is near human activities.

These wasp colonies begin in the springtime with a single overwintered queen. These wasps build paper nests made from fibers scraped from wood mixed with saliva.

During the early summer, the growing colony is fed large amounts of protein in the form of insects and spiders. In late summer, the colony grows more slowly, reducing protein requirements, but requiring sugar for energy. The large number of foraging wasps are attracted to sweet substances at this time. During late summer, the colony produces queens and males which mate. After mating, the males die, but the mated queens seek sheltered locations to overwinter. The rest of the original colony

dies out with cold temperatures.

Yellowjackets. Yellowjackets are about 1/2-inch long, black and yellow, with a stout body. Yellowjackets often build oval paper nests in the ground, in old rodent burrows, but may also live in protected cavities, like wall and ceiling voids. One yellowjacket, the German yellowjacket, builds aboveground colonies. Yellowjackets vigorously defend their colonies and are disturbed by vibrations. Many people inadvertently come across a yellowjacket colony when they mow their lawn or are weeding. In late summer, yellowjacket workers are active around picnic sites, patios and dumpsters, seeking sweet liquids. Traps can be helpful in attracting yellowjackets away from picnic areas.

Hornets. The baldfaced hornet is technically a yellowjacket which builds a large, pear-shaped paper nest. This hornet is about 3/4-inch long and is black with whitish markings. Nests are typically attached to a tree, bush or side of a building. Hornet nests may contain thousands of wasps which are extremely aggressive when disturbed. Removal of these out-of-reach nests can be difficult and are best left alone. Removal can be safely done after the colony dies out in the fall.

Paper Wasps. Paper wasps are about 3/4-inch to one-inch long and have a reddish-brown to black body with yellow stripes on the abdomen. They have slender bodies, a thin "wasp-like" waist and legs that dangle when they fly. The distinctive nests are suspended from a single, central stalk and consist of an upside-down umbrella

of cells. These small nests are often fastened to building eaves, but may be in attics and other structures. Paper wasps are not usually aggressive unless disturbed.

Adults forage for nectar, their source of energy, and for caterpillars to feed their young. Because they feed on garden pests, many gardeners consider them to be beneficial insects.

Wasp Control

Wasps are beneficial because they feed voraciously on insects and spiders. It is best to leave isolated nests alone, especially those of non-aggressive species. Social wasp colonies will die out after frost.

Control tactics are based on the type of wasp nest. At night, spray exposed, aerial wasp nests with a wasp-freeze type aerosol. Direct the pressurized spray stream into the nest opening. Do not use wasp freeze indoors.

Control wasps in the ground or wall voids by applying a dust insecticide in the nest opening. The wasps will crawl through the dust and contaminate the nest. Cautiously scout the nest during the day to locate the opening, but the treatment should be done after dark to keep from getting stung. Don't use a regular flashlight; instead illuminate the area with a red light. Yellowjackets and other insects can't see red—it looks black to them.

If wasps are nesting in wall voids, attics or other interior locations, seal entrances to prevent other wasps from nesting in these areas in future years.

Make a Cheap, Simple Trap for Yellowjackets

Traps may be used to capture yellowjackets foraging for sweet liquids in the late summer. Yellowjackets will be active on warm days until frost. Traps are available commercially, but inexpensive traps can be made of simple components which will work quite well.

What you need:
2-liter plastic soda pop bottles
Stapler
Knife
String or wire.

- Cut the top off the bottle, just below the shoulder.
- Turn the top upside down and insert it into the bottom. Use three or four staples to hold it into place.
- Punch two holes in the side of the bottle and tie a wire or string for hanging.
- Pour in your attractant and spill a little on the side of the bottle and around the funnel top. One researcher compared different attractants and found Mountain Dew™ works well.



- Hang your bottle on a post or tree 20-30 feet away from the trash receptacle.
- Discard traps when they become full of wasps or lose their attractiveness. This can be safely done at sunrise or after sundown.
- For most effective control, use half a dozen or more of these traps.

Hands-On Termite Applicator Training, Sept. 27 & 28

University of Nebraska-Lincoln Extension will offer a two-day, in-depth training for entry-level termite applicators, home inspectors, regulators and other interested persons. The Termite Applicator Training will take place Sept. 27-28 from 8 a.m. to 5 p.m. at the Lancaster Extension Education Center, 444 Cherrycreek Road, Lincoln.

Presenters will represent UNL Extension, Nebraska Department of Agriculture and pest control industry personnel (Pest Management Supply, Bayer Crop Science, Dow AgroSciences and BASF). UNL presenters will include Dennis Ferraro, Clyde Ogg, Barb Ogg and Shripat Kamble.



Classroom presentation topics will include termite biology, termiticide calculations, termiticide effectiveness and soil dispersion, baiting systems and Nebraska regulations.

Participants will have an opportunity to inspect

a home for termites and perform hands-on termite treatments (perimeter and sub-slab applications). Learn how to choose, maintain and calibrate termiticide equipment.

Early registration fee before Sept. 1 is \$300; at the door, fee is \$325. Registration will include lunches, breaks and reference materials. Register early because number of participants is limited. For more information about this program, contact Barb Ogg at 441-7180.