



Paper Wasps and Mud Dauber Wasps are about 3/4 to 1-inch long, slender with a narrow waist and long legs, reddish-orange to dark brown or black in color. There are yellowish markings on the abdomen. Paper-like nests, shaped like tiny umbrellas, are suspended by a short stem attached to eaves, window frames, porch ceilings, attic rafters, etc.

Paper wasps and Mud Dauber Wasps may become a nuisance when nesting around homes and other structures where people live, work or play, if you feel you're in danger call All Valley honey & Bee to have them removed. Adult food consists of nectar or other sugary solutions such as honeydew and the juices of ripe fruits. This is the reason you will always see wasps in the lunch area, and or trash cans. Northern or paper wasps nest in window sills, along eaves and in open areas sheltered from the rain

Paper wasps and Mud Dauber Wasps have a lance-like stinger and can sting repeatedly. When a paper wasp or hornet is near you, slowly raise your hands to protect your face, remaining calm and stationary for a while and then move very slowly away. Never swing, strike or run rapidly away since quick movement often provokes attack and painful stings. Restrain children from throwing rocks or spraying nests with water. Avoid creating loud noises and disturbance near the nest.

Paper wasps and Mud Dauber Wasps live in colonies containing workers, queens and males. Queens emerge during the warm days of late April or early May, select a nest site and build a small paper nest in which eggs are laid. As she adds more cells around the edge, eggs are deposited. Larvae in the center are older with the younger larvae further out. It is the cells at the rim of the nest which contain eggs. After eggs hatch, the queen feeds the young larvae. When larvae are ready to pupate, cells are covered with silk, forming little domes over the individual openings. Larvae pupate, emerging later as small, infertile females called "workers." By mid-June, the first adult workers emerge and assume the tasks of nest expansion, foraging for food, caring for the queen and larvae and defending the colony. Remember with paper wasps, the nest is the work of a single female

When outdoors, avoid the use of heavily scented soaps, shampoos, perfumes, colognes, after-shaves and cosmetics. Avoid shiny buckles and jewelry. Cover exposed skin and wear gray, white or tan rather than bright colors.

Also, remember that if a paper wasp or Mud Dauber Wasps gets into the automobile while driving, never panic. It wants out of the car as much as you want it out. Slowly pull over off the road, and open the car windows and doors. Trying to remove or kill a paper wasp or hornet while the car is moving can result in accidents.

Treatment of Stings

After being stung, immediately apply a poultice of meat tenderizer to the wound. If the sting is not deep, this will break down the components of the sting fluid, reducing the pain.

A commercial preparation such as a sting kill swab can be used. Antihistamine ointments and tablets taken orally appear effective in reducing sting reactions. Persons highly sensitive to stings should consider a desensitization program in an allergy clinic. Consult your physician about medical kits such as Ana-Kit, which contains antihistamine tablets and aqueous epinephrine (adrenalin) administered by injection, a tourniquet and sterile alcohol swabs for cleaning the injection site. Frequently, a bronchodilator material (inhaler) is needed.

Persons who are especially sensitive to stings should get several competitive cost estimates from reputable, licensed, professional pest control operators who have the experience, equipment and most effective insecticides to get the best job done.

The common wasp, *Vespula vulgaris* is a wasp found in much of the Northern Hemisphere, which builds its grey paper nest, often using an abandoned mammal hole as a start for the site, which is then enlarged by the workers. The foundress queen may also select a hollow tree, wall cavity, or rock crevice for a nest site.

The nest is made from chewed wood fibres, mixed with saliva. It has open cells and a petiole attaching the nest to the substrate. The wasps produce a chemical which repels ants and secrete it around the base of this petiole in order to avoid ant predation.

A solitary female queen starts the nest, building 20-30 cells before initial egg-laying. This phase begins in spring, depending on climatic conditions. She fashions a petiole and produce a single cell at the end of it. Six further cells are then added around this to produce the characteristic hexagonal shape of the nest cells. The spherical nest is built up from layers of cells.

Once the larvae have hatched as workers, they take up most of the colony's foraging, brood care and nest maintenance. A finished nest may contain 5,000–10,000 individuals.

Each wasp colony includes one queen and a number of sterile workers. Colonies usually last only one year, all but the queen dying at the onset of winter. However, in the mild climate of New Zealand, a few of the colonies survive the winter, although this is much more common with the German wasp. New queens and males (drones) are produced towards the end of the summer, and after mating, the queen overwinters in a hole or other sheltered location, sometimes indoors.

The common wasp is 17-20 mm long, and has typical wasp colours of black and yellow. It is very similar to the German wasp, but seen head on, its face lacks the three black dots characteristic of that species.

This common and widespread wasp collects insects including caterpillars to feed to its larvae, and is therefore generally beneficial. The adults feed on nectar and sweet fruit. Common wasps will also attempt to invade honeybee nests to steal their honey.

Generally wasps do not have a mating flight. Instead they reproduce between a single queen and a male drone in the vicinity of their nesting area. After successfully mating the drones sperm cells are stored in a tightly packed ball inside the queen. The sperm are kept stored in a dormant state until the following spring. At a certain time of year (often around autumn time) the bulk of the wasp colony dies away leaving only the young mated queens alive. During this time they leave the nest and find a suitable area to hibernate for the winter.

After emerging from hibernation during early spring the young queens search for a suitable nesting site. Upon finding an area for her future colony the queen usually constructs a basic paper nest into which she will begin to lay eggs. This varies from species to species in specifics as not all wasps live in paper nests.

The sperm that was stored earlier and kept dormant over winter is now used to fertilize the eggs being laid. The storage of sperm inside the female queen allows her to lay a considerable number of fertilized eggs without the need for repeated mating with a male wasp. For this reason a single female queen is quite capable of building an entire colony from only herself. The eggs laid initially are sterile female workers who will begin to construct a more elaborate nest around their queen and take over her role of feeding the larvae.

In wasps sexes are significantly genetically different. Females have a diploid ($2n$) number of chromosomes and come about from fertilized eggs. Males in contrast have a haploid (n) number of chromosomes and develop from an unfertilised egg.

