

# In My Backyard Wasps

## Unholy Trinity of the Insect World



Last fall as I was walking past our little screened-in patio house, I opened its door and looked inside, trying to decide if it needed cleaning...it did...it always does. Satisfied that this was not the day to clean, I let the door slam and went on down the walk. Two steps later I felt an icy hot pain in my neck, like being stabbed with an ice pick soaked in acid and burning lighter fluid. Sure enough, an undetected wasp nest was attached to the screen by the door. Slamming the door upset them and they sent out a sentinel to me warn me to stay away... I was warned...painfully!

Later that evening after dark, I went out with a can of long-distance wasp spray and took care of the nest, which was small and only had seven or eight wasps on it. I learned long ago that fighting wasps during the day was a suicide mission. Better



Yellow Jacket Photo: Wikipedia Public Domain

to wait until dark and catch all of them on the nest, sleeping, or lethargic and blinded by the night. Wasps are cunning foes and if you throw a rock at a nest, they follow the trajectory of the rock back to its origin and come out with stingers polished and ready for mayhem. Wasp venom is especially potent and painful and some folks who are allergic actually die from it. Wasp attacks in China recently injured 1500 people and killed over forty. It was just another thing not to be messed with in Texas.

Texas AgriLife says that there are six main types of wasps found in Texas, with many species. Wasps, yellow jackets and hornets are usually lumped together by the general public, but each, plus others, are separate divisions, designated as paper wasps, yellow jackets, hornets, cicada killers, cricket killers and mud daubers. Identification can be difficult, since many have the yellow and black coloration, which usually is a warning of DANGER! But, examination reveals that paper wasps are generally slick with no bristly covering, yellow jackets are hairy buggers, bald-faced hornets (our only hornet in Texas) are black and white, cicada killers have slight yellow markings and are very large, cricket killers are totally black, and mud daubers have a long, slim waist and smaller abdomen.



Bald-Faced Hornet Photo: iStock.com

The wasps that we see most commonly are the paper wasps. They build an unenclosed nest of one layer of nesting cells, usually an umbrella-shaped object, attached under eaves, porches (or to the screen of a patio house) and high up out of the way. For the most part the nest is only used for one year, and then abandoned, but in some well protected areas a nest may be used perennially and become quite large.



Mud Dauber Photo: Jon Yiffo iStock.com

Yellow jackets build a nest enclosed in a bag of paper-like material. All wasps make this material by chewing wood fibers and pasting them together with saliva, which makes a gray, papery wall. Yellow jackets like to hang their nest high up in trees and in all the years I have lived in the Big Bend I have only

seen one yellow jacket nest, on the Gage Holland Ranch in Brewster County. On the inside, the yellow jackets build several layers of nesting cells and old nests can be six feet in diameter.

Bald-faced hornets also build an enclosed nest, usually in trees. My run-in with hornets came when I was at the Gage Holland and trying to cross through a Hackberry thicket. In this case, they boiled out of the nest, which I hadn't seen, and flew in a squadron across my bare arm, stinging as they went by.

Cicada killers and cricket killers build their nests underground. Gardeners and yard workers stumble onto them and get stung. They like to find a hole under sidewalks or patios and build their nests there.

Of all the wasps in Texas, mud daubers are the most benign. I have never been stung by one and they have never shown a bad temper in my many encounters with them. They do not make paper nests, but construct them out of dirt pasted together with saliva, like mini-adobes. They are either tube-shaped with several attached together, or in mud lumps, generally on the sides of buildings, up high, in a protected area. Mud daubers come in a variety of colors...black, black with some yellow markings and in some cases, iridescent blue-black.

Wasps, in general, have similar lifestyles. The young queens and drones are released in the fall, when they mate, the male dies and the young pregnant queen finds a place to hide for the winter, usually in cracks, crevices or under loose bark on trees. In the spring with the arrival of warm weather she emerges and finds a place to make a nest. She lays the first eggs and raises the brood herself. Subsequent broods are raised by the non-reproductive female workers and the queen only lays eggs. By fall the young queens and drones are produced and the workers



Yellow Jacket Nest Photo: Public Domain



Cicada Killer Photo: Mike Merchant



Cricket Killer Photo: Mike Merchant

gradually die off. The original queen goes into hiding for the winter and the nest is abandoned. Normally, it will not be used again. In the case of wasps creating a bag of material around the nest, they may overwinter as well and the nests re-used.

All wasps generally feed on plant nectar. When feeding their young, wasps will use insect material well chewed to feed to the larvae. Mud daubers feed their young with spiders. One paralyzed spider is placed in the nest and a single egg is laid on it. Then, the nest tube is filled with up to 20 more paralyzed spiders, which the larvae eat, then pupate and turn into adults.

There are a few facts about wasp stings. Only female wasps can sting, since the stinger is a modified egg-laying organ. The stinger is not barbed, as in bees, and can be re-used over and over again. One sting for a bee usually results in death for the insect. Not so with wasps.

Since ants, bees and wasps are in the same order their venom is similar and causes 40 to 100 deaths in the USA every year. They are not to be messed with, particularly if you are allergic. The venom contains over 30 enzymes and toxins and deaths occur when the victim has an allergic reaction to one of the ingredients. When stung the victim suffers immediate pain and localized swelling and redness, usually up to two inches around the site. If swelling increases or grows larger, a reaction may be under way and medical help should be sought. Although localized reactions frequently occur affecting a whole extremity like a hand, foot or leg and lasting up to seven days, they are generally not fatal. Anaphylactic shock and death can occur in as little as 10 to 15 minutes, so attention by a doctor is critical if you are allergic. Only 5 percent of wasp stings result in anaphylaxis, but caution is advised. If you are allergic, carrying an epinephrine shot kit or an antihistamine is probably wise.

Paper wasps, yellow jackets and hornets are the most likely to sting, especially when the nest is disturbed. Their venom is more potent than the solitary wasps... cicada killers and cricket killers. Solitaries are not as likely to defend their nests and only sting when trapped or pressed against the skin. The sting is momentary and effects go away quickly, due to the nature of their toxin.

Paper wasps, yellow jackets and hornets are an unholy trinity in my insect theology, along with rattlesnakes, scorpions and centipedes, the BIG three. Although they provide a service to humans in our environment, their nasty nature makes them a dangerous neighbor, especially if one is allergic to their sting. My motto is always, "Live and let live," but it is hard to let something live when it is stinging the heck out of you or endangering your family. So, my natural instinct is to shoot first and ask questions later. After all, I am a West Texas boy.

And, what is in your backyard?