H1 (No character limit): Bee Hive vs. Wasp Nest: Identifying the Differences

SEO Title (60 characters): Bee Hive vs. Wasp Nest: The Truth About Hives + More

Meta Description (150 characters): In this blog, our renowned local experts in integrative pest management compare bee hives vs wasp nests by location, construction, and appearance.

Keyword: bee hives vs wasp nests

Body Copy (400-500 words)

Along with ants and sawflies, wasps and bees are scientifically classified as insects in the *Hymenoptera* order. Thus, wasps and bees are close relatives in the animal kingdom and have many mutual features.

Like most creatures, wasps *and* bees need homes to safely shelter from predators and the elements, store food, eat, prepare for each day, and rear future generations. That is why they have hives, nests, or burrows.

If you've spotted a nest that belongs to some winged insect, but you're not sure if it's a bee hive or a wasp nest, this blog is for you. Today, our Birmingham-renowned experts in integrative pest management are here comparing bee hives vs wasp nests in terms of location, construction, and appearance. Keep reading to learn more!

Bee Hives vs. Wasp Nests: The Truth About Hives

We need to set the record straight about the bee hive vs. wasp nest debate: the most significant difference is that wasps' nests are built solely by wasps, and bee hives are the manmade structures in which beekeepers tend to honeybee nests and harvest their honey.

In other words, **there are no "natural" honeybee hives. Hives are the manmade structures in which beekeepers raise honeybee colonies. Wild honeybees build nests.**

Where Bees and Wasps Live

Unless you're a beekeeper, you won't trail any flying pests from your home back to a hive.

Therefore, the remainder of this blog will examine **nests and burrows:** the two types of homes bees and wasps live in that you may find around your property in Alabama.

Nests

Honeybee Nests

LOCATION

A new, independent honeybee colony will build its nest from scratch in deep cavities, mostly above (but sometimes below) ground if they are:

1. Nearly or entirely concealed and covered at the top, save for a couple of small, honey-bee-sized entryways. Essentially, **honeybees require a shelter with walls, a roof, and doorways**, just like people do, to keep the inhabitants and home interior dry, warm, and protected from the elements and predators.
2. Large enough to house one massive colony, which includes one queen bee, tens of thousands of female worker bees, and (for the summer only) hundreds of male drones.
3. Near flowering plants to collect nectar for making honey and beeswax.
4. Unoccupied since two honeybee colonies will not live together. However, after the colony settles, they might have a few intruders, like mites or tiny beetles.

CONSTRUCTION

Once an independent colony settles on a nest site, the workers build honeycombs using liquid beeswax that the youngest adult worker bees excrete from their abdominal glands after eating a lot of honey.

Immediately upon excretion, the clear liquid wax is exposed to oxygen, causing it to firm into soft white scales. Then, the worker bees in the hive chew the wax scales off each other's abdomens and gather the regurgitated, masticated wax in a pile, from which they construct honeycomb sheets and mold hexagonal cells. Honeybees build honeycomb sheets and their cells as nest insulation and protection, chamber division (making “rooms”), storage shelves for honey, and cradles for raising broods.

APPEARANCE

The outer appearance of wild honeybee hives is not a contained, oblong unit hanging from one tree branch, as cartoons depict. Instead, you aren’t likely to see much of a honeybee colony’s nest except for the exterior of the concealed cavity they built it in.

If you wanted to see the colony swarming a nest and their honeycombs in a tree hollow, you’d have to peer through one of the small honey-bee-sized entryways. We don’t recommend trying that; you’d probably get stung by worker bees guarding the nest’s exterior or entryways.

You can assume you have found a honeybee nest if you see many honeybees going to the same place and entering through small openings in a tree, shed, or other structure that meets the standard requirements for a nest site.

Paper Wasp Nests

There are multiple types of paper wasps, but no significant differences exist between them. Thus, **this section you're beginning to read teaches you to recognize *any* kind of paper wasp nest, including the types living in your area.** If you're native to Birmingham like we are, the most common paper wasp you'll see is the Alabama red wasp.

As you continue reading about paper wasps, remember that all types of them live in eusocial colonies, each with a queen, male drones that are only alive for the summer and fall to reproduce, and a large host of all-female workers—just like honeybees.

LOCATION

After she mates in the summer and fall, the sole queen of a paper wasp colony stores the reproductive material from her many male partners in her spermatheca organ. She hibernates in an underground burrow for the winter. When she wakes up in the spring, the queen fertilizes her own eggs (with the sperm she stored) and begins looking for a place to build a nest.

Paper wasp queens aren't as picky as a honeybee colony's scouts when it comes to choosing a place to build a nest; they mainly require:

1. A semi-covered nook in which a nest up to 8 inches in diameter can attach inside and hang high above the ground, away from where predators could attack them. This is usually in tree hollows or the upper corners of structures like sheds, covered porches/patios, rooms, etc.
2. Proximity to food sources and wood: wood is used to craft paper wasps' nests (more on that in the next section).

CONSTRUCTION

Another trait paper wasps share with honeybees is making their own nest construction materials. Wasp spit and masticated wood are their brick-and-mortar.

Queens start the process by flying to trees or man-made wooden structures, breaking off splinters, and chewing them up to combine the wood with saliva. Then, the queen uses the resulting mush to sculpt the nest.

APPEARANCE

When the nest dries, it is a thin, gray or brown papery structure with an upside-down umbrella shape, a maximum diameter of 6–8 inches, and many hexagonal cells lining the flat underside (where the eggs will go) visible from below.

A paper wasp nest is easy to recognize: it looks like a small, upside-down umbrella-shaped structure made out of gray paper and featuring hexagonal cells in which the queen will lay her eggs.

Burrows

Since there's no such thing as natural bee (or wasp) "hives" for you to worry about, and we've already explored bee and wasp *nests,* let's talk about wasp and bee burrows.

The main two examples of burrowing wasps and bees we'll cover today are the cicada killer wasp and the carpenter bee.

Cicada Killer Wasp Burrows

LOCATION

Cicada killer wasps are large, solitary wasps that make extensive burrows underground in flat, unoccupied stretches of sandy soil that get a large daily dose of direct sunlight.

CONSTRUCTION

After finding the perfect location and building multiple 15-celled burrows out of mud (essentially one nursery with fifteen or so cradles), the solitary mother cicada killer wasp lays one egg in each cell, leaving each one with 3 paralyzed cicadas to eat when they hatch.

The mother then moves on, abandoning her well-prepared children to embark on their own lives alone, and she will perish soon after.

APPEARANCE

From above ground, each burrow looks like an oversized anthill: a pile of dirt on top of flat ground with a hole in the center.

Carpenter Bee Burrows

As you're about to learn, carpenter bees and cicada killer wasps share more comparable traits than carpenter and honey bees (aside from being different species of *Hymenoptera*).

LOCATION

Carpenter bees do not put the same detail into selecting the site of their homes as their honey-making counterparts do. Instead, they just need dry, untreated wood, and they're not too picky. You can find their burrows in logs, tree hollows, and even untreated parts of homes like porch beams or exterior siding.

CONSTRUCTION

Like cicada killer wasps and unlike eusocial honeybees, carpenter bees live in burrows and are primarily solitary. They do not live in giant colonies or among multiple generations at once. Instead, they live in singular generational units similar to humans, with one adult female and male each (the mother and the father) and their eggs (the children).

The process of burrow construction surrounds the carpenter bee life cycle, beginning in the spring when broods of ~7 young adult bees emerge from hibernation and embark on the hunt for a mate. After a male and female carpenter bee find each other on their flight, they mate, then search for the perfect wood to create a burrow for laying their brood of fertilized eggs.

When they settle on some dry, untreated, and soft wood, the male carpenter bee guards the burrowing site, and the queen begins drilling a hole into the wood that's only a fraction of an inch in diameter, using her sharp mandibles. Inside the hole, the queen carpenter bee positions herself parallel with the wood grain (cool, right?) and uses it as a guide to tunnel along inside. She continues to drill herself further until the network of tunnels in the burrow reaches ~7 inches deep.

Similarly to how wasps produce their nest materials out of wood and saliva mush, the queen masticates the sawdust and spits it out, using the resulting mixture to create the cells that will cradle the seven or so eggs she will lay and seal them in with pollen to eat upon hatching.

Then, the male and female will usually die together in the same burrow (but in a separate area from their brood) or in another abandoned burrow.

APPEARANCE

Carpenter bee burrows are easy to spot. Just look for holes in wood that are about an inch in diameter. Depending on the time of year, it's easier to know that the hole is from a carpenter bee because the male bees will fiercely guard the outside in the warmer seasons.

Most of the time, if there are multiple new holes in wooden structures or trees around your property, it will be a pest-related problem, whether or not carpenter bees made them. Ultimately, if you spot some that look remotely like carpenter bee burrows, give your trusted local pest control experts a call to come investigate.

If You Find a Bee or Wasp Habitat…

If you find a burrow or nest where wasps or bees live on your property, remember where it is, but keep your distance. Do not try to touch it or take a closer look. Instead, call a professional pest control agent in your area so they can come to your property, safely remove the nest, and spray your property with preventative insecticides.

…You Need A Pest Pro

You shouldn't hesitate to call a professional to get the bee and wasp habitats off your property for many reasons:

- Yes, wasps and bees are pollinators and have a role in the food chain. However, their stingers are painful, and many people and pets are allergic to them.
- Unless you train your pet to avoid bees and wasps and their habitats or warn your loved one to watch out for wasps or bees on your property, they might stumble upon a nest on accident (especially the underground ones) and get stung.
- Wood-burrowing varieties can damage wood on your property.
- Infestations are unsightly.
- Having an excess of any insect flying around your property can be a nuisance that hinders outdoor activities.

Birmingham Homeowners Count On Us!

Whether you've spotted their habitat using this guide or you see an abundance of wasps or bees on your property, you can trust Vulcan Termite & Pest Control to save the day! We'll remove the nest or burrow and the pests populating it from your house, lawn, apartment, shed, office, or other property in Northern Central Alabama, and implement solutions that keep them from returning!

For 40+ years, our team of integrative pest management professionals has proudly aided hundreds of families in Birmingham and nearby communities by investigating and solving pest problems on their property.

Call (205) 514-6525 or contact us online today, and we'll gladly perform a FREE evaluation and create and implement an effective strategy using our tried-and-true methods so you and your family can enjoy a pest-free home.