

Before I'll get into answering your specific questions, here is some basic background info:

All Wasps that make Western Washington their home are members of the family of North American Predatory Wasps (Family Vespidae). Members have similar physical characteristics: They have a skinny to stout torso, are typically between $\frac{1}{2}$ and 1 inch long, are mostly hairless (as opposed to fuzzy), have a clearly segmented body. They have long skinny wings, and if you manage to get a close enough look at their face, you can see large mandibles they use to manipulate their prey.

The most recognizable characteristic are the have black and bright yellow stripes, as opposed to the brown or honey colored stripes of honey bees. Bald Faced Hornets (the kind you saw me remove on Saturday) are an exception, as their body is mostly black with white tips. The Bald Faced Hornets of the Pacific Northwest are also not "true" hornets, but rather are wasps (genus *Dolichovespula Maculata*). They are closely related to the Aerial Yellow Jacket - *Dolichovespula Arenaria*.

The group of Wasps that seem to cause the most trouble for Western Washington home owners are the Yellow Jackets. Besides the aforementioned Aerial Yellow Jacket, which builds above ground nests, gray in color, and commonly attached to structures, we also have the Common Yellow Jacket - *Vespula Vulgaris*, the German Yellow Jacket (sometimes also called German Wasp) - *Vespula Germanica*, and the Western Yellow Jacket - *Vespula Pensylvanica*. The last three primarily build their nests inside wall cavities, logs, rotting stumps, railroad ties, landscape timber, retaining walls, and underground.

Western Washington is also home to a representative of the Paper Wasps - Genus *Polistinae*, specifically the European Paper Wasp - *Polistes dominulus*. They are easily identified visually by their distinctive long dangling legs and clearly segmented lower abdomen, and they build small, often uncovered paper nests, commonly attached under eaves or overhangs.

When dealing with members of the Wasp family, the structures they build are commonly referred to as nests. The term "swarm" and "hive" is usually reserved for Honey Bees,

> What should people do if they find a hive/swarm in/near their house?

If the nest is outside and visible, for example in a tree or a bush, people should consider leaving it be. Of course if somebody got stung, or if there is a family member with allergies, or if the insects become overtly aggressive, they need to be dealt with. But if let's say the nest is in the far corner of the back yard, and high enough above the ground that the inhabitants are not bothering anybody, homeowners can just wait them out. Members of the Wasp family abandon their nests in the fall, all occupants die and nothing is left in the nest. Only the new queens survive the winter, they hibernate individually in wooded areas or in the ground.

If the nest is attached to the outside of a structure, or clearly visible inside a structure (eg. hanging inside a shed, garage, etc), people should consider similar factors. If they can wait them out without being inconvenienced, leave them alone. Keep an eye on activity levels and size of the nest, to see if there are any major changes that may require a change of plan.

If the nest is not visible, but the insects are coming and going from an area on the outside of the house, for example a crack in the siding, an area near the roof vents, etc, there is a good chance the nest is inside a wall or ceiling or in the attic.

Removal almost always requires cutting into the structure (usually from the inside, drywall is the least expensive to repair) to get to the nest.

You can wait out those nests as well, but what homeowners really want to watch for is whether insects are making it inside into living spaces. They can come in through cracks in the wall, ceiling light bases, HVAC vent openings etc. Also, if you can hear a scratching, clicking noise coming from inside a wall, that's usually Yellow Jackets chewing on the drywall from the inside. There is a good chance they will eventually break through, and then end up in the room in large numbers.

If you hear the clicking, it's high times to call a professional.

> What should people NOT do if they find a hive/swarm in/near their house?

Don't agitate them, don't poke at the nest. You will get stung. If they are coming and going from a crack or small opening on the outside of your house, DO NOT seal them in, eg by plugging the hole with caulk or foam spray. There is a good chance the insects will find another way out, possibly into the inside of the house. If you do manage to seal them in, they will all die inside the wall, and rotting larvae can produce a really foul odor.

I personally would discourage anybody from just buying a can of RAID or any of the many competitors, and try to spray a nest on their own. That stuff is highly toxic, not just to wasps, and can harm or kill other insects (like honey bees), and even pets and humans. External nests have many layers of paper that the poison has to soak through to be effective. Chances are a single application won't be successful.

Even if it is, you are still left with a big poison soaked ball that you have to dispose of somehow.

If the nest is inside a wall, regular spray poison is almost always ineffective. The crack or opening they are getting in through is usually 12-36 inches away from the actual nest. So even if you blast the entrance with poison, you will only kill a few insects that happen to be coming and going at that time. A handful more may die when they come in contact with the poison later, but the vast majority of inhabitants will be safely tucked away inside the nest, the poison never reaches them.

> There are many different bee species. What are the most common? Any advice for keeping people's yards/homes free from this type (or any aggressive type?)

Members so the Yellow Jacket group certainly make up 80% of all removal calls I get. They tend to be the most aggressive and create problems for people. They sting without much provocation, and come around when there are sweet beverages or meats being consumed (they are meat eaters). Of all the Yellow Jacket calls, I would say 75% are about nests inside walls, that have to be cut out.

> Do all bees die out in the fall/winter? Which types do/don't?

All members of the Wasp family (including Yellow Jackets, Bald Faced Hornets, and Paper Wasps) die out in the Fall/Winter. None of their nests stay active more than one season (save for the extremely rare occasion, where the conditions are just perfect, but I have only seen that once, where a nest managed to survive the winter). At the end of the season, the outgoing queen lays several dozen new queen eggs, which hatch into next year's queens, and after they mate, they leave the nest and seek shelter in wooded areas or in the ground to hibernate until the next spring.

The same thing goes for Bumble Bees, only the queen survives the winter, and starts a new colony in the spring.

Honey Bees live year round. They reduce their activity in the dead of winter, and stay mostly inside their hive and feed on the honey they have stored. A Honey Bee queen can live 2-3 years, and Honey Bee colonies can survive virtually indefinitely, given the right environmental conditions. Individual workers only live about 6 weeks, but the queen is constantly laying eggs to produce a steady supply of new workers.

> What about honey bee swarms? What should be done if one appears in someone's yard?

Homeowners should contact a qualified beekeeper who will come and capture the swarm. The Puget Sound Beekeeper's Association (PSBA - I'm a member as well) publishes an annual "Swarm List" with names and phone numbers divided into geographical areas, where people can call if they have a swarm on their property. While in their swarm cluster and not moving, the honey bees are at their most docile and not at all aggressive. I would not recommend touching them without proper protective gear, but they also won't "attack" people. People also have the option of just doing nothing, the swarm will eventually leave on its own, anywhere from a few hours to a few days after it showed up. But for honey bee population management reasons, calling a beekeeper is recommended.

> What other bee issues have you run into that would be good to cover?

People are not very good at identifying what kind of stinging insect they have - which is OK, they are not experts. But I get so many calls where people are just

insistent that they have honey bees living in their walls etc, when 99 out of 100 times they are really Yellow Jackets. People are really disappointed when I come out, take one look, and tell them they are not honey bees, when in fact they should be glad. A Honey Bee removal is much more difficult (and costly) than a yellow jacket removal. Honey bees build wax comb, which is full of larva and actual honey - all of which has to be removed after the bees have been removed, because otherwise the wax can melt and drip down inside the walls, honey can ferment and rot, and attract rodents. It's a messy, messy job.

I think that's it in a nutshell. We try to give people choices, educate them, and help them make the best decision according to their specific circumstances.