

*All around in my home town
They're trying to track me down.
They say they want to bring me in guilty
For the killing of a deputy,
For the life of a deputy.*

*I shot the sheriff, but I did not shoot the deputy.
I shot the sheriff, but I did not shoot the deputy.*

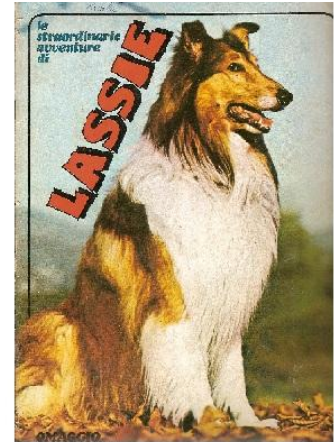
- "I Shot the Sheriff", Eric Clapton

When I give presentations to school classrooms, the most important take-away message that I try to share is the difference between honey bees and other flying, stinging insects. "Normal people" (non-beekeepers) often don't understand or appreciate the difference between our lovely little girls and nasty creatures like yellow jackets. They are all "bees."

For example, around 50 people die each year in the US from insect stings, typically due to the victim's hypersensitivity rather than the gross number of stings. This statistic is often reported as deaths due to "bee stings" or "bee and wasp stings" but the truth is that on average, only one of those annual deaths is from honey bee stings. The vast majority are due to yellow jackets. Yet during picnic season, who gets blamed for hanging around Uncle Ed's Coca Cola? Who "bit" little Susie? The bad behavior of yellow jackets is commonly attributed to honey bees, which fans the hysterical fear many "normal people" have regarding our little angels.

(To put deaths in perspective, about 40,000 people commit suicide each year in the US and about 40 are killed by lightning strikes. So on average, people are more at risk of death from themselves and the air than they are from honey bee stings!)

The first step in correcting the public record is to educate people about things that aren't bees so they'll know the difference. Most folks know the difference between a cat and a dog. Why not a bee and a yellow jacket? Yellow jackets are probably the most common honey bee imposter. If you give them a close look,



Can you tell the difference?

Top: Morris the Cat is on the left, Lassie is on the right.
Bottom: A yellow jacket is on the left, a honey bee is on the right.

however, they are no more similar in appearance to bees than Morris the Cat is to Lassie. Major differences include:

1. Yellow jackets are wasps, not bees, and they have a "waspy" figure, characterized by a thin waist. Due to the way they are built, at first glance honey bees appear to have more of a "pleasantly plump" waist, even though they actually don't.
2. Honey bees are fuzzy, like little teddy bears. Yellow jackets are shiny.
3. As with honey bees, yellow jackets vary in color, but common ones are lemon-yellow, whereas common honey bees are golden.
4. Honey bee wings are relatively wide and rounded; yellow jacket wings are thinner and more rectangular.
5. Yellow jackets are a little smaller than honey bees.
6. Honey bees live off of nectar and pollen. Yellow jackets eat nectar, pollen and meat. The meat comes from other insects and anything else they can catch or find (including you!).

7. Worker honey bees have barbed stingers that can't be easily removed from elastic mammalian skin, so they can only sting people once and they die in the process. Yellow jacket stingers aren't barbed so they can sting as many times as they like. So if someone is stung and there isn't a stinger left behind in the skin, make sure the victim blames a yellow jacket! If there is a stinger, well, sometimes our girls do "shoot the sheriff" and the stinger is the proof. But in that case, point out that the offender has been punished with death and will never sting anyone ever again.
8. Yellow jackets also can, and do, bite, causing pain from both ends. Honey bees don't bite people; their jaws aren't made for it.
9. There are types of yellow jackets which nest up high (e.g., in trees or under the eaves of a house) and other types which nest in the ground. Wood piles seem to be a frequent choice for a nesting site, as does the spot directly under your lawn mower. European honey bees rarely nest in the ground.
10. Every single yellow jacket dies in the winter except for young mated queens that will start new colonies next spring. The mated queens find a safe, protected place to hide out over winter. Honey bees carry their entire populations over winter. When people come to me in the fall asking how to get rid of yellow jackets, I tell them that the simplest and best thing to do is just wait a while. The colony will die once winter sets in. Problem solved.
11. Since yellow jackets start out each year's colony as a single new queen, it takes a long time for the colony to grow large enough for people to notice. Often it isn't until mid summer (picnic season) before there are enough of them to annoy anyone.

Another Commonly Misabeled Creature

As long as we are educating the public about the difference between bees and other flying critters, let's talk about a hornet that seems to almost always be misidentified: the

European Hornet (*vespa crabro*). These hornets love to eat honey bees when they get a chance and are often seen lurking around my hives. They aren't a genuine problem, any more than the birds that eat a bee every now and then are; they are just interesting. "Normal people" call them Japanese Hornets and send me links to You Tube videos showing the real Japanese Hornets attacking hives en mass and quickly wiping them out. But we do not have Japanese Hornets in the United States.

European hornets are huge and very yellow. Their large nests are made of paper and look like bald-faced hornet nests except that they are tan rather than grey. Hornets are carnivorous and can be aggressive but I have never been bothered by one, even though I have had them nest in a corner of my back porch. As with other hornets and wasps, the colony dies in fall, leaving only a new queen to restart the process in spring.

More Information

As beekeepers, the public expects us to know everything about every type of bug, especially ones that sort of look like bees. I encourage everyone to read enough to get a basic understanding of common bee-like creatures, at least enough to be able to dispel common misunderstandings. A good place to start is the [NCSU Apiculture page](#), particularly a nice article entitled "[Non-honey bee stinging insects in North Carolina](#)." Knowledge, and sharing that knowledge, is the best way to keep our honey bees' reputation intact!

Sad Note

Dr. John Ambrose, NC beekeepers' biggest champion and friend, passed away on January 8th after a short bout with cancer. Dr. Ambrose was a highly revered apicultural scientist and educator at NCSU. He was North Carolina's State Apiculturalist until passing that role to Dr. David Tarpy in the mid '90s. Dr. Ambrose started our state's Master Beekeeper Program (MBP) in 1982, modeling it on the one at his alma mater, Cornell University. He administered the MBP for many years, took a

break, and then picked it up again recently. He was a cornerstone of the NC State Beekeepers Association (he became its president at the beginning of this year), the NCSU Apiculture Program and NC's Cooperative Extension apiculture efforts. His humor, wisdom and knowledge will be greatly missed.

Dr. Ambrose took great pleasure in noting that Saint Ambrose is the Patron Saint of Beekeepers. No doubt he's sharing his many stories with his namesake right now.

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