Honey Bee Suite

A Better Way to Bee

December 28, 2014 at 4:33 pm

The truth about honey bee decline

The popular press has created a mythical picture of honey bee decline, at least in North America. Sadly, many people are confused by all the misinformation.

Some non-beekeepers imagine that if thirty percent of all colonies are lost each year, then honey bees will soon become extinct. For example, if you start with 3 million managed colonies and lose thirty percent, you will have only 2,100,000 remaining after the first year. After five years you will have just 504,210. This is clearly not so.

Annual losses are replaced

Non-beekeepers don't realize that annual losses are quickly replaced by raising queens, making splits, and capturing swarms. I've heard many potential beekeepers say they want to help save the bees by becoming a beekeeper. While this certainly is magnanimous, and I love seeing new beekeepers, it is more than a bit naïve.

Related to that misconception is the idea that the Endangered Species Act should be protecting the honey bee. People ask, "Doesn't the government realize the trouble we're in?"

In fact, the honey bee isn't even close to going extinct. And in any case, the Endangered Species Act was designed to protect native species. The European honey bee was imported from—no surprise—Europe, so it's in no way native to North America. It has been treated like domestic livestock ever since its arrival in 1622. Yes, it goes feral now and then, but so do cats and dogs. Feral does not equal native.

Not endangered, but plenty of trouble

Still, there are significant problems. Beekeepers are required to spend more time and money every year to keep their workforce intact. Growers, in turn, suffer losses if the beekeepers cannot supply enough pollinators. Big losses mean big expenses, and we pay for these in food prices. Commercial beekeepers themselves may go extinct if the number of honey bee problems keeps increasing.

In North America we have been concentrating honey bee pathogens and parasites from around the world in one place, while at the same time limiting the importation of genetic variability. What we have is a mess. But what concerns me even more is the plight of our native bees.

Honey bees get all the credit

The spotlight on honey bees has directed our attention away from the species that more immediately need our help, some of which actually *are* going extinct. We tend to think of food when we think of bees, but food is just part of the story. I like to remind folks that bees pollinate many fibers, trees,

shrubs, medicinal and fragrance herbs, flower gardens, parks, plants that hold up banks and hillsides, and plants that filter our air and water. Many of these are pollinated by native bees, not so much by honey bees.

Since I started to watch pollinators carefully, I've realized that a lot of the credit we give to honey bees should actually go to some of the other species. Some species are pollinating all day long, side by side with honey bees, but they are so small and nondescript that no one even notices. Some of these, like the tiny Lasioglossum bees, are incredible pollinators, but because we can barely see them, we don't care. Some bee species have already gone extinct, and we simply shrug. When was the last time you saw a "Save the Lasioglossum!" poster?

The good news is that, for the most part, a bee is a bee. So an environment that is good for one type of bee is most likely good for another. Consequently, planting a diversity of flowers, limiting pesticides, and preserving habitat are good things to do. In that sense, the honey bee spotlight has helped all bees.

Not all bees are honey bees

The bad news is that people have come to equate the word "bee" with "honey bee." This was never so obvious to me as it was this fall. I was taking an online beekeeping course at one of the state universities. One day, the discussion centered around antenna cleaners, so I submitted my favorite photo of a sweat bee using its antenna cleaner. The professor responded, "I like it. Send me a picture of a bee doing that and I'll give you extra credit!"

This floored me. After all, what part of a sweat bee isn't a bee? At first I thought he didn't know a bee when he saw one. But gradually it dawned on me that, in his mind, "bee" meant "honey bee." He meant to say, "Show me a honey bee doing that and I'll give you extra credit." I think. I hope.

Caring for the natives

All of this brings me to my New Year's resolution: unless it is painfully obvious from the context, I am going to write "honey bee" instead of just "bee." I already began doing this back in October, the very day of the sweat bee incident. I thought it would seldom be necessary since I'm usually writing

specifically about honey bees and beekeeping. But to be totally clear, the adjective “honey” is necessary more often than I imagined. I’ve been correcting myself a lot.

My goal is to remind people there is more than one kind of bee—more like 20,000 kinds worldwide, at least for the moment. We need to care about all of them if we want to keep all of them. We need to realize that the honey bee isn’t the bee in the most immediate danger. We need to understand that we can do a lot to help all bees without keeping honey bees. But most of all, we need to understand that whatever we decide do, we had better start doing it very, very soon.

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A male sweat bee, *Halictus rubicundus*, cleaning his antenna. © Rusty Burlew.