

# Over 100 crops depend on bees for pollination

By JOANNE SPAHR  
ROBESONIA - Mention the word "bee" and nearly everyone loses their "cool", so to speak.

"A bee?!" they whisper in terror. "Where's a bee? Is he on me somewhere?"

Yellow jackets, wasps, bumble bees, honeybees, and almost any stinging insect are commonly classified - with one term - "bee."

According to several beekeepers in the area, this is totally unfair. Like the current misnomer, "swine flu", the word "bee" as an overall name for stinging insects gives the honeybee a bad reputation.

"The only fear is fear, itself," says Walter Bucks, Robesonia R1, a hobbyist and ardent fan of the honeybee.

"We need the honeybee," he notes, "for the pollination of over 100 of our crops." And, this is a fact.

The United States Department of Agriculture says that the following agricultural plants would not be able to produce fruit or seed if it weren't for insect pollination; alfalfa and berseem; almond, apple, apricot, asparagus, avocado, blackberry, blueberry and huckleberry, broccoli, brussels sprouts, buckwheat, cabbage, carrot, cauliflower, celery, cherry, chestnuts, clovers (alsike, crimson, red, strawberry, white, and Ladino white), coffee, collards, cotton, cranberry, cucumber, dewberry, gooseberry, grape, flax, honeydew

melon, kale, kohlrabi, lima beans, macadamia nut, mandarin, mango, muskmelon, onion, parsnip, passion fruit, peach, pear, pepper, persian melon, persimmon, plum, prune, pumpkin, radish, raspberry, squash, strawberry, sunflower, sweet clover, turnip, and watermelon, to name a few of the 100 crops.

In total, the USDA estimates that one billion dollars worth of crops are dependent of the honeybee for pollination and that five billion dollars worth are benefited by honeybee pollination.

Some other up-to-date figures reported by Bucks is that in a good year, the honeybee will produce 60 pounds of honey and help to generate 80 tons of fruits and vegetables. So, their value as pollinators is 20 times their value as honey-makers.

Some unique facts associated with the honeybees are that honey is nearly a perfect food. It never spoils and never promotes bacterial growth.

According to Garner and Betty Burt, commercial beekeepers from Columbia county, Egyptian tombs have been opened up to reveal honey still intact.

The Burts should know what they are talking about, since they have approximately 900 hives spread out over a 35 mile radius.

And, in the summer, when it gets too cold outside for their honeybees, they take them to Florida. The bees don't get a vacation,



Two concerned beekeepers are Walter Bucks (left) and Garner Burt (right).

however. Instead, they end up making orange blossom honey for their keepers.

A honeybee pollinates by inadvertently dropping bits of pollen, which gathers on their bodies as they collect nectar, as they fly from plant to plant. This cross-pollination, which is also performed by other insects, the wind and hummingbirds, produces a genetically superior crop to those produced by self-pollination.

One of the biggest plus factors in the use of the honeybee for pollination is that they only collect one type of nectar at a time. This

is very important to plants that are self-sterile and must be cross-pollinated. Other pollinating insects may gather nectar from 50 - 60 types of plants.

Yet, with all these good points to their name, very few people know about bees, and very few people care. As a result, bees are being exterminated right and left by various causes.

Just recently, 2000 colonies were destroyed in Lewiston, Idaho, and for three years now, the states of Washington and Oregon have had to undergo "bee lifts" to replenish the bee

population they have destroyed. Without the bee lifts, their crops would not have pollinated. And, the Wall Street Journal reported in 1974 that there were 20 per cent fewer honeybee colonies in the U.S. than 10 years ago.

One of the worst problems, according to Bucks, who is especially concerned for bee extinction, is that people spray excessively with overdoses of insecticides, which can kill the bee, or they employ insecticides that are toxic to this insect.

"The average person just doesn't know or realize the

affects they can have," he explains.

Another problem is draining of the sprayer and letting the water stand in a place where it doesn't evaporate. The reason this is a problem is that bees use stagnant water, pollen, and honey to feed their larvae. If they pick up water with insecticides, they will kill off their young.

So, Bucks offers some suggestions to farmers and home gardeners, and almost anyone who uses pesticides.

First of all, there are certain pesticides which will do the trick on the unwanted insects without being toxic to the honeybee. The names of these can be found out by just a little inquiry when buying pesticides.

Another suggestion is that when dumping and cleaning out the sprayer, make sure that the contents can either evaporate quickly or drain properly.

A third caution is to never spray something that is blooming, since the honeybee will be gathering nectar from the blossom and inadvertently pick up the insecticide. Or, another possibility to cut down on killing the bees is to spray at night when they are not flying.

These are just a few suggestions to help to keep the little pollinators perpetuating and flying.

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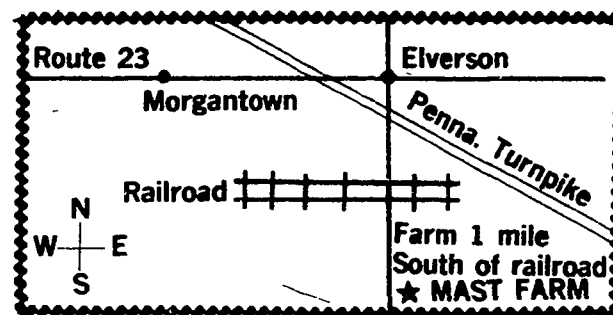
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