

# Bees

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laying thousands and thousands of eggs."

Brossman told how each bee must return to its own hive every day. Guard bees are posted at each hive entrance and drive off any wayfaring bees who mistakenly drop by.

Becoming a guard bee is one step on a honey bee's progressive promotion chart, he said. When the worker bee is hatched after a 21 day incubation, it immediately begins its duties as a nurse bee and feeds a mixture of pollen, honey and water to the other larvae in the 'nursery'.

The worker bee then graduates

to guard, and finally earns its wings. It then takes to the field to gather nectar and pollinate flowers, working itself to a seasonal grave as its wings become torn and tattered. The worker bee's life ends in service.

The 'lazy' bee of the hive is the drone, the male. Only four or five drones are permitted in a hive. Their only function is to mate with the queen bee during her first year, said Brossman.

After the queen mates for life, the drones are tolerated in the hive until fall. They are then driven from the hive to a death of starvation.

"The worker bees don't want to feed them over winter," Brossman said.

For the worker bees and queen

bee remaining in the hive over winter, the chance of survival depends on the amount of honey they have produced that summer, Brossman pointed out.

"I can tell by lifting the top super, where the honey is stored, if there is enough for them to make it through the winter," he said with pride. "Some years there's hardly any honey, even for my family's use. The bees have used it up to raise their young."

Last year, he said, his hives yielded 300 pounds of honey, where the year before, they made 600 pounds. It all depends on the weather, he explained.

The apiarist told how the bees produced honey from nectar gathered from flowers and blossoms.

"When the worker bee enters the hive, the nectar is put into the frames found in the bottom of the lower super. Thousand of bees then fan their wings creating an air current which evaporates moisture from the nectar.

"The fanning maintains the hive at one temperature, acting like a heater when it's cool and an air conditioner when it's hot. If a hive gets too cold in the winter and the bee larva die in the frames, called 'chill brood', the bees will uncap the cells, remove the dead larva, and the queen will deposit new eggs.

"Once the moisture has been evaporated from the nectar, the 'honey' is moved up through the hive and put into the honeycomb cells. The bees continue fanning as the honey 'ripens'.

When the honey is ripe, they seal it with a wax cap. If it isn't capped, moisture can get in and the honey will sour."


Brossman said he allows his bees to make honey until October, (Turn to Page C20)



A puff of smoke releases its calming effect on the bees as Brossman examines the frames stored inside the bottom super. The bees continue to work on the frames he holds, feeding the young a mixture of honey, pollen and water.

"Without honey bees, there'd be no honey, no fruit, nothing," states Brossman.





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