

Hobby keeps Jim Busy as a Bee

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Forget about the birds, Jim Small of Shippensburg is interested in the bees.

Jim's interest in honey bees began five years ago when his son-in-law started several hives in his yard. Jim, a nature lover of sorts, found the bees so fascinating that he had to start his own bee project.

However, according to Jim, you simply don't get some bees and put them in a hive and it's done. The five year veteran explained you first have to learn the basics and build a lot of equipment before you can start beekeeping.

Some of the basic equipment for a beginning beekeeper is the hives, frames, smoker, hive tools, veil, gloves and feeder.

Building equipment is the beekeepers' past time in the winter months, said Jim. He builds all the outer boxes of the hives. Then, Jim orders the precut inside frames and puts them together.

But, Jim's work isn't quite as simple as it sounds. After he nails the frames together, a beeswax foundation is wired into the frame. The beeswax has to be placed in the frames in a straight and secure fashion which helps the bees construct a sound comb.

However, Jim said the real fun begins in the spring and summer when the colony begins its busy activities. Once the alfalfa, asters, buckwheat, clover, cotton, goldenrod, holly, locust (to name a few of the bee-attracting flowers),

start blooming the bees are really busy buzzing. And Jim added, "Hopefully the honey supply is growing."

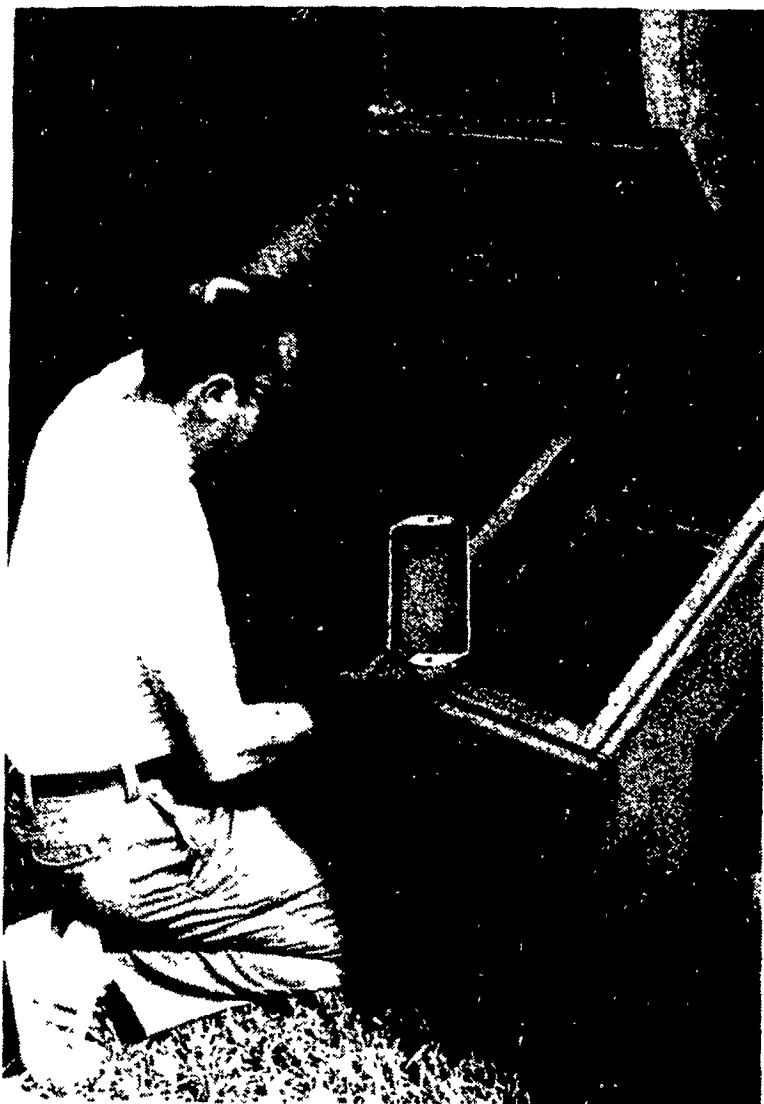
Jim explained the honey making process step by step, saying that the bees can't make honey without nectar from the flowers. This nectar is in reality the raw honey and the bees' main source of food. The bees collect the nectar and gather pollen, another essential ingredient to the bees' life. The worker bees collect these two substances at the same time. The nectar is collected in the mouth and the pollen is gathered in small particles on the hind legs.

Once inside the hive with their catch, the bees evaporate the water from the nectar, changing the nectar into honey. Then, the bees seal the honey into the cells of the honeycomb. The bees also store the pollen in the cells of the honeycomb. It is commonly known as 'beebread.'

According to Jim, during the collecting season, the worker bees do something "quite fascinating". When a bee finds an area populated with nectar-filled flowers, trees and shrubs, it quickly will return to the hive and do the 'bees dance.' In our society, this dance would probably resemble 'rock and roll.' With this dance of shaking, twirling, and wiggling, the bees tell the colony exactly where the good collecting ground is.

Jim said he has been fortunate

Jim shows us a close look at the brood frame as he searches for the queen bee. There is only one queen bee in each hive.



Jim works with his wax melter where he melts the bees honeycombs into blocks of wax. Beeswax is used to make high quality candles.

enough to see this dance and that it is quite amazing.

The bees store the honey, according to Jim, for their winter food supply. However, Jim said when there are several thousand bees in a hive, they can store quite a large amount of honey. The surplus is what Jim can claim. Last year, Jim worked four hives and collected 250 pounds of honey.

The pollen or beebread - the food for the unhatched bees - is also consumed by humans. Jim and his family eat it frequently. "We like the taste, and pollen provides substantial nutrients to the body," Jim said. He noted that pollen is sold in health food stores and athletes are great consumers

of the bee product. The pollen provides their bodies with essential nutrients and energy.

However, the bees are the largest consumers of the pollen. They consume about 100 pounds of pollen a year.

During the honey-collecting season, the queen bee is only busy doing one thing: laying eggs. The queen bee can lay up to 1,000 eggs a day. The eggs are stored in the honeycomb in what is called the brood chamber. Honey is also stored in the corners of the brood chambers.

Jim explained that the worker bees which are undeveloped females only live for six weeks. Therefore, while workers die,

young bees hatch and are ready to take their place in the colony. During the peak time of collecting in the spring, about 60,000 bees can be living in the hive at one time.

With the worker bees live the male bees or drones. Their only purpose in the colony is fertilizing the queens' eggs. Compared to the several thousand worker bees, there are only a few hundred drones in each hive.

Jim remarked, "Bees must have been the inventors of women's liberation." Jim laughed, explaining his remark: after the collecting season is over in the fall, the workers remove the drones from the hive. "I have seen the workers bodily take the drones from the hive, fly them away and drop them," Jim said, adding that the workers also remove any worker bee who doesn't work during the collecting season. "They keep a clean home."

Jim said that each day he learns more about beekeeping and bees. "Bees can be contemplative or they can be nice," he said. And occasionally he even gets stung.

Recently, Jim's enthusiasm has captured the interest of several local children, and he has started a 4-H Bee Club. The club has nine members, and Jim has been teaching them the basics of beekeeping. Several of the members this year have bought their bees and now have one or two hives. Jim said that beginners usually buy a package of two to three pounds of bees with a queen from certified bee suppliers. Beekeepers can also start new hives by capturing a live swarm. Jim said he would like to teach the 4-H members how to capture a swarm, but has had little luck in finding one.

Eventually, Jim would like to turn his fascinating hobby into a business by selling the honey, honeycomb and beeswax. This year he is working towards his goal. He expanded his hives and now has a total of 15. He said he isn't looking for a large supply of honey this year, but next year, "I should be as busy as a bee collecting the surplus honey."

Jim remarked, "The wonderful



Jim is veiled and is taking a close look at a very busy hive. He gently picks up a brood frame crawling with active worker bees.

Homestead Notes

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