

# ME? BEEKEEPING! THE WORLD OF BEEKEEPING It's too much fun to pass up!



# Dadant

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## MAN'S LOVE AFFAIR WITH THE HONEY BEE

Even before recorded history, man was gathering honey from honey bees living in hollow trees. But honey wasn't the only reason for keeping honey bees because man soon learned that the honey bee was an interesting and exciting social insect. The mystery and fascination of the hive and how honey bees live, work and reproduce has intrigued man ever since.

## BEEKEEPING AS A HOBBY OR VOCATION

Dadant and Sons have been supplying the beekeeping industry with supplies and equipment since 1863. In that time we have developed equipment that makes beekeeping easy and fun, for even the inexperienced beginner.

Hundreds of thousands of people in all walks of life have become enthusiastic beekeepers. Whether it is in your own backyard, apartment rooftop, small town garden or farm, beekeeping can fit in anywhere.

## GENTLE HONEY BEES

It is unfortunate that many people have been taught to be afraid of honey bees. Many times people cannot even recognize the difference among honey bees, wasps, hornets, bumblebees or yellow jackets. They categorize all insects that buzz and sting into the same group. This is wrong. Ironically, beekeepers are seldom stung. Truthfully, honey bees sting only when they feel they or their home is being threatened. The drone or male honey bee cannot sting at all and the queen bee rarely stings. However, on rare occasions the worker honey bee will sting if she feels the entrance to her hive is threatened. The only consolation for the person who has been stung is that after she stings, her stinger is pulled from her body and she soon dies.

## THE HONEY BEE COLONY

The story behind what appears to be the casual movement of honey bees from flower to flower is the discovery of an industrious and tireless society. Honey bees are social insects. They band together and divide labor. The honey bees' society is made up of three types of individuals with sharply defined duties and functions. The population of the colony numbers from about 7,000 in mid winter to over 70,000 in late summer and consists of one queen, several hundred drones and thousands of workers.

## THE WORKER

The female worker honey bee is the laborer of the colony. Workers gather all the nectar and pollen, feed young larvae, warm and protect eggs, larvae and pupae, supply water, secrete beeswax, build comb and do many other tasks. The worker starts as a fertilized egg, which hatches into a larva. The larva grows, matures and soon changes into the next form called a pupa. The pupa then matures into an adult worker honey bee. The entire metamorphosis takes only 21 days. During the summer honey flow, June through August, worker honey bees travel about 55,000 miles to gather enough nectar to produce one pound of honey. Each individual worker will only produce about 1/12 of a teaspoon of honey and about 1/80 of a teaspoon of beeswax. However, an entire colony will produce up to 200 pounds of honey annually!



**Worker**

## THE QUEEN

Honey bee colony life revolves around the queen honey bee. Without the eggs that she lays the entire colony would die. She begins life as an ordinary female worker larva, but by feeding on an extremely rich mixture of food, provided by young worker honey bees called royal jelly, becomes a queen. A new queen can be produced at any time, if the young workers choose, by feeding any female larvae less than 48 hours old with royal jelly. The queen's function is to lay eggs. Day after day the queen lays thousands of eggs which will develop into more honey bees. She is continually surrounded, protected and fed by young worker honey bees.



**Queen**

## THE DRONE

The drone is the male honey bee. He is larger than the worker and smaller than the queen. Except for mating, the drone is an expendable member of the colony. Drones do not collect nectar or pollen nor do they make beeswax. In fact they are driven from the colony as winter approaches where they perish from cold and starvation.



**Drone**

## HOW HONEY BEES WORK

Most all flowers produce a sweet liquid to attract insects, primarily honey bees, so that pollination can take place and assure the survival of that plant species. Honey bees make honey from nectar found inside the flower

blossom. Field worker honey bees collect the nectar and carry it back to the hive in pouches within their body. The field worker honey bee gives the nectar to young worker honey bees back at the hive, who then place the nectar in a beeswax comb made up of six sided cells. The excess water is then evaporated from the nectar. After a period of time the nectar is transformed into pure honey. Some workers collect nectar, some collect pollen and some do both. In terms of economic value the workers that collect pollen are the most important to you and me. Honey is just the sweet secondary reward that we collect from honey bees. If honey bees ceased to exist today, about one-third (1/3) of all foods we eat would disappear. Why? Because of pollination. The worker that collects pollen from the flowers packs it into pellets on her hind legs. As she travels from flower to flower, the pollen brushes off onto a special pollen receiving structure called the stigma in the center of the flower. This process is called pollination and allows all flowering crops to reproduce. The outcome is fruit, vegetables, nuts and a wide variety of seeds that are used for human and animal foods. For this reason many people keep bees on farms and near gardens.

## BEEKEEPING EQUIPMENT

### — THE FRAME —



The modern hive for the honey bee as provided by Dadant and Sons is the perfect home for your honey bees and makes beekeeping remarkably simple and enjoyable. The hive is constructed to hold movable frames which in turn

hold pure beeswax foundation (starter sheets for honeycomb). These frames hold the honeycomb that the honey bees make. The honeycomb provides storage space for honey and new bees to develop in its individual six sided cells. Each movable frame can be removed from the hive and examined individually without injuring the honey bees.

### — THE HIVE BODY —(BROOD CHAMBER)



These large boxes containing ten (10) frames are the heart of the honey bee colony. Usually two hive bodies are used year round for the honey bees to use as an area to raise brood (larva and pupa) and to store extra food for themselves for use during winter when no nectar is available.

### — THE SUPER(S) —



Additional boxes, usually smaller than hive bodies, with movable frames are set on top of the brood chamber and provide space for the honey bees to store surplus honey which the beekeeper will harvest. The word super comes from the word superimpose which means, "to place in a covering position; to overlay."

### — THE SMOKER —



The smoker is a metal container with air pumping bellows attached. A smoldering fire is built in the metal fire chamber and the bellows are used to blow the smoke produced out through a nozzle at the top of

the smoker. When lightly puffed into a colony of honey bees the smoke causes a temporary confusion and disorganization within the colony. The honey bees' group defensive behavior is disrupted. This allows the beekeeper to move calmly and comfortably inspect the interior of the colonies.

### — THE HIVE TOOL —

Honey bees collect a miscellaneous product called propolis from tree gums, saps and resins - anything sticky. This they use to seal cracks and crevices within the hive. Because of the sticky nature of this product a special tool is used for those times when a little leverage is necessary to remove frames, supers, etc. from the hive.



### — THE BEE VEIL —

The bee veil protects the face and neck. Many times it is made from wire mesh to help the veil stand away from the face.



### — THE GLOVES —

There are a variety of types and styles of gloves available from Dadant and Sons. However, with proper use of the Smoker, gloves are only occasionally needed.



### — MAKE BEEKEEPING A FAMILY HOBBY —

We've collected everything you'll need to start beekeeping into an easy-to-assemble kit. (Bees not included) Our Beginner's Kit #1 contains everything necessary for the beginner to start that first colony of bees except the bees themselves. Unassembled kit with the best grade wood. As your colony grows, we recommend the Hobby Kit #3 for the additional items needed for production of a honey crop.

## BEGINNER'S KIT # 1

—UNASSEMBLED—M58101 Beginner Kit #1, Wt. 39 lbs

<https://www.dadant.com/catalog>  
and **Quick Find** item number **M58101**

- 1 - standard beehive
- 1 - all purpose hive tool
- 1 - reversible entrance reducer
- 1 - bee smoker to calm bees
- 10 - 9 1/8" grooved top bar frames
- 1 - Hat Veil Pullover Combo
- 10 - sheets plastic based foundation
- 1 - sting resistant gloves
- 1 - entrance feeder
- 1 - book *First Lessons in Beekeeping*
- 1 - assembly instructions
- 1 - smoker fuel 1 lb.
- 1 - telescoping metal cover
- 1 - inner cover
- 1 - bottom board



## START BEEKEEPING TODAY!

For a free Dadant & Sons Beekeeping Supply Catalog, contact us by e-mail: [dadant@dadant.com](mailto:dadant@dadant.com)