## **Backyard Beekeeping:** Guest Article for the *Tallahassee Democrat*

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## **Backyard Beekeeping**

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By Worrel Diedrick

Raising honeybees is fascinating, fun, and a rewarding activity which requires planning, knowledge, and a modest investment of time

and money to be successful. Some materials and equipment you will need before starting your backyard beekeeping include: (1) A bee suit, complete with hood and gloves. (2) Beehives. This consists of deep boxes for the brood chamber, supers, bottom boards, covers, and frames with patterned wax foundations. (3) A smoker

(4) A hive tool (which is a mini pry bar specifically for beekeeping).

Whether you have a vegetable garden or patches of wildflowers in your backyard, you will not believe the difference that honeybee pollination can make. About one-six of the world's flowering plant species and

approximately 400 agricultural plants need pollination by bees. Flowers and plants will be much more plentiful and fruit and vegetable yields will increase dramatically when a large number of pollinators are present. A single honeybee hive in your backyard can have a huge influence on flowering plants in a neighborhood since honeybees can travel more than a mile to collect nectar and pollen. This pollination helps your neighborhood ecosystem remain diverse and sustainable. While pollinating flowers bees also collect nectar to make honey. Honey is stored in the combs designed by the bees in their hives. A single healthy hive can yield 50 to 100 pounds of golden honey per year.



Get inside a beehive with a hive tool. Photo by Ben Hottel

When starting beekeeping, a bee suit, complete with hood and gloves, is a great investment. Photo by Molly Jameson.

It takes the collective work of thousands of honeybees functioning as a whole to make honey. Honeybees have three social castes, each with a specific role or set of roles that divide all of the labor inside a colony. Each hive will have one queen who is the only reproductive individual in the colony. She leaves the hive under two circumstances: as a virgin queen to mate and as an older queen with a swarm of bees to start a new hive. On mating flights, the queen locates a "drone congregation area" to mate with anywhere from one to more than 40 drones before returning to the hive. She will store all this sperm for the rest of her life, which can last up to five or six years. The queen will lay 2,000 eggs per day, "deciding" when to lay drones (unfertilized eggs) or workers (fertilized eggs).

Worker bees are sterile females who do all of the foraging, feeding of young, honey production and storage, wax production, cleaning, and guarding the hive against intruders. Each worker bee will carry out different functions in the hive throughout her lifetime, which can last about four to six weeks during the active season. As they age, their duties will become riskier and require venturing further from the hive.

The only male bees in the colony are drones. Their sole purpose in the colony is to mate with virgin queens from other colonies. Once they mate, they die successful bees. Unsuccessful drones return to the hive to eat honey and pollen. Once swarm season is over, drones become a drain on resources inside the hive and are evicted by workers.



Worrel Diedrick, with veil and smoker, working on beehives in Quincy, Florida. Photo by Ben Hottel.

Honey bees are entirely behavior-dependent on the climate in which they live. The timing for beginning a hive will vary depending on your local climate and geography. Here in Tallahassee, the best time to start a hive is between late March and early May. During this time bees are just starting to get busy building a strong hive as the weather warms up. There will literally be thousands of bees coming and going from the entrance of the hive and it will be very intriguing to watch them waggle dance and bring in pollen in all sorts of colors. You will have to be mindful of where to locate your hive so the bees can have an open flight path away from walkways. Placing hives too close to the vegetable garden can limit your ability to carry out regular garden duties. Beekeepers must take special care so their

bees do not become a nuisance to neighbors, or even appear to be a problem. A high fence can be used to raise their flight path for your neighbors if necessary. Check on your bees periodically to make sure that they are doing well. You can harvest your honey in the fall, or when the bees have filled their hive with honeycomb. It is very rewarding to remove your first comb, dripping with honey, from your own backyard beehive.

If you have access to an extractor, then you can separate out the honey from the wax. An extractor is basically a centrifuge or spinner. During honey harvesting, you can take out the frames that are full of capped honey. Then scrape the wax capping off with a hot knife and place these capping in a bucket. The honey will gradually sink to the bottom, and the capping can be melted down and used for beeswax candles or other things. The frames are put in the extractor and spun. The honey flows out the spigot in the bottom and into your container.

The Apalachee Beekeeping Association (https://www.apalacheebeekeepers.com/) can be an invaluable resource for local information, hands-on training, and acquiring bees and equipment.

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