



ARE WE HELPING OR HINDERING THE HONEY BEE?

On a rural farm, in the foothills of the Appalachian Mountains, my grandfather, Wade Adkins, kept bees. Some of my earliest childhood memories are filled with my dad making a right off a well traveled gravel road, that was barely wide enough for two cars to pass each other, into my grandparents driveway and of me being sure I got out on the right side of the car, because to get out on the left side meant I would have to come face to face with 100 bee hives lined up against an embankment. No it isn't a typo, an exaggeration or a figment of my imagination. My grandfather had 100 thriving bee hives. That's, quite possibly, over 6 million bees, and I wanted no part of them.

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Now, typically, when you hear of someone owning 100 hives, you think Commercial Beekeeper. You might already be thinking my grandfather was one, but he wasn't. In light of that fact, you may be thinking then that he was just a "bee-haver". Again, you'd be wrong. My grandfather was definitely a beekeeper. Many times, I saw my grandfather, armed only with his smoker, go out to tend that never-ending row of bee hives. And come harvest time, only he and my grandmother, painstakingly, extracted each frame of honey. But how? There are mite checks to be done. Hive beetle traps have to be installed, removed, cleaned, and installed again. You have to locate and kill the old queen and install a new queen, every year or two. Didn't he have to do all that? The answer, quite simply, is no.

Many of the diseases, pest and parasites beekeepers face today weren't around when my grandfather kept honey bees, and although my grandfather worked his bees, he also let the bees take care of themselves. Therefore, we must then ask ourselves if there is something to his way of beekeeping or is it simply outdated? Can the honey bees really thrive without us, or do they need our help? If they do need our help, what type of help do they need from us? I believe more than anything else, they need us to be aware. Aware that whether we choose to do some form of "natural" beekeeping or opt for a more modern approach, everything we do will either be helping or hindering the bees.

Tonya Shumate

KNOW YOUR BEES

The honey bee has three body regions: the head, thorax, and abdomen.

In addition to their two compound eyes, honey bees have three smaller, simple eyes.

Scientists say they can only differentiate between six colors: yellow, blue-green, blue, violet, ultraviolet, and also a color

known as "bee's purple," a mixture of yellow and ultraviolet. Bees cannot see red.

The honey bee uses its proboscis (long hairy tongue) to feed on liquids.

A pair of mandibles are located on

the side of the honey bee's head. From daily routines, i.e., eating pollen, working wax for comb construction, etc., to guarding the hive against enemies, the honey bee uses their mandibles much like we would use a pair of pliers.

Apiary Placement And Hive Placement

Apiary Placement

- A. The apiary should be placed away from property lines. You don't want it to cause problems with the neighbors.
- B. Out in the country, you may want it midway of a hill. You might want a natural windbreak. You might want natural screening to block it from view.
- C. In town, you have to be more considerate of neighbors. You might need to place the hives next to a tall solid fence or hedge to get the bees to fly up over the neighbors. They could also be next to a building to accomplish this. You don't want a flight path to be across a walk.
- D. You probably want it away from pets and work areas.
- E. Convenient access, good forage area. Not in your way, safety for people and pets, not where livestock could knock over hives.

Individual Hive Placement

- A. You need to put the hive on a sturdy stand, concrete blocks, wooden stand or metal stand. Good to get it off the ground a little for ventilation and to help keep skunks from bothering the bees.
- B. You might want some light shade or morning sun and some afternoon shade.
- C. Facing the hive to the southeast might help them get going earlier in the morning.
- D. Some say full sun helps with pests: small hive beetle, etc. Not good for the beekeeper.
- E. You might want to stay on heavy clay soil to help in small Hive Beetle control. It is easier for the larvae to burrow down in sandy soil to pupate.
- F. If you use solid bottom boards you definitely want a little forward tilt of the hive to keep rain water from running and collecting on the hive bottom. I use a little tilt even with screen bottom boards. Screened bottoms are used to help in Varroa mite control and ventilation.

The main tip I can give those that have bees now is to keep an eye towards the food supply. Some may have consumed more honey since it has been a mild winter. They can starve in February and March, when they go to raising brood. Feeding fondant or dry sugar via the "mountain camp method" can save them.

NWTBA V.P.,
Terry Woodard

Preparation Is Essential To Success

In about a month, spring will be here. For many, that means the arrival of their bees. The question then is, are you ready? Have you ordered your smoker, your foundation, your hive tool, and/or your bee suit? Have you painted your hives and decided where you're going to place them? Time has a way of sneaking up on you, so if you answered no to any of these, don't fret, just get busy as a BEE!

Call or go online to any of the numerous Bee Supply Companies and order any last minute items.

Decide whether you will paint or stain your hives. (Painting or staining the outside of your hive will protect it against the elements). However, **DO NOT paint the inside of your hives.** If you do choose to paint your hives, choose a light

colored exterior latex paint. **Consider** a location for your hives: Make sure you place them where you can properly manage them. (Remember, out of sight, typically, means out of mind).

Determine how you will provide a clean source of water for the bees. Water is essential to hive activity, i.e., cooling, brood rearing, etc. So start a small water garden, build a rock fountain, use a chicken feeder with gravel placed in the water for the bees to stand on, or use a small pool. Whatever you choose, you'll be aiding your bees to be more efficient. **Think** about mulching or graveling under and around your hives, in order to control weeds.

And **READ!** Take this time

to read and learn all you can about bees. Learn the workings of the hive.

Familiarize yourself with diseases and parasites that affect honey bees and what your treatment options are. Don't wait for a crisis to happen before you decide. Be prepared!

Plan out a flower or vegetable garden. It's a win, win situation!

Don't wait for a crisis to happen before you decide. Be prepared!

DID YOU KNOW?

In the heat of summer, honey bees gather and use approximately 1 quart of water a day to maintain favorable temperatures inside the hive. That means 800 or more bees are doing nothing but gathering water.

- A strong, healthy Queen can lay upwards to 1,500 eggs per day.
- Through a call known as piping, the Queen Bee locates and, in a fierce battle, kills off any would-be rivals.
- This month, half of the honey bees in the U.S. will be moved to California's Central Valley to pollinate 80% of the world's almond crop. Almonds are 100% dependent on honey bees for pollination.
- Honey Bees have preferences: While Pear Trees depend on honey bees for pollination, the trees produce a diluted nectar, so, if available, honey bees will choose other desirable trees, shrubs, and flowers over the Pear Tree.
- One out of every three bites of food Americans consume is directly attributed to pollination by the honey bee.

Cells on one deep frame of 5.4 is 7000

Cell on one deep frame of 4.9 is 8400

Cells on one medium frame of 5.4 is 4620

Cells on one medium frame of 4.9 is 5544

Going Foundationless (Is It Right For You?)

In Michael Bush's book, "The Practical Beekeeper Beekeeping Naturally", Mr. Bush shares why a beekeeper may want to go foundationless: Mr. Bush contends that by allowing the bees to draw out their own foundation, contamination is less of a problem and by allowing them to naturally draw out their comb, the natural cell size aids in the control of the Varroa mite. Mr. Bush presents the longevity of his queens and their proficiency as egg layers as evidence.

So how do you go foundationless? (The following excerpt is taken directly from Michael Bush's Book: The Practical Beekeeper Beekeeping Naturally)

- With standard wedge frames, just break out the wedge and nail it sideways.
- With grooved top bars, put popsicle sticks in the groove or half of a paint stick or a piece of a "one by" ripped
- With drawn wax, just cut the center of the comb out leaving a row of cells around the edges
- With an old frame with no comb, just put it between two drawn brood combs
- With a plastic foundation/frame, just cut the center of the foundation out leaving a row of cells around the edge
- When making your own, cut a bevel on the top bar so it slopes down to a point. You can also make them 1 1/4" wide. (pg. 32-33)

After reading Mr. Bush's book there seems to be both pros and cons to going foundationless. However, it appears there are more pros than cons. You decide.

Pros:

Less time and money invested

Clean wax

Natural cell size

Natural brood nest

Cons:

Without wiring deep frames, you could end up with collapsed comb, if you move your hives

Hives need to be more completely level

Kim Flottum, of Bee Culture Magazine, says that managing bees take "more effort than a cat, but less than a dog."

Congratulations are in order for the winners of the TBA Hive Grant Awards: James R. Hinton, Madison James, and Elaine Wilkenson! Happy Beekeeping!



February Checklist:

- On a sunny, windless day, when temperatures reach 50-55 degrees, crack open your hive and check for disease, a laying queen and brood.
- Check your bees honey stores. With spring right around the corner, your bees are consuming larger quantities of their stores. If their stores are less than 15 lbs., begin feeding them wetted sugar or fondant. **Note:** If you make your own fondant, **DO NOT** use corn syrup or cream of tartar.
- If you didn't collect pollen to feed back to your bees, consider a pollen substitute to help them build brood up for spring.
- Mid February is the time to control Nosema in your bees: In a blender, mix 1 tsp. Tea Tree Oil with 1/2 cup water. Blend on low speed for 4-5 minutes. Mix with 1/2 gallon of water. Combine 1 cup of this mixture into a gallon of sugar water that has been made from 2 parts sugar to 1 part water. If using city water boil to allow any chlorine to evaporate off.

More information can be found at: <http://wolfcreekbees.com> and click on calendar.

You can find a good read at Mother Earth News Website: **Keep Bees, Naturally!**

Go to their website and type in **Keep Bees, Naturally** and the article will come up. Enjoy!

"I like pulling on a baggy bee suit, forgetting myself and getting as close to the bees' lives as they will let me, remembering in the process that there is more to life than merely human." —Sue Hubbell
A Book of Bees: And How To Keep Them

Recipe Center: Bodacious Brownies

2 eggs

1/3 c. butter

3/4 c. honey

2 ounces unsweetened chocolate

1/2 c. unsweetened, shredded coconut

3/4 c. whole-wheat flour

1/2 c. chopped pecans

3/4 tsp. baking powder

1/4 tsp. salt

Heat oven to 325 degrees. Butter a 8-by-8-inch baking dish; set aside.

In a microwave safe dish, at 30 second intervals, slowly melt the butter and chocolate together.

In a small bowl, mix dry ingredients together; set aside.

In a large bowl, beat eggs until frothy. Gradually beat in honey. Beat in small a small amount of the chocolate mixture, then gradually beat in remaining chocolate mixture.

Add flour mixture and beat until smooth. Stir in coconut and pecans.

Pour batter into prepared dish and bake for 25 to 30 minutes, or until a toothpick inserted in center comes on clean. Yields 9 brownies.

“The secret of my health is applying honey inside and oil outside.” Democritus, contemporary of Hippocrates, who lived to the ripe old age of 109

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