

Year One Newbees

Welcome to beekeeping! By now your bees are probably happy in their new home or close to it!

This summer your goals are to:

1. Gain as much experience inspecting your bees as possible.
2. Make sure that the hive continues to be healthy and happy.
3. Have the bees make as much finished comb as possible.
4. Make sure your bees don't swarm.

Successfully accomplishing all these goals will require you to inspect your hives frequently and on a regular basis. As a first year beekeeper, you should inspect your hives once a week if possible.

The first benefit of regular and frequent inspections is that you will gain valuable experience inspecting your hives. This extra time will teach you important things like how to light your smoker and keep it lit, how to pull a frame without rolling bees, and how to stack the hive bodies when you are going through the rest of the hive so that you don't crush a lot of bees. Equally important will be the confidence you will gain with each inspection. You will learn to be at ease while you are inspecting your hives, and your bees will reward you for it by staying calm with you.

The second benefit of regular and frequent inspections is that you will learn to recognize a hive that is healthy from one that is having problems. I think it is safe to say you obtained healthy bees from the start, and your bees are still healthy. By going into your hives now, you learn what a healthy hive looks like and how it behaves. You will learn what to expect from a healthy hive. In the future, you will be able to compare the conditions of the hive with what you saw when they were healthy.

The third benefit of regular and frequent inspections is that you will be able to more closely monitor their progress in drawing comb. In your second year and beyond, drawn comb will be the most valuable thing you will own. Without adequate drawn comb, your honey yield will be reduced and your bees will have a higher likelihood of swarming. Because of this, one of your mini-goals will be to have the bees make as much comb as possible.

In order for your bees to draw comb from the foundation, they will need a nectar flow and the impression that they are running out of brood space.

You will give them the impression that they are running out of brood space by placing the hive body with the foundation directly above the brood nest. As for the nectar flow, you will need to simulate a nectar flow for part of the summer by feeding them 1:1 sugar syrup. The nectar flow in South Central

Alaska will be over by mid to late July, which is not enough time for them to create an adequate supply of drawn comb for you. You should anticipate feeding the bees straight through September.

The fourth benefit of regular and frequent inspections is that you will be able to check for swarming. In addition to stimulating the wax glands of the bees, the sugar syrup you are feeding them will have another affect on the hive the queen will be stimulated to keep rearing brood. This brood rearing, combined with the congestion you are placing the hive under by adding foundation above the brood nest, will give you the same conditions that kick in their swarming instinct. Because of this, you will need to be more vigilant watching for swarm conditions this summer. I don't intend to incite panic with when I say to check for swarming. Although you are creating some conditions that are conducive to swarming, there are several factors working in your favor that are keeping the swarm instinct in check. For instance, your queen is undoubtedly a young queen and her pheromone is strong. Swarming is unlikely in the first year, but is possible. Don't be surprised if your hive goes into swarm mode during this period. Be prepared to take action if it does. Hopefully I have convinced you to go through your hives weekly during your first year. Next month, I hope to give you tips of what to look for during each inspection.

Happy Bee Keeping folks!

Dr. Joe Carson

Using Smokers 101

Question: This is my first year in beekeeping and I have yet to master the use of my smoker. I can get a fire going producing good smoke, but by the time I pull my gloves on, the smoker quits. Any advice on correct procedure here?

I have been doing it so long I can do it in the dark with my eyes closed and I have the same problem. I believe it has something to do with the redesign of the smoker some years back to make them fire safe or something but I have learned some really neat tricks to get nice bellowing clouds of cool smoke that will last for some time on a fill up. The problem is that some of the needed ingredients may not be available to all or in all areas of the bee world.

1. There is nothing better than used press sack from a bees wax rendering plant, the more slum gum the better. It burns cool and long and does not throw a lot of sparks if the smoker is kept stuffed ahead of the fire. (My favorite)

2. Burlap, jute, or some cotton sacks can be used and are available in many farm areas at reasonable, (sometimes) free prices. This material can be treated with old or new oil, cheap mobil wax, even salt peter I have been told and it will burn without going out, but sometimes it will not only drive the bees out but you will find your own head in a cloud of smoke that would give a coal miner black lung. In rare cases sack from pesticide treated seed has been used, but I would not use this as it is a good way to make yourself deathly sick.

3. If you lived in the sticker bush part of Texas, there is nothing as good as dried cow

dung, 2nd in my experience to old fish net. I am sure that those who have not the experience are grinning ear to ear knowing that I am putting you on, but it is true, and there is a difference between the cow dung of the sticker bush desert and that of the green grass or the irrigated cow pasture. Because of the unbelievable amount of dry material the cows of the southwest desert must consume each day the cow pies are really Texas size and contain much more heavy matter that burns cooler, longer, and with more smoke than that wet stuff the northern and eastern beekeepers are always stepping in and trying to burn in their smokers. You may have to get someone in Texas to send you a box full to try, make sure to ask for the BIG flat one's the size and shape of a medium combination pizza from the Pizza Hut. The dry season's production is better than the wet season..... Moose dropping are showing up all around us now.. Time to collect and lay out on the kitchen counter to dry. You could also put them into your oven over a pilot light or on low low and dry them out. I doubt the master of the kitchen would mind much, hopefully. It is for the sake of the Bees! It is Organic! It is natural! Right?????????

Anyway over the years I have learned that there is nothing a beekeeper has not tried to burn in his smoker as there is not much that he has not tried when caught short in the tall grass without any 'nice and soft' including the leaves of the poison oak plant. It's all a matter of what's at hand and experience, good judgment, and personal preference. I liked pressed paper egg cartons when I was in junior high.

(portions excerpted from Bee Source)

Advantages and Disadvantages of Going Bottomless

I am not here to pontificate but I believe bottom boards and landing boards are functions of anthropomorphism, not proper bee culture. We want the bees to have what we would want if we were them, a nice cozy tight room with a comfortable entrance, as though they were good little people that shared our sense of functionality as well as goals. As though they didn't have incredible abilities that we don't have, like the ability to fly, to take off from and land on virtually any surface in any position, to crawl vertically and upside down - abilities they enjoy exercising. Everything that lives has the ability to enjoy, and when bees enjoy life rather than struggle against impossible odds, their health will reflect their lack of stress.

Bottomless hives are difficult if not impossible to steal. The bee thief, looking for the easy way, will find exactly the opposite of what he or she was looking for. It goes against his or her nature to mess with a bottomless hive, especially a big, strong, competent colony housed in falling-apart equipment (my favorite kind).

The breathing capacity of the hive is immediately and dramatically increased. No more moisture build-up or moisture-related diseases. No more debris on the bottom boards. Bottom board rot is a thing of the past, along with the need to replace.

No more slanting hives forward. Vertically straight hives make straighter combs (not that that matters), support weight better, and ride earthquakes better (that does matter around here).

And no more mouse worries. Without a bottom board and sufficient space between the board and the bottom of the cluster, mice can't even get started.

No more facing the entrances to the sun. You might think this is not important but it can be. I moved some colonies onto a lovely piece of land overlooking a large slough designated as a wildlife preserve, faced to the sun as I had been taught to believe was right. They steadily lost vitality and died. There is a fierce wind blowing straight up the slough directly into the hive openings facing south, which is the direction they need to face to get the most sun. Most sun means quickest warm-ups and most light for the longest duration, which means most work which means most production. I still catch

myself feeling uncomfortable about it from time to time. Unlearning is apparently harder than learning.

With bottomless hives, smoking for manipulations is much more effective with much less smoke.

The Bottom Board: (the bottom line) Slatted bottom boards, screened bottom boards or no bottom boards are just a few of the ways to increase the health and vitality of your hive(s). Better hive ventilation, reduce swarming tendency, less moisture, reportedly greater/increased brood production.

According to West Virginia University the screened bottom board used by itself can slightly reduce Varroa populations. This reduction is not enough to keep the colonies to below injury level. Using the screened bottom board with salt/wintergreen patties can increase Varroa drop by at least two times and as high as five times in some colonies which is enough of a drop to keep the Varroa from multiplying and below injury level to the colony. The screened bottom board can be used along with the salt/wintergreen patties year around. We have concluded that starting this system before the mites reach injury level to the colony and while the colony is healthy seems to work the best in keeping the mites at low levels. When the colonies are healthy they consume the patties at a faster rate.

In summer, I am using a screened bottom board (8 mesh hdwe cloth) AND a screened top in place of an inner cover. The hives are placed in fall sun to discourage Varroa. When using a top screen, be sure that the outer cover gives 3/8 inch unrestricted (visible from side) airflow (does not reach down to the level of the super or the bees may propolize the screen.) Colony populations explode when they have enough ventilation. A nice experience is to lift the outer cover of a hive and look in on totally calm bees in the top of the super.

Product Review:

Honey-B-Healthy is a unique mixture of essential oils and has various applications in the beehive. The large 16-oz bottle makes 24 gallons of full-strength syrup solution.

When mixed with sugar syrup, sprayed on new foundation, and fed via a hive-top feeder, produces rapid new honeycomb development

Spraying bees helps prevent fighting when combining nucs, swarms and colonies

Essential for starting new packages, encouraging comb development, and building up a colony after winter

Retards growth of mold in the hive-top feeder

When applied undiluted onto a new queen, and when mixed into syrup and sprayed on the bees, masks the queen's pheromones, greatly helping in ensuring queen introduction

One 16-oz bottle makes 24 gallons of full-strength syrup solution (one teaspoon [5ml] per quart).

The Bottom Board: I use it and know from my experience it works. I introduce my queens with it and believe I have a better success rate because of it. It is what I use when working my bees when not using smoke. With just a short hive check it is fast, clean, and convenient and does a good job. It is also healthy for the bees and I think it encourages hygienic behavior.

Bear Fence for Bees

An apiary can be protected from bears by a sturdy electric fence. Such a fence must be dependable, relatively cheap to construct, and capable of operating in remote locations. Fences are totally ineffective if not installed and managed properly. Avoid a site with overhanging trees, as limbs might fall across the wires. It is also quite common for bears to climb trees and then drop down inside the fence. Control grass and weeds along the fence so that they will not contact the charged wires and short them out. Whenever possible, game commission personnel try to trap a nuisance bear and move it to an area where damage is less likely to occur and where it is desirable to increase bear population levels. They use baited culvert traps mounted on a small trailer, or special foot snares, to capture problem bears. There are several precautions the beekeeper can take to reduce the chances of bear damage. Typically, bears move through their home ranges with preferred travel lanes or bear crossings which often follow certain ridges, ravines, streambeds, or along the forest edge. Beekeepers can help avoid damage

from bears by careful selection of the apiary site. Placement of colonies on or near bear crossings or dumps which serve as food sites for bears will most likely result in problems. Research has shown that the farther bee yards are located from forest edges and ravines, the less chance there is of bear visitation.

Apiary management

Visit your apiaries often. Bears often return night after night, so if you catch damage early, you can take preventative measures to protect the rest of your bees and equipment. The same advice applies to varmints.

CHEMICAL CONTROLS There are no effective chemical measures for protecting bees from bears or varmints.

