#### **Guidelines for Newbee's**

Unfortunately, many people think that they bought their bees, they located their hive in a good spot, and now they can just take a hands-off approach and they will not only survive, but thrive, on their own. We wish that were the case! It would make life a lot easier. However, in our experience, that is generally not going to lead to a successful outcome for you or your bees in the 21st century. Things are very different in US beekeeping today than they were even 40 years ago. Challenges such as varroa mites, loss of natural forage, increased environmental stressors are just a few of the tougher challenges facing honeybees and their keepers these days. In our opinion, you can take a hands-off "natural" approach to your bees (after all, they are your bees), but you probably won't be a beekeeper for long. So, rather than dooming them from the start, we suggest that maybe a thoughtful caretaker/interventionist approach may be better for both the bees and the beekeeper.

Let us start by prefacing that we certainly don't have all the answers, nor do we pretend to. In fact, in our opinion, that's part of the excitement of beekeeping – the fact that you never ever stop learning about these amazing creatures, and what works for one person, or even one hive of bees, may not work for another. In fact, we've learned that what worked well for us one year, didn't work for us the next year with the same hives in the same locations! (e.g.: going from 0% losses one winter to 60% losses the next doing the same thing as the winter before...)

There's the old adage that if you ask 10 beekeepers a question, you'll get 12 different answers. That is very true, and sometimes, we find ourselves changing our minds on something halfway through doing it. While that can be frustrating, given that Heather is a scientist and Jesse is an engineer, it actually adds to the mystery and challenge of beekeeping for us. We have learned to not be afraid to experiment and try new things. To sometimes go against tradition and conventional wisdom. And, to make sure that we've read it in at least a half-dozen or more different sources to begin to trust that there might actually be something to it. As such, you will want to take the suggestions that you read here, compare them to what you read and hear elsewhere, and then formulate your own opinions as to what you want to try. Keep notes along the way and observe changes in your bees (e.g.: queen, number of bees, food stores, mite loads, etc.), local environment (e.g.: good / poor nectar flow, pollen availability, change in landscape / forage, etc.), and weather (e.g.: cold/mild winter, long/short winter, wet/cool spring, hot/dry summer, etc.) that might help explain why something did or didn't work in a particular year. All we can attempt to do here is to provide you with things that we currently practice and believe are important in our operation.

## How Many Hives Should I Start With?

Start with at least two hives – This isn't because we want to sell you more bees (we have no problem selling out of bees each year), but rather because we learned the hard way. Some of the advantages to having two or more hives are:

- You'll learn more about your bees by having something to compare to. Let's face it. (Especially if you are a new beekeeper) If you have just one hive, and it's alive, you will probably think it's doing well. However, you might not realize that they aren't storing enough food, the queen does not have a good pattern, they aren't building up fast enough, they are overly-aggressive, they are thinking of swarming, etc. If you have at least one other hive to compare to, you at least have some comparison basis.
- You can use your strong hive to balance out your weak hive and give them a better chance for survival (and possibly avert the strong hive from swarming). This could be in terms of moving extra frames of food, brood, worker bees (don't accidentally move the queen!!), swapping the locations of the two hives, etc. to help balance out the hives and give the weaker one that extra kick-start that's needed.
- You can often head-off an otherwise doomed hive. If you have just one hive, and they go hopelessly queenless (e.g.: did not produce a replacement queen or the replacement queen did not return from her mating flight), and you are unable to locate and buy a replacement queen at the time, you will probably end up watching that hive dwindle and eventually die-out. However, if you have another hive and can transfer a frame with fresh eggs on it over to the queenless hive, they will generally create a new replacement queen, assuming it's the proper time of the year and there are enough drones in the area, thus saving that hive from doom.

# **Should I Run Deep or Medium Frames?**

This is really a matter of personal preference; however, unless someone has physical limitations, we normally encourage "deeps". There are a number of reasons that we encourage this, including:

- We have found personally that most of our bees seem to do best on deep brood frames. For whatever reason, in our own personal experience, those hives seem to take-off and thrive better than those on mediums.
- As noted above, it is actually more work and harder for us to produce medium nucs that we are happy with. As such, we produce far more deep nucs than we do mediums.
- We are able to provide black foundation for our deep frames. This greatly enhances the ability to see eggs and developing larvae on the frames.
- Even with a good medium nuc, just based on sheer volume and area, people buying medium nucs are really only getting about 2/3 the bees, brood, and food in the medium nucs as they get in the deep nucs; however, our costs and efforts in producing are just the same (if not more).
- Long-term, it takes 3 medium brood boxes to equal the same brood area as 2 deep boxes. This equals more cost in boxes and frames. It also means more boxes and frames to check through when looking for the queen or doing other hive inspections.
- People can still stack medium honey supers on top of their deep brood boxes to minimize the weight associated with handling honey supers.
- Long-term, there are ways to convert your bees over to medium brood frames from deeps should your situation change or should you so desire to do so in the future.

## I Have My Bees! What Do I Do Now??

### 1. Check your hives weekly!

-There are many reasons and benefits to doing this:

- You'll learn more about your bees and enjoy having them more. (Beekeeping is very therapeutic after a stressful day, and it's a very addictive hobby the more you learn about them.)
- You'll, hopefully, be able to spot signs of and attempt to avert swarming. [Note: Queen cells are developed and capped at 6 days, after which point the hive may swarm at any time up until the new queen emerges. Therefore, the weekly check on your hives is a good time to try to spot any newly developing queen cells. If you don't check your hives but every couple weeks or month, you may never even realize that your hive swarmed and you have a replacement queen (or worse, have become hopelessly queenless).]
- You can more closely monitor things like food storage, brood production, signs of crowding, signs of robbing, general health of the hive, monitoring of small hive beetles and other pests/diseases, etc.

### 2. Do a sugar roll test for varroa mites monthly!

- Don't rely on "well the hive seemed to be doing well and I didn't see any". You typically won't see them (and by the time you do, it's probably because they are so infested that the mites no longer had room to hide on the bees' bellies), and often, it is your strongest hives that have the greatest infestation. The only way to know for sure how few/many you have is to do a quantitative test. And, by doing it monthly, you can monitor if that hive is keeping them under control or if they are suddenly exploding and need treatment.
- Treat your hives for mites if they need it! If you don't, they will get weak and die. And, not only does that pose a loss for you, but other neighboring hives will rob them out and take the mites back to their colonies. *Be a good neighbor*.

### 3. Feed your new colonies!

• Not just a little...feed them heavily from the day you get them until they are ready for winter. As stated elsewhere, the primary natural nectar flow in our area is typically only from mid-April to early/mid-June, and then it's over. And, that's assuming the conditions were right for it (not too little or too much rain, or storms at the wrong time, or too much wind....), and that your hives are in an area that had access to plenty of nectar. Only on occasion will we typically get a half-decent fall flow in certain areas. In the meantime, there is almost nothing out there for the bees. And, your new hives need to build-up both in numbers of bees, drawing of comb, and filling with food stores to get ready for winter. All those things require lots of food (both nectar/syrup and natural pollen or substitute) so that the queen continues to lay eggs, the workers rear the brood, the workers inspired to draw wax comb, and they have something to fill it with. If you wait too long to start feeding, you won't have the bees of the right ages with enough time to get ready for winter. While it is hard to say for sure how much they will need, our rule of thumb average is to budget roughly 100 lbs. of sugar per new colony to get ready for winter.

#### 4. Don't take honey from them the first year!

• First off, they need it to attempt to get ready for winter. Secondly, if you've been feeding them, it's not actually honey anyway. Even in later years, don't take too much, and continue to monitor and be ready to start feeding later even if they did put a crop of honey away as they will often eat it before winter and run out.

### 5. Give them space.

• If you are feeding heavily, you need to make sure they don't get crowded or "honeybound". Make sure there is always room in the brood chamber area for the queen to lay eggs and rear brood. Make sure that you put new supers with new foundation on as necessary so they don't feel crowded and swarm. (We like to put foundation supers on in the summer and early fall for them to draw comb while we're feeding sugar syrup, so that they have clean drawn comb the next spring to fill with honey during the nectar flow and are not then spending time/energy on trying to draw-out comb then.)

## 6. Give them ventilation.

• We are firm believers that bees need plenty of ventilation provided through screened bottom boards and other miscellaneous holes that we routinely drill in our hives. In fact, we don't insulate our hives and generally leave the screened bottoms and some of the miscellaneous holes open all through the winter to avoid moisture problems.

### 7. Reduce the Hive Entrance.

• In order to limit robbing, reduce the entrance to between one to three inches. The stronger the colony, the larger the entrance can be. The smaller the entrance, the easier it is for them to defend.

### 8. Join a local organization, get a mentor (and later become a

**mentor**) and never stop reading/learning all you can about your amazing bees! You will enjoy having them more and they will reward you many times over.