

“Everything should be made as simple as possible, but not simpler.”

— Albert Einstein (popular paraphrased version)

“It can scarcely be denied that the supreme goal of all theory is to make the irreducible basic elements as simple and as few as possible without having to surrender the adequate representation of a single datum of experience.”

— Albert Einstein (what he really said)

Over the past eight years I’ve written a half dozen or more articles on honey harvesting, extracting, bottling and eating. Yet folks still ask questions about these topics, which implies that either my information doesn’t meet all of their needs (it may be incomplete, outdated or inaccurate), they haven’t read my stuff (they don’t know where it is or don’t care to read it), or the volume is such that a nice summary, with links to the more complete information, would be more useful than having to wade through everything. I’d like to assume the last reason is most correct, but I’ll allow for the first one as well.

With that in mind, I’ve summarized a few of the things that you need to know this time of year with respect to collecting your reward as a beekeeper. These are highlights only -- follow the links to gain further instructions. (All linked articles are at https://baileybeesupply.com/educational_resources/.)

Do I have honey to harvest?

If you are a brand new beekeeper who has been feeding your newly established colonies (which you must do: see “[Package Basics](#)” and “[Packages versus Nucs: Want to Fight About It?](#)”), you have mostly sugar-water “honey”, aka “funny honey”, stored in your hives. This is not real honey and you should not ever represent it as such. Don’t sell or give it to anybody – it



If we have several surplus honey supers full of frames just like this one, we are extremely blessed. Harvest this honey before something bad happens to it!

doesn’t taste like anything (just sweet, no flavor) and it isn’t honey.

On the other hand, if you have established colonies that have been hard at work storing away surplus honey (not just honey stored in the brood frames), then of course you should harvest it. After all, we keep HONEY bees. As the movie *Babe* explained, everything has a purpose¹: our bees’ purpose is to make honey for us to harvest. See “[The Right Bees for You](#)” and “[Maybe We Shouldn’t Keep Honey Bees After All!](#)” if you have any confusion on this point.

When should I harvest?

Here in Piedmont, North Carolina, we have one major honey flow. It takes place in April and May, sometimes running into the first part of June. Once the major flow is over, it is time to harvest. If you do not do so in a timely manner, the bees may eat up all of your hard work. Or they may begin raising brood in the honey supers. Or they may get robbed out and your honey may end up in your neighbors’ hives. Or the colony may collapse and become overrun by small hive beetle larvae, which turn the honey into a snotty mess. Or as time goes on, the bees may mix less desirable fall honeys with your premium spring honey. Or one of a million

¹ The cat, to Babe: “The fact is that animals that don’t seem to have a purpose really do have a purpose. The Bosses have to eat. It’s probably the

most noble purpose of all, when you come to think about it.” (*Babe*, 1995)

other things could happen to diminish or destroy your crop. Harvest when you are able to do so – don't delay. There is no good reason not to and countless good reasons to do so.

How do I know if a frame is ready to harvest?

Wait until the bees have dried the honey to 18.6% moisture or lower before harvesting. If your bees are good at their jobs, capped honey should be dry enough. With that in mind, as a rule of thumb, don't remove a frame for extracting unless at least 80% of the cells are capped. The idea is that the wetter honey in uncapped cells will average out when mixed with the dry capped-cell honey, but only if there isn't very much of it.

The shake test can also give a hint as to whether uncapped honey cells are dry enough to extract. Hold a frame horizontally over a flat surface and give it a quick up-and-down jerk. Wet honey will rain out of the cells. If instead it stays put, that is a hint that it may be dry enough.

However, the no-guesswork way to know if your honey is sufficiently dry is to test it with a refractometer. Full details on how to do so are in "[Refractometer Use and Calibration](#)". Refractometers are both cheaper and easier to use than you may think, so there is no excuse not to have one.

What if some honey is ready and some isn't?

Not every colony is on the same schedule with respect to curing honey and it's likely that not all the supers will be at the same level of processing. If there are many frames that are ready to extract but many are not, there are at least three options:

- 1) Leave all of the honey frames on the hive until they are mostly capped
- 2) Take off the frames that are capped and extract those, leaving the others to be capped and extracted later
- 3) Take off the frames that are capped and store them in the freezer. Leave the others

to be capped. Then extract all of them later when they are all ready.

How much honey do I need to leave for the bees?

Surplus honey supers should not be on the hive when the honey flow is not in progress and you are not intending to extract the honey that is in those supers. The brood boxes (typically two 8- or 10-frame deep boxes) are the "bees' space" and are more than adequate to hold all of the colony's brood plus the stores needed to survive Piedmont NC's summer and winter dearths.

Don't rely on guessing to determine how much in the way of honey stores are available for the bees – look! If the boxes for the bees' space is light on honey after the honey supers have been removed, then feed sugar syrup to build the stores back up. Problem solved.

See "[Summertime Space Management](#)" for more on this topic.

How do I get the bees out of the honey supers?

A wide variety of popular methods for separating the bees from the honey combs is discussed in detail in "[Spinning Gold](#)". After years of experimenting with different ones, I've found that for me, a fume board with the right stinky stuff applied is impossible to beat for simplicity, reliability, effectiveness, ease of application and total time required. See the article for instructions on how fume boards are used.

How do I extract?

See "[Extracting, Step by Step](#)".

What do I do with the honey I've harvested?

One of the most important steps following extraction is to leave the honey in the bucket for several days to allow foam, wax flecks and other miscellany to rise to the top. It can then be easily skimmed off with a spatula. If you bottle your honey without letting it rest first,

every bottle will contain a portion of that foam and scum.

If you are packaging cut-comb, chunk or section honey (all which have raw wax comb), freeze the comb for a couple of days to kill all life stages of any lingering small hive beetles or wax moths. Wiggling larvae on the comb are not very appetizing. If your freezer is cold enough, these critters will actually be killed in just a few hours, but I don't just want them to be dead – I want them to be *really* dead. And I'm not exactly sure how cold my freezer is. With all of those caveats, a couple of days is plenty.

Bottling liquid honey is straightforward – just remember to abide by the Fill Line on standard honey bottles.

Per Federal law, legal labels must have three critical components: the name of the product, the name and full address of the producer/ packer or distributor (including zip code), and the weight in both imperial (pounds/ounces) and metric units. Full details are in "[Bottling Honey for Sale](#)".

How do I clean up my equipment?

A squeegee type device is extremely handy for getting the very last drop of honey out of an extractor. Once relatively clean, I often set my extractor, cappings pan and other honey-containing equipment outside for the bees to finish off. They'll remove every last bit of honey, although they will leave wax flakes and other debris. Rinsing with hot water will remove those.

What do I do with my empty honey frames?

Comb that has never had brood in it, and therefore doesn't have old cocoons, bee poop stains or pollen residue in it, isn't "good eating" for wax moth larvae and can often be stored unprotected as long as the comb is in the light and in open air. For example, I hang my honey frames in racks under a lean-to roof on the end of my barn. If something like that isn't an option, frames can be frozen for a day or two to kill all life stages of small hive beetles and wax



Comb that has only ever been used for storing honey is nothing but pure wax. It can often be stored in the open, where it gets air and light, without any other protection. However, comb that has been used for brood-rearing requires much more care.

moths. After thawing completely, they can then be stored in bug-tight containers. Note that "bug-tight" is much more than just "with a lid". Also note that while large plastic bags may sometimes work okay, critters (including wax moth larvae) can and do eat through the plastic. The result is a bag full of yuck.

If you want a top-notch defense against wax moths, treat your stored comb with B402 Certan (*Bacillus thuringiensis* subspecies *aizawai* strain ABTS-1857). See "[A New Old Tool to Fight Wax Moths](#)" for details. Treating, combined with proper storage, provides maximum protection. Note that this product will not protect comb within a hive that has resident bees – the brood nest temperature (constant at about 95° F) renders the *Bacillus thuringiensis* spores inviable.

Does this help?

I hope this updated synopsis is useful for your 2021 harvest. If not, send me your tips and challenges and maybe I'll provide a more complete summary of wisdom and best practices for the Piedmont in 2022. None of us are as smart and experienced as all of us!

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