BAIT HIVES

Bait hives are containers that are “baited” and placed where swarms of honey bees may find them and choose to move in. They aren’t traps (even though they’re commonly called swarm traps) – the bees are free to come and go and don’t get “trapped” in the box. There’s a lot of information out there about bait hives and swarms and some of the best is based on research by Thomas D. Seeley, a professor at Cornell University. His book *Honeybee Democracy* is “the book” on honey bees and swarm tendencies and preferences.

Honey and The Hive offers a bait hive that is based on Seeley’s research. Our bait hive is a box that is approximately 38 liters in volume and holds five frames – either medium or deep.

We recommend bait hives be filled with one frame of old brood comb and four frames that are empty (no comb, no foundation). The reason for this is based on Seeley’s research. The old brood comb attracts the scout bees and makes them think honey bees have lived here before. The blank frames provide structure for the swarm to build new comb. Remember that swarms prepare to leave the mother hive knowing they will need to build new comb and gorge themselves on honey, priming themselves to generate wax. They are wax machines – take advantage of that.

You might think providing four frames of additional comb and/or foundation would be beneficial to the swarm in their comb production and you would be right. However, before the *swarm* shows up to take advantage of that additional comb or foundation, *scout bees* must choose your bait hive. Scout bees will “measure” the available space in the bait hive and they seem to prefer cavities with ample open space. Additional comb and/or foundation effectively reduces the open space in a bait hive and Seeley’s research indicates that makes a cavity less appealing.
And there are some other things that you can do to make a bait hive even more attractive to the scout bees:

We recommend baiting your bait hives with a little bit of lemongrass oil. Place a few drops of lemongrass oil on a cotton ball or swab and place the cotton ball or swab in a small re-sealable sandwich baggie. Close the baggie ‘til it’s almost shut and place it on top of the frames and put the telescoping lid on the bait hive. The scent from the lemongrass oil will last for about a month this way. Just don’t overdo it with the lemongrass oil – too much can act as a repellent.

There are also some commercial swarm lures that you can use. Honey and The Hive offers Swarm Commander. In addition to baiting the inside of the bait hive with lemongrass oil as discussed previously, we also recommend using one spray of Swarm Commander on the outside of the bait hive at the entrance when you initially install the bait hive. The Swarm Commander spray is also a very convenient way to periodically “freshen up” your bait hive as you anxiously await the arrival of your free bees. Usually, you can go two to three weeks before the bait hive needs re-scenting. Just remember – if you can still smell the lemongrass and/or Swarm Commander, there’s more than enough to attract bees and you don’t need to add anymore. Like lemongrass oil, Swarm Commander is very potent and a little goes a long way and using too much could drive the scouts away.

And now you’re probably asking where do I put these bait hives. The following are some general guidelines based on Seeley’s research (and for an extended discussion about location and height, read Seeley’s book):

- On the edges of fields, attached to a large specimen tree ten to fifteen feet into the treeline, avoiding locations in full sun
- The higher the better but no swarm is worth risking a fall from a ladder or other precarious perch. Rarely do we set bait hives higher than we can reach while our feet are on the ground (but treestands used for hunting are a popular spot). And remember that your goal is to catch a massive swarm with pounds and pounds of bees - always consider how you'll remove an occupied bait hive from a location.
- Near - but not too close – to existing colonies. These could be your hives (or your neighbor’s hives) or a bee tree or an old structure with a colony in the walls. In these cases you might be tempted to put your bait hive next to the existing colony. But think of the swarm as you would your kid who is ready to leave the house and start out on their own. They don’t want to be too close to you and even though you might not admit it, neither do you. So, place your bait hives at least 50 to 100 yards away and don’t worry – the scouts will find them.

When do you hang your bait hives? We recommend getting them out by the end of March. This allows time for the bees to find the bait hive before they decide to swarm. Before a bee becomes a scout bee, she is a forager. If your bait hives are in place when the bees begin to forage, forager bees will find and investigate them. This may improve your odds that when that forager begins “scouting” for a new home – she may already have your bait hive on her radar.
As far as hanging the bait hives, we recommend using a large nail or screw to hang the bait hive on the support (a tree, fence post, etc.) and then running a ratchet strap around the handle to keep the bait hive firmly attached to the support.

Once you install your bait hives, you should check them periodically – once every two to three weeks is fine. You can usually get someone nearby to keep an eye on it for you if you mention the prospect of collecting honey at some point in the future. The bait hives may need re-scenting or, you may hit the jackpot and find that a swarm has moved in. And although it’s exciting to see bees coming and going from a bait hive and you’ll be tempted to take them home as soon as possible, wait until you see pollen coming in on the bees before “harvesting” your bait hive. Until you see pollen coming in, all the activity could just be scout bees and the swarm may not have arrived yet.

When you’re confident that a swarm has moved into your bait hive, wait until almost dark or first thing in the morning to take the bait hive to your apiary – most of the bees will be inside the bait hive at those times. Now you can close the entrance (rotate the entrance disk so the ventilation holes cover the bait hive entrance) and undo the ratchet strap. If you’ve hung the bait hive as recommend, the bait hive will be supported by the nail or screw after you undo the ratchet strap, leaving both hands free to handle the occupied bait hive. Now you can take your “free bees” home, transfer the frames to a hive setup (keeping as many bees as possible on the frames), and dump the remaining bees into the hive (like installing a package). While transferring the frames it is also a good time to look for the queen and mark her if you want.

And a word of caution – don’t underestimate a swarm’s ability to quickly fill the frames with wax, food, and brood. If, after a swarm moves in, you wait more than a week to transfer the bees you will more than likely find they have built below the bottom bars of your frames and you’ll have to do some comb cutting to transfer all their efforts to a hive setup.