Swarming: Insights from a Master

An Interview with Cleo Hogan, Jr.

By Camilla Bee, Editor

A swarm of bees in May is worth a load of hay;

A swarm of bees in June is worth a silver spoon;

A swarm of bees in July isn't worth a fly.

(Or possibly for the last line, "A swarm of bees in July, let them fly.")

The point of this proverbial, mid 17th century English beekeeper saying is essentially that the later in the year it is, the less time there will be for bees to build the comb, collect pollen and nectar, and produce more bees to successfully overwinter. If you're lucky enough to capture a swarm early spring, they've got time to become a productive, viable colony. Catching a swarm much later than June probably isn't worth your efforts.

I watched a first year hive (!!) swarm in August a couple of years ago. You'll notice, there is no "swarm in August" line because capturing it is worth even less than a swarm in July.

I went after it anyway. It was the principle of the thing (plus they landed on a low-hanging plant 200 yards away.) My first swarm capture was both successful and fascinating.

I've since then witnessed three more swarms, and successfully captured, well, zero. Thus, when the opportunity arose to interview Cleo Hogan Jr., master swarm catcher, I made a beeline for it. Had I known then what I know now, last year I would not have been 0 for 3.

Here are some insights from the master, who will also be speaking on swarming at the upcoming Field Day at Kelley's.

Swarm Prevention

While swarming is good for bees overall (it's the natural way they multiply), it is tough for the beekeeper to watch their investment fly off. Hogan shared "the absolute best thing you can do" for swarm prevention. The first 50-60 degree spring / late winter day:

- Take a clean bottom board and predominantly foundationonly super to each hive
- Replace the bottom board they're using with the clean one (see side bar)
- Reverse the deeps (queen is likely active in the top deep, so this moves her to the bottom and she prefers to build upward)
- Place the super atop the top deep (which was previously on the bottom)
- Kiss each bee and tell them you're proud of them (actually, Hogan didn't say that, but I suspect he feels that way.)

Hogan highly recommends that reversal process because by the time the queen sufficiently fills the bottom chamber and starts

Hogan's mentor, Dr. Ray Howard Houchins, suggested this process because "I can't make honey, but I can clean hives."

The cleaned of chewed cappings, droppings, propolis, etc. bottom board allows the bees to expend their energies elsewhere.

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working on the upper deep, the worker bees will have filled its upper edges with honey—a natural barrier that keeps her from easily accessing and laying in the honey supers. (Not using a queen separator is more efficient for the entire hive.) The worker bees will also have made significant progress on drawing out the foundation, just in time for nectar flow. Best yet, the thought of swarming will likely not enter the queen's crowned head because she is "working up." Working down may make a hive think they're crowded, which motivates them to swarm. With Hogan's approach, the queen goes in to spring seeing vast room in the bottom deep, and then the top deep, and then that honey super which her workers are busy drawing out.

Hogan cautions that deep reversal isn't a guarantee. If there's a wet, cold spring keeping bees inside, for example, there's no sure way to combat their crowded feeling and urge to swarm.

Of course, you always need to be sure there's plenty of room for the bees to work. Thinking they're tight on space, at a minimum might slow the queen's laying down, and worse case (for the beekeeper) motivate swarming.

Signs of Swarming

A few days before swarming, Hogan shared that you may be able to witness large numbers of bees coming out of the hive, flying in big circles 10-15 feet off the ground, then returning to the hive for a few days. If you notice swarming behavior, keep an extra close eye on locations around that hive. Hopefully if they do swarm, you'll see it and it will land in an accessible, handy location!

If you don't catch those practice runs, there may be other telltale signs inside the hive, like queen cells.

There are two types of queen cells—supercedure and swarm. As a general rule-of-thumb (but remember, the bees don't read the same books we do,) supercedure cells are typically built in the middle of the comb. Swarm cells are typically built on the edges, side, or bottom of a comb, closer to the woodenware.

I shared a photo (right) with Hogan, who suggested that the two cells (also known as queen peanuts because they look like peanuts up close) are supercedure cells. He further shared "Supercedure cells normally indicate the bees think the queen is failing, and they might need to replace her at some time in the future. So they have the cells ready. If the queen was already dead, then they would make a queen cell around a viable egg or expand this supercedure cell and turn it into a typical queen cell, and make themselves a new queen."

Hogan believes those cells are on reserve and not yet used, because the edges are smooth. If

a virgin queen had emerged from the cell, the edges would be jagged, due to chewing it open.

He advised against removing those cells, noting "supercedure cells are not all that bad as basically they are queen insurance. It won't do any good to remove them, as they can rebuild overnight. They typically have a viable egg inside, and if the cell is not used in approximately four days, they will remove the egg as it either needs to be capped and made into a queen, or destroyed."

Hogan also shared his expertise on a second photo of a cell on a frame that I'd placed into a nuc box along with a frame of brood (and its accompanying nursery bees.) He confirmed that it is "a beautiful, capped, full blown, queen cell," and predicted it will yield a queen in 10 to 12 days."

Hogan says whenever he finds one of these, he immediately moves the frame to a nuc box and looks forward to having a new colony. Typically, the swarm urge is subsequently diminished, because that frame and a few more will be replaced with foundation, giving them bees plenty of space again. Moving that queen cell to a nuc should of course only be done if it is a swarm cell, not a supercedure cell (which would indicate unhappiness with the queen.) In my case, I knew the colony had a great queen (in my opinion anyway!) because of the vast amounts of brood below that frame.

They're Likely to Swarm, Now What?

If you're seeing signs of a pending swarm, there is at least one thing you can do: place a catcher box / lure nearby.



Hogan has about 100 catcher boxes scattered about locations where he thinks feral colonies may swarm, along with any location where he has more than 2-3 hives. He keeps them active all of swarm season, not just when he thinks he has a hive that might swarm. His catcher boxes are 50 to 100 yards from his active hives, along with those placed along wood lines, fence rows, woods, trails, streams, hollow trees, anywhere there might be a feral colony. Most of his catcher boxes are placed on plastic tubs or barrels, with a few on top of buildings

The box consists of any old hive, with a frame of dark, drawn comb in it (the darker the better, it is seemingly more inviting), and 3-4 drops of lemongrass oil, available at some health food stores and on the internet. Hogan puts a few drops in mid-March, and refreshes it with another few drops in mid-May, keeping it effective until essentially the end of swarm season. Every year he gains 8-15 swarms this way.

Capturing a Swarm

A swarming hive likely won't immediately go into the catcher box, notes Hogan. They'll probably settle nearby (hopefully on a low-hanging branch or fence post) and ball about the queen. At this point, the senior scout bees—the most experienced foragers—will begin seeking a new location for the hive. Hopefully they'll find and convince the swarm to enter the swarm lure.

We humans never know how long the swarm will hang out in their location. It could be hours, it could be days, but depending upon weather, likely not much longer than a day or two. Hogan advises you capture it as soon as possible.

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While bees are normally quite docile during a swarm, he recommends protection, just in case. If they're on an expendable limb, vine, etc., than gently removing that and putting into a container should work. He's captured several from stationery surfaces however, such as a fence post. "Just grab two or three handfuls of bees and put them in the box," he said, "the rest generally just walk right in. Most times you can even see the queen going in."

The first swarm I witnessed last year went to the top of my maple tree. I explained to Hogan it was too high to capture.

"It was too high to capture?" he asked.

Thinking he hadn't heard me, I repeated my estimate of 40-50 feet.

"It was too high to capture?" he again asked.

It was then I heard his disbelief. In Hogan's world, there are very, very few hives that are too high to capture. He explained his approach for those cases, which consists of:

- Wait until close to sundown
- Spread a blanket underneath them
- Position an empty hive where you think they'll fall
- Knock them out of the tree with a pressure washer, basketball, or by knocking the structure on hard enough to dislodge them. The pressure washer has an additional advantage of getting them wet, and wet bees don't fly.

Hogan said in the vast majority of his experiences, the bees scamper into the awaiting box.

Unfortunately, I hadn't learned this from the master in time to get that hive atop my maple last summer,

or the second swarm that landed at the same location a week later. (For some reason, they tend to do that.)

For swarms in old cars, tanks, buildings, etc., where you're not able to get to them directly, Hogan recommends his Swarm Harvester. This innovative device has been used extensively and successfully for years.

Hogan, a third generation beekeeper, has been doing it since 1978. His motivation? He's fascinated by them, loves sharing them with kids and adults, and loves honey. He shared that upon his father's death in 1998, he decided to stop keeping bees and sold off absolutely everything.

Six months later, he missed it too much and bought a couple packages from The Walter T. Kelley Company—just to have a few bees for his honey needs. As you may have imagined, those couple of hives were just a start. He currently has 150—175 hives at his central Kentucky location, and of course, like the rest of us, is always hoping for a swarm to add another one.



Swarm Harvester, Catalog #890-SH.

