



NWNJBA Member Meeting
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Topic: Swarm Traps



SWARM TRAPS

How to catch free bees

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with assistance from

James Zdepski, David Waldman, Bob Kloss, Alice Casey,

Thomas Seeley, Nathan Coleman, and a whole bunch of stuff from the internet



What is a swarm?

- How bee colonies reproduce
- Comprise half a colony's bees (around 20,000)
- Mainly young workers so they can make wax
- Bees are pretty mellow because there is no brood to protect
- Their honey stomachs are full so they can create stores in their new hive
- Can be the size of a baseball to the size of a beach ball
- Usually older queen





Why do bees swarm?

- Reproduction
- Lack of space for brood
- Population crowding
- In the spring after nectar flow has started
- Scout bees go out to find a good location and report back to the colony





Swarming is not absconding

- Swarming is when *half* the colony leaves. The colony is splitting, or reproducing itself. The original hive remains in its location with a new queen.
- Absconding is when the *entire* colony leaves. There are very few bees left behind, and no queen.
 - Bad location
 - Lack of food or water
 - Not enough space at the wrong time of year
 - Excessive pests
 - Disease



What are scout bees looking for?

- Food
- Water
- Protection from predators (i.e., location) and the elements
- Living space
 - Volume of box
 - Empty drawn frames for brood or space to build comb
- Vibe Check: Does it smell like bees?





Trap a swarm or buy a package?

- Swarms are FREE.
- Swarms are local bees:
 - Probably more adapted to your local environment, so they are likely to be hardier
 - Proven queen of her own colony
- Swarms are FREE.
- Packages:
 - Likely overwintered and/or created in the south, which has milder winters
 - Random 3 lbs of bees with random queen, so you have to make sure the bees accept her
- Did we mention they're FREE?



KINDS OF SWARM TRAPS



What **bees** want in a trap

- *Height:* 15 feet off the ground
- *Shade and Visibility:* Well-shaded but highly visible
- *Entrance Area:* About 2 sq inches (circular or rectangular)
- *Entrance Position:* Near floor of the hive
- *Entrance Direction:* South is preferred
- *Cavity Volume:* 1.4 to 2 cubic feet
- Void under comb
- Watertight
- Draft-free
- Favorable scent



What **beekeepers** want in a trap

- Doesn't cost a lot
- Reasonably easy to make
- Reasonably easy to mount
 - We used to put the traps 15 feet up, but installing and removing them got to be difficult. Dealer's choice.
- Reasonably easy to carry to the car
- Easy to move bees to your hives
- Free bees



Deep box

- The depth of two deep frames
- Entrance hole at the bottom (rectangular or round)
- Lid with aluminum flashing
- 5 or 6 frames
- Can be hauled up by the lid or carried up a ladder





Old Langstroth box

- 8- or 10-frame box (deep or medium)
- Spacer underneath (plywood or medium box)
- Solid bottom board
- Solid lid with aluminum flashing
- Platform mount: plywood base, chains, screws, hinge
- Plans and videos available on YouTube





Scion

- Russian trap meant to control bivouacking
- Can be made from scrap wood
- Can use frames
- Can hang near your own apiary





“Planter” trap

- Mimics interior of tree
- Mann Lake version made of Wood Pulp
- [Video on NWNJBA YouTube](#)



Homemade Swarm Trap

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5-Gallon Bucket Trap

- Mimics interior of tree
- Cheap
- Drill hole in bucket for an entrance
- Screw or nail to tree
- Prepare for cutouts



We Caught Them In A 5 Gallon Bucket



Kinfolk Farm
13.2K subscribers

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Hive on porch

This might happen whether you plan for it or not...

Much to my wife's dismay.





HOW TO CATCH A SWARM



“Hey, I have a swarm in my yard”

- 5-gallon bucket or water jug on a pole
- Swarm Reacher
- Bee vac





When do you put up traps?

- BEFORE nectar flow starts, because that's when scouts are looking.
- If apple trees and honey locust trees are blooming, it may be too late.
- This is March or April in NJ depending on the weather.

Still okay to put out traps



Probably too late





What to put in the trap

- Frames:
 - At least 2 with drawn comb, the older the better
 - Fill the box so the bees can't build comb from the lid
- Lemongrass oil (similar to Swarm Commander but cheaper)
 - Dribble it on a cotton ball or paper towel and tuck it in a Ziploc
 - Spray on entrance
- Beeswax (either painted on walls or shreds)
- Propolis



Where do you put your traps?

- Feral bees: Preferably at least 3 miles from your apiary
- Your bees: At least 150 feet from your apiary
- In a tree:
 - 15 feet up (per *Bait Hives for Honey Bees*, T. Seeley)
 - “Alice height” (accessible from the ground)
 - In the fork of two branches
- Near water and diverse food sources (woods, fields)
- Shady location
- Easy to see/Clear flight path
- On the edge of a field
- Preferably facing south



How do you install traps?

- Tools
 - Nail, screw, or tree steps into tree
 - Ratchet straps or chain and S-hook
- Methods
 - Ladder
 - Jig with pulley plus ladder
 - Tree stand
 - Walk up to tree
 - Hinged platform
 - Leave trap on porch





Checking traps

- Sit for a few minutes and watch bee traffic.
 - No bees: No swarm.
 - A few bees going in and out and/or hovering: Probably scouts, come back tomorrow.
 - Lots of bees, bees on face of trap: Probably a swarm.
 - Lots of bees, bees bringing in pollen: Swarm.
 - Trap on ground, smashed apart: Congratulations, you caught a bear.
- Check at least weekly.
- Refresh lemongrass oil/Swarm Commander at entrance if feasible.





NOW WHAT?



How do you bring them home?

- Come back at night so everyone is in the box.
- If bees are on the entrance of the trap, spray them with a little water.
- Shut your trap!
 - Blue tape
 - Hardware cloth 1/8 inch (Screen)
 - Large-size hive entrance disks
- If trap is up high, CAREFULLY bring it down.
- Ratchet lid on trap.



Settling the trap in your apiary

If your trap was less than 3 miles from your apiary, drive 3 miles from where the trap was. Open the entrance to the trap and leave it there for a week. Go pick up the trap.

THAT NIGHT:

- Find a branch with a bunch of leaves on it.
- Open the entrance to the trap (remove tape or screen, open entrance disk).
- Put the branch loosely in front of the entrance. (Forces bees to re-orient).



Settling the trap in your apiary

TWO OR THREE DAYS LATER:

- Remove the branch.
- Open the lid. See what kind of mess there is.
- Have a hive body ready to move the frames into.
- Have empty frames ready in case of cutouts.
- Try to find the queen. Cage and mark if desired.





What to stock the new hive with

- Brood frames (preferably with drawn comb)
- Frames of honey if available
- Feeder if necessary





WAIT, MY BEES SWARMED!



Inspect your hive

- What's the remaining colony's queen status?
- If you have queen cells, are they:
 - Ripped open? You probably have a new queen.
 - Still being capped? Still full of royal jelly? They haven't hatched yet.
- To prevent a secondary swarm, consider moving queen cells to create nucs.
- You may need to reduce the remaining colony to a nuc until the new queen starts laying.



HOW TO STOP SWARMS



HAHAHAHAHA YOU CAN'T



And you shouldn't

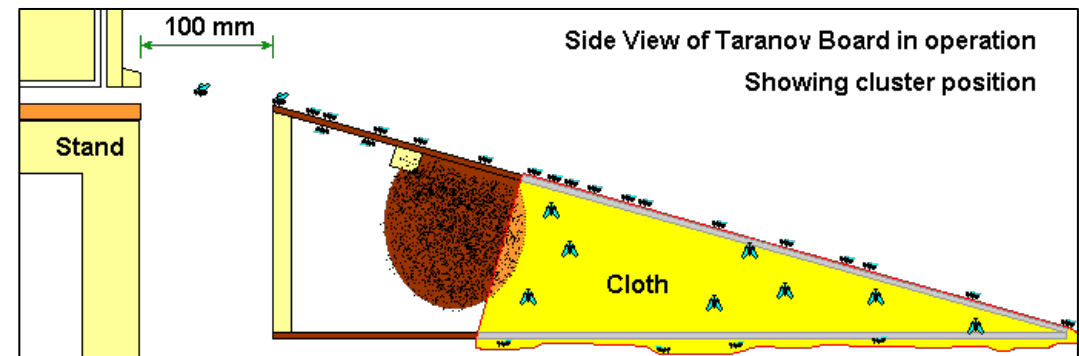
- Bees are going to swarm; it's how they reproduce.
- To prevent *losing* bees during swarm season, monitor population and space. Warning signs:
 - Bees are crowded.
 - There are many queen cells which are not empty (from “have royal jelly” to “capped”).
 - You find the queen and she's very slim.
 - Empty brood cells are being backfilled with nectar.



Actions to take

If you see queen cells:

- Do a split
 - Walkaway split
 - Put queen cell(s) into nuc(s).
 - Put queen herself into a nuc or new hive, leaving swarm cells behind.
- Try using a [Taranov board](#), aka the ramp to nowhere.





Actions to take

If you don't see queen cells:

- GIVE THEM SPACE.
- Do a reversal of brood and honey boxes.
- Remove outer two frames of drawn comb and replace with foundation to give nurse bees something to do.
- Add supers.





“If swarming is natural, why try to stop them?”

- Losing bees meaning replacing bees
- Don't piss off the neighbors
 - The idiot in Peapack-Gladstone who left a 55-gallon drum of honey for the bees to clean up, which led to the Department of Agriculture rewriting the beekeeping laws in NJ



QUESTIONS