

Central Maryland Beekeepers Association

Supporting and promoting beekeepers and the viability of honeybees in central Maryland

Starting a New Honeybee Colony via a Nucleus Hive (Nuc)

Thank you for your support of the CMBA Nuc Program. We think you will be pleased with your choice in getting a nuc to start a new hive. Please read this article in its entirety. The success of your nucs depends in part on your understanding the points presented here.

Before Receiving Your Nucs

Before receiving your nucs you will need to consider the following:

- A feeding method decided, liquid feed prepared, and available for the bees
- Hive equipment painted, in place, and ready to receive your nuc
- Any other equipment you need for the start of the season, ready, and in place
- Register your hive with the state: https://mda.maryland.gov/plants-pests/Documents/ApiaryRegistrationForm.pdf

Nuc Colony Arrival

The nucleus colonies will arrive in a plywood nuc box that is yours to keep. The nuc boxes have a screen bottom and the entrance will be plugged. We will duct tape the lid down to prevent bees from escaping. Take your nuc directly to the location of your hives, sit the nuc box next to or on top of the hive that will be their new home. Wait 10-20 minutes to let them settle, suit up, and pull the plug out of the nuc box. The bees will pour out, ready to stretch their wings after the long journey. They will fly in a figure 8 pattern facing the hive, reorienting to their new location. They should begin bringing in pollen shortly. Tips: a general rule of thumb in moving bees is no more that 6" or less than 3 miles, nothing in between. And technically, it is ok if the frames remain in the nuc box for a day or two but much longer and they might find a new home on their own.

When to Transfer the Frames

It is best to transfer the frames to your own equipment in the late afternoon/evening of the first day in their new location. That way the bees stay in the new equipment overnight, and there is less likelihood of them absconding. Start with only 10 frames total in a single box: the 5 from your nuc box that contain the bees and an additional 5 frames. Once the bees are filling 8-9 frames in a single box, you can add a second box on top. The point is to force them to build out and fill the empty frames first before moving up into another box, otherwise they will leave the outside frames unused.

Transferring Frames into Your Hive

On your new hive remove the outer cover, inner cover, and all but 2 frames from the box. Lift the nuc box lid (Tip: the duct tape is easily cut with your hive tool). Lightly smoke the bees if needed. Pull the frames one at a time out of the nuc box and place them into you new hive, push the nuc frames tight against the 2 you left in the hive. Once all the nuc frames are in the hive, add 3 frames more to fill the hive. Replace your inner cover on top, and finally the outer cover. Place the empty nuc box on its side on top of your hive's over cover, this gives any bees left behind a chance to crawl down to the entrance and find their new hive.

What to Look For After Installation

Generally, once the bees are installed in the permanent equipment, you should not open the hive box for a few days. Observe to make sure they are flying, feed them, and leave them alone to establish their home. After a week, you can open the hive inspect the frames for eggs and new larvae- a sure sign the queen is laying as she should be.

Feeding

The nuc colony must be fed; producing wax and building combs requires a lot of sugar syrup. As soon as the bees are in your own equipment, start feeding them. This means you will need to buy or make a feeder. Most importantly: feed your bees until they stop taking the sugar syrup. Tips: There are various types of feeds on the market, use what works best for you. The cheapest is a Boardman feeder that slides in the front entrance of a standard hive body. If you have extra empty supers, you can put an empty super above the inner cover and use a canning jar as a feeder: pierce the metal lid with an ice pick a number of times, fill the bottle with the sugar syrup and invert the bottle partially covering the hole in the inner cover. Put the outer cover on top of the empty super, covering the bottle, you can place the bottle on two slips of wood 3/8" thick to raise the bottle. That way the bees can come under it from multiple directions. In any case, check whatever feeder you are using daily to make sure they do not run out.

What to Feed

A 1:1 volume sugar syrup is good at this time of year. It doesn't need to be exact. Measure both white sugar and water with a measuring cup in equal amounts. Heat half of your water and pour it in to the sugar, stirring to dissolve the sugar, then add the remaining ½ volume of water (cold) to cool the mix.

General Management Going Forward

After two weeks, you can assume the colony is established in their new hive. From this point on you can start whatever you consider general management. The biggest difference between a nuc and packaged bees is speed. The nuc will grow very quickly, so you need to observe and be aware, add equipment timely and as necessary to avoid swarming. Swarming is rarely a problem with packaged bees, but nucs can outrun their equipment if the beekeeper is not watching.

For further information or questions, write to info@centralmarylandbees.org or consider joining our club's "Nuc Yard" teaching apiary.