



Nucleus Colony Installation Instructions

Congratulations on getting your nucleus colony from Betterbee! There are several ways to install nucs, but we found this way to be the easiest and simplest to explain for beginners.

Prepare equipment ahead! Your hive equipment should be assembled and painted **BEFORE** the bees arrive so they can be installed without delay. Bees will do best if installed the same day you get home, after resting a few hours (or the day after). Place your complete hive (hive stand, bottom board, deep box with 5 frames missing, and covers at your location before you leave to pick up your nuc. This will provide one less thing to do when you arrive home with your bees.

Not every nuc will be exactly the same size or strength. We examine each nuc to confirm there are brood, bees, and a laying queen. The queen has already been mated and is walking among the bees in the box. There will be one frame that may or may not yet be fully drawn out. By not having the frames all drawn out, we can better provide bees that are in quick growth mode yet not in imminent danger of swarming. The brood will be different ages. By buying a nucleus hive (A Nuc, pronounced nuke), you have about a three-week head start on brood rearing over a package. New bees will be emerging every moment, unlike in a bee package, where adults dwindle for about 21 days until newly laid eggs have developed into more adults.

Step 1: Transporting

1. Keep your nuc as cool as possible. While there is some ventilation in the boxes they come in, for the health of the bees you need to go directly from Betterbee to your hive location. Dress warmly and run the air conditioner on the way home.
2. Be sure the box is secure, so it does not tip over or the lid does not come open. You may want to bring straps, or bring items to prop against the nuc in your car. If you transport them inside a vehicle you might consider covering them with a net. We have [mesh bags](#) available for sale if you want one. There may be a few "hitchhiker" bees on your nuc. We will do our best to brush them off before they are loaded in your car.
3. Do not stop for a long period of time with the nuc in a vehicle or in the bed of a truck in direct sunlight. Rain or cold wind will not harm them and will help keep them cool. Nucs die from overheating, not from being too cold.
4. When you arrive home, place the nucleus colony on top of the hive already at the hive location. Face the entrance of the nuc(s) in the same direction as the hive entrance. The bees will orient to this spot as their new home. You cannot change this spot more than a foot or two without losing bees.
5. **VERY IMPORTANT: Open a door.** There are doors at both ends. Open one so the bees can fly, even if it is after dark. Let the bees calm down from the trip. To open the entrance, push the plastic insert toward the top of the box. The plastic insert moves within slots in the main box. The angles in the box cause the plastic insert to fold out, creating a space for the bees to enter and exit the box. If this is difficult, it's fine to simply open a corner of the cover, but make sure the wind will not blow it off.

CLOSED



When closing, make sure the lip on the plastic insert engages the box. This slot should be brown with no yellow showing.

OPEN



To open, move the plastic insert toward the top of the box. The plastic insert bends outward, giving the bees space to come and go.

Your nuc may have a mixture of plastic and wood frames.



Step 2: Installing

1. **Wear veil and have smoker ready.** After a couple of hours, or the next day, you can transfer the frames in your nucleus hive to your deep box. It is best to do this in the middle of a sunny day, as many bees will be off foraging for nectar and pollen. You most likely will not need smoke, but if the weather is cool and cloudy, you may need just a bit.
2. Move the entire nuc box off to the side of the hive. Remove the covers and the frames from the hive. Open the lid on the nuc box slowly. If there are many bees bouncing off your veil, you may want to give the nuc a puff of smoke.
3. In the nuc, start with the outermost frame closest to you. Separate it from the adjacent frame with the hive tool and then carefully remove it from the nuc. Place the frame in the deep hive body. Continue to move all frames and place them in the deep in the **center** of the deep box, **in the same order they came out of the nuc.** (This is important to keep the brood cluster together.) When putting the frames in the deep box, if you can't move a frame close to the next one because there are so many bees, smoke that area so you can get them frames to touch.
4. Add your remaining frames on either side of the nuc frames to total 10 or 8 (depending on what size equipment you are using; fill the box).

Step 3: Feeding

If you have frames of honey from last year, put these in a second deep box, above the deep you installed the nuc in. There is no need to feed syrup in this case. On new equipment it is important to feed, as it takes a lot of energy to draw out comb (build comb on) new foundation. Even with comb, it also may be necessary to feed syrup, since bees cannot fly to flowers to collect food unless it is 55 degrees Fahrenheit or above. So plan to feed syrup. When using liquid feed, syrup should be about 1 pound of sugar per 1 pint of cool water. There are many more ways to feed than can be explained here, but here are a few tips:

- If you are using any hive top feeder, **DO NOT** use an inner cover. These feeders have a large rectangular reservoir for syrup and cover the entire top of a hive box. They must be covered with **ONLY** the outer cover, to prevent access to the reservoir from above by bees. Bees will drown if they get in the feeder from above.
- **USE** an inner cover if you are using an in-hive feeder such as: Pail Feeder, Small/Large Plastic Entrance Feeder, or Boardman Feeder in the hive. Place these feeders on top of the inner cover near the center hole, so the bees can have access to the syrup. Next, place another deep box (or two mediums) on top of the inner cover, to shield the in-hive feeder. Close the notch in the inner cover's rim with duct tape to prevent robbing. **NOTE:** In cool areas, **DO NOT** use entrance feeders at the entrance, because bees will not access the syrup in cool weather. Use these feeders inside, above the inner cover, instead.
- After feeding, close the hive with the outer cover. The size of the entrance at the bottom board should be reduced to an opening of ½ by 1 inch. Continue feeding the colony until combs are well drawn out (built). Add another box (deep or medium) once most of the frames are drawn out on the initial box (8 frames if using 10 frame equipment, 6 frames if using 8 frame equipment). When the bees have established 2 deeps or 3 mediums, stop feeding, remove the feeder, and add a super.
- Use pollen patties (aka Global Patties) when there is no pollen available from flowering trees and plants. Place patties on top of your frames and add a shim and the covers.

As soon as there is congestion at this small entrance, you can change to the bigger entrance or remove the entrance reducer.

Next Steps:

Depending on the age of the brood in the nuc, how much you feed them upon arrival, and what the weather and nectar and pollen flows are like at their new home, they can fill your single story deep box in 2 weeks or it may take 6 weeks or more. Once the bees start working the outermost frames (building comb or filling cells with pollen and nectar), place your second deep box with frames on top and continue feeding. When the bees have established 2 deeps, stop feeding, remove the feeder, and add a super.