

NEW BEEKEEPERS AND THEIR NEW BEES

Created by the Lake County Beekeepers Association Board

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When becoming a beekeeper, one of the first decisions you need to make is how to obtain your bees. There are two methods of obtaining bees in early spring in Northern Illinois – Packages or Nucleus (NUCs). This short paper is an attempt to help new beekeepers decide on which method they would prefer to utilize in obtaining their bees.

The Club recommends that new beekeepers start at least two hives. This way the beekeeper will be able to compare the hives to each other as the season progresses. The new beekeeper will also have the resources to resolve any issues that might occur during the season. In addition to deciding how to obtain their bees, the new beekeeper also has to have all necessary equipment ready prior to the arrival of their bees.

Packages

- Packages need to be ordered early in the season – January/February.
- Packages can be ordered to arrive early to mid April so that the bees can be present to take advantage of early flowering fruit trees and other strong spring sources.
- A Package is the size of a large shoebox. It includes a small caged mated queen, a tin can of medicated 1:1 sugar water, and 2 or 3 pounds of bees. There are approximately 11,000 bees in a 3-pound package.
- The package producer shakes bees out of a number of hives into the box. The caged queen has no relationship to any of the bees in the box and it takes some time for the bees to become acclimated to their new queen. That is why the queen is in a separate cage.
- The beekeeper needs to order one Package for each hive they want to start.
- Package bees come from warmer parts of our country: Georgia, Florida, or California.
- The Package Bees are dumped into the new hive and then fed 1:1 sugar water and pollen in order to produce the wax needed to create cells for the queen to begin to lay eggs in.
- It is helpful to order Packages very early in Spring (two to three weeks before dandelions begin to bloom) to ensure that the hive will have enough time to develop some strength.
- Disadvantages
 - Packages are not a natural situation for the bees and can be very stressful.
 - Packages that are installed on new foundation or who do not receive any drawn out comb are slower to develop into a strong colony.
 - The queen could be injured or over stressed.
 - The quality of the queens cannot be assured because breeders have had to stockpile queens to meet the desired April delivery date. It is difficult to judge the installed queen quality for a couple of weeks.
 - Drifting is common with Packages. This means the bees will fly into other hives, during installation.
 - Success is dependent upon weather. If it is too cold bees may not feed.
 - There are not eggs or brood in the package and until the queen has cells to lay eggs in no brood will be produced.
 - The time until new workers emerge in the new hive is about 21 days from when the queen begins to lay eggs.
 - Bees must be fed 1:1 sugar syrup heavily in order to draw foundation (wax cells for eggs). Feeding stimulates the wax glands to produce wax.

- Bees must be fed a protein supplement until there are enough flowers blooming for them to gather pollen.
- Bees may not forage if weather is too cold or wet, which will delay colony development.
- It is worth noting that the bees shipped with the package have a normal life span of only 45 days. The queen is the most important individual in the colony, as she must replace those thousands of workers.
- Package bees may not produce harvestable honey in the year they are installed.
- Experienced beekeepers often install their packages into hives with drawn comb so that the queen can begin to lay eggs right away. New Beekeepers do not have this advantage.

Nucleus Hives (NUCS)

- A NUC consists of 4 or 5 frames of brood and bees, plus an actively laying queen in a small wooden or cardboard box. A NUC is a hive in miniature and is a fully functioning colony of bees. Some providers put a purchased queen in frames of brood from another hive. A reputable provider should provide you with brood that is from the queen in the NUC. Some providers put a purchased queen in frames of brood from another hive (this is not a true NUC).
- Beekeepers need to order one NUC for each hive they want to start.
- A NUC is far less stressful for the bees. They are in their own home with their own queen. (See first bullet point above)
- It should be possible to see that the queen is actively laying eggs.
- A NUC includes all ages of bees and brood.
- Purchasing a NUC from a local dealer means that the bees are acclimated to our geographic area. It depends on if the queen in the NUC is from local stock. NUCs from local stock are generally not available until late June.
- A good NUC will have at least a two-week start on a Package. By June, packages received in the beginning to middle of April can be as strong as NUCs received in the middle to end of May.
- It is easy to transfer frames and clinging bees from a NUC into a standard box.
- In general NUCs grow more rapidly than Packages however, it is still dependent on the quality of the queen in the NUC or package.
- An early start makes it more likely of a honey harvest in the current year.
- Disadvantages
 - Additional equipment is needed if the NUC grows fast and when the contents of the NUC are transferred into a standard hive body.
 - A NUC does not have the resources of a fully functioning hive.
 - It does not have the field force of a full hive and cannot take full advantage of nectar flow or pollen availability.
 - A NUC is more vulnerable than a full hive because it does not have the guard bees.
 - NUCs are usually sold on Brood Box frames. If the beekeeper is using Illinois or Medium Boxes, then the frames will be too large for the boxes. Some NUCs are sold using Medium frames. Make sure to check with the provider regarding the size of their frames.
 - NUCs cost more than packages
 - NUCs have more exposure to brood diseases and should come from a bee yard that has been inspected. Foundation in frames should not be black and old.

Purchasing Bees through the Lake County Beekeepers Association

The Lake County Beekeepers Association provides a service to Club members by collecting your orders and money and placing an order with the supplier. This year packaged bees will be purchased from Tim Willbanks in Sullivan Wisconsin. One of our members drives to Wisconsin, picks up the packages for distribution at a central location in Grayslake for package pick up. The pickup and delivery of the bees is completed in one day, so purchasers of packaged bees through the Club need to be available on the delivery date.

Beekeepers who take advantage of this service acknowledge that the Lake County Beekeepers Association will transport their bee packages from Wisconsin to Illinois only as a courtesy to them and for the purchaser's convenience. Purchasers of the packages agree that the Lake County Beekeepers Association, as well as the volunteers that make the pickup, transport, and distribute the bee packages is not responsible for any damage to or destruction of bee packages during transporting and distributing the packages. When purchasing package bees through the Club the member agrees not to hold the Club responsible for the health or condition of the bees or the other elements that are contained in the package. Further weather conditions and other unforeseen events may cause either an earlier or later delivery date, and the member assumes responsibility for picking up their order at the defined time as the Club will not be responsible for holding the packages after the defined time of delivery. It is understood that weather conditions and lack of beekeeping skills may adversely impact the health of the bees and that new members or members with less experience are encouraged to seek guidance prior to the arrival of their bee. The Lake County Beekeepers Association does provide a mentoring service for new beekeepers.

Club members are always free to forgo this Club service and arrange for their own pickup and transportation of bee packages or NUCs.

The Club is choosing to obtain their packages in Mid-April when there is typically very little forage available for the bees and the weather is unpredictable. The delivery date is never firm because it is dependent upon weather and the availability of the packages. This year the Club will purchase 3-pound packages. All packaged bee orders must be received by the March Club Meeting.

References

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