

## **Buying Bees**

Purchasing bees for the first time can be a little bit confusing. Generally, bees are bought and sold in a couple of different forms, 1) as packages and 2) as nucleus colonies.

## Package Bees

Package bees are typically sold by the pound (e.g. 2lb, 3lb) although some producers will refer to them by a number (#2, #3). The cage they are shipped in is called a package. The top of the cage has a circular opening which is used to load and unload the bees in the cage, and allow the insertion of a feeding can which sustains the bees during transport (some producers use a hard candy system instead of syrup). The queen is also installed in this opening in a cage of her own which hangs alongside the can.

There are approximately 3,500 bees to the pound. All the bees you get in your package will perish within about six weeks so it is very important to get the hive started so the queen can start laying eggs and the colony can start raising new bees as soon as possible. Because each day counts in getting bees started in a hive, you should not



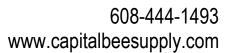
delay getting your bees into a hive after your pick up your package from the distributor.

Again it is normal for a number of bees to die each day and longer the package is in transit, the higher the number of dead bees you will have in the bottom of your cage.

Caution must be used when transporting your package bees. Bees are very sensitive to wind blowing directly on them and to the heat of the sun or enclosed vehicle. If the temperature

reaches 100 degrees or more, you will kill a lot of bees. How the bees are behaving will indicate how much stress they are under. If the bees are quite and calm, everything is fine. However, if they are rushing about the package, and some bees are sticking their tongues through the screen then they are too hot. When rushing around in a package cage, the bees make a loud humming sound. If you see or hear these things happening you need to take some action.

What can you do? First, get them in the shade out of the sun. Second, sprinkle water or a light sugar syrup on the screen of the package cage. A spray bottle filled with room temperature water can be used just for this purpose. Make sure you use a new one and remember that soap, detergent, chemicals, and insecticides can kill bees. You can also mix sugar with the water - one pound of sugar to 1/2 gallon of water to make a light





syrup. When sprayed on the screen lightly, the bees will take up the water and sugar and the rushing around will stop.

## **Nucleus Colonies**

Some beekeepers prefer to purchase nucleus colonies (nucs) instead of package bees. A nucleus colony is a self-sustaining split made from a larger colony. This split is composed of bees, brood, honey, perhaps an empty comb and a laying queen. A nuc is a functioning mini colony ready to grow into a big one. The advantage to starting with a nuc is that a nuc is essentially three weeks, or more, ahead of a package of bees in terms of establishment.



Nucs are sized and sold by the number of frames they contain. Nucs usually contain three to five frames, with the most common size being the five-frame nuc. Typically speaking, nuc producers sell only the frames/bees and charge more money to beekeepers wanting to purchase the accompanying nuc lids, bottoms, and hive bodies. Many nuc producers will require a deposit for the nuc lid, bottom, and hive body. The beekeeper is given his/her deposit back if he/she returns the nuc hive parts to the nuc producer.

Nucs do have a higher potential for problems since the buyer is also acquiring the brood frames. Brood frames have the potential to harbor certain diseases that can be very detrimental and potentially spread to other colonies the purchaser may have. In addition, some producers will utilize their old, crummy frames for making up nucs. Therefore, we strongly encourage buyers of nucs to ask a lot of questions of the nuc producer and inspect the nucs if possible prior to taking possession of them. Refer to our nuc buying guide for further information.



## 608-444-1493 www.capitalbeesupply.com

Packages		Nucs
Price	\$110-\$135 for a 3 lb package of bees with a queen (2020 prices)	About \$130 - \$210 for a five frame nuc (2020 prices)
How are they sold?	2 -5 lb packages with 3 lb packages being most common	3, 4, and 5 frame nucs with 5 frame nucs being most common
Amount of bees included	About 3,500 - 4,500 bees per pound, this being a rough average. It is common to purchase packages with queens, though one can purchase queenless packages.	About 2,000 bees per fully occupied frame (both sides of a frame) in a nuc. A nuc should come with a mated and laying queen.
Presence of brood	Does not come with brood	Comes with brood of all stages of development
Stored honey	Does not come with stored honey	Comes with stored honey
Stored pollen	Does not come with stored pollen	Comes with stored pollen
Wax comb	Does not come with comb	Comes with comb
Availability in WI	Available from late March through end of May. Package producers typically do not ship packages during summer months.	Available mid-April through October, depending on where the producer is located in the U.S. Locally produced nucs with locally raised queens aren't available in Wisconsin until June. Nucs with imported queens are available mid-end of April
Likelihood of disease transmission	adult bees can be acquired through	All pests/pathogens that a colony can have can be acquired through a nuc, including brood diseases. Arguably, beekeepers are slightly more likely to acquire a pest/pathogen through a nuc than through a package.
First season productivity	Typically, colonies derived from packages are in growth mode the first season. This is especially true if the bees were hived on foundation. However, packages may produce surplus honey the first season if managed correctly.	Like packages, hived nucs typically are in growth mode the first season. They do have a head start over packages given that they already have brood, an accepted/laying queen, and some food stores. They can produce surplus honey the first season if managed correctly.
	You can keep the package (the cage the bees are shipped in). Some package bee suppliers require a cage deposit which is refunded when the cage is returned in a timely manner but this is not common practice anymore.	Nucs come with the purchased frames. Usually, the nuc hive body, lid, and bottom board can be purchased with the frames/bees, but for an added cost (if wood). Often, nuc distributors require a deposit for the hive body, lid and bottom board, with the beekeeper getting the deposit back upon return of the equipment to the producer.