

# A guide to packages and nucs

(Updated FEB23)

## Packages

– are made with bees shaken from brood frames of colonies into a cage for transport.

Each package comes with a mated queen. One may assume the queen is made by the package supplier. Sometimes she isn't. Mostly, she is. Do you trust your package supplier to make good queens? Do they have the resources available (weather, food, drones, even knowledge for that matter – and what age was that larvae?) - producing queens is easy. Producing amazing quality queens... that requires resources many southern queen producers aren't willing to commit in the early spring – can't control weather for example... has anyone looked at the weather in Georgia late Feb? If someone is selling packages April 14<sup>th</sup> with spring queens, then go back 35-45 days. That is likely when your queen is was being made. I watched a Bob Binnie video (Thanks CIBA!) where the southern queen producer said. "I like to make sure the queens eat all their royal jelly." How did the producer know the queen wasn't underfed???

Personally, to make 64 Michael Palmer cells, I need a strong production hive [3 box broodnest exploding], add 7-8 frames 90% emerging capped brood on top, 1/4 lb of pollen collected and preferably good weather for foraging – about 20 days! Dr. Larry Connor also discusses the importance of the above factors with Queen Essentials and the importance of royal jelly for the queen. This isn't the only way to produce queens, but after playing around with the many many ways suggested to produce queens, this method by far consistently performs and is easy to understand.

Back to the bees in the package. Are they nurse bees? 2lbs vs 3lbs – basically you ensure you have more nurse bees... or do you? It all depends on who does the shaking'.

The more nurse bees in the package, the better/sooner the artificial swarm will establish itself. These queens are freshly mated aka as soon as they start to lay at the mating yards, they are put into these transport boxes via a queen cage.

**At best** these queens are 2-3 weeks old from emergence. The bee package is immediately sent via the road. There is the stress of transport therefore DO NOT blow off picking up a package. Immediately place it in your hive body and watch the colony grow.

*\*\*\*PLEASE note, I have talked to several bee package makers... they DO NOT treat their packages, however the bees shaken into the package come from treated hives\*\*\**

### What about the freshly mated queen?

It requires approx. 45-55 days to properly evaluate a mated queen from emergence. So yeah, kind of rolling the dice with regards to the queens they send with the packages; good news is we are going to

address this by supplying queens whose mothers overwintered with no or little chemical treatment for the club. We encourage our members to take advantage of this by buying nuc woodenware from Bill Budd & company from the workshop and the various projects to keep costs down and enjoy the hobby.

## Nucleus Colonies/Nucs(5FrS)

- Nucs are a wonderful way to start a beehive. There are many types of nucs however.

### Overwintered nucs

...are nucs with queens made the previous spring/summer whose queens made their own bees to overwinter. These queens are proven and in their prime for 1st honey crop producing season.

Overwintered nucs can be offered at any time. I normally sell mine in February/March. This confirms that they are indeed overwintered. People come to my apiary and see for themselves. Apiary Inspector Bernie Andrews was out here one year in February 2018!

Overwintered nucs are the gold standard of nucs (packages) bought in spring. I charged \$175 that year. This year it is \$225 for an overwintered colony, 2023.

### Olderwintered nucs

...can also be overwintered production hives that are split into two colonies (queenright nuc, and/or queen less 10Fr/any combo) in the spring.

The queen from the production hive is normally in her 2nd season for honey crop and thus not considered to be a prime queen. You want a vigorous healthy queen. She may fit the bill, I don't know. She is proven and produced a crop with her own bees. Still many advocate for her removal in lieu of a prime queen.

### Spring splits and spring nucs

...are made with frames of capped/open brood supplied with a freshly made queen or left to make their own queen (NOT IDEAL). After approx. 30 days or far longer, the queen should have laid all the brood in the box.

Sometimes it is supplied with a freshly mated queen from a reputable supplier (again, refer to the above warning about evaluating queens). This queen should be readily accepted by the emerging nurse bees and start laying immediately.

Sometimes a virgin queen is introduced, accepted, she mates and begins to lay.

Sometimes a queen cell is introduced, the cell is accepted, she mates, and begins to lay.

Sometimes, a queen cell or virgin queen is rejected, and the colony makes its own queen. She will be 2+weeks behind.

If the producer creates a spring split/nuc with a mated queen that he/she did not create... you can't know what you are getting unless the producer is extremely familiar with the queens history. One can deliberately put in all stages of brood, put in an untested/unknown queen and as soon as he/she sees eggs, call it a spring nuc! The queen is untested (not wintered), unevaluated and the bees could

supersede her after they do their own evaluation 30 days after introduction. As shady as this sounds... there is only education to prevent buyers remorse.

If the producer creates a spring split/nuc with a mated queen from the previous year from a different hive from his/her apiary, you still have the same problem, but at least you know he/she made the queen (albeit 2nd year plus) and the acceptance will probably be 100% as he moved the laying queen onto laying capped brood frames.

If the producer created an early split or nuc and allowed it to create its own queen, this is a terrible scenario as the queen is a huge unknown. Was the queen well fed? Were there enough nurse bees? Too many unknowns.

*Ideally, an early split or spring nuc is created with a quality robust fat and well mated queen made by the local producer with his/her own bees and queen – that same year! The local queen will be freshly mated through cell introduction (and mating) or transplant from mating colony and vigorously laying for at least 30 days IN THE NUC to show all stages of brood (egg to hatching) and patterns, hopefully the bees have undergone their own evaluation of the queen and fully accepted her without supersedure (45-55 evaluation rule).*

I believe I explained the possible scenarios, can't really think of different ones.

## One last word.

### Under ideal conditions

(I MEAN EVERYTHING GOING RIGHT) IF I grafted LOCAL queens APRIL 1st. They would emerge 13 days on 14th of April. 10 days from then they would be mated and laying. 21 days from then the colony should have brood at every age produced by the vigorous young queen and bees to show with no supersedure cells. This nuc colony would be available for sale and worth buying as a spring nuc.

**That day would be May 10<sup>th</sup>.**

**Nucs sold before that date can only occur with above shortcuts.**

*I cannot make queens till I start seeing drones. And then I normally give it a week before I start hatching queens to coincide with the maturity of the drones. Folks, it is going to be a bit, winter was long, spring is late. I am thinking the earliest we will have spring nucs "worthy" for sale is the final week of May. The further north you go the later this date is. The further south you go the earlier this date is. Protect yourself by informing yourself. Ask the seller reasonable questions should you have them. And everyone should ask...*

*"Please describe the process of how you make your queens."*

*"How do you perform quality control?"*

- 1. Weight*
- 2. Weather for mating/location of mating yards so you can see for yourself?*
- 3. Waited 30 days to evaluate? Some say 2 weeks, some 3, longer the better.*
- 4. Overwintered nucleus colonies are standard.*
- 5. Vigorous layer*
- 6. Royal jelly leftover*

*DO NOT ASSUME bee package sellers know their products. Right now, the average loss of bee packages is around 50%!!! We can do better... but it starts with education and awareness.*