

MAKING & WINTERING SUMMER INCREASE

Larry Connor

Trend to wintering nuclei colonies

If you haven't noticed lately, *over-wintering Summer increase* colonies is THE way to prepare for *Spring increase*. Well, maybe you've been too busy fussing over queen replacements in your package bees, or fretting over all the dead brood in colonies loaded with chalk brood. With African bees in the Southeastern United States, and with *Varroa destructor* sucking the life out of colonies in the north, I think it is time for you to try a new method of increasing your colony numbers. And in all the work I've done, hives I've seen and headaches I've had with old ways of doing things, I'm convinced that wintering nuclei colonies is one way for a lot of beekeepers to go, especially hobby and sideline operations, or about 98.9% of the beekeepers in this country. Or do I exaggerate?

July-early August ideal time for makeup

It is quite possible to make up nuclei during Spring swarming season, when bees instinctively produce queen cells and want to swarm. So, if you hustle out to the apiary and pull out those frames of brood with queen cells on them and put them into a nucleus box and move them to a new yard, you don't have to raise any queens. There is nothing wrong with this – you will not go to Hell for Beekeepers – and I have discussed this several times before. I look at beekeepers while they cut cells and wonder *what they are thinking! Can't they control swarming by removing frames of brood with queen cells and reduce the swarming instinct all at the same time?* Oh, I know what some of the books say, but really, isn't it easier just to make up a new colony? But I digress.

This year we have had a damp swarming season, with rain, lots of rain during most of May. Some beekeepers checked their hives by canoe or flat-bottomed boat. Or with water flowing into their high tops. There were a lot of swarm cells and a lot of swarms. It has been an inter-

esting season, with some colonies building swarm cells while at the very same moment pulling out drone brood because they have run out of pollen and are eating the drones. Would you please tell me what beekeeper is in charge of these bees?!

Anyway, if you make up a nucleus with one frame of brood and bees and a queen cell or two, and do it in late May, by late July you probably have a box filled with bees ready for full sized equipment or a nuc that swarmed. Not that there is anything wrong with that, but I thought most beekeepers were trying (at least in theory) to get

away from producing swarms. That nuc can be managed to keep it small, divided into additional nucs, and/or used to requeen a colony that has lost a queen due to CBS (Clumsy Beekeeper Syndrome).

Summer increase – Sacrifice weakest colonies

Many beekeepers think that they must remove brood and bees from their *strongest colonies* to make up Summer increase. I probably wrote that in the past.

You can do this if you like. If you find the queen (good luck). And if your back doesn't give out because of lifting honey supers off and on these colonies. And you are interfering with the precious few good sunny days of nectar forage by messing with your bees again. **Beekeepers: Step away from the strong beehives during the nectar flow! Get away from them! Don't you touch!**

Instead do what Mike Palmer of Vermont suggests: sacrifice the poorest, weakest, saddest (Mike does not have sad bees) performers in the apiary and make Summer nucs out of them. If you take the bees that have not done anything (*I swear that queen has just sat there on that same frame for four years and still looks like she is going to do something real soon*), tear them apart to make nucs in July and August. Less lifting, smaller brood nest. and the old queen may or may not get one more chance



Two Summer increase nucs, using a feed sack for an inner cover.



Preparing Summer increase for Winter. The three-box colony below is wrapped as shown, and the double nuc, with only a plywood floor, is placed directly on the inner cover of the bottom colony. It, too, gets wrapped.

in a nuc of her own to build up or get replaced on the next apiary visit.

Palmer makes up double nuclei colonies (10-frame deep hive bodies divided into two sections). He makes these up in July and August and then manages them to spend the Winter with him up near the Canadian border. Mike, who is president of the Vermont Beekeepers Association, claims that some of his bees forage in Canada and are bilingual. If you order queens from him please specify if you want English or French speaking queens.

Each Summer he makes four-frame nucs with the following arrangement, moving out from the center of the double nuc:

1. An empty frame of drawn comb
2. A frame of bees and brood
3. A partial frame of brood (if you have it), with stored pollen or a frame of pollen
4. A frame of honey or honey and pollen

If you make up a five-frame nuc, add another frame of honey or an empty frame of brood comb or a division-board feeder.

Palmer uses a special feeder copied from Kirk Webster, also of Vermont, that divides the two nucs. It feeds two nucs at once and takes up the space of two frames, giving each nuc four frames for Summer and Winter both.

Use nucs as a means of making additional nucs

Once the nuc is made up and moved to a new location, give it a queen cell or a mated queen. If you do not yet raise queens, I suggest you contact a local beekeeper

who does, and who has good stock you want, and purchase ripe queen cells (ready to emerge in 24 hrs) as a means of introducing your queen. The economics work too, since a queen cell at \$5 to 7 is less expensive than a locally-produced-and-mated-queen at \$15-20. You can't buy locally mated queens at Wal-Mart.

I've been using some newly emerged virgin queens for introduction this Spring, so if it works you will probably hear about it. I've used them before with good results, but you must treat them like a regular queen during introduction.

4 vs. 5 frames

The difference between a four-frame nucleus and a five-frame nucleus, both in a double nuc, is the feeder. I have seen both in use this spring, set up from the previous season, and they seem to be ok. If you use the feeder, you will feed the bees until they have three and a half frames filled with honey or syrup as winter approaches. This leaves half a frame for cluster space. With deep frames, this provides 20 or more pounds of honey per hive.

With five-frame nucs in a double box, you either need to use a top feeder (glass jar in a hole in a migratory cover), or provide frames of honey for the bees. All but half a frame should be filled with honey (and pollen underneath). I do not recommend Fall pollen feeding, since there is no clear evidence it works. These small units usually have stored a good supply of pollen on their own. Unless you messed them up somehow.

Preparation for Winter

Local beekeepers have wintered these double nuclei without doing anything for them except (maybe) to put a two-inch piece of stiff insulation material on the cover of the nucleus. Most of these beekeepers use feedbags or silt fence material for an inner cover, so the insulation sits over the fabric and the telescoping cover is put on top. The double nucleus just sits on the ground without added protection.

Wintering over another colony

Mike Palmer and others Winter their double nucs over a strong three-deep colony of bees. The double nucleus colonies are put on top the strong colonies, after flight for the season is over. The double nucleus (which has a half-inch plywood bottom) is placed directly on the inner cover of the strong colony. The full sized colony is wrapped with roofing paper and the nucleus gets its own wrapping. Again, a two-inch piece of stiff insulation material is placed on top of the double nucleus and the outer cover put in place. Each colony has its regular entrance, cut into the roofing paper as necessary.

Late Winter/early Spring inspection

If a break in the weather allows, a late February early March inspection reveals that the two clusters have moved toward each other in the double nucleus box. When wintered over a strong colony, the lower unit has moved up

and all three colonies are sharing some sort of thermal energy unity through the wood of the inner cover and the nucleus floor. Until some physicist is able to measure what is going on, I will just assume that the three units are benefiting from shared heat from the other two. I like to think they are passing messages back and forth and having a great time all Winter long.

Using over wintered nucs in the Spring.

In April and May the nuclei can be moved off to other locations and allowed to grow with the season. There are several options:

Sell the nucleus – Both Mike Palmer and Kirk Webster sell the double nucleus colonies when they are ready for the beekeeper to pickup in the double box. Once moved to a new site, the nucs can be moved into regular eight- or 10-frame equipment.

Restock dead-outs/Increase – A chief benefit for most beekeepers is a supply of locally produced and mated queens that have survived the Winter in a small conservative nucleus. Just like Brother Adam at Buckfast Abbey, you have actually produced and tested a queen for most of a year, and yet the queen is young and ready to expand into a full sized colony. You do not have to rely on another beekeeper for packages or nuclei produced in some other part of the country. You can grow your operation in a self-sufficient manner.

Keep as a nucleus – A few of the nucleus colonies should be kept small in size (by removing frames of brood and bees) to keep a constant supply of young queens in the operation. If you or another beekeeper loses a queen, you have one. For a heft fee, of course. **B.C.**

Larry Connor has finished writing and preparing Increase Essentials and has sent it off to the printers for their magic. He is well underway with a second book on Bee Sex Essentials, but will need to work on it on the road while traveling (again) this Summer to beekeeper's meetings. Readers may contact him at ebeebooks@aol.com
