

Splits For Different Reasons

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What do you want from your splits?

Since moving to Georgia, April has become my favorite month by far. The temperatures aren't too cold and definitely not too hot. It's the perfect weather for playing in your yard, hiking about, planting your garden, camping and, of course, working bees (that is if the rains hold off). The dull browns and grays of the Winter have been replaced with lime greens, pinks, whites, reds, yellows, and blues. The cold Winter smells have melted away, and the sweet warm aroma of Springtime has returned. Yes, I love April in Georgia. I imagine that, in the northern tiers of the country, your thaw is almost complete, and you too are shaking off the Winter chill and soaking up the Spring sun with a smile.

Yet, for the beekeeper here in the south, the month of April, along with its picture perfect days, can also bring about some serious headaches. The degree of which depends partly on us, partly on the nectar flow and mostly on the weather. Here in central Georgia and to our north, April is the peak swarming month, but there are no absolutes when it comes to bees. Swarms can occur as early as February or as late as September. Granted, those are the outliers of the season and they typically don't have a chance in . . . (you know where) for survival, but, why would we ever just sit back and let them hit the trees?

To maximize our honey, we should always take advantage of each bee's potential. We must harness her energy, and guide it in the right direction. (Do I sound like an infomercial?). As long as the colony has been managed properly in the Fall and overwintered with plenty of healthy Winter bees, it should now be strong and ready for the challenge.

As proper Fall management and

overwintering yield strong and ready bees, proper funding yields strong and ready University Bee Labs. Unfortunately, like I've said before and probably will say again, this lab runs hand to mouth. We receive a pittance from the State, which only covers a minimal percentage of our monthly needs. The rest (supplies, repairs, gas, wages, bees, sugar, etc.) is funneled from grant money. And, for those out there who still believe that our lab receives money from large chemical companies . . . well, guess what? You're wrong! Anyway, I digress. Back to the point, our budget, just like the rest of the nation, is tight; tighter than tight, and looks like it's going to get even tighter. Hence, we need to watch every penny, and every bee lost to the trees, whether here at the Lab or in my private operation, is critical money down the drain. In the Georgia Spring-time, we need every bee we can keep our hands on. So, what do we do? We make splits or "artificial swarms." It's so easy; all you need is an additional hive (nuc box or standard eight or 10 frame), frames, sugar syrup, and about 15 minutes!

Now, before going into the apiary,

you need to decide what purpose you have in mind for these new splits. Are they for swarm prevention? Will they go into honey or queen production? Are they to be sold off? Or, are they just more pets to look after? There are slight differences when making up the splits for each of the above cases. Also, the strength of the original colony will play a role as well. They may not be strong enough to make splits yet, or so strong as to be able to make more than one.

Let's start off with the basic split for swarm control. For you in the far North, the first of April may be a bit too early temperature wise, to make a split; however, you can at least begin to plan your attack so that you'll be ready when the time comes. To begin a split for swarm control, open the colony, locate the queen and set her aside. What we prefer to do here at the Lab is to take frames covered in bees, including most of the capped brood frames, a frame of pollen, and a frame of honey, as well as last year's queen and transfer them into a five-frame nuc box. This equates to a total of four frames with bees and brood from the parent colony (given that it has the resources to do so) and an

When you've made the split move one to a new location.



empty frame. Arrange the frames in the nuc box (and the parent colony) as follows:

Honey (H)– Empty frame (preferably drawn) (E)– Brood (B)– Brood (B)– Pollen (P)

If you are using a standard eight or 10 frame box, just add empty frames to the outside positions. As the temperatures warm, you can move those empty frames next to the brood frames to provide extra room for the queen to lay eggs. However, just be careful not to separate the brood from the pollen or honey too early, as April can still be very unpredictable, with drastic changes from high to low temperatures being common, even here in the South. This arrangement can be dangerous if cold temperatures are still in the forecast because the bees will not leave the brood. They can be a mere inch from the honey and starve. Think of the amount of energy it takes to fuel their bodies in order to create enough heat to keep not only the brood but themselves warm. As their internal energy supply dwindles, they lose their ability to generate heat, and the cluster becomes colder and colder. Once the bees are chilled, they're too cold to traverse the frames to reach the honey and will stand in place and starve. Hence, you may want to either put a few frames of honey in a super directly above the brood nest or bring the lateral honey frames closer if temperatures are predicted to drop.

Now, let's go back to the parent colony. Make sure to leave behind plenty of nurse bees, a frame of eggs or very young larvae, honey and pollen; this colony is now queenless and will need to raise its own queen. If



Finding the queen in a big colony can be a challenge.

there are swarm cells, leave those behind. Or better yet, if you've thought ahead, and ordered a queen she can be introduced immediately by placing the cage into the parent colony, thus saving precious brood-rearing time.

After the swarm control split is made, screen the entrance, load it in the truck and take it to a different location. This will reduce the tendency of adult foragers to return to the original hive. It's a good idea to feed these girls to reduce stress since they've been moved to a different location and don't know their way around the new neighborhood just yet. Also, keep in mind that this new split will soon bust out of that five-frame nuc box, so you will need to anticipate transferring it into a bigger box shortly. Now, not only have you kept your colony from swarming (hopefully), you have another colony that you can keep, give away or sell.

If your goal is to make more honey, especially cut comb, a slightly different arrangement is warranted, and timing is of the essence. In this scenario, the split needs to be done just prior to the nectar flow. Take the queen, all the open brood, most of the honey and pollen and transfer them into a nuc or standard hive box. Again, take this new colony to a different location so that the remaining foragers don't fly back into the nuc where the queen is located. Leave behind most of the foraging force, the capped brood, a frame of eggs, and some honey for the bees to survive on. With little to no open brood for the bees to attend to, it frees them up to forage mostly for honey. For cut comb, you need these boxes full of bees, basically on the verge of swarming during the entirety of the nectar flow. But, don't forget to check for a laying queen in about four weeks. Plus, you will want to arrange the split and parent colony exactly like before with honey and pollen frames on the outer edges with brood in the center.

If you want to expand your operation, there is yet another route you can take, especially if you were on the ball last year and ordered early queens. This works great for sourwood honey production or any other mid Summer nectar flow. Making splits now gives your new, robust queens time to populate the hives with plenty of foragers eager to bring in that nectar this Summer. Basi-

cally, you are just splitting the colony in half. Take half the brood, bees, honey and pollen and put them into a new box leaving the remaining half in the parent hive. Place the honey and pollen frames on opposite ends of the box with empty frames next to the brood.

E-H-E-E-B-B-B-E-E-P-E

Again, keep an eye on those future temperatures and, as the threat of chilly weather subsides, move those empty frames even closer to the brood so the queen has more cells available to her.

Splits not only help keep your colonies from swarming or provide you with additional colonies and honey, but they are also a natural method of *Varroa* control. Each time the queen's egg laying is interrupted, there are breaks in the honey bee brood cycle; hence, there are corresponding breaks in the foundress mites' reproduction cycle. The resulting delay in mite population growth reduces the stress on the colony. The splits that you've made without the original queen will take days (if introducing a mated queen immediately) to weeks (if they must rear their own) before egg laying will resume. There's even more time before the larvae are old enough for the mite's migration into the cell for her egg laying to commence. So if you time this right (when there is little to no capped brood), and dust the colony with powder sugar, you may be able to remove a good majority of mites from that colony since the mites are outside the cells feeding on the adult bees or hunting for a suitable larvae, and not under the protective wax capping.

If I've learned anything from my years in beekeeping, it's this: When I think that I still have time to do something in the beeyard, it's usually already too late. Beekeepers always need to think weeks in advance, to keep one step ahead of the bees, especially this time of year! And one other thing I've learned; if I goofed off this Winter and didn't do my rainy day chores (building frames and hive bodies), then I'm out of time come April. So, don't waste time. Get that equipment ready today for what you will need tomorrow to harness the energy of your bees and guide them in the direction of high productivity and long-term survival. Have fun and enjoy the season.

See Ya! **BC**