"In order to govern, the question is not to follow out a more or less valid theory but to build with whatever materials are at hand. The inevitable must be accepted and turned to advantage."

— Napoleon Bonaparte

March is the start of swarm season in my area of the northcentral Piedmont. My bees are functionally illiterate so they haven't read the textbooks that say swarming is initiated by crowded conditions, no place for the queen to lay, an overabundance of young bees, etc. They swarm for one reason only: it is swarming season. Swarming is Bee Sex. That's where the expression about "the birds and the bees" comes from. It is fundamental to a colony's purpose in life. Preventing it isn't impossible but it sure is difficult.

There is only one practice that seems, for me in my bee yard, to be marginally reliable for preventing disruptive swarming. That is to persuade the bees to think that they've gotten what they want: to send off the old queen and some bees to a new location and initialize a new version of their old colony with a new queen. I do this by making preemptive splits. This allows me to both make honey and to increase my colony count enough to mitigate any losses throughout the year. I don't make quite as much honey as I would if my bees loved me and chose to stay at home, but I certainly make more than if they were to take things entirely under their own control.

The goal

We all know that it takes bees to make honey. Ideally, we would have colonies busting from the seams at the start of our honey season and the bees would work like dynamos all the way up to the summer dearth. But swarming throws a huge monkey wrench into our plans. It is the same sort of thing as if we were to have a huge manufacturing facility with employees working 24/7 cranking out record levels of production, then all of a sudden half of them walk off of the job and move out of town. Production would grind to a stop, or at least slow to a trickle. Adding insult to injury, the departing employees make it so that we cannot get any new employees for about a month. Bummer.

Very careful examination of this frame shows that this colony has well-developed queen cells and will swarm as soon as the weather allows. Can anything be done to salvage the value of a colony that is determined to swarm? Photo: the author.

The point of making early-season splits for swarm prevention is to allow the bees have Bee Sex but do so on our terms. Instead of the bees deciding when they want to do it, we do. Instead of them deciding how many bees will go with the old queen and how many stay in the original hive, we decide that too. Instead of the bees deciding where the departing bees will end up (the top of a pine tree? inside the wall of a house?), we control that. For me, ultimately the biggest control factor is that, timed right, it is me rather than the bees who decide whether I get a honey crop. Outcomes are best when splits are made as early as is reasonable; that maximizes the time for the colony population to rebound.

Step by step

1. **Assess the situation**

Is the colony making preparations to swarm? Are there already swarm cells? If so, short of major, disruptive intervention, the colony will swarm within around a week. Or maybe it isn't that far along but we expect the colony to swarm (it has a prior-season queen, lots of bees and brood and comes from swarmy bee stock) and we want to get ahead of it.

2. **Move the old queen**

To mimic natural swarming, the old mother queen must be removed to a new location. It doesn't have to be far from the original spot –

the same bee yard is perfectly fine – she just has to be placed somewhere different from the old hive that is remaining in the old spot. Move the old queen and enough bees and brood to initiate a new colony. Make absolutely, 100% sure that there are zero queen cells on the frames that are moved to the new spot with the old queen. Don't make this new colony too strong or it will soon get the impulse to swarm just as the mother colony did.

3. Clean up the hive in the original spot

Carefully go through the brood frames in the hive at the old spot and remove all but one or two of the nicest swarm cells. "Remove" may mean cutting them out or, if you have plenty of resources, moving the frames to start even more new colonies. It is no problem to borrow brood frames from several different colonies to build a new starter colony.

If we are being proactive and don't yet have queen cells (the colony hasn't begun making swarm preparations), we can either let the original-spot colony raise a new queen on its own or install a young store-bought one. The second option will minimize the time without new brood, getting the colony back on track quicker so they can focus on making our honey crop. It will only work, though, if the colony hasn't already decided to swarm.

Things can go wrong

Making preemptive splits is dead simple but things can go wrong. A strong colony may decide that it wants to swarm more than once. If so, the workers will prevent a new virgin queen from killing her sisters. Instead, they'll protect them and hold them "in reserve". The primary swarm (the one with the old queen) will leave the original hive when the first queen cells are capped. (Or in our preemptive artificial swarm, we move her ourselves.) A new virgin queen emerges about 8 days or so later. When she is flight-ready, the colony swarms again (this is called an after-swarm). A "reserve" virgin queen is now available to head the old colony… or to lead yet another swarm if the colony has several "reserves" and chooses to do that. I have had colonies swarm so many times that they were left with too few workers to survive.

It is common for after-swarms to contain multiple virgin queens. If we catch a swarm headed by a virgin, keep looking – there may be several in there.

The colony in the original spot may fail to successfully requeen itself or reject the installed store-bought queen. No worries – we have the original queen in her new spot as backup.

Things to consider

Several factors must be considered before deciding when, or if, we want to make an early-season split.

1. Can we pull the queen and some brood without significantly retarding the mother colony?
2. Do we have enough worker bees in both sides of the split to warm their brood on cold nights?
3. Will we supply a store-bought queen to the queenless side of the split or allow them to make their own?
4. If we allow the queenless side to make its own queen, will there be an adequate number of drones in the area when it is time for her to mate?

More info

This is a very basic description of one method for preemptive swarm prevention. For more information, see "Swarm Season is Here!", "Making Splits Without Bananas", "Queen Development Timetable" and "Honey Bee Colonies as a Superorganism".

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