Walk-Away-Splits
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There has been much discussion about walk-away-splits. A walk-away-split is where you split a strong hive; provision both parts of the split with honey, pollen, fertilized eggs, and day old larvae, and older brood. With the fertilized eggs and day old larvae, the bees will raise themselves another queen in the part that does not have a queen. There are antidotal reports of larvae older than a day old being used for emergency queens by the bees. Normally the part that does not have the queen should be larger. However, this does result in an emergency situation and often the queen produced is inferior to a grafted, supercedure or swarm raised queen. Often, a walk-away-split queen will be superceded after she starts laying, by the colony. Walk-away-queens are superceded more often that mated queens, but both are often superceded.

I usually split the end of February / first of March. I am in the Midstate, South Carolina area. I have found splitting strong colonies the end of February / first of March time frame reduces swarming during the nectar flow that is usually from the first of April thru the second week in June in the Midstate area. Colonies normally only swarm once in the year and this is mainly during the spring nectar flow. During the end of February / first of March time frame queens are difficult to obtain and you will have approximately four to five weeks prior to the nectar flow to the first of April. Hence, I usually do a walk-away-split the end of February / first of March, with my workers starting to hatch around the middle of April. I usually still obtain a good crop of honey. If after the queen starts laying, and I end up with an inferior queen, I will replace the walk away queen with a mated queen. The walk away split should not be done until after the drones start flying.

When you let the colony raise their own queen it takes approximately 12 days to raise the queen (you can shorten this time by using a queen cell) + a week to ten days or so for the virgin queen to mate + 21 days for the worker brood to hatch. This time schedule means you a looking at six or so weeks to get workers, which put you into mid-April. This will impact your hive productivity but not as much as if the colony swarmed on you.

Often, I will also split after the nectar flow is over in June. I normally treat for varroa after the nectar flow is over the first half of June since the queen is tapering off her egg laying but the existing bee numbers are high, and the varroa counts are on the increase. After treatment, I often will split my colonies if I am going to place them on cotton. It should be noted that treating prior to splitting results in having to treat one hive in place of two splits. Cotton blooms six weeks after planting which puts the bloom during July. Since I need immediate laying, I use a mated queen rather than doing a walk-away-split.

I often will also split again in August, after cotton, and before the soybeans start to bloom the end of August / first part of September. Again, I need an immediate laying queen, so I use a mated queen rather than doing a walk-away-split.
The middle toward the end of August, the bees start transitioning from their summer bodies to the winter bodies that contain more “fat” on their dorsal and ventral sides. Hence, you need to minimize a long period of no brood hatching, since this will impact the number of bees in the colonies going into winter.

What type of split you do, whether walk away or with a mated queen, depends on your time horizon to a great extent. The walk away split often produces an inferior queen that is superceded, but also a mated queen is superceded but less often. When a walk away queen starts laying, you can make a decision of whether to keep her or not. Walk-away queens are mated in the colony location, which does result in obtaining genetics from the local area. Using a walk away procedure can save you the cost of a queen but will cost you time. It should be noted that the bee numbers will dropping while a walk away queen is being produced that needs to be watched closely so you do not lose the colony. When making splits, you should feed both parts, especially the part that does not have the field bees. It will take several weeks for the split without field bees to build up their field force.

Mark Sweatman comments:

Dave,
I am not a promoter of walk away splits. Comb condition (old dark comb not easily formed into a queen cell), conditions may not be favorable to produce an abundance of royal jelly, and maintaining proper temperature for queen development (especially in early spring).

I think your points are valid and correct. Emergency queens are OK if you evaluate the performance and re-queen later if needed.