



STAHLMAN BEEKEEPING

NOTES FOR 2025

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Some thoughts on Making up splits/hive increases

W.Z. Hutchinson begins his book **Advanced Beekeeping** published in 1905 with a chapter called Mistakes in Beekeeping. He wrote “There are critical times in beekeeping that will brook no delay; when three or four days’ or a week’s neglect may mean the loss of a crop.” I am often asked by new beekeepers; how often should I look at my bees? Or How much time is required to take care of bees?

Most individuals beginning beekeeping have a positive attitude toward how easy it is to manage a colony of bees. After a years’ experience they may still have that attitude. The knowledge gained by taking a bee school helps, but the first mistake is to think a hive can be managed without much **trouble**. **Trouble is an interesting word**. My Merriam Webster dictionary defines the word with this: a condition of annoyance, disturbance, or distress. Other words offered are inconvenience, difficulty, hardship, strain, stress as well as many others.

We are about to enter the summer bee season. Trouble is around the corner:

Robbing: Bees are always looking for an opportunity to rob when little or no nectar is available.

Failing Queens: By now, a beekeeper should have a pretty good idea if the colony has a good laying queen. I have seen so many beekeepers buy queens that are poorly mated in the spring. They arrive with package bees – lay poorly and a beekeeper thinks that because the colony has a queen everything is okay.

Wax moths: When I see wax moth damage to a colony of bees or stored comb, I don’t blame the wax moths. This is clearly the results of neglect and poor management.

Pests and Disease: Beekeepers must be vigilant and especially in the beekeeping world of today, develop a plan to manage for mite control and other bee diseases.

Crop Failures: Weather plays an important role in the lives of all of us. One can expect even the strongest hives to face starvation during periods of dearth, cold rainy and unsettled weather, and hurricane like weather.

Poor bee management: I left this topic for last because it can be easily corrected. Making mistakes is common and lessons about what not to do are remembered. Just keep in mind that humans can not control everything honeybees do. But beekeepers can adapt to working with (not against) honeybees. **It takes time and patience to succeed with bees!**

This is the time of the season when beekeepers with one or two or more years of experience have resources to have fun with honeybees.

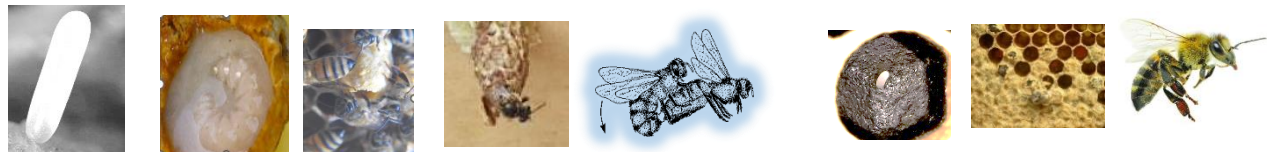
Anyone keeping honeybees will deal with one fantastic feature that honeybees do with regularity--- reproduce by swarming annually. It was a very popular sport at one time to spend a lot of time in the bee yard waiting for a colony to swarm. Swarms were caught to make increases. However, beekeepers today have hives with removable frames. And beekeepers “of years gone by” decided **why wait for a colony to swarm?** The best time to make splits or raise queens is during swarming season and many techniques have been written about by a multitude of beekeepers.

Let me share a secret with you. Bees can be managed and encouraged to do what we want them to do. One needs to understand bee reproductive biology. Anyone can make successful splits or raise queens.

Bees will rear queens under three impulses: the supersedure impulse; the swarming impulse, and the emergency impulse. The first two impulses supersedure and swarming are decided by the bees – basically when each will be carried out. However, nature also empowers honeybees with one other option – if for any reason the queen pheromone is reduced or missing, worker bees can select a young worker larva; feed it with royal jelly and make a new queen. This is the emergency queen response which serves to prolong the life of a colony; saving it from certain death.

Let me point out that anytime splits are made or a queen is absent from a colony, honeybees will make adjustments to fit the situation. One of the **greatest errors is trying to make a large number of splits using the emergency queen response to raise replacement queens with small populations of bees.**

This is a time-line for a colony of bees to raise a new queen -emergency impulse - and then the time it takes for that queen to start laying eggs and develop into a strong colony.



Day 1 (21- 23 days) ← another 21 days before emerged bees begin to add to the total bee population.

→ to first eggs laid by the new queen and

This results in a period with no new bees being added to the colony bee population.

Eggs laid by the new queen begins to replace the older bees.

The quality of a split will depend on the number of bees the queen will have to support her ability to lay eggs. Brood temperatures must be maintained at 92 - 94°F and food must be available to support bee populations. A weak split will be unable to support a queen capable of laying 1500 – 2000 eggs a day. Colonies require almost two full months to get to the point they might survive with a good laying queen. The larger the bee population, the greater the chance a split will survive. Remember – bees only live 40 some days and the original bee population in a split will die off and they must be replaced.

Introducing a new mated queen into a split speeds up colony development by at least four weeks. This is one factor to consider when deciding to make splits using emergency queen

development. Expect a brood break of 20 days if no eggs are laid while the split does not have a laying queen. This 20-day period also produces a declining bee population as older bees die.

When I make nuc's/or hive splits, I use the resources I have available to build strong colonies. One of America's most practical beekeepers was C.C. Miller the author of 50 Years Among the Bees. His book discusses how he made hive increases and if you plan on making any number of increases, I would suggest you read his book.



I could do what is called “dirty splits” which means a strong colony in two deep boxes with a laying queen can be split into 2 colonies. Some call this a walk-away split.

The process is simple and easy. All one needs is an extra bottom board, and top cover. It is not necessary to find the queen.

The process is to select the box with the most brood (including young larvae) and bee population and move it to the new bottom board

placed more than 3 feet away. Place the top cover on the hive and that is it. The old hive stand with the other box should have at least a frame of young brood to raise a queen if the queen happens to be in the moved box. This box will also pick up all the forage and flying bees which will add to its bee population. Close it up and move on to other colonies to be split. One of the hive locations will have a queen and the other will use the emergency queen response to make a new one.

If you want to install a new queen into the queen-less hive, return two days later to check frames in both hives. The hive building emergency queen cells is queen-less. Cut down any queen cells and place the new queen (protected by a queen cage) in the hive. Check back in 3 to 5 days to see if the new queen has been released from her cage and maybe pull a frame or two to check for eggs. At least a week later, check for eggs and new larvae to make sure the hive is queen-right.

What this does is create two colonies from one Colony. Both can be equalized to make population fairly equal in two weeks. Equalized means both hives should have about the same bee populations.



Some of you may be extracting honey and others will be looking to extract soon! It all depends on where you live and the way bees are managed.

Follow up checks are required to make sure both colonies have good laying queens. This method works when a person has only a few colonies/hives to make increases or a beekeeper has limited time and wants to pass on a honey crop.

•Next week, I will share how to make splits and still have strong hives that could gather in a honey crop if nectar plants are available.