

Combining Hives

By Carey Mitchell

Reasons for combining:

1. Production strength—comb honey production, quick supering
2. Requeening—queenrighting, stop laying workers
3. Winter survival—too light on stores, not enough bees

1. Production Strength—join two strong colonies

- Start with 2 colonies of near equal strength—1-2 boxes each (3-4 frames of brood in each box and active foragers)
- Move colonies close together (same bench) in early flow (March-April)
- Provide each colony with a new entrance, opposite sides
- As soon as flow reaches a steady rise, move the two colonies tightly together place proper size queen excluder on each
- Place one or two honey supers, with foundation in frames, over the queen excluders, centering the supers over both colonies, giving each colony equal access to the supers
- Place a ½ size migratory cover over the remaining open area on each side of supers. Place an inner cover and a telescoping cover on top of the supers
- Check supers for progress every few days; check each colony's brood area weekly to insure there is plenty of space for queen to lay. Remove a full frame of brood if crowding becomes a problem

2. Requeening: Queenrighting

- If a queenless colony is large, but has no laying workers, a smaller colony, headed by a young and productive queen, can be joined to the larger colony by the simple act of stacking the smaller on the larger
- The first step is to arrange the hive bodies of both colonies so that the assumed brood area (queenless) and the active brood area (queenright) of the two colonies will be together when joined.
- The larger colony's food stores can be placed on the stand and at the bottom position, with the brood nest on top (1 or 2 boxes)
- The smaller (queenright) colony's brood nest can be placed on the stand in the bottom position, with the food stores on the top. Remove top and inner covers
- Place a sheet of newspaper directly over the top of the queenless colony. Tape it securely
- Immediately place the smaller queenright colony on top of the newspaper. Leave NO exits or entrances for the colony. Leave top and inner cover on the queenright colony.
- Check on progress after two to three days.
- The queen should be laying, and nurse bees should be in attendance of brood.
- Wait to see progress of joined colonies before rearranging boxes. (Moving all brood to the bottom and stores to the top)

Note: Generally the smaller colony is moved from its original location to be joined at the larger colony's location.

2. Requeening: Stop laying workers

- Open colony to reveal stores, brood, eggs, open comb, emerging brood.
- Laying workers will not be immediately obvious.
- Make note of brood; laying workers cannot lay fertile eggs.
- Any brood made by a worker will be drone brood; the brood will be larger for that reason.
- Any eggs laid by ordinary workers will be deposited on the sides of normal worker cells because the worker bee abdomen is much shorter than that of a bred queen.
- The drones raised from worker eggs will be smaller than normal drones—the same size as a worker bee except for the head.
- Open brood will look the same as normal worker brood, and requires the same nurturing by nurse bees.
- These bees can be useful in raising normal worker brood, so they can be salvaged.
- Forager/water carrier/guard bees are not problematic. These can also be salvaged.
- Frames with a supply of stores, open brood, and few eggs can be useful.
- All these above should be separated from the main colony, and set up to be added to a new queenright colony.
- The queenright colony should be set with the brood at the top position with the stores below.
- Place a sheet of newspaper on the top of the top brood box of the queenright colony, and the laying worker colony (stores, foragers, house bees) are set directly on top of the newspaper.
- Apply an inner cover and outer cover; leave no exit or entrance to the top colony.
- Check the combined colony after two to three days. Remove the newspaper when you see the two colonies have combined.

Note: Best to dismantle the original queenless/laying worker hive to avoid starting a robbing or disease outbreak.

3. Winter Survival: Join weak hive with strong hive to get both stronger for winter

- Size of colony is not an indication of strength of colony's preparedness for winter
- A young queen (3-6 months old) with a good brood pattern and good disposition is much better than an older (2-2 ½ year old) queen.
- The older queen may have a physically larger colony, but the young queen may raise more brood earlier.
- A decision about the worthiness about the older queen needs to be made. The older queen can be transferred to a nucleus colony along with frames of food, bees and open comb.
- After decisions about the queen values have been made, there should be two separate colonies. One without a queen and one with a mated healthy well mated queen.
- The larger colony should be left on its original stand. The colony should be arranged with the brood boxes on the top positions and the food boxes below.
- The smaller colony should be arranged with the brood boxes at the bottom and any food boxes at the top.
- These steps make joining simpler and quicker with brood areas adjacent.

- Remove the inner cover and top from the larger colony. Tape a sheet of newspaper over the top box.
- Seal all exits and entrances on the smaller hive. Move this colony to the top of the larger colony over the newspaper.
- Wait two to three days for bees to chew through the newspaper. When they have joined, move the brood to the bottom of the hive and stores to the top.

Note: Steps for preparing the colony are best done during the day, while there is plenty of daylight. The final step, joining the two colonies, is best during the early evening when fliers are back to the colony.

Note: Second option would be to dispatch the older queen, before joining per above.