Making Splits

Matt Libhart

1. Walk-Away
2. Making a Nuc
3. Splits from Swarm Cells
4. Juniper Hill Split

Walk Away Split

- Easiest Split To Make
- What You'll Need
  1. A second bottom board
  2. A second inner/outer cover
  3. A hive to split with two or more boxes full of bees and brood
- What To Do
  1. Ensure each box has eggs.
     - Move frames if necessary to ensure this
  2. Split one box off onto its own bottom board
  3. Give that box a lid
  4. Walk away

Walk Away Split

- What does “full of bees” look like?

Walk Away Split

- What's going on?
- Why does this work?

Walk Away Split

- What's going on?
- Why does this work?

- One of the two boxes has a queen and continues to operate normally
- The other box will raise a new queen
- Return to the hive in two days to find out which is which.

Walk Away Split

Image by Ebert Honey

A good suggestion would be to put the box that is raising a queen in the location of the original hive. Why?

Making A Nuc

- More than one way (because of course there is)
- The following is a well thought out procedure
- You do not *need* to find the queen, but it is best if you do

Making A Nuc

- What you'll need
  1. A strong hive with lots of bees
  2. Queen excluder
  3. Extra box the same width and depth as the parent hive
  4. Bee brush/wing/branch
  5. Nuc the same depth as the parent hive including frames, lids, bottom, and entrance reducer
  6. Feeder of 1:1 syrup
  7. Pencil/Marker
  8. Two days in the apiary

Making A Nuc

- You'll need to decide ahead of time…
  - Will you introduce a mated queen into the new nuc?

  or

  - Will you let the new nuc raise a queen?
- If introducing a mated queen
  - Have the queen ordered and planned for on-time delivery on one of the two days required in the apiary.

Making A Nuc

- The idea is to form your nuc with as many nurse bees as possible. How do we “capture” nurse bees?

- Day 1 in the apiary, bring the following:
  1. Frames from the nuc
  2. Hive body which matches the parent hive
  3. Excluder
  4. Bee brush
  5. Pencil

Making A Nuc

- Day 1 in the apiary
  1. Locate and remove the following frames from the parent hive
     a) 2 frames of open brood
        - If allowing the nuc to raise a queen, ensure eggs are present on at least one of these.
     b) 1 frame of capped brood
     c) 1 frame of pollen
     d) 1 frame of honey
     e) 2 “extra” frames of open brood. Mark these “EF” with your pencil
  2. Replace these frames in the parent hive with those you brought. The EF frames do not need to be replaced.

Making A Nuc

- Day 1 in the apiary
  3. Go through each removed frame, one at a time
     - Search for the queen. If found, either place her back into the parent hive or choose another frame from the parent before adding her frame back.
     - Brush all bees from the frame back into the parent hive
     - Place the frame in the box you brought.
     - All brood frames in the middle, honey on one side, pollen on the other

Making A Nuc

- Day 1 in the apiary
  4. Place the excluder on top of the parent hive
  5. Place the new hive body with its now-beeless frames on top of the excluder
  6. Place the cover/lid on top
  7. Plan to return tomorrow

Making A Nuc

- What's going on?
- How does this achieve our goal of "capturing" nurse bees?

Making A Nuc

- What's going on?
- How does this achieve our goal of "capturing" nurse bees?

- The nurse bees are compelled to go through the excluder to care for the open brood
- Most foragers will stay below the excluder
- The queen is below the excluder since the frames were beeless when you placed them in the box

Making A Nuc

- Day 2 in the apiary, bring the following:
  1. Full nuc (no frames because they're on the hive)
  2. Bee brush
  3. Feeder/syrup

Making A Nuc

- Day 2 in the apiary
  1. Move all frames and bees except the “EF” frames into the nuc
  2. Brood in the middle surrounded by honey/pollen
  3. Brush the bees from the ”EF” frames into the nuc. Place these frames back into the parent hive
  4. Place the feeder on the nuc and make the entrance very small

Making A Nuc

- Day 2 in the apiary
  5. Remove the excluder from the parent and close it up.
  6. In the nuc, you can now implement your queen plan.
     - Add queen cage with cork removed from candy end

     or

     - Allow them to raise their own with the eggs you ensured were present per your plan

Making A Nuc

- Food For Thought
  - What's up with the "EF" frames?
  - The frames do not need to come from the same hive
  - The extra hive body brought on day one could actually become the nuc
    - It's only a nuc because you call it a nuc and manage it that way

Splitting With Swarm Cells

- If you find capped swarm cells, you can make a split using these cells, but remember that the hive may have swarmed already even if it looks full of bees

Splitting With Swarm Cells

- The most “natural” way to make a split from a hive with swarm cells is to split off the existing queen.
  - If you can find her…
  - Move her with frames of
    - Capped brood
    - Honey
    - Pollen.
  - All bees on these frames go with the queen into the split. The original hive is left with its cells.

Splitting With Swarm Cells

- If the queen cannot be found
  - Cells can be moved into a split
  - The parent hive must also be left with a cell
  - Frames to move should be the same format
    - Brood
    - Honey
    - Pollen

Introducing Queens

- The “safest” way to introduce a queen
  - Do not try to introduce a queen once a hive/split has begun raising their own new queen
  - Add a caged queen in no more than 4 hours after making a split
  - Cages with candy provide a timed release
    - The bees can acclimate to the new queen
    - The release of the queen is uneventful. She’s released while the hive is dark and “normal”.

Juniper Hill Split

- This is the split method developed by John Hogg to maximize comb honey production

- You will have to find your queen…twice

Juniper Hill Split

- What You Will Need
  1. Queen excluder
  2. A second bottom board and cover/lid
  3. Super ready for comb to be built
  4. Courage to manipulate your hive

Juniper Hill Split

- Steps:
  - At the beginning of dandelions…
    - Place the queen into a single box under an excluder
    - This box should have two frames of open brood. The other frames should be as empty as possible

Juniper Hill Split

- Steps:
  - 17-20 days later…
    - Put the queen back into the upper box(es).
    - Position the new bottom board in the opposite direction
    - Remove the excluder and set the bottom, now queenless box onto the new bottom board
    - Give this box a lid and introduce a queen or allow it to raise its own
    - Place the queen right box back on the original bottom board and add a honey/comb super

Juniper Hill Split

- What's Going On?
- Why Does This Work?

Juniper Hill Split

- What's Going On?
- Why Does This Work?

- During the 17-20 days, the queen will lay the bottom box full of eggs.
- All brood above the excluder will emerge

Juniper Hill Split

- What's Going On?
- Why Does This Work?

- After the split, the queenless hive is full of brood and nurse bees.
- The queenright box(es) are full of bees and no brood, perfect conditions for maximum wax building and foraging to make comb honey.

Questions?