Splits

• Thanks to West Sound Beekeepers Association for permission to use slides.

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Reasons for doing a split

- To prevent swarms
- To get more colonies
- To re-queen
- To get more production
- To raise queens
Timing for doing a split

- When mated queens are available
- Drones are flying for virgin queens
- Weather is warm
- Bees are healthy
Concepts of splits

Both resulting colonies need:

- Queen or the resources to make one
- Adequate supply of honey and pollen
- Adequate supply of bees
  Important! Account for drift back to the original site
Concepts of splits

Natural structure in the brood nest:

- Brood combs belong together
- Drone brood goes on the outside edge
- Pollen and honey go outside that
Concepts of splits

- Using a laying queen will shorten the time they are queen-less.
  - Rearing a queen to laying status will take an average of 24-40 days.
  - Introducing a queen will take an average of 4 days.

- Easy to introduce new queens in a small nuc rather than a large colony.
Concepts of splits

- Small nucleus splits should be performed in the evening and the bees locked down for 24 hours if staying in the same yard.

- Provide a dark, cool room for lockdown

- Provide ventilation
Take a Split off a Hive

- Take 5 frames off of a strong hive
- 2 frames of Honey with Pollen
- 3 frames of Brood
- Queen from Queen cell or Starter nuc.
Nuc set up

Honey

Capped Brood

eggs, larvae, capped brood and 2 queen cells

Capped Brood

Honey
Nuc/Split Set up ten Frame box with follower board

- Honey & Pollen
- Capped Brood
- Eggs, larvae, capped brood and 2 queen cells
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Capped Brood

Eggs, larvae, capped brood and queen cells

Capped Brood

Honey & Pollen
Kinds of splits

- Even split
- Walk away split
- Typical split
- Demaree
- Swarm prevention split
- Cut down split
- Queen mating splits
Even split

- You take half of everything and divide it up.
  - Remember to respect the brood nest structure.
- Face both of new hives at the sides of the old hive
  - So the returning bees aren't sure which one to come back to.
- In a week or so, swap places to equalize the drift to the one with the queen.
Walk away split

- You take a frame of eggs, two frames of emerging brood and two frames of pollen and honey and put them in a 5 frame nuc.
- Shake in some extra nurse bees (making sure you don't get the queen)
- Put the lid on and walk away.
- In four weeks see if the queen is laying.
Simplified Walk away split

- You take the top box off of a two box hive (or the middle box from a three box hive) when there are bees and brood in both boxes and set it on its own bottom board with its own lid.

- Walk away

- Check for a laying queen in 4 weeks.
Typical split

- Same as the walk away, but you introduce a queen you bought.

- They will be three weeks ahead of a hive that is raising their own queen.
Demaree

- Take the queen and half the brood etc. and put it above a double screen.
- Come back in four weeks and look for a queen in both boxes.
- Remove the double screen and replace with an excluder or do a split.
Demaree swarm prevention split

- The colony has swarm cells started

- Keep two best swarm cells for a split
  - or keep colony together with two queens
  - or remove all swarm cells and keep colony intact with one queen
Demaree Set-up

- Brood box
- Brood box
- Brood box with young brood
- Super
- Queen Excluder
- Brood box with queen, 2 frames sealed brood & rest empty combs.
Cut-down split

Concepts of a cut down:
- Free up bees to forage because they have no brood to care for.
- Crowd the bees up into the supers to maximize them drawing comb and foraging.
- Especially useful for comb honey production and more so for cassette comb honey production as it crowds them into the tight spaces.
- Will produce more honey regardless of the kind of honey you wish to produce.
Cut-down split

- This is very timing critical. It should be done shortly before the main honey flow. (two weeks is optimum)
- Requires a strong hive
- Put almost all the open brood, honey and pollen and the old queen in a **new** hive
- Leave all the capped brood, some of the honey and a frame with eggs or ripe queen cell with the **old** hive
- Leave the **old** hive with less brood boxes and more supers.
<table>
<thead>
<tr>
<th>New Stand</th>
<th>Old Stand</th>
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<tbody>
<tr>
<td><strong>super</strong></td>
<td><strong>super</strong></td>
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<tr>
<td>Brood box with young brood and queen</td>
<td>Capped brood with 1 frame of eggs/larvae</td>
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They are now really crowded. Why don’t they swarm?

- The new hive won't swarm because it doesn't have a workforce (which all returns to the old hive).
- The old hive won't swarm because it doesn't have a queen or any significant amount of open brood. It will take at least six weeks or more for them to raise a queen and get a decent brood nest going.
Benefits

- You still get a lot of production from the old hive because they are not busy caring for brood.
- You get the old hive re-queened
- You get a split.
- If you let the old hive re-queen itself you get a break in the brood cycle which will cost the Varroa a brood cycle as well.
Cut-down Split/Combine

- Same as cut-down split but two hives are being split/combined as one.
- Set up two hives right next to each other (touching would be good.
- Two weeks before the main flow do the cut-down split using two colonies.
- One frame of eggs, some honey, and all the capped brood goes in #1 hive.
- Open brood, honey, pollen and the old queen in hive #2.
- Move #2 hive in a new spot
- #1 hive receives all the field force from #1 and #2
Benefits

This is a way to get the same number of hives, new queen and a good crop of honey.

- #1 hive will have an enormous field force supplemented by emerging brood.

- Inserting a queen cell or letting hive #1 raise its own queen will put a break in the varroa cycle.