

# Splits

- Thanks to West Sound Beekeepers Association for permission to use slides.
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# Reasons for doing a split

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- To prevent swarms
- To get more colonies
- To re-queen
- To get more production
- To raise queens



# Timing for doing a split

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



# Concepts of splits

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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

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- 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

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- 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

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- 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

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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

Capped Brood

Honey & Pollen

# Nuc/Split Set up ten Frame box with follower boards

Honey & Pollen

Capped Brood

Eggs, larvae, capped brood and queen cells

Capped Brood

Honey & Pollen

# Kinds of splits

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

# Even split

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- 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

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- 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

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- 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 it's on bottom board with it's own lid.
- Walk away
- Check for a laying queen in 4 weeks.

# Typical split

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- 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

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- 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.



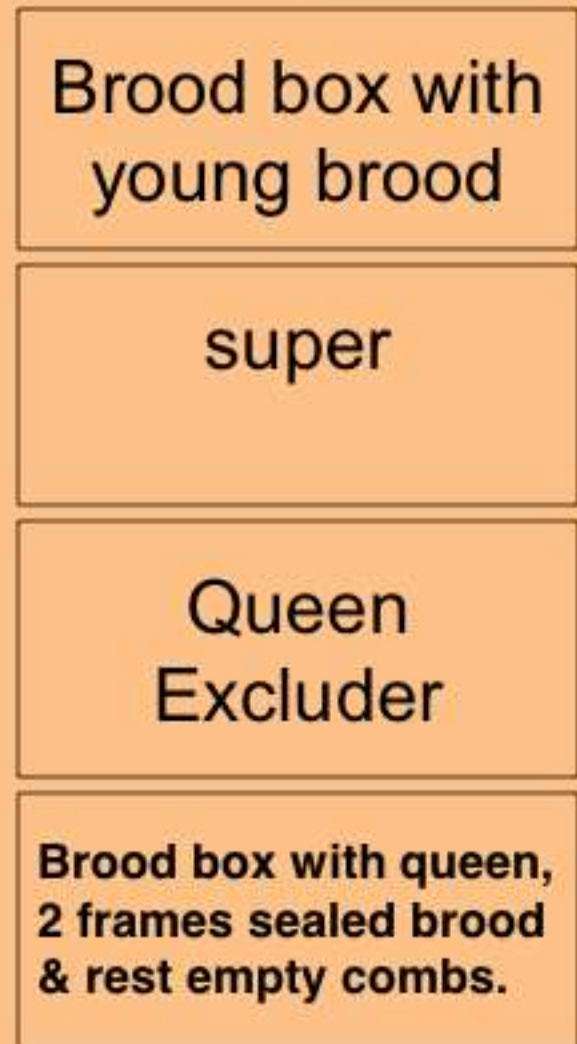
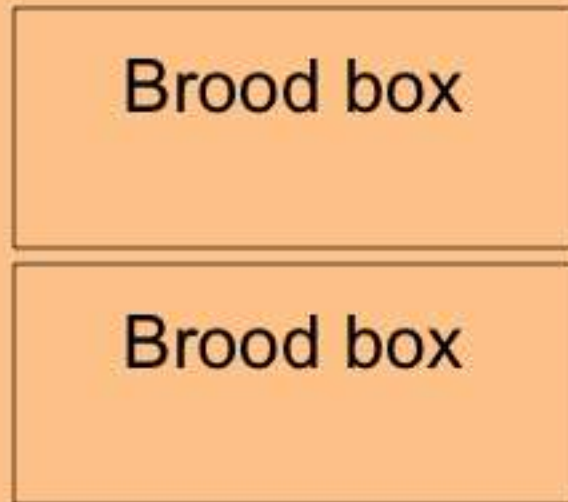
# Demaree swarm prevention split

- 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

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# Cut-down split

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## **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.

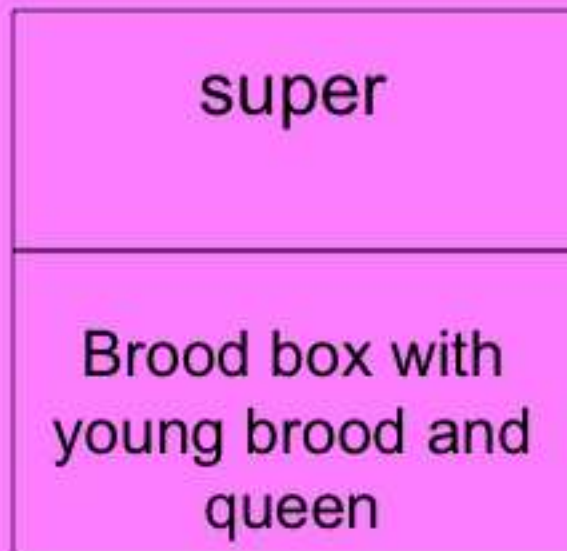
# Cut-down split

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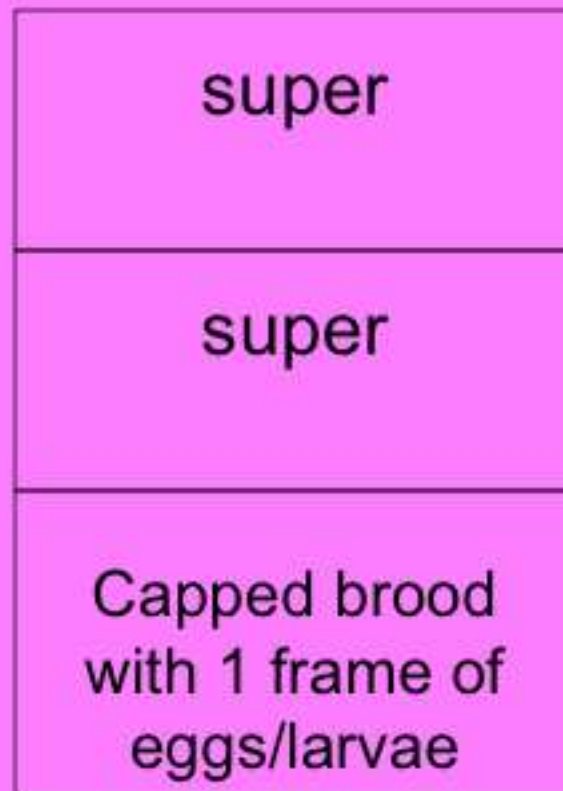
- This is very timing critical. It should be done shortly before the main honey flow. (two weeks is optimum)
- Requires a strong hive
- Put almost all the open brood, honey and pollen and the old queen in a new hive
- Leave all the capped brood, some of the honey and a frame with eggs or ripe queen cell with the old hive
- Leave the old hive with less brood boxes and more supers.

# Cutdown Split Set-up

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New Stand



Old Stand

# They are now really crowded.

## Why don't they swarm?

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- 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

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- 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

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- 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

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- 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.