

# **Practical aspects of queen rearing**

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# Topics

- Reading mating colony behaviour
- Queen Introduction
- Queen rearing crib sheet



# Incubator



# Mating nuc outside behaviour

- Store until roar stops
- Entrance activity
- No activity



# Inspecting and spitting double nucs



# Mating nuc inside behaviour

- Fill frames with stores
- Will not draw comb until happy with queen
- Make space for new queen to lay



# Colony protecting a queen cell



# Queen emerging



# Extra queen



# Moving nuc/queen on

- Never move a queen on to a new colony until you have all stages of brood
- Be dubious of queens that start to lay after 21 days
- Expanding a mini nuc is hard but not impossible

# Queen introduction

- Queen cell
- Virgin queen
- Mated queen
  - Small colony
  - Large colony
- Aggressive Colony



# Overriding rule

- Always protect the queen



# Queen cell

- Protect the cell
  - Large colony
- Introduce cell between frames
- Close to open brood



# Other options



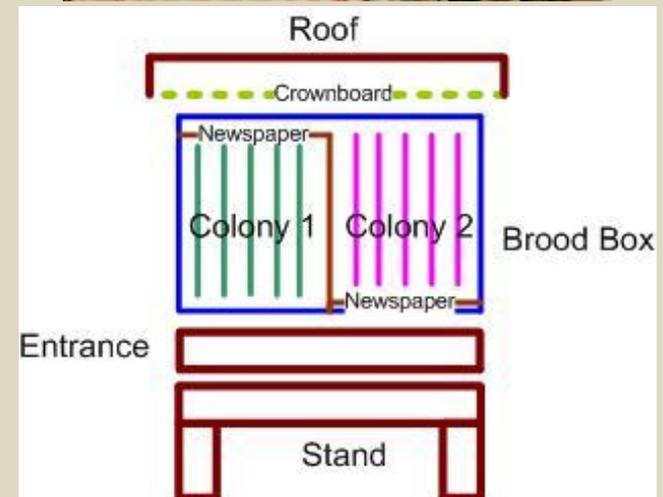
# Virgin queen

- Small colony ideal
- Ideally mini-nuc
- Queenless colony
- Allow the queen to run in between outer frames



# Mated queen

- Small colony
  - Direct using introduction cage
- Large Colony
  - Make up nuc 1<sup>st</sup>
  - Introduce queen to nuc
  - When accepted unite with original colony



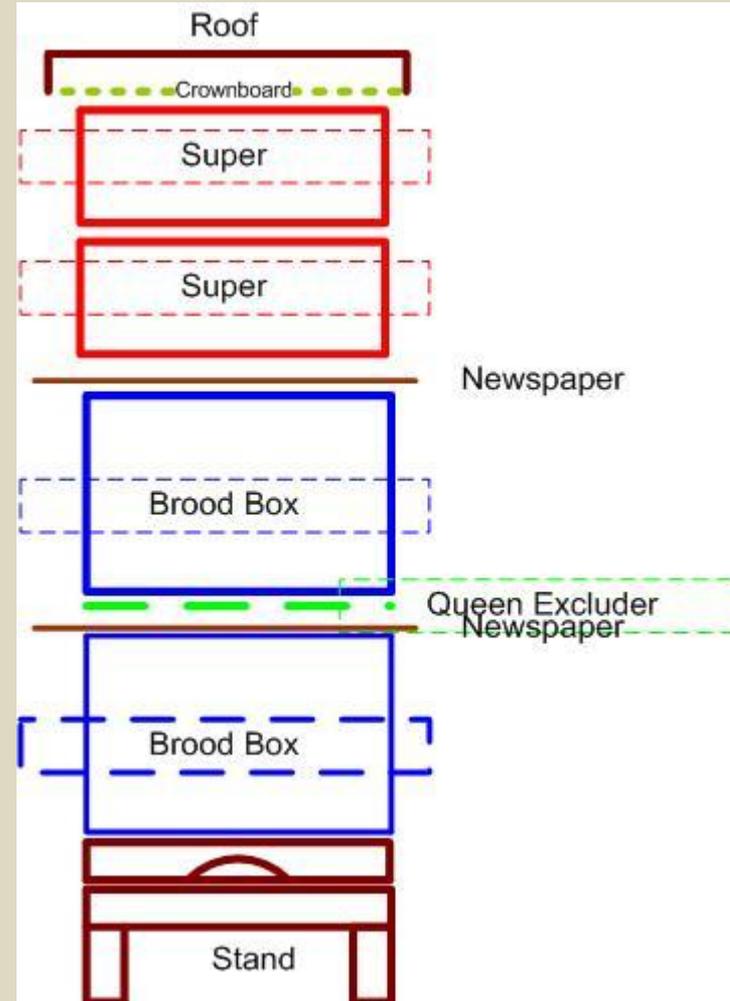
# Aggressive colony part 1

- Set up stand several yards away from colony
- Heavily smoke the colony
- Remove roof and supers
- Move brood box and floor to new stand
  - Leave open
- Place new floor on original stand
- Place supers and roof on new floor
- Go and have a cup of tea



# Aggressive colony part 2

- Find queen and cage her with exist permanently blocked
- Make up nuc from colony with new queen
- Return brood box to the original stand
- Place nuc next to colony
- After 1 week repeat part 1 to purge queen cells if present
  - Remove old queen (still in cage)
- Unite nuc and colony (protect the queen)



# Crib Sheet Small Scale Miller

Activity	Timing	Comment
Choose a donor colony		Develop your own criteria
Demaree a colony	Day 0	Ideally use colony with swarm preparations
Tear down any queen cells	Day 4	Makes top box hopelessly queenless, shake bees off all frames
Arrange frames in top box	Day 4	
Select frame from donor colony and insert in top box	Day 4	Frame with eggs and young larvae, cut saw shape
Pinch out queen cells	Day 7	Tear down sealed cells and make space
Distribute queen cells	Day 14	
Quick check to see if queen has emerged	Day 18	Take care not to disrupt colony
Check for laying mated queen	Day 30	Earliest queen will lay is day 24

# Crib Sheet Medium Scale Using Queen Right Colony and Grafting

Timing	Activity	Comment
Day 0	Rearrange colony over double brood, introduce empty graft frame into top brood box	Queen in bottom brood box with plenty of space to lay
Day 1	Graft from donor colony	Graft frame super depth with no frame spacing
Day 3	Check grafts, destroy sealed cells	Note cells with/without bee activity
Day 3	Check for queen cells in top brood box	Queen cells will use wrong material and distract bees from grafts
Day 10	Distribute queen cells	Early season full size nucs
Day 10	Redistribute frames and repeat from Day 0	Sealed top box, open and space bottom box
Day 14	Check queens emerged	
Day 28	Check for laying queen	

# Any questions?



<https://tinyurl.com/MatingNucsandMore>