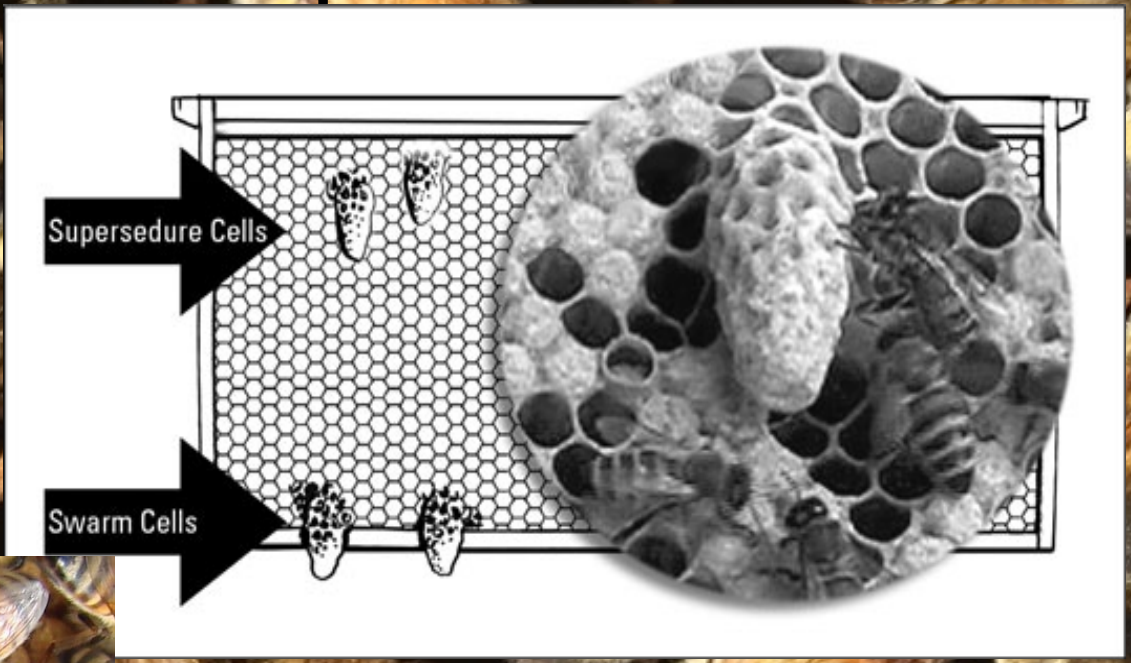
Methods of Queen Rearing

Queen Rearing Course 2017

“Types” of queens

- Swarm
- Emergency
- Supersedure



Dummies.com

Beepods.com

Why raise your own?

- Genetics
- Expansion
- Economics
- Young queens

Basic Needs of Queen Cells

- Queenless to start…
- …queenright to finish
- Heat & moisture
- Timing…
  - Nectar flow/swarming season
  - Drones!

Cell Builders

- Start your cell builder 1-2 days before grafting or inserting cells
- Remove/exclude queen
- Add food if necessary
- Lots of young bees required

Queenless Cell Builders

- Cage
- Make a split
- Cloake board
- Maintain a queenless colony
  - Add brood weekly

Cloake Boards

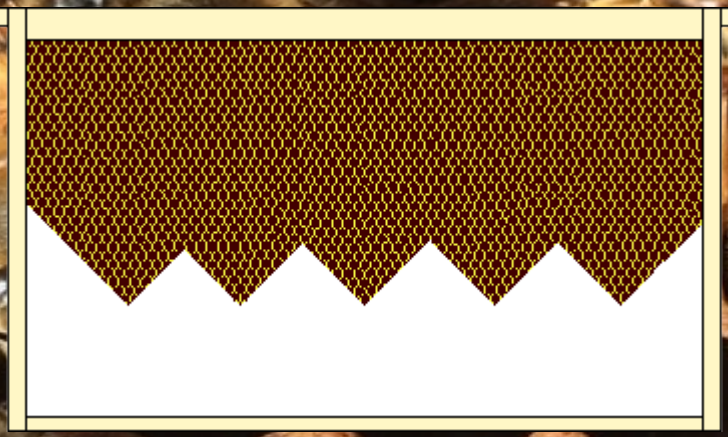
- Queen excluder with slide & entrance
- Use same colony for starting/finishing cells
- Must reverse lower entrance

METHOD 1: Miller

- PROS
  - No grafting!!
  - Relatively simple
- CONS
  - Cells may not be ready at the same time
  - Nectar flow required to draw foundation
  - Lots of little work

Miller Method

Dave Cushman



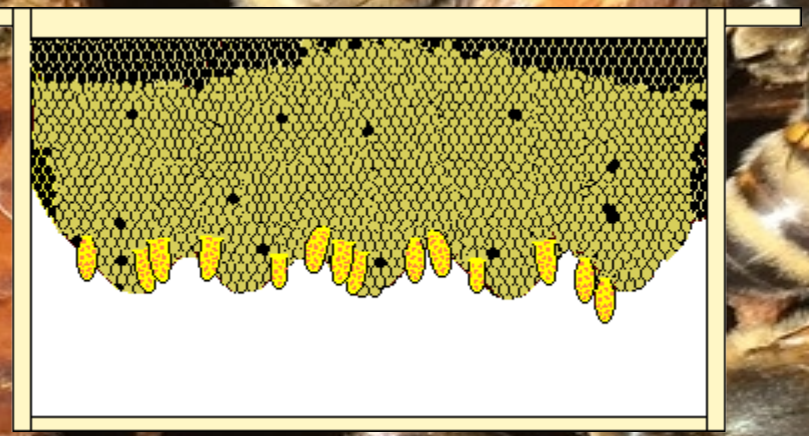
Dave Cushman

- Strips of foundation (or drawn comb)
  - 1.5 inch wide
  - Cut to a point 1.5 inches from the bottom

Miller Method

- Breeder colony
  - Draw out foundation
  - Queen lays
- Day 4 (since laying)
  - Remove frame
  - Cut back to 4 day larvae
- Cell builder
  - Feed and build queen cells along edges

Dave Cushman



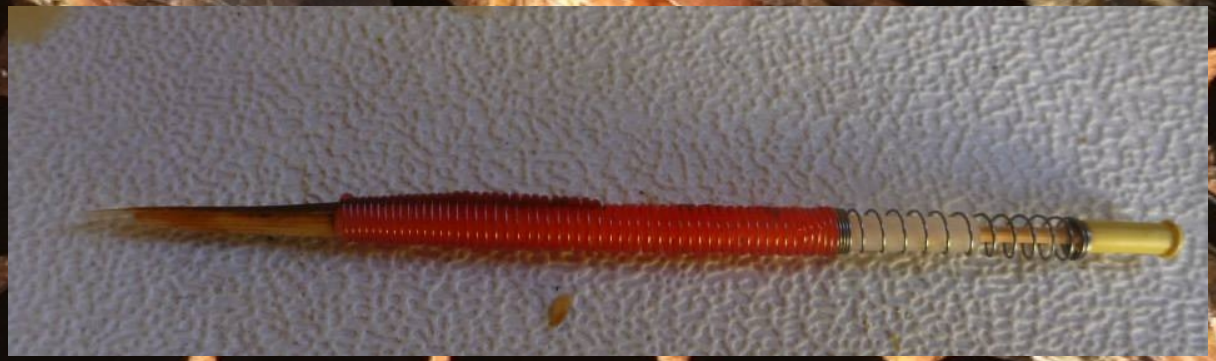
Dave Cushman

METHOD 2: Doolittle

- PROS
  - More control over timing
  - Effective, popular
- CONS
  - Grafting required

Doolittle Method- Grafting

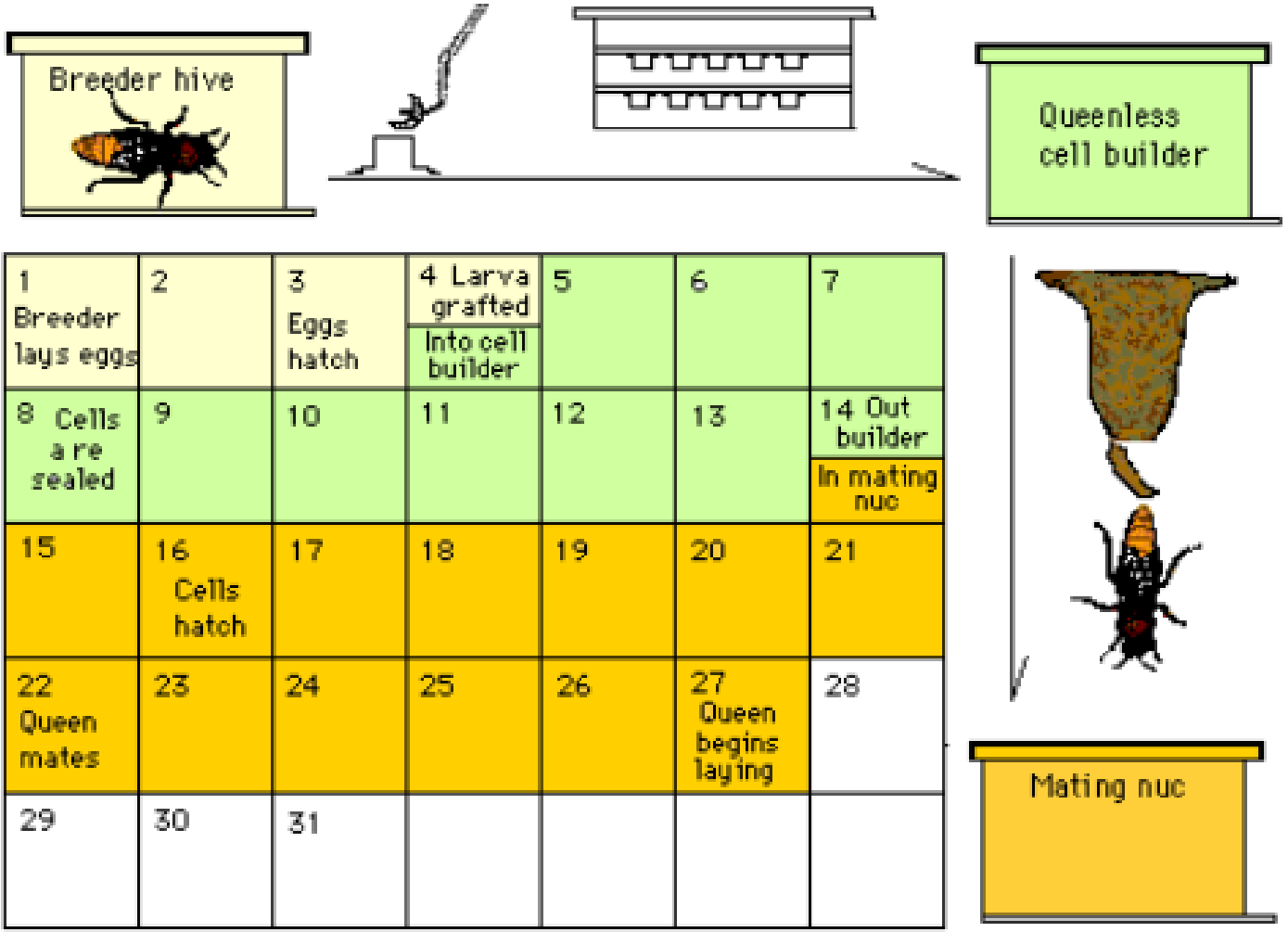
- Warm, well lit place
- Larvae- 4 days “old” (since laying)
  - Crescent, not “C”
- Black foundation or older brood comb is easier
- Grafting frame, cell cups with larvae should be kept warm & moist



Doolittle Method

- After grafting, insert into your queenless cell builder
  - Make space in advance!
- Mark your calendar!!

A Simple Queen Rearing Technique



1 Breeder lays eggs	2	3 Eggs hatch	4 Larva grafted Into cell builder	5	6	7
8 Cells are sealed	9	10	11	12	13	14 Out builder In mating nuc
15	16 Cells hatch	17	18	19	20	21
22 Queen mates	23	24	25	26	27 Queen begins laying	28
29	30	31				

(Illustration: Tom Glenn, Glenn Apiaries)

Doolittle Method

- 11 days later…

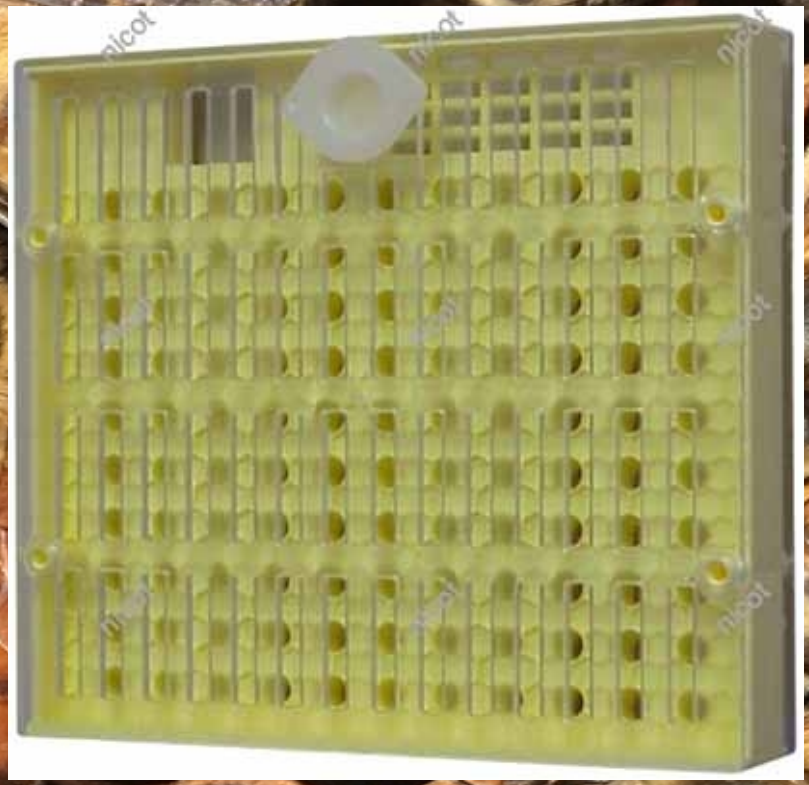
Doolittle Method

- …and into your mating nuc!

METHOD 3: Cell Plug Box

- Nicot/Jenter
- PROS
  - No grafting OR handling cells!
- CONS
  - Lots of small, finicky pieces
  - Must handle breeder queen

FRONT VIEW



Nicot

Cell Plug Box

- Plastic box with queen excluder and artificial, movable cells
- First time…put into a colony for a few days
- Attached to cut comb or foundation

REAR VIEW

Bush Farms

Cell Plug Box

- Insert into cut comb, or attach to foundation
- Catch queen & release in box
- Queen lays in cells
- Box is removed after 5 days
- Cells taken out with plug holders

Success!

- Wishing you all MANY perfectly hatched queen cells!!!

Sources

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