Successful Requeening
Protecting Your Investment

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How are queens an investment?

+ $$$$ Expensive

+ Heart of the colony

- All positive and negative characteristics of colony flow from the mother queen.

Why is it Important to develop dependable method of requeening?

1. Advantageous to requeen colony every 1 to 2 years

    - Queen bee is most productive her first season which translates into more populous hives and bigger honey harvests.

    - Colony less likely to swarm when headed by a 1st year queen

2. Failed requeening attempt acts to dissipate momentum of colony buildup

    - Spring requeening failure endangers only major honey flow

    - Fall requeening failure endangers over wintering

3. Lengthy queenless state makes hive harder to requeen

    - Loss of young brood

    - Laying workers can develop

4. Hard to find replacement queens & expensive

The Why, When & How of Successful Requeening

Why to Requeen ?

I. The mother queen is the heart of the colony - all characteristics of the hive both positive and negative flow from the queen.

1. Genetically

    + Bee foraging characteristics make for strong colonies & prodigious honey harvests

    +Colony temperament

2. Physical characteristics of the queen make her more or less able to respond appropriately to seasonal ques

+How many eggs a day can the queen lay during spring buildup

+What percentage of these eggs will be viable

+Ability to control direction of colony thru pheromone ques

-this dominance decreases with time

II. Timely requeening maintains productivity of colony

1. Queen's egg laying capacity greatest 1st & 2nd seasons

-strong spring buildup

-populous colonies for overwintering

-stay ahead of mites

III. Preempt Colony Problems

1. Productivity

-spring buildup and nectar gathering

-overwintering success

-midseason queen failure

2. Disease

-Colony diseases linked to genetics (chalk brood, foul brood, nosema, mites)

3. Temperament

When to Requeen

I. Seasonally - Spring or Fall

1. Spring Buildup

- April thru May

- Natural buildup - swarming, honey flow, spring flower blooming

2. Fall Buildup

- September into October

- Slight buildup - fall flowers blooming

- poise colony for robust growth in early spring

- less demand for fall queens - easier to purchase

II. When not to requeen

Winter or summer

-no honey flow

-Brood rearing in decline, fewer nurse bees in hive

-more unoccupied forager bees in hive

-more aggressive toward new queen

-EQUALS less acceptance of new queens

How to Requeen

+ During honeyflow
+ After colony dequeened for 2 to 24 hours
+ By Indirect or Direct Release of replacement queen into hive

Indirect Release - there is a delay before bees have direct access to queen

a. Shipping Cage - queen cage is suspended between brood frames, bees eat through sugar plug and release queen in 2 to 3 days. Time delayed release allows workers time to accept “scent” of new queen.

b. Push in Cage - trap queen under cage and press into comb over mature brood, after a retinue of attendants have hatched and queen begins to lay, pull out cage and queen is readily accepted.

Disadvantages to Indirect Release.

- Old queen must be eliminated before new queen can be introduced
- Difficult to requeen populous hive.

Direct Release - Queen is immediately released among bees. This method is most successful when preformed in a nucleus hive

Successful Requeening Using a Nucleus Hive

Using this method we isolate the part of the colony (nurse bees & brood) most likely to receive a new queen and then recombine the nuc with full colony after the new queen has been successfully accepted and begun laying.

1. Setup Nuc box - deep box with frames, screened entrance, front exit hole, and feed hole in cover.
2. Find old queen in hive to be requeened & set frame aside.
3. Remove 2 to 3 frames of sealed brood with bees and place in nuc box

4. Bookend brood nest with frames of honey and pollen
5. Brush additional bees from brood frames into nuc box.
6. Cover nuc and place backwards on top of parents hive
7. Install feeder with 1:1 scented syrup on top of nuc
8. Next day install queen by either direct or indirect release
9. Continue feeding syrup and check nuc for queen acceptance in a week

Direct Release Procedures

1. Feed nuc with scented syrup (a few drop of an essential oil or vanilla)
2. Next day open nuc and spray brood frames lightly with scented syrup
3. Lightly spray queen in cage with scented syrup
4. Replace brood frames and release “scented” queen in between frames
5. Close hive, replace cover and refill scented syrup.
6. Check hive in a week for queen acceptance.

Requeening Parent Colony with Nuc

1. Locate old queen in parent colony and eliminate
2. After 2 to 24 hours reopen parent colony and take out spacer frames
3. Spray bees on adjacent frames with scented syrup; spray outside of nuc frames; insert nuc frames into parent colony.
4. Near 100% acceptance can be expected

Advantages of Requeening with Nuc

1. Successful queen introduction is assured before old queen is eliminated (old queen is better than no queen)
2. Opportunity to monitor new queens performance for several weeks before old queen is eliminated
3. Double queen hive can be run until fall
4. Introducing new queen to young nurse bees “only “ - important when requeening robust or aggressive hive.
5. Nuc method can easily be adapted to make colony increase.