Swarming - and what to do about it

By Nick Withers
A Welcome Sight?
Most beekeepers don’t spot signs of swarming

In one recent season:

Had swarmed: 50 - 60%
Beekeeper knew: ~ 20%
Beekeeper caught: ~ 20%

Important to expect it to happen & be prepared.
The effect of swarms on surplus honey yield

No swarm - expect, say 100lbs Honey  
Prime swarm (if caught)  
Cast (if caught)  
Parent hive  

4 supers?  
2 supers?  
1 super?  
? zilch

Actions:  
Prevent  
Control  
Catch & unite  

Priority: keep all the worker bees at home!
Actions: Prevention (if you’re lucky!)

- Young queen
- Give plenty of room
- ‘Non swarming’ strain of bee
- Shook swarm?
- Set up a 2 queen hive
Actions: Prevention (Non ‘U’!)

- Kill queen
- Disease (e.g. chalkbrood)
Actions: Catch and Unite

- Catch the swarm (if you’re lucky!) and hive it
- Control QCs in old hive to ensure no casts
- Unite swarm hive to old hive when a new queen is laying, retaining the new queen
- Or keep the two (make increase)
Catching a Swarm
Catching a Swarm with a Bait Hive

Bait hive swarms are frequently not from your own hives
## What you see in the hive during swarming

<table>
<thead>
<tr>
<th>In the Hive</th>
<th>The Bees</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cups with eggs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cups with young larvae + RJ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Queen cells with larvae</td>
<td>bees lazy (swarmy)</td>
<td>less foraging</td>
</tr>
<tr>
<td>Sealed queen cells</td>
<td>swarm issues</td>
<td>no eggs from now on</td>
</tr>
<tr>
<td>VQ emerged</td>
<td>cast issues</td>
<td>then another etc.</td>
</tr>
<tr>
<td>All VQs emerged</td>
<td></td>
<td>little brood left</td>
</tr>
<tr>
<td>New Q mated</td>
<td>large nuc</td>
<td>eggs (3wks after swarm)</td>
</tr>
</tbody>
</table>

Where is the point of no return?
What is the best course of action starting at each stage?
Cups, cells & sealed cells
What do you do when you see:

- Cups: check carefully no eggs in any cup
- Cups with eggs: destroy & look again soon (max 7 days)
- Cups with young larvae: control procedure
- Queen cells with larvae: check none sealed, control procedure
- Some sealed queen cells: has Q gone? – No – control procedure
  - Yes – destroy sealed cells & leave 1 week
- Sealed queen cells, no young brood: VQ emerged? – No – leave 1 cell.
  - Yes – pull other VQs, destroy all remaining cells
- Sealed queen cells, some young brood: destroy sealed cells & leave 1 week
  - then leave 1 cell
Actions: Control

Cell cutting

Once swarm preparation has started, control needs drastic action.

Proper Control

Adrian Waring’s thesis:

Flying bees )
Brood & young bees ) Remove any 1, stop or delay swarming
Queen )

e.g. Remove:

Flying bees Move colony (in apiary with other hives)
Brood & young bees Artificial swarm
Queen Take Q away in a nuc or cage her over
the supers
Actions: more about control

Other methods:

Shook swarm  All bees & queen shaken into parent hive,
(Q excluder under box to stop absconding)
brood given to another colony (minus QC's!).

Taranov swarm Cage queen under a board in front of hive and
shake all bees onto it.
Many bees will form a swarm cluster around the queen
which can be hived.
Management of procedures

Remember you can’t have a swarm without a queen (& queen cells)

To be successful you need to predict where the greatest risk of swarming is, for example - the artificial swarm:-
The Artificial Swarm Procedure
(unsealed Q cells & queen present)

- Day 1: Move hive with QCs aside. Replacement hive with Q + 1 brood + broodless combs on old site. (flying bees go to old site with queen)
- Day 7: Move hive with QCs to other side of old site. (more flying bees join old site)
- Day 7+: VQ emerges in moved hive.
- ~Day 14+: New Q in moved hive mates.
- ~Day 21+: New Q starts laying.
- ~Day 35+: Opportunity to unite, retaining new queen.
### Management of procedures - eg the artificial swarm

<table>
<thead>
<tr>
<th>Stage</th>
<th>Parent site</th>
<th>New site</th>
<th>Contents</th>
<th>Risk of swarming</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Queen + flying bees</td>
<td>Brood + young bees + QCs</td>
<td>May swarm</td>
<td>Can’t swarm</td>
</tr>
<tr>
<td></td>
<td>Queen + brood + FBs</td>
<td>Brood + YBs &amp; FBs + QCs</td>
<td>Low risk</td>
<td>Can’t swarm</td>
</tr>
<tr>
<td>2.</td>
<td>Queen + brood + FBs</td>
<td>Brood + YBs &amp; FBs + VQs + QCs</td>
<td>Low risk</td>
<td>High risk</td>
</tr>
<tr>
<td></td>
<td>Queen + brood + FBs</td>
<td>New Q + Fbs + eggs</td>
<td>Low risk</td>
<td>Won’t</td>
</tr>
<tr>
<td>3.</td>
<td>Queen + brood + all Bs</td>
<td>New Q + brood + all Bs</td>
<td>Can prepare</td>
<td>Won’t</td>
</tr>
<tr>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>5.</td>
<td></td>
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</tbody>
</table>

After stage 5 the best course of action is to unite the parent hive to the new one, retaining the new queen.
All the better methods of swarm control end with a new laying queen in a strong hive.

Thank you for listening