

Factsheet #406

SUMMER MANAGEMENT

This factsheet covers beekeeping management practices between mid-June and mid-August. Beekeepers should examine their hives every ten days to two weeks until such time that the nectar flow is well underway and supers become heavy with honey. In examining a hive, a beekeeper routinely checks on the five situations listed below.

1. The Queen's Performance

- *Presence of Queen* - Learn to recognize eggs and brood in the various stages. Eggs situated in normal position in the cell confirm a laying queen.
- *Quantity of Brood* - Brood (eggs, uncapped larvae, capped pupae) should be on several frames. Most frames should be about two-thirds filled with brood.
- *Quality of Brood* - The brood pattern should be solid, i.e., not a mixture of capped and uncapped brood in the same area. Check on the availability of honey and pollen since a poor brood pattern can result from a shortage of stores.

Queens that have not produced a good volume of brood or have produced spotty brood, will not produce a populous hive. The alternatives are:

- Replace the queen with a new mated queen.
- Kill the queen and allow the colony to produce emergency queen cells from which new queens will emerge. One queen survives and mates, but such a colony will not likely produce a honey crop. It will develop sufficiently for wintering.
- If wintering is not considered, then it is best to kill the queen and unite the colony hive with another (see instructions below)

Drone Layers are queens that are unmated and thus only produce drone eggs in worker cells. The eggs look normal, properly placed in the cell, but the capped brood is dome-shaped and spotty. Such a queen must be removed and destroyed. The colony should be requeened or united with another hive of medium strength.

Laying Workers are found when a colony is without a queen for some time. Some workers will be selected and fed a rich protein diet enabling them to lay a few eggs. Many eggs are laid in each cell or on the sides of the cells. Such a colony is usually weak in population and it is best to shake the bees onto the ground several meters away. The workers will seek another hive while the laying workers will be lost.

2. Food

The two week period prior to the main nectar flow is very important for the colony to ensure that there will be enough foraging bee population.

3. Disease

Learn to recognize brood disease symptoms when checking for queen performance and food. In case brood disease is detected, remove the affected frame(s) and destroy. Apply antibiotics promptly. Mid-June is usually the latest time for applying antibiotics in order to prevent their presence during the nectar flow (refer to **Factsheets #205 – Honey Bee Disease Detection** and **#204- Antibiotics for Bee Disease Control**).

4. Space

An increasing population of bees will require additional comb space before the main nectar flow begins. Add supers as required. Adequate space is one of the keys in swarm prevention.

5. Swarming

Refer to **Factsheet #404 - Swarming** for information about swarm management.

OTHER CONSIDERATIONS

Uniting Hives

A queenless or weak colony may be united with another. Place the weak colony on top of the medium strength colony. Remove and kill the most unsatisfactory queen in one of the two hives to be united. Place a sheet of newspaper over the stronger hive, cut a few slits in the paper with a hive tool, and place the weaker hive on top.

Queen Excluder Use

Queen excluders are used between brood chambers and honey supers to prevent the queen from laying eggs in the honey super. The queen cannot pass through the excluder while worker bees can. Queen excluders are some hindrance to the free vertical movement of workers in the hive. When an excluder is used, it is usually placed above the second brood chamber at the time the third 'box' or first honey super is put on. The usual procedure is as follows: reverse the two brood chambers, as described earlier; place the excluder above the new second; then place a super of drawn combs above. Do not put a queen excluder over a second brood chamber that is plugged with honey or has a wide rim of capped honey above the brood. If such a situation is present, reverse the brood chambers first. Do not place a super of foundation directly above the queen excluder. Foundation should be put on in the fourth 'box' (second honey super) or intermingled with other combs in the hives for best results.

Mid-Summer Supering

Know when the nectar flow takes place in your area and do not over-super the colony when the flow comes to an end. Remove and extract honey as soon as it is mostly capped.