CALENDAR FOR BEEKEEPING IN CENTRAL NORTH CAROLINA

Nancy Ruppert, Apiary Inspector, NCDA & CS <u>nancy.ruppert@ncagr.gov</u> Updated December 2019

This calendar was designed for general beekeeping use in most of central North Carolina. Recommendations are based on average climate/weather conditions, and may vary with significant temperature changes. Those who manage hives for commercial operations may have different needs than those listed below. Details regarding bloom types/dates and pest/disease management are not included here due to space limitations; consult *reliable and current resources* for this information. This calendar is subject to being updated as new information becomes available. **Remember: bees often follow a different calendar than humans do!**

January

Add pollen supplements, if needed; check amount *and location* of honey stores, and feed (2:1 syrup, candy board or fondant) if <3/4 super of stored honey left.

Check/repair/replace stored equipment; order wax/woodenware.

Consider single dose of oxalic acid vapor or drizzle early in Jan. to clean up residual varroa in hives.

Order nucs/packages.

Keep learning---beekeeping class, read books/journals, etc.

Combine or insulate smaller (less than 4 frames of bees) hives.

Combine hives where queen has failed, if they're still alive and haven't absconded.

Move hives if they'll need to be relocated this year.

Bees may need help removing dead bodies and/or heavy snow from entrance area.

February

Noticeable pollen flow under way, especially red maple-; brood build-up intensifying.

Minimal if any nectar available---most hives need feeding (1:1 syrup in most cases, unless honey stores very low [i.e., <1/2 super left], or continue candy board/fondant).

Combine hives if needed (see January entries above).

Repair/replace equipment if needed; move hives if needed; keep learning.

During last half of February, consider adding super/hive body of wax *foundation* to allow bees to draw out more comb for spring. (Feeding or nectar is required for this.)

Replace a few (<4) frames where comb is old or damaged.

Some hives may need testing for *Nosema* disease, especially if too cold for cleansing flights. Also, late February is not too early to begin/continue varroa mite assessments, especially in southeastern NC.

Call your local cooperative extension office if you want your name on a "swarm-catcher" list.

Make plans to attend the annual NCSBA Spring Meeting in March.

March

NCSBA annual Spring Meeting (usually first weekend in March)---great learning opportunity!

Swarming under way-; implement prevention measures (make splits, remove queen cells, "checkerboard", temporarily or permanently remove current mother queen); set up "bait" hives.

Reverse bottom two or three boxes on hive to give queen more room to lay: most hives have moved up above the bottom hive body, leaving it virtually empty. This measure also helps reduce swarming. Caution: **be careful not to split up clusters of brood when you do this**. Two to three weeks after this reversal, it's likely that you'll need to reverse them again. (An alternative to reversal: simply add another hive body or super.)

Assess for pest and/or disease problems (especially varroa mites, American foulbrood, and European foulbrood) and treat if needed. **Treatments should be completed by early April to limit risk of contaminating honey**.

Check honey stores; feed (1:1 or thinner syrup) if needed.

Look closely at the brood pattern; order new queen if current one failing.

Continue to replace few frames of old/undesirable comb, if needed.

Near end of the month, add at least one honey super; remove entrance reducers; equalize hives.

April

Nectar flow is often heaviest this month: make sure that all medications are out of hive unless required for bees' survival, be prepared to add new supers every 7-10 days, and remove feeders from all except new or weak hives.

Bees should be very busy; closely examine hives that are not, and trim weeds that may be hindering flight.

Swarming usually heavy---continue prevention/capture measures.

Look closely at brood pattern; replace queen if needed.

Have everything ready to install nucs/packages that you've ordered; feed upon installation.

Consider adding queen excluder to prevent brood in honey supers.

May

Nectar flow continues---keep adding supers; get extraction/bottling equipment ready. Consider adding an additional hive entrance (via 5/8" hole or shim) above brood area, for foragers.

Swarming continues---keep up prevention/capture measures.

Replace failing queens.

Start/continue planting warm season annuals for ongoing nectar/pollen supplementation.

Install traps for small hive beetles if needed (i.e., if more than 20 adult beetles seen in hive).

Place two or more bee "watering holes" in apiary, if not already present.

June

Main nectar flow starts to dwindle---fewer supers needed, unless sourwood nearby: if in area of sourwood, consider harvesting available honey before mid-June sourwood flow to ensure more "pure" sourwood crop.

If honey being harvested, put "wet" supers back on hives late in day to limit robbing.

Can start late-season splits during last half of June; feed splits initially, even if there is nectar available

Continue measures to control small hive beetle population.

Check varroa mite levels if not done since February. (www.honeybeehealthcoalition.org)

Keep water for bees <u>constantly</u> available.

Make plans for attending NCSBA Summer Meeting in mid-July.

July

May harvest some (or all) of honey; may continue late-season splits; continue beetle controls; keep water available for bees (see June activities).

Attend NCSBA annual Summer Meeting, if possible (usually mid-July)---great learning opportunity!

Get supers on for cotton honey, if hives near cotton fields.

Replace failing queens; consider replacing <u>any</u> queen that is two years old or older.

Continue varroa mite assessments, and treat if needed/practical.

August

If not in area of significant cotton bloom, harvest remaining desired honey by mid-month to keep bees from eating it.

Nectar dearth in most areas; may need to feed carbohydrates (1:2 sugar:water, or honey water)

Pest control is <u>critical</u> this month: hive beetle populations are peaking, varroa mites are nearing their peak populations, some factors increase risk of damage from wax moth larvae, and yellow jackets/ hornets tend to be plentiful.

Careful assessment of queen performance---this month is usually last chance to replace queens until the following spring.

Can still make late-season splits early in August if using mated queens.

Keep water available for bees constantly.

Be prepared for "badly behaving bees": because nectar flow is so scarce, bees may become more defensive and more likely to rob other hives; install robbing screens or entrance reducers (but be aware of need for ventilation), and keep hive inspections as brief as possible.

Completing honey harvest + decrease in queen's egg-laying = extra empty supers of drawn comb; store them using method that prevents damage from wax moth larvae (freezing, keeping open to light/ventilation, using paradichlorobenzene [PDB] crystals).

September

Continue measures for pest control. Varroa control should be completed by end of month!!

May feed thin (1:1 or more diluted) sugar syrup for 2-3 weeks to stimulate queen laying---builds up winter population---but by last week of September, begin feeding thicker (2:1) syrup for winter stores, although thicker syrup may not be necessary if >3 supers of honey left on hive and/or heavy fall nectar flow.

Consider assessment for Nosema parasites.

Combine colonies later in the month if weak and/or have failing queens.

Should have brood in bottom box; if not, may need to rearrange things.

October

Assess for varroa mites via sugar roll or alcohol wash. Varroa levels need to be below threshold by mid-October, as winter bees are developing and can be permanently damaged by varroa.

Remove all queen excluders, if present.

Combine hives that are weak/have failing queens.

Feed thick syrup, if needed, for winter food stores.

Limit frequency of inspections after mid-October: bees are sealing cracks with propolis, and waste lots of time/energy if they have to keep replacing it.

Add entrance reducers near end of month to keep mice out.

Drones being expelled in most hives.

Plant (October through December) herbaceous perennials, shrubs and trees for future nectar/pollen sources.

November

Combine hives that are weak/have failing queens.

Ensure adequate ventilation near top of hive.

Feed thick syrup, candy boards or fondant if needed, for winter stores.

Provide weights (brick, rock, concrete block, etc.) for tops of hives to limit wind-induced toplessness.

Plant trees for future nectar/pollen sources (tulip poplar, maple, sourwood, etc.).

Consider closing off screened bottom board to improve heat insulation.

Bee caught up before Thanksgiving, so you can enjoy food, family, football, Black Friday, etc.!

December

Combine hives that are weak/have failing queens.

Feed thick syrup, candy board or fondant if needed (i.e., if not more than one super of honey stored up).

Consider insulating smaller hives (those with 4 or fewer frames of bees).

Consider single dose of oxalic acid late in Dec. (while hive's likely broodless) to clean up residual varroa.

Sell honey to Christmas gift shoppers.

Year-end review/assessment of apiary success/challenges.

Leave bees alone, if possible. (Take a break---you probably need it by now!)