**Rowan County Beekeepers Association**

**Meeting Minutes**

**4/11/2022**

**Location: In Person and ZOOM Facilitated by Rowan County Extension Agency**

Marcel Renn called the meeting to order at 7:00 pm and welcomed all the members there. There were 31 participants in person and 2 on Zoom.

**Program: PowerPoint:**   [Protect Your Bees from Varroa Mites PowerPoint](https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DNmmQKvQFqKg&data=04%7C01%7Ccjcraddock%40ncat.edu%7C6312f94a7dcc426d88ab08da1643211d%7Cd844dd75a4d74b1fbd33bc0b1c796c38%7C0%7C0%7C637846776096902170%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=pCUt8keIvkhStmsxtPRXfQPj0nqWEvSQMagDyQKBFsQ%3D&reserved=0) – Honey Bee Health Coalition (HBHC)

Narrator - Mark Dights – President of Apiary inspectors of America – Varroa mite is most devastating pest on honey bees. Colonies infested with varroa will most likely die within a year. Honey Bee Health Coalition has developed several resources for managing treatment for varroa mites. Also includes resource videos on YouTube – Tools for Varroa Management – Honey Bee Health Coalition.

What is a varroa mite – originally a pest of Asian honey bee. Introduced to US in 1987. Is now in all beekeeping countries except Australia. Parasitizes larva and adult bees. It causes premature aging of adults and death of larvae. It is also a vector for many diseases. Every honey bee colony in the Continental US and Canada either has Varroa today or will have them within several months. Doing nothing is not an option for most bee keepers.

Successful varroa control is proactive.

There are 4 population phases of the honey bee/varroa mite seasonal cycle - dormant, population increase, peak population and population decrease.

What percentage of mite infestation is considered to be potentially harmful? 3%.

Regular sampling provides an estimate of your mite population and allows you to select the appropriate control technique. It also allows you to determine the effectiveness of your treatment methods.

What sampling methods does HBHC recommend? Sugar shake and alcohol wash. Should sample ~4 X per year. (Sampling videos are available on You Tube.)

While mite densities may vary across colonies, all colonies should be treated at the same time with same chemical or non-chemical technique. Strong colonies can spread mites across many colonies.

What controls work? See the tools for varroa management guide and videos for more info on non-chemical and chemical treatment options.

Ultimate solution is a bee that can resist this pest. Until we have this type of stock, Integrated Pest Management (IPM) is necessary. There is no single solution. Treatment options may vary from beekeeper to beekeeper based on their situation.

Guide and videos can be found at: [Varroa Management Decision Tool - Honey Bee Health Coalition](https://honeybeehealthcoalition.org/varroatool/)

Points of emphasis:

Everyone will have mites at some time. Kevin Watson treats 4 X per year. Mite Away Quick Strips (MAQS) and Apivar (which can be used at higher temps). Some use oxalic acid in winter (broodless periods). (Page 12 of the HBHC guide lists chemicals that are recommended for different stages of bee/mite population as well as limitations (such as preferred application temps).

Marcel uses Apivar strips and oxalic acid. Had good experience with oxalic acid this past winter.

Richard has had good success with oxalic acid in December (no brood).

Mark Heuser will use formic acid spring and fall and oxalic acid in drizzle method in December.

Rile Gobble has Russian bees and treated his bees for the first time in many years with Apiguard this past year.

Remember that the label is the law!

Q about use of drone frames – mites infest drones preferentially because of longer brood time. You MUST be sure to remove the drone frames before they hatch or you have introduced a mite bomb in your colony.

**Secretary Report:** No comments were received on the March minutes. Last month’s minutes were approved.

**Treasurer Report:** Mark Heuser provided the Treasurer’s report. Beginning balance as of 2/18/22: $3124.60. Ending balance as of 3/31/22 was $2860.60 – includes state dues and 1 check from our March meeting. If you paid for state membership and have not received a yellow membership card from the state, email the state treasurer (Todd Walker) and ask for one.

**Old Business**:

Randy Cox brought the club library books for check out.

No other old business.

**New Business**:

Marcel thanked Holly Hutchins and Beth Stebe for providing snacks for our meeting and asked for volunteers to provide refreshments for the May meeting.

The club has been asked to provide an information booth at the Sacred Heart Catholic School. They are planning a big community event for Earth Day on Saturday, April 30th from 10-11:30 AM. Mark Heuser and Marcel will support this event.

Marcel asked Cody to bring up the swarm list on the screen. Mark Pryor stated that he will do structural retrievals and that information will be added to the list. Marcel said he also found a union carpenter that will do the cutout and subsequent repair - Gary DuBois: 508-989-7553.

China Grove Farmers Day is coming up July 16, 2022.

Marcel stated that the surplus honey flow started today. Strong hives should have supers on. If you have drawn comb, you can add more than one super at a time. If you use just foundation, add only one honey super at a time. If you use a queen excluder, you need to add at least one frame of drawn comb or honey in the honey super to entice the bees above the queen excluder.

If you don’t use a queen excluder, when you pull your honey supers, you will need to make very sure that your queen is not in the honey super.

Richard used a bee escape one year. Disadvantage is that you have to lift all heavy honey supers to put the board below.

Don’t sell honey that the bees have made from sugar syrup!!!

To increase the number of drawn comb frames you have, you can checkerboard drawn and new. Or you can put the new foundation frames on the outside with drawn comb in the middle.

Someone asked about agreed upon price of honey - $30/quart, $15/pint, $10/pound. Dandelion Bee Supply is working on getting smooth sided quart and pint jars for honey sales.

There were no additional Q&A.

Door prizes were handed out and the meeting was adjourned at 8:30.

Respectfully submitted,

Lee Williams, Secretary

**CALENDAR FOR BEEKEEPING IN CENTRAL NORTH CAROLINA**

Nancy Ruppert, Apiary Inspector, NCDA & CS nancy.ruppert@ncagr.gov 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, “checker board”, 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 constantly 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 any 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 critical 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 is 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!)

As of APRIL 2021

EXTRACTOR EQUIPMENT LIST FOR USE BY RCBA MEMBERS

(YOU MUST BE A CURRENT MEMBER OF RCBA TO USE THE EXTRACTOR.)

Please fill out the Sign-Out sheet with date, your name, and phone number.

1. Randy Elium is managing the extractor and accessories
	1. Phone: 704-213-2661
	2. Address: 2085 Lake Rd, Salisbury, NC 28146
2. The list of extracting equipment includes the following (15 items):
	1. Maxant 9-frame Electric Extractor s/n VO851A0015
	2. Extractor wood floor bracket (keeps it from vibrating)
	3. Hot knife
	4. 2 Capping scratchers
	5. Stainless steel strainers (sieves)—2 parts. Smaller sieve has straight sides and fits inside the larger bowl-shaped sieve. The larger sieve has side arms that adjust to hold sieve over top of a bucket
	6. Collection Bucket (5 gallon bucket with honey gate)
	7. Capping bar (yellow rectangular device to fit over top of bucket and support frame as caps cut off)
	8. bracket for supporting a tipped bucket to drain into another bucket or container
	9. lubricant for the extractor axel—needs to be food-grade
	10. Refractometer
	11. Capping vault (5 parts):
		1. Bottom box with honey gate
		2. Top box with separate metal grid to catch cappings
		3. Wooden support with nail to balance frames on while uncapping
		4. lid

All small accessories are inside the gray capping vault box labelled “RCBA”

Extractor Instructions and diagram are included, in a small plastic bag.

1. Please thoroughly clean all equipment when finished extracting and return all equipment to Randy Elium.