

Dunn County Beekeepers

Community Garden/Menomonie WI

June 10, 2019 at 7:00 p.m.

April Kustov - Wisconsin Apiary Inspector

Hive Check:

1. **Light your smoker: How to light a smoker: Taller smokers work better for larger apiaries, they stay lit longer.**

For longevity of your smoker, light your smoker with a small amount of paper in the bottom. Once lit, add pine needles, wood chips or pellets. Puff the bellows until cool thick smoke comes out by itself.

2. **Disinfect your hive tool and equipment between hives with isopropyl alcohol to prevent spreading diseases from hive to hive.**

Working your hive:

Work your hive from the back/side of the hive. Stay away from the flight path in front. Puff cool smoke into the entrance, wait a bit, then lift the cover and puff smoke inside before lifting cover completely off.

1. **Start with the outside frame nearest to you. Carefully pull it out and either set it leaning next to the hive or use a frame holder that hangs on the side of the hive box.**
2. **Purchase and use brood boxes of all the same size so you can move frames around as needed during the year. You should always keep 10 frames in your brood boxes to keep weird comb from being built between frames.**
3. **Be in your hives at least every other week, sometimes you may need to check them weekly (mites, honey supers, swarm control, etc.)**
4. **When checking frames, clean off burr comb to make the next check easier. If it's drone comb, set aside to check for mites later. Have a container there to save the wax to melt down and use later to coat new frames.**
5. **When using natural wax foundation, if it warps, bees may build uneven comb to make up for the warping.**
6. **When looking for eggs, they should be bright white, standing upright at the bottom of the cell. If there is a laying worker, there may be 2-3 eggs in one cell that may be attached to the sides of the cell (worker bee has a shorter abdomen and can't reach the bottom of the cell). Older eggs will be in a C formation still on the bottom of the cell. April showed the group frames with eggs, larvae, and capped brood (worker and drone).**
7. **Look for the queen. She is usually on the frames with new eggs. Randy R. had a marking pen so we marked Willie M.'s queen green. Queens move fast, have a longer abdomen, and can be a different color than the workers. Sometimes you can spot the queen because her attendants are in a circle around her taking care of her needs as she works.**
8. **Look for queen cells. Russian and Carniolan bees are more apt to make more queen cells than other breeds.**
9. **Look for drone cells, these cells are more domed when capped. Workers are about even with the frame.**
10. **One of the frames had capped brood that was a lighter color and had pretty thin wax coating on top. One almost full term bee was uncapped. April said it usually happens when the bee dies in the capped cell. Workers know that it's dead; remove the capping; pull the dead bee out and clean the cell out. Many times this happens when there is a high mite load and the immature bee died.**
11. **When working your frames, keep the brood together (put frames back how they were). The exception to that is if there is an empty frame on the outside and capped honey frame inside of it, switch the frames around. Queens don't necessarily like to cross over capped honey to lay eggs so the outside frame may stay open if you don't help them. Bees like food on the outside and brood in the center of the hive box.**

Checking for mites: Have a wash tub about the width of a frame; a pint jar with a screen on top; ½ cup measuring cup and powdered sugar. Also a pie pan or small bowl for mite check and a water bottle.

Powdered sugar method:

Find a frame with capped brood and nurse bees. Double check to make sure the queen isn't on that frame. Shake frame into the wash tub. Don't bang the frame. Scoop out ½ cup of bees and put them into the pint jar with about a tablespoon of powdered sugar and put screened lid on immediately. Put the frame back into the hive along with the remaining bees in the tub that you didn't need.

Roll the jar so the bees become coated with powdered sugar. Be careful to keep the lid end up. Once the bees are well coated in sugar, set them aside in a shady spot for a couple of minutes to let them groom each other.

Shake the jar with the bees gently into the bowl until no more powdered sugar comes out. About a minute will do it. The sugar covered bees can now be dumped back into the hive.

Pour some water onto the powdered sugar in the bowl until the sugar is dissolved. Count the mites. The threshold for a healthy check is under three bees per ½ cup. If three or more mites are in the bowl, plan to treat immediately. April has found that hives can go downhill fast when five or more mites are found and not treated.

Alcohol wash method: Mite check container from the Dadant Company

Again make sure the queen is NOT on the frame you pick to shake into the wash tub. Alcohol wash kills the bees you test and you don't want to kill your queen! Scoop out ½ cup of bees and put them into the container already containing the alcohol in the bottom. Roll the bees over and over to kill the bees and wash the mites off of them. Count the mites in the bottom of the jar. Threshold is under three mites per ½ cup of bees.

Finish your hive check and put the hive back together. When putting the heavy brood boxes back on, they can be hard to handle. A tip from April is to put the box on at a diagonal and wiggle it a bit to let the bees know you are moving it. Then slide it gently back into position.

If the mite check showed too many mites, add your treatment now, then close up the hive.

If mite treatment is necessary, check temperature and time of year. Do you have honey supers on and is there brood. Do the follow up mite check to see if your treatment is working. Retreat if necessary. April recommended rotating mite treatment options depending on the time of year, mite load and to prevent mites from becoming resistant to the treatments.

Honey Bee Health Coalition: Mite- A- Thon is usually in August/September each year. Do your mite checks after honey supers are off and report your mites so the Mite- A- Thon can do the tracking. Watch our local news for notification. The Dun County Beekeepers participate so watch our website/Facebook page.

April went over the treatment options and passed out a Pest Management Options sheet. Jenny Gruber already uses multiple options as well as checking drone comb. If anyone wants to look more in depth on that, she is a wonderful source of information.

More of April's Tips:

1. Have a bee journal. Make notes for each hive every time you open or do anything with the hive. You will appreciate it when something happens and you can go look back to look at your notes. It will help you see if one of your hives is not doing well, or if it needs to be split.
2. Jot down what is blooming. Are bees bringing in pollen/nectar? When is the first big nectar flow in your area (dandelion bloom)? Track when you test for mites and what the count is each time for each hive.
3. Mites go after bee fat, not blood. Mites reduce the bee's immune systems; take calories from the bees; spread diseases and if there are too many, can actually kill the immature bee.
4. Pull out drone comb (burr comb) when doing hive checks. It will help reduce the places where mites can mature, reproduce and make future hive checks easier.
5. Year one of a new package can go without many mites. They may even go a whole winter season without a lot of mites. But the next package right next to it may be overloaded with mites and came from the same seller. When you check your hives, check for mites, especially when there is a lot of brood in the hives.

State Regulations: [datcp.wi.gov website https://datcp.wi.gov/pages/progress](https://datcp.wi.gov/pages/progress)

Click on the Department of Agriculture Trade and Consumer Protection (DATCP) Home Beekeeping and Pollinators links to see regulations for your apiary. You most likely don't need a license if you want to sell a few jars of your own honey to friends and neighbors. BUT, there are regulations on where you can extract and bottle your honey; how to label your bottles and where you can sell it. Each person should look up what they need to be aware of before selling honey.

Managing mites:

Monitor, monitor, monitor every time you do a hive check

Do spring splits - this will break the brood cycle as there is no place for mites to lay eggs

Do special drone frames (shorter frames so they build at the bottom, or larger cells for drones)

If you do this, you have to remember to remove these frames on time before they hatch.

Managing your hives:

Why are you keeping bees?:

Honey production? Pollination? Selling Bees? How you manage your hives will depend on why you are keeping bees. For example: You won't do a lot of splits if you are trying to sell honey.

Honey supers need to come off by mid-august in Wisconsin. The main nectar flows are done and it's warm enough to extract the honey more easily. Bees have time to build up hives for winter and it will still be warm enough to do mite checks and treatments before going into fall. April likes hives to weigh 80 – 90 pounds going into winter. Plan for long hard winters, early falls, and late springs.

24 attendees signed in

Next meeting is our July picnic at the park. Monday, July 8 at 6:30 p.m.

Adjourn at 9 p.m. by Mary L. and seconded by Greg M.