

Honey Bees and Pollination

What's the Buzz Newsletter

February 2017

What we've Been Up To

North American Beekeeping Conference

We travelled to Galveston, Texas in early January for the North American Beekeeping Conference. We were able to take in numerous research presentations as well as workshops and sessions by beekeepers. It was clear that challenges in beekeeping are felt everywhere, not just in Atlantic Canada. We were able to brainstorm upcoming research ideas, learn helpful extension tips, and connect with beekeepers from around the world.

Workshops & Meetings

On February 2nd, Master Beekeeper Karen Thurlow delivered a workshop on nosema and tracheal mite identification in northern New Brunswick. We look forward to continued collaboration with Karen to offer more of this type of valuable training opportunity.



Looking under the microscope for Nosema spores.

On **Thursday, March 02**, ATTTA is pleased to announce that Randy Oliver will be visiting the Dalhousie Agricultural Campus in Truro, NS for a workshop and open lecture. The afternoon workshop, targeted to advanced beekeepers, will focus on **Research Tips for Beekeepers**. There is limited seating for this free event, so please contact Robyn McCallum at rmccallum@perennia.ca or (902) 957-3274 to reserve your spot. The evening lecture, titled **Beekeeping in the California Foothills** is open and free to the general public. Stay tuned for more details on locations.

ATTTA is also collaborating with the New Brunswick Beekeepers Association and the Nova Scotia Beekeepers Association to feature Randy Oliver at the joint AGM in Moncton, NB on March 03- March 04. Check out the beekeeping association websites for more details on registration, agenda, and location. Randy will be delivering sessions on varroa management, reading combs, and colony buildup. We hope to see you there!

As always, if you have suggestions about guest speakers or potential workshops, contact us to share your ideas.

Spring Management Guide

We have been developing resources including fact sheets, webinars, and management guides. Stay tuned for our upcoming spring management guide, as well as resources on splitting hives, spring feeding, differences among bee races, and expanding your operation. We will also have a winter dead-out diagnostic key available online in early spring 2017!



Hives that have been wrapped for winter.

Winter Management

If you are overwintering colonies indoors, here are some safety reminders:

Check on temperature controls and exhaust fans. Exhaust fans can prevent moisture and carbon dioxide levels from building up within the facility by bringing in fresh air. Depending on the weather, a cooling system may be needed to keep the facility around 5°C. Although unlikely, a heating system may be needed during cold periods.

If the temperature is higher than 5°C, bees become very active and consume valuable food stores. Below this temperature, it becomes more difficult for the cluster to regulate an adequate temperature.

Helpful information on overwintering indoors can be found through the [Canadian Association of Professional Apiculturists](#) (CAPA) website.

Risk of Starvation

Starvation is a major concern over the winter, but steps can be taken to check for starvation and intervene if necessary. Signs of starvation during spring dead-out inspections include bees headfirst into cells, searching for food, and very small cluster.

A colony may starve over the winter if it runs out of food stores – either there were insufficient food stores in the fall or the colony is very active and growing, using up stored honey. The risk of starvation increases during long cold spells, as the colony will increase honey consumption to keep warm.

A colony can starve even with adequate food stores still present. As the cluster dwindles in size, it may not be able to move even a couple of inches to the nearest food frame.

Through careful observations during the winter, intervention is possible to save the colony. If you gently lift the hive and find it to be very light, emergency feeding is likely necessary. [**This is the same lift test as for checking hive weight during fall management – [more information](#)**]. On warm, mild days, you may be able to listen to the cluster buzzing or slightly crack the hive to check for food stores.



Listening to the hum of bees.

Emergency Feeding

If you notice your colony requires emergency food stores, there are several options.

If there are still honey frames remaining in the hive but the cluster is too small to access them, you can move the honey frames adjacent to the cluster for a close, accessible food source. Be careful to not disturb the cluster.

If there are no honey frames left, you can place a division board feeder next to the cluster (only if warm, mild weather allows- do not risk opening the hive during cold conditions). If you stored frames of honey over the winter and they are free of pests and diseases, they can also be added to the hive if weather permits, and this practice is often more successful than feeding sugar syrup.

Pollen patties can be placed directly next to the cluster for a quick protein source.

Fondant or ‘bee candy’ is a common starvation intervention method during the winter. Bee candy provides an accessible sugar source to the cluster, and can be placed on top of the frames or on the inner cover, reducing disturbance to the colony during winter conditions.

There are many different types of fondants and bee candy (commonly used with candy boards), hard candy made into bricks put in the top bars, hard candy with pollen, and even just granulated sugar (Mountain Camp Method). Sometimes using the “baggie” feeder method is a way to get some syrup to bees when it is still too cold to use frame feeders since the bags are placed almost over the cluster and have a smaller volume so they warm up faster. Simply fill a plastic bag with a sugar syrup solution, place on top of frames near the cluster, and make a couple of slits in the bag with a knife to allow bees access to the sugar syrup.

Recipes for bee candy can be found online, such as: <http://beehivejournal.blogspot.ca/2009/01/bee-fondant.html> or in *The Beekeeper’s Handbook* by D. Sammataro and A. Avitabile.