

# FINGER LAKES BEEKEEPERS CLUB

## 2011 Geneva Bee Conference

*With Heather Mattila and Randy Oliver*

The 2011 Geneva Bee Conference will be held from 9 AM until 5 PM on **Saturday, February 19<sup>th</sup>**, 2011 at the Albright Auditorium of Hobart & William Smith College in Geneva, NY. Admission is free.

Our speakers will be Prof. Heather Mattila and Randy Oliver. **Prof. Mattila** is an Assistant Professor in the Department of Biological Sciences at Wellesley College. She has a PhD in Environmental Biology and held a Natural Sciences and Engineering Research Council of Canada Postdoctoral Fellowship. Prof. Mattila has devoted her life to the study and observation of the honey bee.

**Randy Oliver** operates a small commercial beekeeping enterprise in Northern California, writes monthly in *The American*

*Bee Journal*, and runs [ScientificBeekeeping.com](http://ScientificBeekeeping.com). Randy is dedicated to finding ways to help honey bees thrive, in spite of the ever escalating number of pests and diseases that threaten their very existence. He has 40 years of practical beekeeping experience, and holds BS and MS degrees in Biological Sciences.

**Directions** to the College from the north: From the New York State Thruway (I-90), take exit 42 - Geneva. Once through the toll booth, turn right, heading south on Route 14 toward Geneva. Travel approximately 5.8 miles through the City of Geneva. Turn right onto Seneca Street. Travel to the top of the hill to the "T" intersection. Turn left onto South Main Street/Route 14. Continue approximately .7 miles. You'll pass through the commercial district and enter the campus area.

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### Winter 2011

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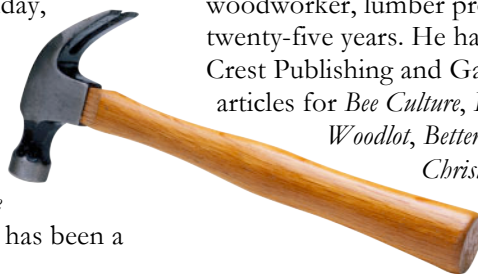
For more information but the FLBC, go to:

<http://flbeeclub.com>

## January FLBC Meeting

Our January meeting will start at 2 pm on Sunday, January 16<sup>th</sup> at the Cornell Cooperative Extension Center on Willow Ave. in Ithaca. We will be electing officers, so be prepared to volunteer names (or yourself!).

Our speaker will be Peter Sieling, author of *Bee Hive Construction* and other books. Peter Sieling has been a



woodworker, lumber processor and kiln operator for over twenty-five years. He has written several books for Mason Crest Publishing and Garreson Publishing, plus numerous articles for *Bee Culture*, *Popular Woodworking*, *Sawmill and Woodlot*, *Better Homes and Gardens*, *Wood*, and *Christian Science Monitor*.

## Tom Seeley on Swarming

### SWARMING!

Many of us were fortunate to be able to listen to Tom Seeley on NPR's Science Friday, which aired Christmas Eve, 2010. He passed on much valuable information. At the end, he was asked what question is strong in his mind. He stated that he "would love to learn how the bees decide when they're going to swarm. It's still an utter mystery." This is an old question, as yet unresolved.

This is from 1958:

Reproduction of colonies of the honey bee is achieved by swarming. Normally only one queen is present in each colony, but, before swarming, the colony begins to rear additional queens. The first swarm usually leaves the parental nest to found a new colony.

Attempts to elucidate the factors which encourage swarming and to devise methods of eliminating it have received a great deal of attention in beekeeping literature and a wide variety of opinions have been expressed as to the conditions under which swarming or swarm preparations most frequently occur.

Unfortunately a large proportion of these opinions appear to have no sound basis in observation, experiment or beekeeping experience. Many of them are of such a nature that their truth could only be established by large scale experiments which their authors show no evidence of having carried out, while others involve the acceptance of one

particular conclusion from evidence which could be interpreted in several ways.

On the other hand there are also many opinions held by beekeepers which, although not based on observations which have been published or to which reference can be made, may nevertheless be

soundly based on practical experience. Such opinions must not be ignored if they are of such a nature as to be readily verifiable in beekeeping practice without liability to statistical misinterpretation.

*(The Factors Which Cause Colonies of Apis Mellifera to Swarm by J. Simpson)*

—Peter Borst

*Tom Seeley's interview is available on the Science Friday web site, <http://sciencefriday.com/>*

## 2011 Geneva Bee Conference (cont'd)

**Directions to Medbery Parking Lot** From South Main Street, turn right onto St. Clair Street at the President's Home (a large, white, pillared residence). At the first stop sign, turn right on to Pulteney Street. Medbery Parking Lot, the visitor's lot, will be down the street on the right. Park here.

### Schedule

- 9:00 – 10:00 Registration
- 10 am – 12:30 Heather Mattila
- 12:30 – 1:30 Lunch (bring a dish to share or bring your own brown bag)
- 1:30 – 4:00 Randy Oliver
- 4:00 – 5:00 General Q&A

For a full brochure and map, see the front page article at <http://flbeeclub.com>



## Colony Collapse Disorder

In response to an immediate need for a baseline of both bee production and health, several survey and data collection efforts, supported both by ARS and NIFA, have been underway. Together, the different survey efforts have better defined CCD symptoms. Previous studies showed that symptoms included a rapid loss of adult honey bees, excess immature bees present in the combs, and the queen still present. Additional findings indicate an absence of damaging levels of the gut parasite *Nosema* or parasitic varroa mites at the time of collapse. Data on overall honey bee losses for 2010 indicate an estimated 34 percent loss, which is statistically similar to losses reported in 2007, 2008, and 2009.

Survey work will continue to assess the status of honey bee health and further refine CCD symptomology. Following up on efforts from previous years, researchers supported both by NIFA and ARS continue to analyze bee samples for pesticide residues and pathogen loads to determine possible linkages to bee declines. Studies continue to demonstrate very high levels of pathogens in CCD-affected samples and lower pathogen levels in non-affected samples, consistent with the empirical observation that healthy honey bee colonies normally fend off pathogens. These observations have led to the hypothesis that bee declines are resulting from immune suppression.

A large survey of healthy and CCD-affected colonies also revealed elevated levels of pesticides in wax and pollen, but the amounts of pesticides were similar in both failing and healthy colonies. CAP-funded studies also identified sub-lethal effects of neonicotinoids and fungicides on bees. It is hypothesized that these pesticides impair the bee's immune system, which leaves the bee more susceptible to three important bee viruses. Future experiments are needed to test these hypotheses and conclusively identify mechanisms of immune response, as well as how these interactions might affect mortality and colony health.

Research efforts jointly supported by ARS and NIFA continue to investigate factors that may play a role in causing CCD, either alone and/or in combination. Factors include diseases (parasites and pathogens), pesticides, poor nutrition, and beekeeping practices.

Colony Collapse Disorder Progress Report  
CCD Steering Committee June 2010

--Peter Borst

## Varroa in FLBC Hives

*Varroa Destructor* are external parasitic mites that attack honey bees. Unchecked, they typically kill a colony within two years and they are suspected to be a factor in Colony Collapse Disorder.

While mites are always present in North American hives (with rare exceptions), infestation rates may be low enough that the mites—visible with the naked eye—are not seen during inspections. We noticed mites in the summer of 2009, but decided to monitor the infestation and not treat.

During the summer of 2010, we tested for varroa using the alcohol wash method. This involves killing about 300 adult bees in a jar of rubbing alcohol (about ½ cup of bees). After straining out the bees, the mites can be counted in the alcohol. It was discovered that most of the colonies suffered from a 5% to 10% infestation level.



Scott Bauer, USDA Bugwood.org

In September, the Club decided that the colonies should be given a formic acid treatment. A crop of honey had been removed and autumn weather had begun. A 24-hour treatment was given by applying formic acid to pads above the brood chamber of each colony. Although formic acid treatment methods are still being investigated, this is an atypical approach, though similar to the 7 day Mite Away Quick Strip method.

In October, the colonies were inspected and mite levels were checked. Two of the colonies appeared to be queenless and mite levels were only slightly reduced. We suspect that the formic acid treatment may have killed the queens.

Treatment with formic acid is considered to be a natural method, since formic acid occurs naturally in honey. However, as we have learned, there are some risks. There is ongoing research in the realm of mite control and it is prudent for all beekeepers to review the findings in order to address the problem.

The season of 2011 will be another with *Varroa Destructor* control being of primary concern to FLBC beekeepers and the FLBC beeyard.

--David Hopkins

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## Honey Challah Recipe from Honey.com

Thanks to a book showing pre-schoolers making *challah*—a traditional egg bread—my daughter and I have started baking together. Even a toddler can sift flour, measure out a teaspoon of salt, or help pour half a cup of honey into the bowl. And what toddler doesn't love to play with dough?

- 1 package (1/4 oz.) active dry yeast
- 1-1/4 cups warm water, divided
- 5-1/2 cups all-purpose flour
- 2 teaspoons Salt
- 1/2 cup honey
- 2 eggs
- 1/4 cup butter or margarine, melted

- 1 egg yolk

In small bowl, combine yeast and 1/4 cup warm water. Let stand 10 minutes, until yeast bubbles and doubles in volume. In large mixing bowl, combine flour and salt; add honey, eggs and margarine or butter. Add proofed yeast and mix until well combined. Turn dough onto lightly floured work surface; knead until dough is smooth and elastic. Place dough in lightly greased bowl. Cover with a towel and let rise in warm, draft-free place until doubled in bulk. Punch down dough; cover and let rise again until doubled in bulk. Punch down dough; form into a ball. Place on lightly greased baking sheet. Mix egg yolk with 1 T water. Brush over formed challah. Let rise until almost

doubled in size. Bake at 350°F for 35 to 40 minutes until golden brown and hollow when underside is tapped. Remove from oven and cool before slicing. Makes 1 loaf (about 16 large slices).



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*The Finger Lakes Beekeepers Club meets monthly, on the third Sunday of the month. The exceptions are December, when we skip a meeting for the holidays, February, when we meet on the third Saturday in Geneva in a combined meeting with the Ontario Finger Lakes Beekeepers, and July, when we have our annual club picnic. The purpose of the FLBC is education and promotion of beekeeping. We are a not-for-profit organization. Dues are \$10 per year.*

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**FLBC**  
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CLUB

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