# THE MARIN BEEK NEWS

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# What You Missed

Our February meeting featured a presentation by Les Eccles, Ontario Tech Transfer Program Team Leader. Les started his agriculture career as a Crop Science major at the University of Guelph. He found the university's apiary on the edge of campus, became a volunteer and ended up pursuing beekeeping along with managing his family dairy & beef herds. He leads the Tech-Transfer Program of the Ontario Beekeepers' Association.

## **Ontario Beekeepers' Association (OBA)**

- Supports membership of small hobbyist & large scale commercial operations
- Good connection with provincial Ministry of Agriculture, Food & Rural Affairs
- Province has a strong apiary inspection service that beekeepers must participate in

## **Tech-Transfer Program**

- Mandate is to conduct research for Ontario's beekeeping industry, to facilitate a honey bee breeding program in Ontario & to transfer information, skills and methodologies to the beekeepers
- Base funding comes from the government & beekeepers also donate funds
- Tech Transfer program came out of need to breed mite resistant bees
- Links academia with beekeepers
- Cornerstone is the Ontario Resistant Honey Bee Selection (ORHBS)
- Key to breeding dedication & passion bee genetics turn over so quickly
- Program has been successful in eliminating tracheal mites – see occasionally in imported stock
- 20 breeders in program with ±300 colonies
- Important to have in hands of beekeepers to keep program going
- Looking to expand breeding program

# What's the Buzz?

Our next meeting will be on Thursday March 2, 2017 at the American Legion Log Cabin, 20 Veterans Place, San Anselmo, CA, starting at 7:30 pm. The meeting will feature a talk by Ross Conrad, beekeeper and owner of Dancing Bee Gardens, Middlebury, CT. He will speak about Natural Beekeeping in the Age of Neonicotinoid Pesticides and Colony Collapse Disorder (CCD) - Ross will address how beekeepers can cope with the current state of honey bees and beekeeping in North America through proper nutrition; non-toxic, organic and treatment free ways to control Varroa mites, Small Hive Beetles, and Wax Moths; and drug-free ways to keep colonies healthy in the face of high virus loads, American Foul Brood, Nosema and CCD symptoms.

## **Upcoming Meetings:**

April 6, 2017

Charlie Blevin, beekeeper, San Francisco, CA. He will discuss swarms and extractions.

## May 4, 2017

Randy Oliver. "Reading the Combs: Understanding bee biology over the course of a season".

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## **ORHBS Participation Requirements**

- Member of OBA & OBBA
- \$200 membership
- \$150 10 colonies tested technicians come out to apiaries
- \$50 additional 10 colonies
- Testing for hygienic behavior, varroa, nosema

# **ORHBS Program Testing**

## a) Hygienic Behaviour

- Select brood just at "pink eyed" stage
- Liquid nitrogen poured in metal collar
- Return dead brood to colony for 24 hours
- Looking to find bees that uncap dead brood & pull out
- 4 samples per frame

## b) Varroa Monitoring

- Select for colonies that produce very little varroa
- Varroa sensitive hygiene
- Growing behavior is key attribute to look for

## c) Nosema

- Symptom of stress on a colony
- Not a big issue for colonies that are stationary
- Important to monitor in correct season in Ontario this is late May / early June
- Low priority characteristic

## **Queen Rearing Manual**

- Developed short list of 12 characteristics
- Doing well if selection is based on 2 or 3

## **Key Aspects**

- Define each characteristic
  - 1. Low defensive behavior
  - Calm reaction to normal management of a colony
  - Minimal need for smoke to maintain calm bees that do not sting
  - 2. Honey Production
  - Increase in colony weights (honey) during a heavy honey flow over 1-2 weeks
  - Don't look at seasonal yield
  - 3. Overwintering Ability
  - Likely different for NorCal climate

- Measured by consumption of overwintering food & population of bees in early spring
- Looking for least change in weight
- 4. Spring Buildup
- Management of early pollination
- Find balance with risk of swarming
- 5. Low Swarming
- Test is to limit space within a strong colony
- Reasonable pressure through normal management
- 6. Comb Stability
- Ease of moving frames of bees
- Useful when dividing colonies or making nucs
- 7. Queen Longevity
- Lay fertile eggs
- Maintain solid brood patterns, do not swarm & keep low disease levels
- Create a consistent 5 point system to measure performance
- Put pressure on colonies
- Compare colonies with queens of same age
- Same person judging resistance
- Compare results taken from same day / same bee yard
- Queen rearing protocol must result in high quality queens

Important to first know how to raise queens consistently before pursuing breeding

- Colonies are evaluated based on selection criteria
  start with 2-4 characteristics & add new ones gradually
- Assign weight to each criterion
- Score on each (out of 5) & calculate total weighted score
- Tech-transfer program offers workshops covering bee genetics, designing mating yards and practical review of calculations
- http://www.ontariobee.com/outreach/ttp

Thanks to Marina Wright for providing the "What You Missed" column this month.

# **Farm Day**

For those who like to plan ahead and would like to help out with the Marin Beekeeper's Farm Day exhibit, this year it will be held on Thursday, March 16 from 9:00 am to 12 noon at the Marin County Fair Exhibit Hall.

If you are not familiar with Farm Day, please check out their website at www<u>http://cemarin.ucanr.edu/Programs/4-</u> H\_Program/Farm\_Day\_98/Farm Day.

More details about Farm Day will appear in next month's newsletter and on the Buzz. If you would like to volunteer to help staff our exhibit or have any questions, please contact Steve Lamb at <u>stlamb1@gmail.com</u> or <u>415-412-6125</u>

# **Beekeeping Classes**

Upcoming classes with Bonnie Morse, Bonnie Bee & Company:

Mark your calendar for 2017 classes and workshops (additional information available www.bonniebeecompany.com):

**Backyard Beekeeping**, Sat. March 18, Fairfax Backyard Farmer, 3 hours

**Field workshop: Beekeeping Basics** (using your tools, inspection basics, swarm prevention), Sat., May 13, 9:30am – 12:30pm

**Field workshop: Intermediate Beekeeping** (splitting hives, queen issues, space management), Sat. May 13, 1:30pm – 4:30pm

**IPM / Hive Feeding**, Sat May 20, Fairfax Backyard Farmer, 3 hours

Summer and Fall Hive Management class series, Class room sessions: Wed. 7/12 – 7/26, 6:30pm – 8:30pm, San Rafael Community Center, Field Day: Sat. 8/12, 9:30am – 12:30pm, location TBD

# **Upcoming Workshops**

Ross Conrad, our March guest speaker, will be leading two beekeeping workshops on **Saturday, March 4**, **2017** in Corte Madera, \$50 per person, per session, 20 person max per session.

<u>9:30am - 12:30pm</u>: will cover - Pesticides and Honey Bee Health; and Organic Varroa Mite Control in Beehives.

**<u>1:30pm - 4:30pm</u>**: Overwintering Bees and Spring Management: Live Hive Demonstration (weather permitting). We will open hives and evaluate the colonies state of health and condition. If you have never handled bees before, this is your chance for hands-on experience!

Please contact Richard Hyde at <u>rh@hyderanches.com</u> to register and receive additional information.

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Randy has defined the eleven biological phases that the colony goes through over the course of the season. With photographs, He will explain how the beekeeper can "read the combs" in order to determine how the bees are doing at each point in time, and whether they need help. Such visual confirmation then allows one to make informed management decisions to fit their situation and goals. Workshops will be scheduled for Saturday.

June 1, 2017

Gadgets and Gizmos

July

No meeting: Marin County Fair.

## August

No meeting: Marin Beekeepers Annual Potluck.

# **Hive Tips**

By Bonnie Morse, Bonnie Bee & Company

Here comes the sun! Sunny, warm days are forecast in the next couple of weeks, so expect your bees to be busy and building! It is very likely that you'll need to start adding space, if you haven't done so already. If you're concerned about having too much space above the cluster, you can always add a box below. And, depending how many boxes your bees were in before winter, it's possible they still have space below.

\* There's a lot of forage out there right now! Now that the bees can get out and get to it, we will likely start to see swarming. Given the buildup we've observed in southern Marin recently, it wouldn't be surprising if strong, untended colonies start taking flight in the near future. Prevent swarming by planning to check your bees every 2-3 weeks and add space as needed to prevent congestion. Have a backup plan in case you find your bees making preparations to swarm when you go in.

\* Got a very small colony? Probably OK to leave them bee. Not much you can do at this time of year and it will be very difficult for them to get temperature around brood (which is likely there) back up to 90+ degrees if you open them up. But don't leave them alone too long and plan to check in mid-March.

\* We're starting to see drones out and about. It is still early to consider splitting, but not too early to start planning for swarm season by thinking about setting up bait hives. If you've got bees, you should have at least one bait hive out. Despite our best attempts to minimize swarming (which aren't always popular with the general public in urban areas – particularly if they move into the walls of someone's home), it can happen. Bait hives can provide a home to a nearby swarm, plus are just plain fun to monitor and observe during the season.

## Not sure how to do it?

Review Tom Seeley's book, **Honeybee Democracy**, for complete details on what his research has shown that swarms prefer in a nesting cavity.

No time to read? We've had success with the following set up:

- Deep hive box (10 frames is approximate size that Seeley's research indicated bees prefer, though here in Marin 5 frame deep boxes seem rather attractive to them as well)
- 2. A couple of frames with empty built out combs (if you have them) in the center surrounded by empty frames with starter strips (or just empty space but you'll need to add frames soon after they move in or else they will start building from the top of the box).
- 3. Entrance reducer set to medium
- 4. Box above the ground 2-3' (higher if you are able)
- 5. Optional: Spray lemon grass tea (boil lemon grass until you make a dark tea) or other substances mimicking queen pheromones on the top of the frames and entrance of the hive.
- 6. Wait to observe scouts! And if you're lucky, get a move in.



Setting Up a Bait Hive

# **Beekeeping Workshop**

#### Queen-Rearing Workshop with Michael Bush Saturday, April 1, 2017 Ed Roberts Campus, 3075 Adeline Street, Berkeley

Michael Bush is one of the leading proponents of treatment free natural beekeeping, and has been keeping bees since the mid 70's. He is author of The Practical Beekeeper and creator of the popular beekeeping website Bees at Bush Farms. His books will be available for sale at the workshop.

#### Making queens and then what?

In this workshop, we will learn how to raise honeybee queens and what to do with them, once they are raised.

## **Topics include:**

8:30 AM-12:30 PM: Lecture

\* Making queens by grafting and the Nicot cage methods, including how to make a starter/finisher hive with a Cloake board.

\* How to keep the new cells/mated queens alive until they are used.

\* How to introduce queen cells to splits.

\* How to re-queen established hives.

\* How to get your virgins mated - mating nucs - what they consist of, where to place them, how to care for them, can they be reused for the next batch of queens, etc.

\* Queen banks - what are they and how are they made.

\* Why re-queen hives and best time of year to do it.

1:30-4:30 PM: Hands-on at a yard TBA (If weather is bad, lecture will continue in the afternoon.)

Fee for the workshop is \$65 for ACBA members, \$75 for non-members. Space is limited to 20 participants. To register, email Catherine Edwards at <u>richmondgoldhoney@gmail.com</u> to get your name on the list and then mail a check made out to ACBA to: Catherine Edwards 5212 Esmond Ave. Richmond, CA 94805