

# THE MARIN BEEK NEWS

Volume 3, Issue 10

November 2011

## What You Missed

Our last meeting featured a talk by John Jacobs, Queen Breeder and Owner of Old Sol Enterprises. This year our club arranged a group purchase of nucs from John's survivor stock bees. The title of his talk was "Survivor Stock Selection, Propagation, and Care".

John started by asking, "What is a hive of bees?"

- A. An integral component to modern agriculture.
- B. A cherished family pet.
- C. An indicator species (like canaries in coal mines).
- D. All of the above.

John's point was that your perception of what bees are will determine the way that you manage your bees.

What are Survivor Stock Bees? Bees derived from stock that has faced very strong selection pressure.

Identification and Selection of Survivor Stock:

- Start with the healthiest most robust hives possible

see What You Missed on page 2

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## What's the Buzz

Our next meeting will be on Thursday, November 3, 2011 at the American Legion Log Cabin, 20 Veterans Place, San Anselmo, CA, starting at 7:30pm.

Dewy Caron, Emeritus Professor, University of Delaware; Affiliate Scientist - Horticulture Dept, Oregon State Univ., Corvallis

The title of Professor Caron's talk will be "Back To The Future"... How have your bees been preparing for over-wintering and what might help them survive and prosper this next season? What could/can we as bee stewards do to better insure survival and colony "success" (however we might care to measure it) this season?

### Upcoming Meetings:

#### December 1, 2011

Steve Sheppard, Entomology Department Chair  
Professor, Graduate Faculty  
Apiculturist, Thurber Memorial Chair  
Washington State University  
Professor Sheppard is an expert in honeybee genetics and evolution.

His topic will be "Consequences of Colonization – US Honeybees, Bee Breeding and Genetic Diversity".

#### January 5, 2012

Thomas D Seeley, PhD, Professor and Chairman of the Department of Neurobiology and Behavior, Cornell University

Dr Seeley's talk will focus on his latest book "Honey Bee Democracy".

#### February 2, 2012

Diana Sammataro, Research Entomologist  
USDA-ARS Carl Hayden Honey Bee Research Center.

- Apply strong selection pressure (withhold treatment)
- Quantify responses and performance (monitor mite load)
- Graft from the top 3% hives that respond well or tolerate the selection pressure best.
- Use daughters from top performers to requeen susceptible hives (the losers).
- Restart the process continually. Observations must be made over a long period of time

#### Selection Considerations:

- Date that drone brood rearing is initiated (genetic component).
- Date of drone eviction (mites prefer drone brood).
- Brood Pattern
- Productivity, especially pollen hoarding (nutrition is very important)
- Overall mite load.
- Observed varroa-sensitive hygiene (You want to see them removing some brood from cells.)
- Did they over-winter well and build up strong in the spring?

#### Tools and Tips for Stock Selection:

- Powdered sugar roll to determine mite count. You can make a homemade tester by taking a quart Mason jar and cutting a piece of 1/8" hardware cloth to fit snugly in the band. Shake bees from a brood frame into a box; make sure the queen is not on the frame first. Scoop up 1/2 cup of bees (about 300 bees), dump into the Mason jar and quickly put the screened lid on. Dump 1-2 tablespoons of powdered sugar onto the screen and push through to coat the bees. Shake the jar vigorously for about 30 seconds. Wait two minutes. Shake the powdered sugar out of the jar onto a white plate, shake vigorously.

Pour some water on the plate to dissolve the sugar and count the mites. A low mite count is 3%, about 10 mites. Return the sugar coated bees to the hive.

- Freeze killed brood assay. This is usually done with liquid nitrogen to kill an area of brood. After 24 hours you count how much of the brood is removed. This is a measure of hygienic behavior.
- Intentional exposure to pest and pathogens. Monitor pest and pathogen populations.
- Isolated mating yards and/or instrumental insemination.
- A collective approach:
  - Keep lots of nucs
  - Larger selection pool
  - A means to efficiently distribute winning genetics to the loser hives
- Propagation of top-performing queens through grafting and/or well-timed and managed splits.

#### Care of Survivor Stock Bees:

- Nutrition is key; protein is essential to bee immune function. If feeding sugar, John recommends Drivert, which can be fed dry instead of making a syrup solution. Ants are not as attracted to Drivert and it does not encourage robbing.
- Mitigation for the loser hives
  - Not every hive will express all the traits that they carry
  - Don't lose hives unnecessarily; requeen the losers with desired stock.
- Use IPM techniques to lower mite loads on the losers
  - Cultural practices (break in brood cycle).
  - Use of essential oils
  - Organic acids, such as oxalic and formic acid. They mitigate mites without tainting the wax.

John closed by recommending a visit to [beesource.com](http://beesource.com). It is a free website with a wealth of information on beekeeping.

## Marin Pollen Project

The pollen project got an early start with preliminary October wax and pollen sampling from 30 hives in 10 apiaries. The purpose for the testing is two fold: 1) They hope that preliminary data might be able to help secure funding for additional sites and 2) student (Brian Bates) who is coordinating project with us will be using it as his honors thesis and needs some preliminary data since 2012 project data will not be available until after his graduation.

Samples are on track for being sent to Penn State this week and we hope to see results within the next couple of months.

Maryann Frazier and Brian prepared a video to demonstrate sampling procedures. Here is the link for any interested in the process:

[http://www.youtube.com/watch?v=tML0viZpt-g&feature=channel\\_video\\_title](http://www.youtube.com/watch?v=tML0viZpt-g&feature=channel_video_title)



Frozen Pollen and Wax Samples Waiting for Shipment

## Dues are Due

A reminder that annual dues for 2012 are now due. Dues are still just \$20 per year. You can pay in person to David Peterson at the monthly meeting or mail you check made payable to Marin Beekeepers to:

Marin Beekeepers  
c/o Mary Nordquist  
2072 Hatch Road  
Novato, CA 94947

New members and members with new contact info please make sure to include your address, phone number and e-mail.

Membership includes free admission to all meetings, access to the Club's honey extracting equipment, and subscription to the Club's "MarinBuzz" listserv, which serves as an online discussion forum and a way to notify Club members of local bee swarm information.

## Workshops

### **BEEKEEPING EQUIPMENT**

Date: Saturday, February 4, 2012  
Time: TBA  
Location: TBA

Diana Sammataro, Research Entomologist  
USDA-ARS Carl Hayden Honey Bee Research Center.

### **SELECTING DISEASE RESISTANT COLONIES FOR BREEDING STOCK**

Date: Saturday, April 7, 2012  
Time: TBA  
Location: TBA

Katie Lee, the Bee Informed Project

Watch for more information on these workshops in future newsletters and on the Marin Buzz.

## Did You Know?

The Cedars of Marin has embarked on a very ambitious beekeeping enterprise. The Cedars is a Non-Profit Organization that houses and cares for the developmentally disabled providing programs to cultivate their interests and develop independent living skills. Their main campus is in Ross and they have a "Ranch" where they run a weaving program, tend an organic garden, raise alpacas and now keep bees.

Dave Peterson has been working with Cedars Staff and new Marin Bee Club Members Connie Pelissero, Director at the Ranch, Joseph Kosdrosky and Kelly Moore to get the program going. Last winter Dave and Fred Morfit, another Club Member, traveled to Hopland, California to pick up 14 hives that had been donated to The Cedars, 9 of which were occupied.

They now have some 26 active hives and nucs at the Ranch. Some of the bees have been purchased and some are from swarms they captured at the Ranch. The 22-acre Ranch is located through the Cemetery at the end of Fifth Street in San Rafael. It is actually right behind the Redhill Shopping Center, not far from Mea and Jerry's farm. But the only access is through San Rafael.

This past week several of the Cedar's Clients and Staff mentioned above, brought a few frames of honey up to Dave's Honey House (his garage) to extract. While they did not get a lot of honey this first year, they got enough to auction some at their November Fund Raiser, give some to the Voluntary Board Members as well as some for the Client's toast and tea.

They hope to get enough honey next season to sell at The Cedars retail store in downtown San Anselmo. They currently sell fancy woven products produced at the Ranch from the Weaving Program. You should stop by the store to pick up some Christmas gifts and ask when they expect to have some very local honey to sell.

*Buzz continued from page 1*

Diana will discuss "Honey Bees and Proteins".

**March 1, 2012**

Eric C. Mussen, Ph.D., Extension Apiculturist  
University of California Davis

Dr. Mussen will speak on the current state of beekeeping.

**April 5, 2012**

Katie Lee, the Bee Informed Project

Katie will speak about "The Bee Team: helping CA bee breeders select stock"

## From The Librarian's Desk

Many thanks to Keith Wedmore for his very generous donation of beekeeping books written by his grandfather, E. B. Wedmore. Now available for borrowing are the following:

A Manual of Beekeeping  
A Manual of Beekeeping for English-speaking Beekeepers  
Successful Beekeeping  
The Ventilation of Bee-Hives

E.B. Wedmore was President of the British Beekeepers' Association, and a member of the Scottish, Kent and Surrey Beekeepers' Associations. The books Keith has donated are wonderful reference guides and although they were published in the 1930's & 1940's, much of the information stands the test of time. We are honoured that Keith is sharing his family treasures with us.

Also new to the library:

Beekeeping Self-Sufficiency by Joanna Ryde  
Queen Rearing by Harry Laidlaw & J.E. Eckert

Library materials are available for borrowing by all members. In order to maintain a strong hive though, the foragers need to come back. Please, if you have borrowed a book from the library, bring it back so the other members of the hive can enjoy! Also, if you have suggestions on books or materials you would like to see in the library or are interested making a donation, please contact Marina during the meeting or at [marinamay@earthlink.net](mailto:marinamay@earthlink.net).