THE MARIN BEEK NEWS

Volume 6, Issue 10 November 2014

What You Missed

Our October meeting featured a talk by Jennifer A. Berry, Research Coordinator and lab manager for the University of Georgia Honey Bee program.

Her investigations have centered on bee health, particularly the sub-lethal effects of pesticides and IPM management techniques. Her multiple-season study on the effect of small cell foundation on mite reproduction caused a stir: she found that it did not provide benefit.

Among the many other subjects she has delved into are: top versus bottom supering, comb age, mite controls such as powdered sugar. She has assayed the genetics of feral bees.

She is a columnist for Bee Culture and writes for Bee World as well as other European publications. She has a queen and nuc business, Honey Pond Farm, where she does her own selection for longevity, pest resistance and honey production.

Jennifer started her talk, which she titled “Realist” Natural Beekeeping, discussing Colony Collapse Disorder (CCD). The silver lining to CCD is that the general public became aware of the importance of honey bees. Also, a lot more people took up beekeeping.

The symptoms of CCD were that when you inspected a hive you would find a queen and a small amount of young bees but no foragers. Why? To try to find the answer researchers tested bees, they tested for pesticides, they tested comb, pollen, etc. The public glommed on to pesticides.

Is beekeeping natural?

We put bees in boxes. We locate them where we want. We tear their home apart on a regular basis. We control swarming. We requeen. We manipulate hive bodies, changing the configuration. We control drone production. We take honey. We combine hives.

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What’s the Buzz

Our next meeting will be on Thursday November 6, 2014 at the American Legion Log Cabin, 20 Veterans Place, San Anselmo, CA. starting at 7:30 pm. The meeting will feature Marin County beekeepers showing off the gadgets and gizmos that they have found or built themselves to make their beekeeping a little easier.

Upcoming Meetings:

December 4, 2014

Robbin Thorpe, Professor Emeritus of Entomology, Harry H Laidlaw Jr. Honey Bee Research Facility, University of California, Davis.

January 8, 2015

Tom Seely, Professor and Chairman in the Department of Neurobiology and Behavior at Cornell University, Ithaca, NY.

February 5, 2015

Jay Evans, researcher at the USDA lab in Beltsville,

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We treat with chemicals. We have introduced exotic pests, such as varroa mites, tracheal mites, and small hive beetle.

Jennifer warned us to "Beware!". Don't believe everything you read on the internet. Find reputable sources for information (i.e. peer reviewed scientific journals or popular beekeeping magazines).

There are also many good beekeeping books; such as The Hive and the Honey Bee, ABC & XYZ of Beekeeping, The Beekeeper's Handbook, etc.

Jennifer then talked about wax foundation. Old comb reduces the body weight of emerging bees. It also harbors a lot of bad stuff. She recommends removal of old brood comb after three years.

All wax was found to be contaminated if you use commercial wax of foundation. One solution is to let the bees draw their own comb, but this tends to be harder to work.

Jennifer bought unwaxed plastic foundation and then coated it with 2:1 syrup. She found that this would attract the bees enough for them to draw comb. Now she uses unwaxed plastic foundation and coats it with her own wax.

She talked about the two main reasons that bees die:

Starvation

Although she acknowledged that feeding bees is not natural, she feed her bees when necessary because maybe we have put them in a location where there is not enough forage to support them.

Varroa mites

The arrival of varroa in the United States devastated colonies. Beekeepers began using chemical treatments to combat varroa but the mites have become resistant to many of the chemicals. Thymol, formic acid and oxalic acid still seem to be effective chemical treatments.

She suggested an integrated pest management (IPM) approach.

- Biological – there are promising treatments for varroa using certain fungi but this is not commercially viable yet.
- Cultural – This includes brood cycle disruption, using screened bottom boards, powdered sugar dusting, and drone brood trapping
- Genetic – obtaining VSH or Russian bees or breeding for local survivor bees.

Drone brood has a much higher rate of mite reproduction than worker brood, 5 mites vs. 1½ mites per cell. She suggested drone brood trapping in early spring, removing capped drone brood and freezing. Put the drone brood comb back into the hive after freezing for drone production during the mating season.

Jennifer studied powder sugar dusting as a varroa control. Her study was conducted from January to March with an application interval of four weeks. The powdered sugar only affects phoretic mites. It does drop the mite load in a hive, but usually not enough.

She also conducted a study of small cell comb as a varroa control. Regular worker comb cell size, using foundation, is around 5.35 mm. Small cell foundation has a cell size of 4.9 mm. In her study, the mite count in 8 of the 9 small cell colonies was greater than the control colonies. She concluded that it was not effective for varroa control.

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Maryland. His work has spanned a wide range of topics including genome characterization of varroa mites and managing diseases and pests of honey bees.

March 5, 2015

Christina Grozinger, Professor of Entomology and Director, Center for Pollinator Research Penn State University.

April 2, 2015

Elina Nino, Extension Apiculturist, University of California, Davis.

May 7, 2015

Dr. Marla Spivak, Distinguished Knight University Professor at the University of Minnesota.

June 4, 2015

Mark Winston, Academic Director and Fellow of the Centre for Dialogue, Simon Fraser University, Vancouver, BC. Mark is recognized as one of the world's leading experts on bees and pollination.

Hive Tips

Many are reporting decreasing activity of yellow jackets, but they are still out and active. If you see them entering your hive(s), give the bees a hand in defending the colony by reducing entrance size.

Temps are starting to drop and your beekeeping season is winding down. Time to finish your winter prep (though the bees have been getting ready for months): Remove unused space and unneeded honey so the bees will not have to work as hard to keep warm. In our area, bees need about 30 lbs of honey per colony going into the winter.

Cold doesn't kill bees - moisture does. Make sure your hive tilts forward slightly so rain doesn't condense inside on your bottom board. If you see moisture inside on your top, you should consider giving them a little more ventilation by adding a shim, stick, or thin piece of wood between the top and inner cover.

Store your honey supers and built out combs in a manner that will not encourage wax moths, i.e. where light and airflow are abundant or in a freezer (or after freezing). If you stack outside, put spacers in between hive bodies to allow for airflow. Do not allow too much space or mice might move in and make a nest and destroy your combs.

Hive stat: 47% of the hives lost annually in Marin County occur October – December, most are likely a result of varroa mites

Combs improperly stored in plastic bin in a garage for about 6 months. Wax moth larvae have destroyed the combs.

Supers with built out comb stacked to discourage wax moths.

From the Librarian's Desk

In conjunction with Gizmos and Gadgets night on November 6th; our librarian, Marina Wright, will be conducting an auction in support of the research exploring broodlessness as a means to managing varroa mite levels in treatment-free colonies. See the announcement on page six of this month's newsletter for a list of the auction items. You won't want to miss this golden opportunity. Don't forget to bring cash or your check book with you on Thursday.

Many thanks to our generous donors: Apiara, Heidrun Meadery, Marin Ace Hardware, Sarah Burgess, Steve & John Lamb, Richard & Karen Hyde, Mea McNeil, Bonnie Morse, Marina Wright

Beekeeping Classes

Bonnie Bee & Co. Fall and Winter Classes

Class room sessions at the San Rafael Community Center, 618 B St., San Rafael, 6:30pm - 8:30pm
Additional information and registration in the 'Youth and Adult' classes through San Rafael Community Center

Beginning Beekeeping class series (9 hours, $99, course code 22399)

Classroom sessions will include basic bee information, seasonal cycles of a colony, equipment options, where to place your hive, how to get bees and tips on working with your equipment. When the weather warms up, there will be a field session so you can observe and practice working with your tools and bees.

Class room sessions: Wed., Jan. 21st – Wed. Feb 4th (3 classes)

Field Day: Sat., Mar. 14th, 9:30am – 12:30pm

Intermediate Beekeeping class series (9 hours, $99, course code 22402)
You've got your colony through winter (or not) - now what? Class sessions will include how to clean up your equipment, expanding hive size for spring, swarm prevention- and if that fails, swarm capture, setting up bait hives for swarms, identification of common pest and diseases and management options for them. Topics will also include dealing with special situations: aggressive hives, queen failures, and laying workers. Field day will include information on how to split a colony, pest and disease ID, and swarm prevention.

Classroom sessions: Wed., Feb 11th – Wed. Feb 25th (3 sessions)

Field Day: Sat., Mar. 14th, 1:30pm – 3:30pm

Party at Peterson's

Setting up to do your own extraction for a small number of frames can be very time consuming, messy and generally a lot of work. For this reason Club Member, David Peterson, hosts a fall Extraction Party in his Honey House (his garage) in Ross, now an eight-year tradition.

Over the weekend of September 20 & 21 there were 7 participating Club Members. There were also two others that were new beekeepers with no frames to extract but just came to observe. Several NewBees only had a few frames to extract while others came with two or three supers of full frames. More than 100 frames were run through the Club's extractor resulting in about 300 pounds of honey.

Near the end, there was a bit of a mishap when some wax foundation frames blew apart in the 12 frame extractor. The comb hunks sheared a pin designed to fail before doing other damage. Fortunately the 6 frame extractor was already set up and ready to take over. It took a week or so to get the replacement pin installed, but it is up and running again.

Dave sets up the extraction equipment in the garage since getting kicked out of the kitchen where he originally extracted by crushing and rendering. He reported his 20 hives produced over 850 pounds of honey this year. He extracted some 400 frames in advance of hosting the weekend Extraction Party.

Dave stores and schedules some of the Club's extraction equipment at his place, both the 6 frame and the 12 frame. Rob Tysinger stores a second 6 frame extractor in Novato and the Nordquists store the Club's 20 frame extractor. This equipment is available for use by all Club Members and can be reserved by contacting:
Dave at dpeterson307@aol.com,
Rob at rob@tysingerengineers.us or
Neil and Mary at neilmary@verizon.net.

Generally it requires a station wagon, SUV, van or truck to transport the extractors. A truck is required for the 20 frame machine. Club Members can check them out for use a few days at a time. There is also an electric uncapping knife, a scratcher and uncapping bin available to go with the extractor. The equipment should be picked up, used, cleaned and returned within a few days to a maximum of one week.

Fall Pollinator Plant Sale

In our area, most root growth occurs in fall and spring, so with ongoing drought conditions, fall is a great time to plant. Marin Beekeepers teamed up with Marin ACE for a pollinator friendly / drought tolerant species / neonic free plant sale October 18-19. Part of the sales ($275 to be exact) were donated to SuperOrganism to help with expenses related to the Broodless Study currently underway at the Romberg Center.

Thank you to volunteers Cherie Bremer-Kamp, Mea McNeil Draper, Marina Wright and Richard Hyde for assisting customers in selecting plants for their gardens.

Marin ACE owner, Michelle Leopold and Marin Beekeeper, Marina Wright, discuss pollinator friendly plants.

Flat of pollinator plants heading for a local garden. Includes: Salvia, Nepeta, Rosemary, Lavender, Sabiousa spp., and Sedum.

Chemical Treatment for Varroa – Not the Only Way

Last month's Hive Tips listed Randy Oliver's web site for information on varroa treatment options.

For those who want to consider treatment free options, here are some web sites with information about the treatment free approach:

A video explanation of why to keep bees treatment free by Michael Bush:
http://www.youtube.com/watch?v=5DFKqgWuCBA

Also, see his website: www.bushfarms.com

BeeSource has a forum on treatment free beekeeping:
http://www.beesource.com/forums/forumdisplay.php?251-Treatment-Free-Beekeeping

Thanks a Lot

Usually the club newsletter is created with a certain amount of anonymity but, since it is that time of year, I would like to acknowledge some of the people who help make the newsletter better.

Thanks to the contributors including Bonnie Morse for Hive Tips and other articles throughout the year, Marina Wright for keeping us informed about what is happening in the library, and Dave Peterson for writing about goings on from time to time.

I also want to thank my wife, Karen, who proofreads the newsletter every month, making me look like a much better writer than I actually am.

Marin Beekeeper's Fundraiser Live and Silent Auction

In Support of Research Exploring Broodlessness as a Means to Managing Varroa Mite Levels in Treatment-Free Colonies
Thursday November 6, 2014

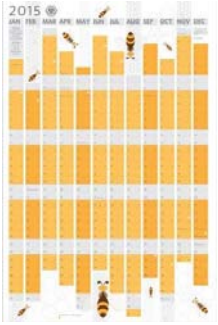
A treasure trove of items awaits you.

Apiara Hive Monitoring System

Tour & Tasting for 6 at Heidrun Meadery, Pt. Reyes Station

Framed hand-cut paper letter "B", surrounded by bees.

2015 Bee Calendar Poster



Bee-themed Burton Snowboard

Dadant Smoker & Smoker Fuel

Gusanito Worm Bin & Composting Books

Handcrafted Zippered Pouch with set of Burt's Bees creams

Solar Wax Melter
(ready for assembling)

And much more, including ….

- Electric uncapping knife
- Flat of pollinator friendly, neonicotinoid-free plants
- Frame perches
- 24 16oz glass jars with gold screw top lids
- Electric 5 gallon bucket heater strap
- Placemat & napkins (set of 4)
- Beekeeping books (gently used)
- A couple of surprises ….

The Silent Auction will begin at 7:15 and close at the end of the meeting. Tables displaying the items will be set up at the back of the room. If an item interests you, write your name & phone number beside a bid amount on the provided bid card. A few items will be live auctioned during the Gadgets & Gizmos presentations.

Purchases must be made in full at the end of the meeting.
We gratefully accept cash or cheques (no credit cards, sorry!)