

THE MARIN BEEK NEWS

Volume 7, Issue 3

March 2015

What's the Buzz?

Our next meeting will be on Thursday March 5, 2015 at the American Legion Log Cabin, 20 Veterans Place, San Anselmo, CA starting at 7:30 pm. The meeting will feature Christina Grozinger, PhD, Professor of Entomology and Director, Center for Pollinator Research, Penn State University. Her areas of expertise are: pollinators, genomics, immunity, behavior and physiology.

Her topic is: "Bee health: from genes to landscapes"

Upcoming Meetings:

April 2, 2015

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

May 7, 2015

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

June 4, 2015

Mark Winston, PhD, Academic Director and Fellow of the Centre for Dialogue, Simon Fraser University, Vancouver, BC.

July

No meeting (Marin County Fair)

August

Annual Marin Beekeepers Potluck - TBA

What You Missed

Our last meeting featured a presentation by Jay Evans, researcher at the USDA lab in Beltsville, Maryland.

Jay's talk was entitled "Honey Bees: Up with the Good"

Bee colonies are hot and crowded, which makes them susceptible to viruses and parasites. Commercial beekeeping allows diseases to spread rapidly. There are a number of viruses, mostly Rna types, that are vectored by varroa mites.

Honey bees fight viruses in two main ways.

- Hygienic behavior.
- Immune / stress response.

A study conducted by his lab on hygienic behavior found bees that not only groomed mites off of each other, but would actually damage the mites so that they were unable to climb back up into the hive. Over a period of 6 years selecting for this trait they have been able to increase the effectiveness of "mite chewing bees". However, he cautioned that it is still too early to tell if this will be effective in the long run. Selection for desirable traits tends to dwindle over successive generations.

See What You Missed on Page 2

1	What you Missed
1	What's the Buzz
2	Beekeeping Workshops
3	Beekeeping Classes
3	Very Interesting
4	Hive Tips

Jay found that bees have good microbes in their bodies, much like humans, that assist in maintaining their health. He conducted an experiment with colonies infected with American Foul Brood (AFB). The colonies were then inoculated with good bacteria to see if they could knock out the AFB. They found that there was some beneficial effect but it did not eliminate AFB.

What about adult bees? Do bacteria play a beneficial roll in their health? He found that beneficial bacteria do not eliminate the bad bacteria but can reduce its population. He performed a study on bees infected with deformed wing virus (DWV). They were inoculated with beneficial bacteria. The bacteria triggered an immune response which, in some cases, eliminated DWV. He stated that it is still too early to tell if there is a practical application.

Jay closed by saying that, through screening for honey bee pathogens, he has found that all colonies have some level of pathogen exposure. A strong colony will have some disease, which they can fight off. A weak colony will have a larger variety of viruses. He also found that viruses may react to each other making things even worse.

Beekeeping Workshops

Melanie Kirby and Mark Spitzig of Zia Queen Bees will be conducting a series of workshops on survivor stock queen breeding and rearing, hive medicines: making apiceuticals, and 2nd step beekeeping field practicums over the last two weekends in March at Wings of Nature Apiaries- based near Palo Alto

March 21- In Her Majesty's Chambers: Intro to Queen Breeding & Rearing

March 22- Hive Medicines: Making value added products from the hive for health and wellness

March 28- In Her Majesty's Chambers: Intro to Queen Breeding & Rearing

March 29- 2nd Step Beekeeping- take your hive management skills to the next level

More info at www.wingsofnaturebees.com and <http://ziaqueenbees.com/zia/no-cali-charm-school-for-beekeepers-workshops-march-2015/>

Alameda County Beekeepers Association Michael Bush Queen Rearing Workshop

Saturday, March 21st, 8:30 a.m. - 6 p.m.
2-3 Backyards in the East Bay
\$75 ACBA members/\$85 nonmembers

Instructor: 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. The workshop will start off with a 1.5 hour lecture overview of Queen Rearing and what we will cover the rest of the day. The rest of the workshop will be working with hives and doing the steps of queen rearing, including:

- Grafting demo plus students trying it themselves
- Moving grafts into a cell starter/builder
- Nicot system
- Creating mating nucs
- Transferring a queen cell to a mating nuc
- Creating a cell starter/builder with a Cloake board

Space is limited to 20 people, and will likely fill up.

TO REGISTER, first, please send an email to Catherine Edwards to reserve your spot at catherine.edwards6@gmail.com.

Second, to guarantee your spot, mail a check made out to ACBA to:

ACBA c/o Catherine Edwards,
5212 Esmond Ave.
Richmond, CA 94805

Beekeeping Classes

Pairings: “Hive Mind”

Thursday, March 12, 2015 • 7:30 p.m.

[Exploratorium, Pier 15](#) • [Bay Observatory Gallery](#)

\$15 General; \$10 Members; Free for Lab Members

Info & Tickets at: [Exploratorium](#)

Api-Sophia – Honeybees for life

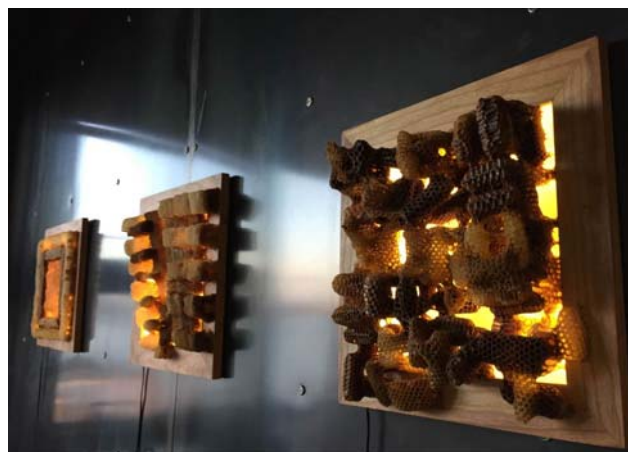
Mar 14, 2015; 12:00 PM – 3:00 PM

Join bee-whisperer Michael Thiele, founder of Gaia Bees, for a journey into the deeper workings of the remarkable species of *Apis Mellifera*, Honeybees, in this of exploration biodynamic apiculture. Learn about relationships, social decision making, sustainability, and survival through the inherent wisdom of the hive in this moving presentation suitable for all bee-lovers, from beginners to practicing beekeepers.

More Info & Tickets at: [SHED](#)

Very Interesting

Marin Beekeepers member Jennifer Berry recently completed a six month residency at software company Autodesk, where she focused on bee-related projects. The Autodesk workshop includes a 3D print lab, metal and wood fabrications labs, and a robotic and electronics lab. For her first project she built a better bee vacuum for extracting hives from buildings, and while doing so documented how bees create feral comb. With this knowledge she then developed a series of collaborative art pieces, where she begins the 3D prints using cutting edge technology and the bees finish the work with their own 3D printed honeycomb, a technology that far surpasses any human engineering.



Hive Tips

Prevent your bees from swarming: make sure there is adequate space in the brood chamber. With the warm weather this season, you should have already checked your colony since fall, and likely have added space. If not, you need to do so ASAP. **Colonies are building quickly.** If your bees are starting to get crowded, add more space. Most importantly – be sure there is contiguous space in the brood chamber. If you add additional space, but there is only honey between it and brood area, you will not prevent brood area congestion – which is the cause of swarming.

- **Considering splitting?**

Drone reports from around the county are indicating that mature drones are – or will soon be – out and about. Keep in mind that research shows that well mated queens do better in the long term. That means plenty of drones out flying during queen mating flights. It takes 24 days for drones to go from an egg to cell emergence. It takes an additional 14 days to reach full maturity. Some beekeepers in the county are holding out a little longer for a greater mature drone population. Some beekeepers are concerned about foraging resources drying out early this year (like in 2013) and therefore limiting new colony build up, and argue that earlier splitting will help new colonies take advantage of what's out there now.

- **A Simple Formula for Splitting: #7 Split = 2+2+2+1 (for a 5 frame nuc box)**

- 2 frames of brood (one capped, one mixed age that has eggs/young larvae from which bees can start queen cells)
- 2 frames of food (include pollen and nectar/capped honey)
- 2 frames of bees shaken in (preferentially from brood frames that have a lot of nurse bees; return brood frames to parent hive after shaking bees into your split)
- 1 empty frame
- Check split in 2-3 days to be sure they are making queen cells (no queen cells? Are you sure you didn't get the queen?)
- After ensuring that bees have queen cells, then be patient and wait for about 30 days +/- . By then, if the queen successfully returned from her mating flight(s) you will likely see capped brood.

- **Time to set up your bait hives!**

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? Local beekeepers report success with the following set up:

1. Deep hive box
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!

Have a bait hive tip? Post it to the Buzz!



Catching a Swarm with a Bait Hive