

THE MARIN BEEK NEWS

Volume 9, Issue 4

April 2017

What You Missed

Our March meeting featured a presentation by Ross Conrad, beekeeper and owner of Dancing Bee Gardens, Middlebury, CT. Ross is also the author of "Natural Beekeeping, Organic Approaches to Modern Apiculture." His talk was titled "Natural Beekeeping in the Age of Neonicotinoids & CCD."

- Ross' career evolved from DJ to soul searcher to beekeeping
- Drawn to native American writings of Sun Bear
- Honeybee connection during vision quest – everything in nature has something to teach us if we are open to it
- Approached by local commercial beekeeper to work full time & took the opportunity
- Timing was just as varroa mite started to hit – used pesticides because work required it
- Did not use treatments in his home apiary – the hives died, but eventually hives started to make it through the winter
- Colony Collapse Disorder (CCD) hit – lots of symptoms with key denominator of stress
- Bases his approach in reducing stress on bees in as many ways as possible
- Climate change impact on environment – more carbon dioxide in air, plants produce more sugars & less protein

Nutritional Stress

- Feeding – always try to give them what they are meant to eat – real pollen, real honey
 - Substitutes can get them through the real stressful time, but should not be used on a regular basis
 - Can fortify sugar syrup with natural sea salt (for minerals) & replace some of the water with chamomile or thyme tea
 - Suggests using cane sugar vs. non-cane sugar since sugar beet source is commonly GMO

See What You Missed on Page 2

What's the Buzz?

Our next meeting will be on Thursday April 6, 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 Charlie Blevin, beekeeper, San Francisco, CA. Learn quick and easy methods in capturing urban swarms from trees, cars, mailboxes, barbecue grills, satellite dishes, sewer grates, crosswalks and other weird places they land. You'll also learn how to set lure hives to attract swarms.

Upcoming Meetings:

May 4, 2017

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

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- Need to provide diverse forage for pollinators to reduce nutritional stress

Pest Stress

- Wax moths
 - give frames light & air exposure & keep your bees strong to keep wax moths at bay
 - Will move in when hive is weak
- Weak hives – match size of cavity with the population of bees
 - Will have fewer problems with pests
- Small hive beetle (SHB)
 - Feces have bacteria that causes honey to ferment – can happen quickly
 - Keep combs covered with bees
 - SHB can smell hives in distress from 5 miles away
 - SHB have learned to take advantage of bee feeding mechanisms tricking the bees into feeding the beetles
 - Bees will corner beetles in an area of the hive using wax / propolis
 - A lot of traps available to deal with beetles effectively
- Australian sap beetle (lesser hive beetle)
 - About the same length as SHB but narrower –
 - Scavengers that feed on pollen
 - Same measures that will take care of wax moths & SHB should take care of these
- Varroa mites
 - Biggest problem because everyone has them
 - Natural treatments - Organic acids (formic / oxalic),
 - Sugar dusting can be effective – if treat every 3 days & treat consistently & do 7 to 8 times in a row – recent studies show it is not effective if treatments are done less frequently.

Sustainable Treatment-Free Beekeeping

- Looks to mimic a sustainable farm, making or producing everything in the apiary that my bees need instead of relying on outside sources to manufacture the things he needs to maintain his apiary.
- Treatment-free bees require management
 - Start with good genetics – Russian, varroa sensitive hygienic bees (VSH) & hygienic bees

- all have some level of capability of dealing with varroa
 - Look for local bees that are adapted to regional area
 - Mite reproductive cycle is tied closely to bee cycle
 - Mite hides in brood food – waits for cell to be capped & lays eggs
 - Get exponential growth over time – doubles every 21-24 days
 - Mites weaken bees immune system & make them susceptible to other disease
- Making splits breaks the brood cycle & interrupts the mite repro cycle
 - Swarming also breaks the cycle
- Replace old comb on regular basis
- Use screened bottom boards
- Trap mites or cull drone brood
- Doesn't subscribe to just ignoring or leaving bees alone
 - Need to take care of the bees if we are going to select a home for them
- Each of us are in a unique situation – location, equipment etc. – part of the fun – learn as much as you can and determine for your situation what will work for you
- Don't worry about monitoring – look for deformed wings or mites in drone brood – get a feeling of whether mite load is changing
 - Many monitoring techniques give false readings or can change quite rapidly
 - Don't worry about it, but be conservative
- Consider treating bees going into winter – needs to be early enough for the bees to get healthy & be able to care for others – a bee with a viral infection will infect bee food
 - Alternatives to antibiotic treatments
 - Pro Health or Honey B Healthy – made with essential oils emulsified with sugar syrup
 - Drench hives – bees forced to lick up liquid & regain health
- When a hive dies it is critical to understand why it died
 - Recommends the autopsy chart in his book “Natural Beekeeping” as a guide
 - We need to learn from our mistakes in order to become good beekeepers

Pesticides / Neonicotinoids Stress

- Correlation between increase in use & decline in pollinators
- Vermont has passed legislation for a pollinator protection plan
 - Baseline record of pollinators from citizen science project in 2000 – study was repeated in 2015 and found dramatic differences – rusty patch bumblebee has disappeared
- Very clear that native pollinators are being affected by neonicotinoids since they are generally solitary
- Honeybees being buffered from effects due to colony sizes
- Bees don't have a normal fighting chance – beekeepers take financial hit to support colonies
- Bees are such good teachers & sources of inspiration
- 12 bees work their whole lives to make 1 tsp honey – hive needs 200 lbs. to survive
- Bees don't fall for the myth that what they do doesn't matter – they do whatever they can to contribute
 - Do no harm
 - Give back more than they take
 - Regenerate life on the planet
- Each person who chooses to care for pollinators is making the world a better place – that's the kind of healing the earth needs

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

Beekeeping Workshops

Randy Oliver, our May guest speaker, will be leading two beekeeping workshops on **Saturday, May 6, 2017** in Corte Madera, \$50 per person, per session, 20 person max per session.

9:30am - 12:30pm: Small scale queen rearing

1:30pm - 4:30pm: Mite monitoring and treatment options – including Aluen strips (a method for delivering an oxalic acid treatment)

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

fit their situation and goals. Workshops will be scheduled for Saturday.

June 1, 2017

Gadgets and Gizmos

July

No meeting: Marin County Fair. See Page 6 for more fair information.

August

No meeting: Marin Beekeepers Annual Potluck.

Beekeeping Classes

Upcoming classes with Bonnie Morse, Bonnie Bee & Company:

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

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

Other Classes:**Biodynamic Apiculture**

'Healing the planet through apiculture'

Green Gulch Farm, CA

April 22, 2017; 9am – 4pm

Info and registration at: <http://www.sfzc.org/green-gulch/calendar/workshops-retreats/biodynamic-apiculture-workshop>

Sun Hive workshop

April 29 & 30, 2017

Location: HomeFarm, near Healdsburg, CA

Info and registration

at: <http://healdsburgshed.com/events/sunhive/>

Hive Tips

By Bonnie Morse, [Bonnie Bee & Company](#)

- **The flow is on!!!** Prevent your bees from swarming: make sure there is adequate space in the brood chamber.
 - Strong hives 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.
 - Are they already making preparations to swarm...i.e. swarm cells? You won't stop swarming by adding more space. You can take a split with the queen – and without any frames with queen cells – to (likely*) stop them from swarming. This is basically a swarm (except they will get some comb and perhaps some food). By removing the queen and part of the colony, you have done what they were already planning to do. Now, leave the original colony (with queen cells) alone for at least 3 weeks to do what they were already planning to do – get a new queen to replace the one that left in the “swarm”.
 - “likely”... if they are left with too many bees, they could still have a secondary swarm.
 - Adding a new hive body above the brood with new frames? Help entice bees to move up by adding a frame with built out comb in new box. Are you a new beekeeper who doesn't have any frames with built out comb? Help entice the bees to move up by pulling a frame with young brood (young larvae & eggs) up into the new hive body from area below. Nurse bees will stay with these bees and their presence above will entice building in the new hive body. If you do this:
 - Be sure frame you pull up is kept directly above other brood frame(s) for easy access by nurse bees.
 - Replace frame you pulled in lower box. At this time of year (warmer temps so bees can break cluster to access food in different parts of the hive), you can place the replaced frame in the brood cluster area, OR between outermost brood frame & food frame, OR outside last frame in the box.

- Bees not quite ready for more space above? But you are concerned about swarm prevention? Add space BELOW. A super below your other hive bodies will give queen potential space to expand into and also give space to returning foragers.
- **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.
- Cleaning out a winter dead out in preparation for the arrival of new bees?
- Check frames closely for the presence of American Foulbrood. While chances are more likely that your bees perished for another reason, this highly contagious disease continues to be found in colonies in Marin. Do yourself – and your neighboring bees – a favor and educate yourself on the signs. Unsure? Ask for help on the Buzz.
- **If you haven't done so already, it's time to set up your bait hives!**
 - If you plan to set out bait hives this year, now is a good time to do so. (We've already had two move-ins this season.)
 - Review Tom Seeley's book, Honeybee

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Democracy, for complete details on what his research has shown that swarms prefer in a nesting cavity.

- o 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!

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

Members' Survey

Last chance for annual member input on speakers and workshops.

We're looking ahead and planning for the Sept 2017 - June 2018 speaker series and would like to hear your input on what topics you would like to hear about at our monthly meetings...and who you might like to speak to the group.

We're also looking for general feedback on the organization of the group. Keep in mind...everything is done by volunteers so we're looking for folks who want to step forward and lend a hand as well.

[Here's a link to a brief survey.](#)

Thanks for your participation and input!

UC Davis Bee Symposium



The third annual **Bee Symposium: Keeping Bees Healthy** will be hosted at the UC Davis Conference Center on **Sunday, May 7, 2017**, preceded by the first California Honey Festival in Woodland, CA on Saturday, May 6, 2017. This educational program is designed for beekeepers of all experience levels, including gardeners, farmers and anyone interested in the world of pollination and bees. In addition to our speakers there will be lobby displays featuring graduate student research posters, the latest in beekeeping equipment, books, honey, and much more.

This year, our lead speaker is Dr. Steve Sheppard, Thurber Professor of Apiculture and Chair of the Department of Entomology at Washington State University. Other speakers include Santiago Ramirez from the College of Biological Sciences at UC Davis, Maj Rundlof from the Department of Biology from Lund University, and Margaret Lombard, CEO of the National Honey Board. Elina Niño, the Extension Apiculturist from the Department of Entomology and Nematology at UC Davis, will be honoring the Apprentice-level students from the Master Beekeeper Program.

For more information and to register go to:
<http://honey.ucdavis.edu/events/2017-bee-symposium>

Date: Sunday, May 7, 2016

Time: 8:00AM - 6:00PM

Location: UC Davis Conference Center

Fee: \$80 (General), \$25 (Students)

New Marin Source for Bee Equipment

If you find your growing colony – or recently acquired swarm – or split made to prevent a swarm – is in need of equipment ASAP, we now have a source in Marin County for bee equipment! The Fairfax Backyard Farmer has been open since fall '16. Open 7 days a week, Mon – Sat noon – 7pm, Sun noon to 5pm.

135 Bolinas Rd
415-342-5092

County Fair Time!



Spring is here and so is swarm season. That also means the **2017 Marin County Fair** is fast approaching. The official Fair entry form deadline is Thursday 11 May 2017. If you entered last year you should have received an entry package in the last week or so. If not, or if you are entering for the first time, there are entry forms and the 10 category descriptions for the Adult Honey Department on the Fair website, under Competitive Exhibits. <https://www.marinfair.org/~media/files/fair/2017/exhibit-pdfs/honey.pdf?la=en>
Entry forms are available at: <https://www.marinfair.org/~media/files/fair/2017/exhibit-pdfs/entry-form.pdf?la=en>

Please don't be shy, enter as many categories as you wish, you have plenty of time to get your entries prepared. Exhibits will be received over 2 days at the Exhibit Hall at the back of the Fair Grounds. **Friday, June 9, 3 pm to 7 pm & Saturday, June 10, 10 am to 5 pm, Exhibit Hall**

This is an opportunity for all of us to participate in a little good-hearted competition with other beekeepers on all types of hive products: honey, beeswax, and candles. Cash prizes are associated with the first 5 places. There are two big prizes, the Best of Show and the Barney Salvisberg Award, a founding member

of Marin Beekeepers. Again, this year each will have additional monetary awards. All the exhibits are on prominent display at the bee booth during the fair (ribbons included) for your friends and neighbors to see, and we can showcase the many different hive products produced locally in Marin. There is still time to assemble and get your entries in.

Next up is staffing the bee booth inside the exhibit hall during the Fair which this year is from **Friday 30 June to Tuesday 4 July**. This is our club's opportunity to do outreach and get the word out about our little "trusts" and hopefully dispel some misinformation. We get to talk about bees, show off the observation hive (a fresh one every day), look for the queen and enjoy the various reactions. Even as a "newbie" you have more knowledge than most of the public. The club also gets paid from the Fair to help continue our excellent list of speakers.

We staff the bee booth with 2 people during each 3- to 4-hour time slot. In exchange, each staffer receives a pass to get into the Fair and each time slot will have one car pass to the exhibitors' parking lot in back of the exhibit hall. The rest of the day you can enjoy the other parts of the Fair. The entertainment web site is at: https://www.marinfair.org/2017/concerts_menu/all-concerts (included with entry) special events and attractions, especially the fireworks display each night at 9:30 p.m. The sign-up schedule will be sent to the Buzz soon. Email me your preferences. Stralka.daniel@epa.gov Please sign up and join in the fun!

The important dates are:

May 11

Entry forms due in with this year's entry fee of \$2.50 per entry.

June 9 and 10

Drop off exhibits in the Fair building at the back of the Fairgrounds

Friday, June 9: 3:00 to 7:00 p.m.

Saturday, June 10: 10:00 a.m. to 5:00 p.m.

We can accept late entries even if you hadn't submitted a form. Fill out the forms before you come to expedite the processing.

June 11

Judging by Michele Ferrante, chef/owner Gira Polli in Mill Valley

June 16

Finalize Bee Booth sign-up.

June 30- July 4

MARIN COUNTY FAIR!

July 5

Entry retrieval and collection of awards.

Bee Informed Survey



Dear Beekeeper,

Warm up your keyboard, grab a cup of coffee and take the Bee Informed Partnership National Colony Loss and Management Surveys! You can find them by following this link:

<http://26.selectsurvey.net/beeinformed/TakeSurvey.aspx?SurveyID=2017>

We need you! We know it is one of the busiest times of the year for beekeepers and we thank you for taking valuable time from your colonies to participate in the National Colony Loss and Management Surveys. **The surveys are now live and will close on April 30th!**

The Colony Loss Survey has evolved from our winter loss survey conducted 11 years ago. Now we monitor summer losses as well. The National Management Survey is conducted annually in conjunction with the Colony Loss Survey. The two surveys are aimed at looking for relationships between colony losses and colony management (including disease treatment strategies, supplemental feeding, etc.) and/or other factors that may influence colony health (such as colony location, honey production, and forage type).

Please share this survey information with your beekeeper friends and clubs!

We are excited to share our [dynamic state map](https://bip2.beeinformed.org/geo) located at <https://bip2.beeinformed.org/geo> where you can view state losses from all years of the survey. At that site, you will see annual, winter and summer losses as well as the number of participants and colony numbers for your state. Dynamic management reports that have resulted from previous years' surveys can now be found at

<https://bip2.beeinformed.org/survey>. This exciting [data management explorer](https://bip2.beeinformed.org/survey) lets you see what actionable practices are correlated with improving survivorship!

We need your responses! Some of you may be contacted independently by the National Agricultural Statistics Service (NASS) of the USDA to participate in their first quarterly colony loss survey. We encourage all beekeepers contacted by NASS to answer **BOTH** BIP and NASS surveys.

If you have any questions or comments, please contact us at support@beeinformed.org.

Once again, thank you for your participation,
The Bee Informed Partnership

The Fine Print (read quickly and with a serious voice):
Please do not complete the survey more than once.
Information about past Loss and National Management Surveys and the annual reports can be found online at <http://beeinformed.org/>.

Again, your participation in this research is voluntary and your responses will be kept confidential. In any publication or presentation resulting from this research, no personally identifiable information will be disclosed.

Farm Day

Marin Beekeepers' exhibit is always popular at Marin County Farm Day. This year, visitors were treated to frequent queen sightings in Dave Peterson's observation hive, saw honey in the comb and how it is extracted, learned that most "bee" stings are really yellow jacket stings, what honey bees do for us and what we can do to help honey bees.

Thank you to our volunteers this year: Nessa Brady, Jim Dowling, Tim Erin, Richard and Karen Hyde, Shana Katzman, Judy Paton, Cecil and Tyler Nielsen.

