THE MARIN BEEK NEWS

Volume 8, Issue 2 February 2016

What's the Buzz?

Our next meeting will be on Thursday Februaruy 4, 2016 at the American Legion Log Cabin, 20 Veterans Place, San Anselmo, CA. starting at 7:30 pm. The meeting will feature a talk by Dave Tarpy, PhD, Department of Entomology, North Carolina State University. Dr Tarpy is a popular professor at NCSU and a respected researcher.

Upcoming Meetings:

March 3, 2016

Greg Hunt, PhD, Professor of Entomology, Purdue University. Dr. Hunt studies the grooming traits of bees. He also works with a multi-state consortium of survivor stock to breed the grooming trait into honey bees. He will be discussing mite-biting bees.

April 7, 2016

Dewey Caron, PhD, professor emeritus, Department of Entomology and Wildlife Ecology, University of Delaware. He is the author of "Honey Bee Biology and Beekeeping". He now spends time living in both Oregon and Bolivia. He will share his hands-on expertise on the Africanized honey bee.

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What You Missed

Our December meeting featured a presentation by Neal Williams, PhD, UC Davis entomologists. Dr. Williams' talk was titled "Designing Habitat to Support Pollinators and Pollination Services from algorithms to implementation".

Dr. Williams is not an apiculturist. He started studying bee biology when he arrived at UC Davis. He has been conducting integrated pollination research involving honey bees and wild bees looking at context and opportunities, and synergies between honey and wild bees. His main focus has been on developing wildflower plantings to support pollinators.

Bee crop pollination services have been valued at over $360 billion, globally. In the United States bee pollination services have been valued at over $17 billion with honey bees contributing $14.6 billion and wild bees contributing $3 billion. There is a nationally and globally recognized need to develop strategies that support bees on farms.

Honey bees are ideal crop pollinators. They are colonial as opposed to wild bees, which are mostly solitary. They practice social foraging, gathering stores to be shared by the hive. Their hives are perennial. They are very adaptable to being moved, able to orient to their hive quickly after being relocated.

Wild bees also contribute to crop and other plant pollination. Many native bees are very efficient pollinators and can actually be more effective than honey bees on a per visit basis. However, the large numbers of honey bees in a colony make them better suited to commercial crop pollination. Studies have found that wild bees contribute to crop pollination to a greater degree on organic farms, particularly organic farms located near wild habitat.

They have also found that honey bee pollination effectiveness and fruit set increases when wild bees are present, although they have not determined the reason for this phenomenon.

Dr. Williams then discussed his work to enhance

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forage habitat for bees. Commercially, honey bees are brought into farms to pollinate a particular crop. The bees forage on crop plants, experiencing a bonanza of resources then a dearth due to the practice of monoculture farming. The problem with current agricultural practices is that they do not provide enough forage or a diversity of forage. Also, the common use of pesticides in agriculture can cause problems for honey bees,

Dr. Williams' goal is to encourage farms to plant wildflowers in the margins adjacent to crop fields to promote a variety of resources for pollinators when the crop is not in bloom. The goal is to select plants that provide forage for the bees and increase pollination of the crop plants.

Plants selected for the wildflower mix must be preferred by bees, regionally relevant, have a good bloom period, grow reliably, be readily available and cost effective, not attractive to pests, and non-weedy.

Choosing plants that can support bees on a biological basis:

- Determine the time of year that the bees are active (flight season).
- Chose plants that bloom over that period of time. You may need three or four different plants to cover the flight season.
- Determine which plants are attractive to what bees.
- Determine a set of plants that meet these criteria at an acceptable cost.
- Conduct field testing of the plant mix
  - Look at how the mix actually grows
  - Determine if the mix increases the abundance of bees vs. natural habitat.

Dr. Williams initially determined plant mixes manually with the help of colleagues. However, he found that computers were much more effective at determining an optimal plant mix for attracting a variety of bees at an effective cost.

Dr. Williams is currently working on an interactive program that will determine what plants are most beneficial to bees in your area. The goal is to be able to input your zip code and obtain a list of plants suitable to your area, including places to obtain seeds locally. Currently, the seed mix from his recent experiments can be obtained from Hedgerow Farms, www.hedgerowfarms.com.

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May 5, 2016

Yves Le Cont, Research Director at the Institut National de la Recherche Agronomique. After French apiaries were devastated by varroa mites in 1982, Le Conte investigated the few surviving apiaries and was able to identify traits in those bees that allowed them to rid their colonies of the mites.

June 2, 2016

Bonnie Morse, co-owner Bonnie Bee & Company. She will be discussing results from the broodless study.

July 2016

County Fair

Dues are Due

A Message from Dave Peterson:

Time to Renew Your Membership -- Take the Double Your Dues Challenge

Membership dues remain at **$20.00** for another year. Memberships include all family members residing in the same domicile and are for the calendar year. Those new members joining after October 1 are paid through all of 2016. Renewals are due by the January meeting and delinquent after the February meeting. In mid February, we will purge the Buzz, Swarm and BeekAdmin list subscribers who have not renewed by that time.

The best and easiest way to pay your 2016 dues is online at **www.marinbeekeepers.org.** You do not need to sign in or use a password. Just click on "become a member", fill out the form and submit. Be sure to complete the payment section at the end, which is via PayPal. You do not need to have a PayPal account to pay using a credit card. There is a small transaction fee added to your dues which is assessed by PayPal.

Or... you can mail a check payable to Marin Beekeepers to our Treasurer:

Mary Nordquist
2072 Hatch Rd.
Novato, CA 94947

If all else fails, you can always pay at the door when you come to the February meeting.

Support the Bee Audacious Conference -- with the Double Your Dues Challenge

You can **Double Your Dues** (or add more if you choose) and the balance over $20 will go to support the Bee Audacious Conference. This is treated as a tax deductible contribution through PlanetWorks, the 501-3c Non-Profit, who is acting as the Fiscal Sponsor of the Conference. Any amount you donate online, by mail to Mary, or give at the door at the meetings, will automatically go toward this exciting project. **Only the portion over $20 is tax deductible**. You will receive a deductible receipt for your contribution.

Two Marin Beekeepers, myself and Richard Hyde, have each pledged $1,000.00 to match the first $2,000.00 raised through the Double Your Dues Challenge. So the more you give, the more we give.

As many of you know, a number of "Enthusiastic Marin Beekeepers" are organizing a unique Conference being held in December 2016, bringing together the best minds in beekeeping from all around the country and even some international participants. Those of us who are working to make the Conference happen are extremely honored that many of the leading minds in beekeeping have chosen our area to hold this Conference. We are organizing volunteers and fundraising to make it all happen.

The conference is being built around three "Leaders", Mark Winston, whose editorial in Bee Culture sparked the concept, Tom Seeley and Marla Spivak. All three have been part of our speaker series over recent years and are familiar with our club and what we are doing. These three will invite 7 more Leaders of their choosing. Then the ten Leaders will invite 45 participants from the world of beekeeping across the country and around the World. There will also be 45 participants selected, from open applications solicited from the wider beekeeping community. These Leaders and participants will be bought together for two days of intense discussions, in breakout groups, about the future of beekeeping. The conference will conclude with a round table presentation of the findings and aspirations. This presentation is to be held in a large auditorium, open to the public and streaming live over the internet. Hopefully recorded as a TED Talk. All very exciting. We hope you will help us in this fundraising effort.

You can learn more about the Conference or volunteer to help at www.BeeAudacious.com.

Workshop News

Participants at the Kirk Webster Workshop visiting bees at Dave Peterson's Corte Madera Apiary

Hive Tips

By Bonnie Morse, Bonnie Bee & Company

Strong hives are building up.

If your bees are starting to get crowded, add more space. If you have frames with comb built out, it might be best to add those at this time of year as temperatures are not ideal yet for comb building
.

Bees not quite ready for more space above?

But you want to let them take advantage of resources currently available to start building up? Add space BELOW. A super below your other hive bodies will give the colony potential space to expand into, without allowing for heat to escape up above the cluster.

Adding extra space to a weaker colony will just make it that much harder for them to keep the brood cluster at the right temperature.

How can you tell? One indication will be if the foragers are leaving the hive early in the morning. If the foragers can leave during colder times of the day, then it may be an indication that they have enough workers to maintain the brood cluster temperature and still have workers to spare for foraging.

Cold doesn't kill bees - moisture does.

Make sure your hive tilts forward slightly so moisture doesn't condense inside on your bottom board. Not sure the bees have enough ventilation? On a warm day, quickly check the inside of your top to see if it is wet or has mold. If so, consider giving them a little more ventilation by adding a shim, stick, or thin piece of wood between the top and inner cover.
Keep an eye out for next month's newsletter and tips for using your empty equipment to set up a bait hive!

Beekeeping Classes

Upcoming Classes

Intermediate Series: *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 10th – Wed. Feb 24th, 6:30pm - 8:30pm, 3 classes, course code 24632, drop in fee = $30/class
San Rafael Community Center, 618 B St., San Rafael

Field Day: Sat., Mar. 14th, 1:30pm – 4:30pm

Mark your calendar for other 2016 classes and workshops (additional information available at: www.bonniebeecompany.com).

Field workshop: Beekeeping Basics (using your tools, inspection basics, swarm prevention), Sat., May 14, 9:30am – 12:30pm

Field workshop: Intermediate Beekeeping (splitting hives, queen issues, space management), Sat. May 14, 1:30pm – 4:30pm

Summer and Fall Hive Management class series, Class room sessions: Wed. 7/6 – 7/20, 6:30pm – 8:30pm, San Rafael Community Center, Field Day: Sat. 8/6, 9:30am – 12:30pm, location TBD

Biodynamic Apiculture –
Supporting the Life of Bees

February 27, 2016; 9am – 4pm
Green Gulch Farm, Muir Beach, CA

This workshop will be an introduction into biodynamic apiculture and a treatment-free, bee-centered approach. Topics will include alternative hive designs, working with natural comb, biodynamic management technques, the examination of core principles of bee instinctual needs, self-sustaining apiaries & design, health and more. Michael will be available as a resource and support for class participants throughout the season at no extra charge. Info and reservations at http://gaiabees.com/events/