

THE MARIN BEEK NEWS

Volume 4, Issue 7

July/August 2012

What You Missed

Our last meeting featured a talk by club member Dan Stralka. Dan has been keeping bees for over 26 years. Dan also enjoys making mead from his local honey.

The title of Dan's presentation was "Survivor Stock: What Is It and How Can I Play?" Here are some of the highlights from Dan's presentation.

Dan stated that the most important criteria for queen rearing is to select good stock to work with. Recording keeping is the key to success.

What is good stock?

Primary Criteria:

1. Bees that have survived more than one winter.
2. Bees that require minimal or no treatment.
3. Bees that have minimal disease and mite loads. Mites are still the number one problem since they often carry diseases into the hive.

Secondary Criteria:

1. Gentleness, bees that are easy to work. This is especially important in our urban area.
2. Honey production.

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What's the Buzz

Our next meeting will be the annual pot luck dinner on Saturday August 11, 2012 at the American Legion Log Cabin, 20 Veterans Place, San Anselmo, CA. Go to <http://marinbees.com/wp/marin-county-beekeepers-annual-potluck> for more information on the event and to sign up to bring a dish.

Upcoming Meetings:

September 6, 2012

Alan Hawkins. Alan keeps bees in several areas in California, including the Green Gulch Zen Center on Mt. Tam. His discussion will include beekeeping strategies for particular micro-climates.

October 4, 2012

[Bonnie Bollengier & Gary Morse](#). Our own club members and owners of "Bonnie Bee & Company" will discuss the first club order of nucs with Marin queens & future plans to develop local stock.

November 1, 2012

[Kate Frey](#). Kate is a world class garden designer and consultant, specializing in sustainable, bio-diverse, ecological gardens and landscaping, including the [Melissa Garden](#) bee sanctuary in Healdsburg. Kate will present her "pollinator garden slideshow."

December 6, 2012

John Miller & Hannah Nordhaus. Touted as "a revelatory, bittersweet investigation into the state of commercial beekeeping in the 21st century," this duo will talk about "[The Beekeepers Lament](#)," written by Ms. Nordhaus about John Miller (commercial beekeeper). Mr. Miller is widely known for his charisma as a speaker — this is one not to be missed!

January 3, 2013

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[Steve Sheppard](#). Dr. Sheppard is Department Chair of Entomology at Washington State University. His area of interest is population genetics & evolution of honey bees, insect introductions & mechanisms of genetic differentiation.

February 7, 2013

[Kirk Visscher](#). Dr. Visscher is an associate professor of entomology at UC Riverside. His research interests include the social behavior and ecology of social insects with emphasis on honey bees, which occupy a special place among the social insects because they are among the most behaviorally complex, the most amenable for study, and of the greatest benefit to man.

March 7, 2013

[Kirk Webster](#). Kirk Webster is a master natural Queen Breeder living near Middlebury, VT. His queens are selected for VSH (Varroa Selective Hygiene). Colonies that display this characteristic detect infested larvae and then uncap & remove them.

April 4, 2013

[Heather Mattila](#). Heather Mattila is an Assistant Professor in the Department of Biological Sciences at Wellesley College. Professor Mattila's research focuses on the role that intracolony (within-colony) genetic diversity plays in the organization of communication and division of labor in honey bee colonies.

May 2, 2013 & June 6, 2013

TBD

- 3. Color, only if that is an important attribute to you.

Why raise your own queens?

- 1. To select eco-type for your conditions. Different hives of bees will be better at different things, such as honey production or pollen collection or early spring build up. You decide what is important to you and breed towards those traits.
- 2. To raise bees that are more disease and mite - resistant. Survivor bees are those that are able to deal with the diseases that are present in your area.

- 3. To control your own propagation so that you don't have to rely on others.
- 4. Cost.
- 5. Curiosity.

Queen Rearing History

- 1853 Langstroth Hive – This allowed easier observation and exchange of bees.
- 1883 Alley Method – Much like the Hopkins method where a section of comb with young larvae is cut out and introduced to a queenless colony by laying the comb over the top bars of the hive.
- 1888 Doolittle Method – This is the method where larvae are grafted into queen cups and then introduced into a queenless hive. It allows for the raising of a large number of queens and is the most common commercial method of queen rearing to this day.
- 1912 Miller Method – This uses a frame with plastic foundation where the bottom of the foundation is cut in a jagged fashion. The frame is placed in a colony with a queen who has the traits that you desire to propagate. The bees draw comb along the jagged edge of the foundation and the queen will lay into the comb. You then remove the queen and place her in a separate hive with a few frames of bees. The now queenless bees will raise queens from the larvae laid along the jagged edge of the frame.

Timing is critical in queen rearing. You must start with the right conditions.

- 1. There should be a nectar flow on.
- 2. The bees should be bringing in lots of pollen.
- 3. You need plenty of young bees to feed the larvae.
- 4. You should start with very young larvae, the best is just hatched.
- 5. A new queen will emerge 16 days after the egg that she came from was laid. If you are harvesting queen cells from your colony you need to keep track of this, since once the first queen emerges she will seek out and kill all of the other un-emerged queens.

Dan closed by stressing that it is not difficult to raise your own queens and that it allows you to employ your own selection criteria and propagate bees that are adapted to your local conditions.

Celebration of the Bees



Honey Tasting

The Celebration of the Bees went off once again without a hitch. Attendees were greeted by a warm and sunny day. Activities included a tasting of over a dozen local Marin County honeys, an observation hive, discussion of the many native pollinators throughout the county, tasting of a variety of meads, a demonstration of skep weaving and live music by Jerry Draper and friends. All this combined with wonderful foods and drinks prepared by Savory Times. Thanks go out to all the club members who assisted in making this another memorable celebration! Proceeds from the Celebration of the Bees go to benefit the Marin Survivor Stock Project.



Skep Weaving

Fair News



Once again the Marin County Beekeepers pulled off a great exhibit at the 2012 Marin County Fair. This year we were part of Fair's theme of local agriculture and did some great PR for our charges. The results of the honey competition are posted. There was a good turnout of entries that greatly added to the display of locally produced hive products. Let's see if we can add even more next year. Congratulations to Gary and Bonnie for taking home some of the top prizes. Please consider planning your entries for next year. Thanks go out to everyone who made this a successful event, all those who volunteered to answer questions and find the queen, the Hydes for the great name tags, Dave Peterson and Gary and Bonnie for the use of their observation hives, Wendy Lee-Ezekiel and Tim Crosse for arranging for the bee-friendly plants from Sunnyside Nursery and Mary and Neil Nordquist for set up and take down. With all your help we added to the club coffers to support our events. Send any suggestions for improvements for next year and additional exhibit categories to Dan Stralka at Stralka.Daniel@epamail.epa.gov

Here are the results from the 2012 Marin County Fair:

Honey

Wild Flower

1st Rob Tysinger, Novato

2nd Jeff A Kent, San Rafael

3rd Gary/Bonnie Bollengier, San Rafael

4th Richard Hyde, Belvedere

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It's Always Something

Citizen scientists needed for SF State's "ZomBee Watch"

New web site -- ZomBeeWatch.org -- will help track location of parasitized honeybees

The San Francisco State University researchers who accidentally discovered "zombie-like" bees infected with a deadly fly parasite want people across the United States and Canada to look for similar bees in their own backyards.

Today SF State Professor of Biology John Hafernik and colleagues launched ZomBeeWatch.org, a citizen science project to report possible sightings of the parasitized bees. The researchers hope to find out how far the parasite has spread and how many honeybee hives might be affected.

After being parasitized by the *Apocephalus borealis* fly, the "zombees" abandon their hives and congregate near outside lights, moving in increasingly erratic circles before dying. The phenomenon was first discovered on the SF State campus by Hafernik and colleagues, and [reported last year](#) in the research journal PLoS ONE.

The ZomBeeWatch site asks people to collect bees that appear to have died underneath outside lights, or appear to be behaving strangely under the lights, in a container or in a glassine envelope. They can then watch for signs that indicate the bee was parasitized by the fly, which usually deposits its eggs into a bee's abdomen. About seven days after the bee dies, fly larvae push their way into the world from between the bee's head and thorax and form brown, pill-shaped pupae that are equivalent to a butterfly's chrysalis.

If it looks like their sample contains hatched parasites, "zombie hunters" can upload photos of their sample's contents to confirm whether they have found a parasitized bee. Along with information about the location of the photographed bee, the images will help the scientists build a better map of the honeybee infection.

ZomBeeWatch offers tutorials on how to become a zombie hunter, complete with step-by-step instructions for monitoring and collecting bees, building a light trap and uploading data.

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Crystallized
1st Gary/Bonnie Bollengier, San Rafael
2nd Rob Tysinger, Novato
3rd Jeff A Kent, San Rafael
4th Marina M Wright, Sausalito

Chunk
1st Dan Stralka, Mill Valley
2nd Marina M Wright, Sausalito

Comb
1st Dan Stralka, Mill Valley

Hive Products

Natural Beeswax
1st Gary/Bonnie Bollengier, San Rafael
2nd Rob Tysinger, Novato
3rd Gary/ Bonnie Bollengier, San Rafael
4th Dan Stralka, Mill Valley

Molded Beeswax
1st Gary/Bonnie Bollengier, San Rafael
2nd Dan Stralka, Mill Valley
3rd Jeff Kent, San Rafael

Hand Dipped Beeswax Candles
1st Dan Stralka, Mill Valley
2nd Anna Taylor Gravley, Corte Madera

Full Frame
1st Gary/Bonnie Bollengier, San Rafael
2nd Cedars Hands & Earth Apiary, Ross
3rd Richard Hyde, Belvedere
4th Daniel Stralka, Mill Valley

Special Awards

Best of Show – Honey
Dan Stralka, Mill Valley

Best of Show – Beeswax
Gary/Bonnie Bollengier, San Rafael

Best of Show – Full Frame
Gary/Bonnie Bollengier, San Rafael

Marin Beekeepers Award
Dan Stralka, Mill Valley

Salvisberg Award
Gary/Bonnie Bollengier, San Rafael

Although there have been other reports of parasitized bees in Santa Cruz, Santa Barbara and South Dakota, Hafernik said, "what we'd really like to see is if this parasitism is distributed widely across North America."

Hafernik says he has timed the launch of the site for when the parasitized population begins its seasonal rise. "Right now is the low season for parasitized bees," he explained, "but they will start ramping up in July and August. In the San Francisco Bay Area, infections peak in September through January. We hope to learn about the timing of infections in other areas of North America."

Since last year's report, Hafernik and his colleagues have embarked on an ambitious set of experiments to learn more about the plight of the infected honeybees. In one key project, the researchers, led by graduate student Christopher Quock, will tag infected bees with tiny radio frequency trackers to monitor their movements in and out of a specially designed hive. They hope the tracking system will tell them more about how the infection affects the bees' foraging behavior and why they eventually abandon their hives.

Hafernik and his collaborators are eager to learn as much as they can about the parasite, since it may be an emerging and potentially costly threat to honeybee colonies, especially those that cross from state to state to be used in commercial pollination.

The researchers hope the intense public interest in the parasitized bees earlier this year will encourage people to visit and contribute to the ZomBeeWatch site. "We're sort of a mom and pop operation at this point," Hafernik said, "but if we can enlist a dedicated group of citizen scientists to help us, together, we can answer important questions and help honeybees at the same time."

Extraction Party

As in the past, Dave Peterson will be hosting an extraction party at his Honey House (garage in Ross) for Members with 30 or less frames to extract on September 22 & 23. Send an e-mail to arrange a time to:

Dpeterson307@aol.com

And Finally

A reminder from Bonnie Bollengier of Bonnie Bee & Company:

1. Yellowjackets are getting very active. Time to monitor activity level and reduce hive entrances.
2. We're getting reports of hives with little or no food. Might need to monitor and feed. (Pollen seems particularly low right now.)
3. Mite populations are rising. Check mite levels. Even if you don't plan to treat, it is educational to observe (and see what thresholds bees can / cannot tolerate).