THE MARIN BEEK NEWS

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What's the Buzz?

Our next meeting will be on Thursday December 3, 2015 at the American Legion Log Cabin, 20 Veterans Place, San Anselmo, CA. starting at 7:30 pm. The meeting will feature a talk by Elina Niño, Extension Apiarist, U.C. Davis.

"What's Happening for the Bees at the Davis Niño Lab"

Elina Niño takes the challenges of facing bee health in stride. Consider that she grew up in war-torn Bosnia-Herzegovina, when gun battles were the norm; bee problems she can work with.

Her PhD at Penn State dealt with declining queen health and how it affects colony survival. Her lab at U.C. Davis has continued this investigation, as well as other forays into the largest problems faced by beekeepers.

She has spent the last year reaching out to California beekeepers, assessing their problems and needs in order to address them. She will speak on how her lab is responding, as well as new educational programs at several levels.

Upcoming Meetings:

January 7, 2016

Neal Williams, PhD, UC Davis entomologists. Dr. Williams is an expert on native bees and bee forage. He will speak on his model for bee habitat that will benefit native bees as well as honey bees.

February 4, 2016

Dave Tarpy, PhD, Department of Entomology, North Carolina State University. He is a popular professor at NCSU and a respected researcher.

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.

What You Missed

Our November meeting featured a presentation by Kim Flottum. Kim is the current editor of Bee Culture Magazine. He studied with an extension entomologist at the University of Wisconsin and subsequently worked at the USDA bee research lab in Madison where he researched crop pollination and the interactions of pesticides and honey bees. His talk was titled "On the Radar" which he explained was an ever evolving presentation, gleaned from information he gathers from beekeepers from around the country.

Honey Bee Health

Varroa Mites –

Everyone deals with varroa mites one way or the other. You need to pay attention to varroa. You take care of your bees but if your neighbor doesn't then their bees abscond and all of a sudden you have a varroa problem. You need to watch out for "varroa bombs".

Summer losses can be worse than winter losses. Why are summer losses mounting? Varroa builds up in the spring and, if nothing is done, the bees will crash.

Locally Raised Queens –
 Local queens are great. Not only are they produced from locally adapted stock but they produce local drones, which is good for surrounding beekeepers.

See What You Missed on Page 2

- 1 What's the Buzz
- 1 What you Missed
- **2** From The Librarian's Desk
- 3 Bee Audacious Conference News
- 3 Beekeeping Classes
- 4 Hive Tips
- 4 Workshops

Commercial Wax –

Commercial wax is full of coumaphos and fluvalinate, which are not going away despite the fact that they are not used that much anymore. A.I Root, the parent company of Bee Culture, makes a lot of candles from beeswax. They filter the wax to make it whiter. They found that coumaphos can be processed out by filtering but fluvalinate cannot. It has been found that fluvalinate mixed with any other chemicals is bad for bees. Kim suggested not buying waxed foundation. You can buy unwaxed foundation and apply wax from your own hives or you can allow your bees to build their own comb without foundation.

Nutrition –

Only about 5% of acreage in the United States is good for bee forage. Ohio has a program to turn road shoulders into forage. Nationally, the President's initiative is looking into converting more federal land into bee forage. The government has set aside 7 million acres, mostly in the mid-west since that is where most beekeepers are located. There is concern that, long term, the program will lose funding.

Pesticides –

This is a very controversial issue depending upon you rpoint of view.

- Tank mixes combine various pesticides that are labeled for individual use. We don't really know what happens when they are combined.
- Nobody has looked into the effect on bee larvae.
 The EPA only required toxicity testing on adult bees but they are starting to require test on larvae.
- Genetically Modified Crops Most major crops have GM components.

Moth Crystals –

The moth crystals that you can buy at the local store are not registered for use in beehives. If you use moth crystals for wax moth control, you should buy them from a bee equipment supplier.

Honey

- The US honey crop was around 150 million pounds in 2014. The crop in 2015 will be about average due to the drought and severe weather in the mid-west.
- Kim predicts that honey prices will increase since less honey is produced in the US but there is a greater demand for US honey.
- More beekeepers are concentrating on pollination since there is more money in pollination. Also there is a great deal of cheap imported honey so US honey production suffers.
- There is no legal definition of honey, it depends on the state.

 Also varietal honey is not defined. It could be "mostly" one nectar source or it could be "51%" one nectar source. Several states have requirements now if you sell in grocery stores.

Good Things – Kim closed by listing some of the good things that he sees on the horizon for beekeeping.

- The President's initiative is a good thing although the impact will depend on funding.
- There are lots of new beekeepers who are sticking to it.
- Russian bees and locally adapted bees are making beekeeping easier.

From the Librarian's Desk

Congratulations to Keith Wedmore, last month's winner of the "I returned a book" raffle. You too can enjoy this elite group by remembering to bring your library book back this month!

Have you seen The Wonders yet at the Rafael Theatre? It's an Italian/German film (English subtitles) about a family of beekeepers in Tuscany. The beekeeping scenes are terrific and may be vivid reminders to some about the hazards in our pastime. http://rafaelfilm.org/the-wonders/

What's the Buzz continued from Page 1

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.

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

Bee Audacious Conference News

Jim Frazier recently accepted an invitation to join the Audacious conference as a leader. During his time at Penn State, he performed groundbreaking research on the sub-lethal impacts of pesticides on honey bees.

Mark Winston recently received the 2015 Governor General's Literary Award for Non-fiction for "Bee Time: Lessons from the Hive". According to the awards jury, Winston's book "distills a life's devotion to the study of bees into a powerful and lyrical meditation on humanity. This compelling book inspires us to reevaluate our own relationships both with each other and the natural world. Vital reading for our time."

A crowdfunding campaign in support of the Conference is being planned for January. If you would like to help us get the word out, please contact Bonnie Morse at info@audacious.com

Beekeeping Classes

Backyard Beekeeping

Wednesday, December 16th, 7pm – 9pm, \$20 Sunrise Center, 645 Tamalpais Drive, Suite A, Corte Madera

This class is for aspiring new beekeepers. Families are welcome.

This is a great time of year for new beekeepers to start planning so equipment is ready and bees are ordered in time for the 2016 season.

In this class, you'll learn about the roles of the queen, workers and drones within a colony and how they interact with seasonal cycles.

With a basic background of the needs of honeybees and the challenges they currently face, we'll move on to basic considerations you'll need to take into account including: where to place your hive, equipment options and sources, bee sources and time commitment required.

At the end of class, you'll have the opportunity to sample some local honeys from around Marin County.

Upcoming Beginner and Intermediate Classes

Save the dates! Registration will be open on December 1st through the San Rafael Community Center.

Beginner Series: 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. 13th – Wed. Jan. 27th, 6:30pm - 8:30pm (3 classes, course code 24633, drop in fee = \$30/class)

San Rafael Community Center, 618 B St., San Rafael

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

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

Biodynamic Beekeeping

"Slow Bee": A Fundamental Shift Towards the Wholeness of Bees

January 10, 2016 at SHED, Healdsburg, CA

"Slow Bee" is an attempt to redefine our relationship with bees and to create a new paradigm of caring for bees. We will examine a biodynamic approach to apiculture, the unique matrix of life of honeybees and their intricate inner organization. Another focus will be on the reemergence of ancient and traditional ways of apiculture, in particular the craft of the "Zeidler", who used to take care of bees in living trees. How can we heal the earth through healing the life of bees? Info and tickets at

http://healdsburgshed.com/events/slow-bee/

Hive Tips

By Bonnie Morse, Bonnie Bee & Company

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.



Temps are cooling down and the drones are all but gone. If you plan to check your hive, have a plan for why you are going in and what you are looking for. Plan to inspect when temps are 60 or above and keep your inspection as brief as possible. Inspecting at this time of year for curiosity sake could potentially do more harm than good (and if you injure your queen the colony has low likelihood of successfully replacing her), but a well planned and executed inspection could

save a colony from starvation or mites.

You can find out a lot of information without opening the hive. Put your ear up to the side and knock gently. What kind of buzz do you hear? Does it sound like a large cluster or a few sporadic bees? Try to heft the hive. Is it heavy with stores? Or is it light and lifted with ease? If you have a screened bottom board, what do you see on the monitoring board? From debris, can you see if the size of the cluster is the same, smaller or larger than when you looked last? Do you see dark cappings from brood emerging? Or lighter cappings where stored food is being consumed?



Cleaning up Equipment for Winter Storage

Workshops

January Workshops with Kirk Webster Sunday, January 24th, Corte Madera \$50 per person per session If weather allows, workshops will include apiary visit Contact Richard Hyde to register

<u>Kirk Webster</u> is the owner and operator of Champlain Valley Bees & Queens in Middlebury, Vermont. He produces Russian queens and nucs, as well as honey, and his apiary has been treatment-free since 2002. Kirk uses the natural processes active in nature to maintain his hives without treatment for mites and other pests or pathogens.

9:00am – 12:00pm: Equipment and Hive Management: The equipment and accompanying management style that allow Kirk to run a successful one-man operation. (Suitable for beginner beekeepers.)

1:00pm – 4:00pm: Making Increases: breeding selection, queen rearing schedule and processes, nucs.