THE MARIN BEEK NEWS

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What You Missed

Our last meeting featured a talk by Gene Brandi, owner of Gene Brandi Apiaries and president of the <u>American</u> Beekeeping Federation.

Gene has more than 45 years of experience with keeping bees. In 1969 Gene got his first job with bees. He extracted honey, moved bees by hand, made frames, and installed wax foundation. He is current president of the American Beekeeping Association.

Along with his son, Gene owns a commercial beekeeping operation. Their business consists of crop pollination (almonds, cherries, melons, and berries), honey production, and bulk bee production. They move their colonies an average of 5 – 6 times a year in California (350 to 1000 miles per colony annually). They manage around 2000 colonies during peak season. He also leases bees from the Mid-West and New England for almond pollination.

Colonies are kept on pallets – 4 hives per pallet Single deep brood chamber with a queen excluder and honey supers above

Have to watch for swarming – to control swarming reduce the number of bees by creating nucs, etc. When adding supers for honey, he adds the empty super to the bottom of the stack, just above the brood chamber

Annual Colony Migration Patterns:

Feb/March – almonds, cherries April/May – Sage, eucalyptus, citrus, berries June - wild alfalfa, toyon, melons July/August – melons, cotton, alfalfa

Natural bee forage in central California:

Sage (the best), wild buckwheat, toyon, vetch, manzanita, eucalyptus, star thistle, bluecurl, tarweed, russian knapweed, mustards, fillaree, fiddle neck, sticker weed, and poison oak. Avoid buckeye (poisonous to bees). El Nino years are the best for honey crops

Irrigated Bee Forage:

What's the Buzz?

Our next meeting will be on Thursday January 4, 2018 at the American Legion Log Cabin, 20 Veterans Place, San Anselmo, CA; starting at 7:30 pm. The meeting will feature a panel discussion of community breeding / sourcing of bees followed by Q&A. Panelists include: Volker Ackermann, Jennifer Berry, Roy Crumrine, (Anything Bees), Richard Hyde, Bonnie Morse (Bonnie Bee & Company) Cynthia Perry (Split Squad) and Dave Peterson.

Upcoming Meetings:

February 1, 2018

Mace Vaughn, Pollinator Program Co-Director, Xerxes Society for Invertebrate Conservation, "Habitat and Lobbying".

March 1, 2018

Leo Sharaskin, editor, Keeping Bees with a Smile, "Natural and Practical Beekeeping".

April 5, 2018

Samuel Ramsey, Doctoral Student, University of Maryland, "Varroa Research".

See What's the Buzz on Page 3

- **1** What's the Buzz
- 1 What you Missed
- 3 Inspiring Interviews
- 3 Hive Tips
- **3** From the Librarian's Desk
- 4 Beekeeping Classes
- 4 Dues are Due

Tree crops – almonds, fruit Cotton - #1 summer honey in San Joaquin Alfalfa – seed and some hay Melons Berries Sunflower and safflower

Cotton is a good nectar plant but the pollen has little nutrition. Cotton exudes nectar from other parts of the plant as well as from the flowers. When there is a bug infestation strong pesticides are used. They are applied at night but can be a problem for bees.

1.3 million acres of almonds are planted in the Central Valley. Fifteen years ago, there were probably only around 650,000 acres of almonds. Over 2 billion pounds of almonds are produced per year now. In January and February, when the almonds are in bloom, it is a beautiful time of year.

Almond Pollination:

The increase in demand for almond pollination is the best and worst thing that has ever impacted California beekeeping. In 1969 the rental fee was around \$5 per colony. In 2017 the rental fee was \$175 to \$200 per colony. 85-90% of the available commercially managed honey bees in the US are needed to pollinate the 1 mil + acres of almonds. This amounts to approximately 1.8 million colonies in California during the almond bloom. Growers are experimenting with self-fertile varieties of almonds but have found that these trees still need some bees. Pollen is sticky so you still need something to move to the pollen from stamens to pistil.

Other crops he pollinates:

Cherry, apple, plum, avocado, raspberries, blackberries, and melons. He doesn't pollinate alfalfa or chemigated watermelons due to pesticides. Chemigation is where systemic pesticides are introduced through the irrigation system

California Citrus:

Primary citrus belt is in the southeastern San Joaquin Valley

More than 50% of acreage is naval and Valencia oranges.

Approximately 20% is mandarins (some covered to keep bees out)

Still about 250,000 hive pollinate the citrus crops He is considering phasing out pollination of citrus from his business because of neonic pesticides used by the citrus growers.

Major issues which continue to negatively impact honey bee colony health include:

Varroa mites
Pesticides
Nutritional issues
Disease
NOT cell phone or transportation

Mites

1984 tracheal mites were discovered in the US 1987 varroa mites were discovered in the US with devastating effects.

1992 Gene began miticide treatment in his apiaries He treats at least 3 times year and has treated with various products through the years. Now he is using formic acid, hasn't tried oxalic acid yet

Pesticide impacts (pesticides though the years):

1970 organophospates carbamates
1976 Penncap – M
1980 neonics, IGRs (insect growth regulators)
2000 sulfoximines spirotramat
Systemic chemigation (applied thru irrigation)
Fungicides and IGRs – cause brood damage (don't effect adult bees but are damaging to brood)
Residuals and synergism

Oregon State University (OSU) has produced a pamphlet – how to reduce bee poisoning from pesticides (PNW 591) Pacific Northwest #591

The EPA has not been helpful in mitigating pesticide impact on bees but the almond board has established best management practice for applying chemicals. The best management practice discourages tank mixes which include IGRs.

Supplemental Feeding:

Gene feeds type 50 syrup as needed using top feeder cans. He often feed during almond pollination to prevent starvation. He provides a protein feeding July thru October and again in January. He has added probiotics to his feed but has just started trying it.

The United States used to produce over 2 million pounds of honey annually. The last year the US produced over 2 million pounds was 2000. Bee health issues reduce honey production and there is more splitting of hives than in the past.

Beekeepers in the US are working harder than ever to

keep up their numbers of viable colonies.

Management costs are through the roof. Queens, mite control, feed, labor, and other cost are higher than ever. Most colonies would not survive without beekeeper intervention.

Queens:

Gene normally buys 1400 to 1500 queens per year. Most of the queens he purchases are from California but he also get some from Hawaii. Most of the queens he buys are Italian and a few new world Carniolans. Queens cost him \$24 - \$26 in 2017.

American Beekeeping Federation:

The ABF Convention is in Reno in January this coming year. It is the 75th anniversary year of the ABF. A majority of members are small scale beekeepers.

What's the Buzz continued from Page 1

May 3, 2018

Elina Nino, Extension Apiculturist, UC Davis, "Effects of Supplemental Forage on Bees".

June 7, 2018

Marin Beekeepers, "Gadgets and Gizmos".

July

No meeting: Marin County Fair, June 30 – July 5.

August

No meeting: Marin Beekeepers Annual Potluck.

Inspiring interviews

Last December, many of the participants of the Bee Audacious conference were interviewed by Caroline Harrison of The Hive Studios. She has organized the interviews into "bee insights". The first seven - including Tom Seeley, Marla Spivak, Mark Winston, Chas Mraz, Nicola Bradbear, Randy Oliver, Mace Vaughn, Megan Denver, Becky Masterman and more - are now available:

http://beeaudacious.com/index.php/interviews/

Hive Tips

By Bonnie Morse, Bonnie Bee & Company

By now, you've hopefully made sure your hive is queenright and ready for winter. Unless there is good reason (extreme weather events, for example) to do otherwise, it's now best to let the bees alone. Inspecting hives now will break propolis seals (which will be hard for bees to repair in cold temperatures) and release heat needed to keep the brood warm. If the cluster is small, the latter could prove disastrous as they may have difficulty bringing temperature back up.

For the curious, 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 lift one end of 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?



Observing Bee Activity

From the Librarian's Desk

Now that winter is upon us, perhaps it's time to catch up on some reading? Stop by the library table on Thursday & see if there is a book or magazine to pique your interest! Also, one lucky returner of materials will win a lovely door prize - remember to check your bookshelves and bring back items you have borrowed

Beekeeping Classes

Upcoming Classes

Beginner Beekeeping class series (9 hours, \$99)

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: Wednesdays, January 24, 31, February 7, 6:30pm – 8:30pm (3 classes, drop in fee = \$30/class)

San Rafael Community Center, 618 B St., San Rafael. Registration through the San Rafael Community Center opens November 1.

Field Day: Sat., March 17, 9:30am – 12:30pm, location TBD, tent. San Geronimo

Intermediate Beekeeping class series (9 hours, \$99)

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: Wednesdays, February 21, 28 & March 7, 6:30pm – 8:30pm, 3 classes, drop in fee = \$30/class

<u>San Rafael Community Center,</u> 618 B St., San Rafael. Registration through the San Rafael Community Center opens November 1.

Field Day: Sat., March 17, 1:30pm – 4:30pm, location TBD, tent. San Geronimo

Backyard Beekeeping

Sat., February 17 or March 31, 9:00am – 12:00pm, \$50.

The abridged version of the Beginner Beekeeping class series.

Location: The Fairfax Backyard Farmer, 135 Bolinas Rd.

Register through The Fairfax Backyard Farmer

Intermediate Beekeeping

Saturday, March 24, 9:00am – 12:00pm, \$50 The abridged version of the Intermediate Beekeeping class series.

Location: The Fairfax Backyard Farmer, 135 Bolinas Rd.

Register through The Fairfax Backyard Farmer.

Habitat and Holistic Care for Honeybees

Location: EcoFarm Conference, CA on January 27, 2018. More Info at www.apisarborea.com/events/

Dues are Due

If you haven't already, it's time to renew your membership in Marin Beekeepers. Annual dues remain at \$20.00 for the calendar year 2018. The payment is due by the January meeting, and delinquent if not paid by the up the February meeting. After which, we will purge non-renewed Members from the Buzz, Swarm and BeeLegal List Serves. So be sure to renew by then.

The best way to renew is do it on the Website: www.marinbeekeepers.org and pay using PayPal or a Credit Card. Be sure to complete the payment section. You do not need to "Sign In". Just click on "Become a Member", scroll down to: "To join, complete the following form:" Then check the circle by "Renewing Member" and fill out the form with your current information. Be sure to complete the payment section. There is a small service charge to PayPal for the processing of the payment.

Or you can mail your renewal check for \$20.00 payable to Marin Beekeepers to our Treasurer:

Mary Nordquist 2072 Hatch Road Novato, CA 94947

And, of course you can also renew at the meetings as you come in the door, by cash, check or Credit Card.