



The Buzzzz

The Monthly Newsletter of the Gilroy Beekeepers' Association

Volume 2

February 2013

Getting to Know Each Other!

by Vicki Basham

This month, we'll get acquainted with Paula Joiner. Paula has been keeping bees for about four years now and currently has two hives on her hillside organic blueberry farm in Morgan Hill.



Paula originally became interested in beekeeping for the pollination benefits for her plants. She knew that if she had bees, both the quality and the yield of her plants would be better. But beekeeping may have been in her blood all along. "I only found out a little while ago that my grandfather, who passed away many years ago, was a beekeeper too."

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Guest Column

Valentines for Your Honey

By Heather Oliver

February is the month when cupid strikes his bow into the hearts of lovers. Those lovers in turn may purchase flowers for their sweethearts. It's important to remember the ladies in your life on Valentine's Day, especially those striped, winged ones and their pollinating pals. Beekeepers can show their appreciation for their six-legged ladies by planting flowers this Valentine's Day and throughout the year. Succession planting of flowering annuals can provide the beekeeper with a bit of reassurance their girls will have a natural pollen and nectar source every season. Consider planting flowers for your beloved this holiday. Your efforts will likely be requited with gallons of honey.

For those of us with bees in open spaces, consider planting native wildflowers. Native flowers are specially adapted to the climate and conditions of an area. They attract pollinators and other beneficials without upsetting the balance of nature. Favorite wildflowers of bees in Northern California are lupines, fiddleneck and the stunning California poppy. The best way to determine which wildflowers thrive in your particular micro-climate is to take a look around your

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Message from the President

Our local queen rearing plan is coming together. So far we have three members signed up. If you are interested, please send me an email to kingbee@uvasgold.com requesting to be added. There is a limit of eight people. We will be starting around 1 March depending on the weather. I have received reports of members finding queen cells already this month. Our earliest recorded swarm was on 15 Jan. Swarm season is upon us.

This month I am enclosing an article from Dr. Mussen's Nov/Dec 2012 newsletter describing some of the latest research about Varroa control - not yet available for use, but in the pipeline. Maybe we will have this in a couple of years.

If you are not familiar with RNAi technology please check out the Wikipedia article at: en.wikipedia.org/wiki/RNAi. To subscribe to Dr Mussen's newsletter please go to: <https://lists.ucdavis.edu/sympa/subscribe/ucdavisbeenews> enter your email address and click on Subscribe.

Advances in RNAi

The promises of molecular genetics, positively impacting honey bees, are closer to becoming realities. I have written previously about attempts by a company called Beeologics™ to inoculate adult honey bees with dsRNA (double-stranded RNA) targeting Israeli Acute Paralysis Virus to prevent the virus from replicating in adult honey bees. In two years of experiments, the results showed that the approach worked, but needed to be improved. Beeologics was purchased by Monsanto, and more funding should become available for work on honey bees.

Meanwhile, the originators of the RNAi approach to honey bee virus elimination, at

the Hebrew University of Jerusalem, continued to conduct their studies but the target became *Varroa destructor*. They recently published a paper describing their success in feeding *Varroa* targeted dsRNA, combined with a green fluorescent protein marker, to adult bees in sugar syrup and following the marker through those adult bees, into immature bees that the nurse bees were feeding, and eventually into the mites. The mites picked up the marker from feeding either on adult bees and or feeding on pupae that were reared by inoculated adult bees. Since the inoculum targeted some *Varroa* RNA that does not occur in honey bees or in humans, they compared mite levels in colonies 60 days after treatments began. The honey bee colonies all appeared to be the same strength. Compared to control colonies, treatments with dsRNA containing a few anti-*Varroa* targets +GFP, and treatments with a cocktail of anti-*Varroa* targets, reduced the mite populations by 53 percent and 61 percent, respectively.

This is a good start, but the research protocol called for the dsRNA inoculum to be fed 10 days at the beginning, 32 days of feeding twice a week, then ending with 14 days of feeding daily, again, to finalize the study. This is not a feasible approach to controlling mites in a real world situation.

To review this work, go to:

<http://www.plospathogens.org/article/info%3Adoi%2F10.1371%2Fjournal.ppat.1003035>

Wayne

**Remember to order your packages
at the February Meeting**

Paula *Continued from page 1*

In the spring of 2012, Paula bought three packages of Russian bees and one of Italian. Unfortunately, she lost the Italian hive within four weeks, and suspects a failed queen may have been the problem. She also lost a Russian hive later in the year. She would like to concentrate on reproducing the two surviving hives instead of purchasing new packages or nucs.

Paula is leaning toward a treatment-free approach to the Varroa mite problem. She tried powdered sugar one year, Apiguard another year, and in 2012, she tried HopGuard. "It seems that the losses are the same, though, whether you treat for Varroa mites or not," she says.

One of Paula's favorite ways to learn more about bees is by reading books. She especially likes *The Beekeeper's Handbook* by Diana Sammataro and Alphonse Avitabile. "It's filled with great illustrations and short, concise information. It's a book you can quickly reference," she says. She also feels that joining a club is great way to learn. "Gilroy's guild is great," she says. "A nice group of people." She says that it is just the right size where one can talk with many different people and see how others are managing their hives. "Everybody does it differently!" she says.

Paula has had some interesting experiences in beekeeping, including a new respect for the wax moth. "One year, I set aside an empty hive in my dining room and then forgot about it. After a while, I noticed a few moths in the house, but didn't think much of it. But before long, I ended up with about 200 of them flying all over in the

house!" She also recalls a time when she was angry at the sight of some bees robbing her hive. Her instant reaction was to wave them away, and she ended up with lots of stings on her hand and forearm. "It took a long time for the swelling in my hand to go down!" she says.

So what's in the future for Paula? "Raising queens!" She is very excited to learn more about propagating surviving hives, and she feels that queen rearing will play an important part in that plan. Eventually, she would like to have ten to fifteen hives.

Valentines, *continued from page 1*

property. Armed with a field guide, you can determine which of those tenacious flowers are native and begin sprinkling such seeds around the property. Wildflower seeds are available in bulk at your local nursery, or you might consider an online source.

Some of us might keep hives within city limits (shh...don't tell anyone). Bees in city limits often fare well in terms of flower availability. This is due to the high concentration of landscape flowers and backyard gardens. In the case of somebody I know (again,...shh!) the bees in her backyard need travel a mere 10 feet from the hive to a nectar and pollen source. Such a close proximity of flowers can be a real boon in inclement weather. As well, bringing a struggling hive or nuc to a landscaped backyard can lessen the burden on the colony by providing ready access to natural food sources. The sky's the limit when choosing flowering plants for one's backyard. A few favorite flowering shrubs that are also useful to the cook in your family are lavender, rosemary and sage.

Whether your bees are kept in rural or suburban areas, they will benefit from

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having a pollen and nectar source year round. Some of us give our bees the option of pollen patties and sugar water during the winter months. These substitutions are fine in a pinch, but, just as a vitamin C tablet is a so-so imitation of an orange, so are patties and syrup for the real thing. The beekeeper can assure his bees have access to the real deal (pollen and nectar) year-round by planting flowering plants that bloom in every season. Nature can usually be counted on to provide your rural bees with a riot of springtime flowers, such as poppy, Ceonothus and certain fruit trees to choose from. In the summer months, a local farm or backyard garden can provide bees with colorful pollen from squash, pumpkins and melons.

Fall can be a time when bees struggle to make ends meet. Many hives have recently been harvested, leaving them with precious little honey stores to get them through the upcoming months. Combine this with a steady drop in temperature, windier conditions and a shrinking natural food supply; domesticated bees need our help to pull through the season. We can help by landscaping with plants that bloom in the fall. Aster, chives and borage not only provide food for bees this time of year, but provide their human caretakers with colorful beauty against an increasingly stark landscape. Even in the dead of winter, beekeepers in milder climates will see their girls out foraging on the odd sunny day. Luckily for us, some “cool season” plants might still be blooming in January. Plant Iceland poppies, pansies and ornamental kale (let it go to flower) in the fall and leave them as a welcome treat for the wayward winter forager.

This Valentine’s Day, remember the ladies in your life by planting flowers they can enjoy all year.

References:

- <http://nature.berkeley.edu/urbanbeegardens/list.html>
- <http://www.themelissagarden.com/plants.html>

February in the Beeyard

As you read this, January has ended and February has begun on a warm note. The early bloomers like eucalyptus and rosemary are in bloom, and mustard is close behind, providing an early nectar flow.

Although we probably still have cold damp weather ahead, the bees are recognizing the upcoming season transition and things are changing in the hive. It would not be uncommon to see a hive double in population during the month. We need to be vigilant in monitoring their growth. It's not too early, especially if the weather stays warm, for hives to swarm. Be prepared to add a second brood box or supers.

On the other hand, a prolonged cool or rainy spell will force the bees back to consuming their honey stores. It may be necessary to continue supplementing with sugar syrup, if you think their honey stores are low.

In addition, to honey stores, some additional things should be looked for if you do a hive inspection. As we mentioned, the hive population should be rapidly increasing. If it's not, an attempt should be made to determine the cause. If supersedure cells are present in combination with spotty brood patterns, or there is an inordinate number of drone cells, it could be an indication that the queen is old or failing. Spotty brood can also be the residual effect of a virus, protein deficiency or Varroa problems that affected the hive in the fall. While still a little early to re-queen, it's time
Continued next page

to begin making plans to do so. A new queen should greatly help the hive population, and the break in the brood cycle caused by re-queening should help with the Varroa issues. Having a readily available pollen substitute will help with any protein deficiencies.

Happy beekeeping, Enjoy the weather!!

Drippings From The Extractor **(Notes from the Editor)**

Again, I would like to thank all the contributors to this months *The Buzz*. The success of this newsletter depends on the input of its members. I encourage everyone to contribute an article . My only request is that somewhere, you use the word "bee" at least once! Also, please remember our "classifieds." Anything you want to buy, sell, or give away, here's your spot!

In early January, I stopped in at the Ag Commissioner's office to renew my applicator's permit. I was advised that the Section 18 Emergency Exemption for Hopguard had not been renewed. I called the Department of Pesticide Regulation and was advised that Hopguard had in fact received it's exemption, and we can still use it! (More to follow on Hopguard next month).

My wife recently received the following e-mail from CREDO Mobile/Action. While the intent of this newsletter is not to be a political forum, it is important for all of us to be concerned about the health of our bees. Please follow your own beliefs in responding to the following from CREDO.

"A blockbuster study released this week by the European Food Safety Authority (EFSA), has for the first time labeled the pesticide clothianidin as an "unacceptable" danger to bees.

Scientists have long thought that clothianidin is at least partially to blame for

the alarming rate that bees have been dying off in the U.S. - nearly 30% of our bee population, per year, has been lost to so-called colony collapse since 2006.

But the EPA has repeatedly ignored scientists' warnings and Americans' urgings to ban its use, citing lack of evidence.

Now, the EFSA study could be a major breakthrough to convince the EPA to take emergency action, and suspend the use of clothianidin to stop the precipitous decline in global honeybee populations."

If you concur with this information and would like to encourage the EPA to suspend the use of clothianidin, you may sign the petition by clicking on the following link or copying and pasting into your search line:

http://act.credoaction.com/campaign/efsa_bees/?r_by=53576-5123076-QCA%3DgXx&rc=mailto1

Finally, Dr. Mussen in his November/December 2012 Newsletter mentioned the following on-line beekeeping courses for those who may want to take their beekeeping to the next level.

Beekeeping Courses Online

Penn State Beekeeping 101 is a beekeeping training course for potential beekeepers, beginning beekeepers, or for experienced beekeepers who wish to update their knowledge and techniques. This (up to 12 months) course allows participants to learn from nationally recognized experts; take the course sessions anytime, anywhere, and at your own pace; and trade questions, successes and stories with other program participants. The instructors are Tom Butzler, Penn State Extension horticulture expert who has been teaching beekeeping to youth and adults for 15 years and Maryann Tomasko Frazier, Penn State Entomology expert, senior extension associate, who teaches courses in beekeeping, general

entomology and teacher education. The cost of the course is \$189. For more information, or to register, please go to:
<http://beekeeping101.psu.edu/>.

Apiology and Apiculture (ENWC 214) is the name of an online bee biology and beekeeping course that can be taken for university credit or for personal enjoyment. All that is required is a computer and the ability to connect with the Internet (however the textbook, "Honey Bee Biology and Beekeeping" is suggested reading). This is an introductory-level, college course covering basic bee biology with an emphasis on bee colony management. This scientific approach to studying the life of honey bees includes bee biology, anatomy, physiology, behavior, bee botany, and communication. In addition, it offers an introduction to beekeeping, including techniques for practical bee care, bee culturing, and managing honey bees for honey production and crop pollinations services. The course is overseen by retired professor of apiculture, Dr. Dewey Caron. To view the course syllabus and sign up for the \$295 non-credit approach, please go to: -
www.continuingstudies.udel.edu/udonline/search and look for ENWC214, or call Melanie Rehberg at 1-800-597-1444 (press 5 and ask for Melanie). For course credits: www.continuingstudies.udel.edu/udonline/registration

Classifieds

For Sale

5 gal white food grade buckets w/ lids for
\$4 each

Contact: kingbee@uvasgold.com

Wanted

Bulk Honey 5 gallon minimum

Contact: maidenflightapiaries@yahoo.com



" I know things are tight, but I'm sure we can afford to keep more than one bee."

From *The New York Times*

Calendar of Events

Feb. 2, 2012

Monterey Bay Beekeepers - 8am
Black Bear Diner
2450 N. Fremont St.
Monterey, CA 93940

www.montereybaybeekeepers.org

Feb. 4, 2013

Santa Clara Valley Beekeepers Guild
1292 Minnesota Ave San Jose, CA 95125
6:15- 6:45

Questions and Answers with Dr. Bee
Swarms & Catching swarms
Mark Paterson & Thomas Keller
Preventing swarms TBD

Feb. 6, 2013

Santa Cruz Beekeepers Guild - 6:30 pm
El Rio Mobile Home Park
N. Pacific Ave
Santa Cruz

<http://santacruzbees.com>

Feb. 7, 2012

Beekeepers Guild of San Mateo County - 7pm
751 Alameda de Pulgas
Belmont, Ca

www.sanmateobee.org

Topics:
Elections
Equipment Night by Tom Vercoutere

Feb. 8, 2013

Gilroy Beekeepers Association - 7pm
Grange Hall
8191 Swanston Lane
Gilroy

www.uvasgold.com/gba

Topics: Bee Equipment for Beginners

Feb. 8, 2013

Alameda County Beekeepers Association
7:30 pm
Rotary Native Center
600 Bellevue Ave.
Oakland, Ca 94610

Classes

Gilroy

Beginning Beekeeping

TBD in April

Queen Rearing

TBD in June

Santa Clara

Special Saturday Workshop (fee based)

March 23, 2013

Natural beekeeping

with Serge Craft

San Mateo

Beginning Beekeeping Class

Congregational Church of Belmont,
March 9, 2013

A beginning beekeeping class will be offered March 9, 2013, from 9 am to 3 pm (please arrive at 8:30 am for registration). The class covers a wide range of topics including bee biology and life cycle, working with bees and beehives, managing pests and diseases, harvesting honey, and more!

There is no fee for the class but attendees must register. For more information, contact learnaboutbees@sanmateobeeguild.org.

Low Intermediate Beekeeping Class

Location TBD, May 4, 2013

Serge Labesque will lead this day-long class. Check back soon for more details and online registration!

Advanced Beekeeping Class

Location TBD, June 22, 2013

Randy Oliver will lead this day-long class. Check back soon for more details and online registration!