THE MARIN BEEK NEWS

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What You Missed

At our April meeting our guest speaker was Serge LaBesque. Serge is a beekeeper from Sonoma County who maintains bee colonies in four separate locations. Over the past ten years, he has experimented with different methods of keeping bees. He has also designed and fabricated his own beekeeping equipment. His goal is to maintain bee colonies by relying on the natural strength of local strains of bees, by completely eliminating the need for antibiotics or chemical compounds for pest and disease control, and through techniques that allow beekeepers to be self-sufficient practitioners. The title of his presentation was “Division is also Multiplication”. As usual, Serge shared al great deal of information.

First, you don’t need a lot of bees to produce many colonies. Bees have the power of regeneration as an organism. As beekeepers, we can intervene to assist them.

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What’s the Buzz

Our next meeting will be on Thursday, May 6, 2010 at the American Legion Log Cabin, 20 Veterans Place, San Anselmo, CA, starting at 7:30pm.

Guest Speaker

Our guest speaker will be John Gipson, Honey Packer and Entrepreneur

John started Gipson's Golden, Inc. back in 1987 as a hobby and a way to spend some extra time bonding with his kids. In 1998 the hobby took off and Gipson's Golden, Inc. is now a leading producer of raw, natural, organic and kosher certified honey. John now spends his time attending bee conferences, learning about his bees, and selling the best honey ever produced!

Upcoming Meetings:

June 3, 2010
Dr. Michelle Flenniken,
Haagen-Dazs postdoctoral fellow

Häagen-Dazs postdoctoral fellow Dr. Michelle Flenniken is conducting studies on the details of honey bee cellular immune responses to infection by RNA viruses in the Department of Microbiology and Immunology at the Mission Bay campus of UC San Francisco.

The eventual goal is to find a way to interfere with virus replication in infected host cells. Working in conjunction with Dr. Joseph Derisi's team, in an adjacent laboratory, she also is involved in the process of developing microarray "chips" that will be

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able to demonstrate the presence of any known honey bee pathogen(s) in a submitted bee sample.

Michelle obtains her virus-infected bees from Bay Area hobby beekeepers and she delivers extremely well-received research presentations to audiences with all levels of apicultural expertise.

November 4, 2010

Dr. Diana Sammataro, co-author of the *Beekeeper's Handbook*.

Diana began keeping bees in 1972, setting up a package colony in her grandfather's old bee hive equipment in Litchfield CT. She earned a B.S. in Landscape Architecture, University of Michigan, Ann Arbor and a M.S. in Urban Forestry, University of Michigan, Ann Arbor. In 1978 she joined Peace Corps and taught Beekeeping in the Philippines for 3 years. On returning, she worked at the USDA Bee Lab in Madison, WI under Dr. Eric Erickson, studying the effects of plant breeding and flower attraction of bees in sunflower lines. She eventually went to work at the A.I. Root Company, as Bee Supply Sales Manager in Medina OH. She went on to earn a Ph.D. from Ohio State University, Columbus, OH. The title of her dissertation was: *Studies on the control, behavior, and molecular markers of the tracheal mite of honey bees.*

In 1995, she worked as a post-doctoral assistant at the Ohio State University Agricultural Research Center in Wooster OH, with Dr. James Tew and in 1998 at the Penn State University Bee lab with Maryann Frazier. In early 2002, she was invited to join the USDA-ARS Carl Hayden Honey Bee Research Center in Tucson AZ. Her current position is a Research Entomologist with Dr. Gloria DeGrandi-Hoffman and staff. Her work at the lab includes developing a novel approach to managing parasitic mites of bees using new mite controls (bee and mite chemical compounds and natural products) and research on pollination problems.

The title of Diana's talk will be: "A Molecular Biology Approach to Honey Bee Pathogen & Colony Collapse Disorder Research".

Diana plans to tell us about her research focused on pathogen detection in honey bee samples and her work investigating the honey bee antiviral immune system.

Special Event

Celebration of the Bees:

Join us for the afternoon on Saturday, May 8, 2010 from 1pm – 4pm at Hillside Gardens in Mill Valley to celebrate the wonder of native and honey bees, both of which are suffering declines due to pressures in their ecosystems. This day will bring exhibits presented by the Marin County Beekeepers Association, native bee walks led by Gordon Frankie of UC Berkeley, honey bee talk by Mea McNeil, Master Beekeeper, along with delicious foods, meads from Beowulf Mead, Celtic music, and a Maypole ceremony. This is a kid-friendly event so please bring your children.

We encourage you to dress comfortably and casually.

Tickets are $25 per person (kids are free; reservations required). Proceeds will benefit the Marin Survivor Stock Queen Bee Project. Sponsored by Savory Times

Purchase tickets at
http://www.mayach.com/beecele.html

RSVP to Ali Ghiorse at ali@savorythymesevents.org

About Savory Thymes:

The mission of Savory Thymes is to convene artists, grassroots organizations and activists in order to cross pollinate ideas, build relationships and alliances, and provide a space to galvanize support for a wide variety of social and environmental initiatives. Established in 2005, by Alison Ghiorse and Hans Schoepflin, Savory Thymes supports and educates the public about local and sustainable systems within the context of grassroots movements and the arts, through events that celebrate the beauty, the tastes, and the textures of the Earth. Savory Thymes events are sponsored by Hans Schoepflin.

More information can be found at:
http://www.savorythymesevents.org/index.html

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In nature bees multiply by two basic methods, swarming and queen replacement. Swarming is the natural way that bees create more colonies by splitting. Generally the bees prepare the colony by creating queen cells. Once these queen cells are capped the old queen and about half of the bees will load up on honey and leave the hive searching for a new location, leaving the old hive with the capped queen cells. Once the queen cells hatch the new queen will mate and then start laying eggs, continuing the life of the hive.

Only 16 percent of swarms survive through the first winter. By splitting your hives instead of allowing them to swarm on their own, you are providing a known cavity and increasing their chances for survival. The benefit to the beekeeper is young colonies with young queens.

Queen replacement occurs when the hive senses that the old queen is failing. Usually a failing queen will produce reduced amounts of pheromones. The bees will then select an egg or eggs that have already been laid by the queen and create a new queen by continuing to feed the larvae royal jelly. The old queen is eventually killed or driven out and a new, hopefully healthier queen takes her place.

Beekeepers can create more hives artificially by splitting existing hives. The split without a queen will attempt to make a new queen from the existing eggs in the split. If they are successful, a new hive is created. Every beekeeper can divide and propagate bees. It is not very hard to do.

In the spring, survey your existing hives. Weak hives should be combined with other hives or requeened. Average hives can be split into two hives. Strong hives can be split into four or more hives.

Serge's keys to splitting hives:

Colonies need to be strong. Look for a large bee population, ample, rich nutrition and the presence of drones.

2010 will be a good year for bees in our area – lots of moisture will mean a longer honey flow.

Allow your splits to raise their own queens. It creates a period of broodlessness and maintains the genetic diversity of your bees.

To create splits you need pollen and nectar placed next to young open brood, you only need some eggs and very young larvae, sealed brood, honey, and additional bees.

How to determine if bees are ready to swarm:

The first sign of their intention to swarm is reduction of the ratio of open brood to sealed brood. Normally it is somewhere around 1 to 1. This occurs because the bees are preparing the queen to fly. They harass the queen running her around the brood nest. This causes her to lose weight. The other effect is that the queen is not allowed to lay as many eggs. Thus the amount of open brood will dwindle.

Swarming can start the day after the first queen cell is capped.

To split a hive:

1. Transfer some brood, stores, etc, into an empty hive. Reduce the entrance. You might need to feed this hive. Leave the supers, stores, etc. in the original hive. You don't need to know where the queen is.

2. Four to seven days later inspect the smaller hive for eggs or queen cells. If there are new eggs present then the queen is in this hive. If there are queen cells then this hive is queenless.

3. If you find queen cells in the original hive be prepared to divide it again. Each split should have at least two queen cells. You may end up with three to four additional splits.

4. Four weeks later check all the splits for queens, brood, adequate egg laying space. Manage accordingly. If you don't see evidence of new eggs or a queen, wait a little longer. Sometimes the mating of the new queen can be delayed by poor weather.

5. After six weeks if there is no evidence of worker brood then the queen failed to mate properly. If that is the case, the failed queen should be removed and the hive combined with a queen-right hive.

Remember, you need young bees in order to make splits. Old bees don't make good nurse bees.

Fan division – when making multiple splits from one hive.

1. Find the queen. Put her in a new hive with egg laying space. Add some frames with no comb,

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some uncapped honey, some empty drone comb and some bees. The original hive will start rearing queens.

2. One week later look for queen cells in the original hive. Make splits giving each split at least two queen cells. Arrange the splits in a fan around the location of the original hive. The foragers will spread out into the splits. Leave everything alone!

3. Four weeks later check the splits for queens, brood, etc.

Raising good queens requires young brood, lots of nurse bees to care for them and good nutrition. The bees raise the queens. The beekeeper just facilitates.

Don't select colonies that you have treated for pest and diseases. You can't tell the value of the genetics of a treated hive since you are artificially supporting them with the chemical treatments.

Practice "survival of the fittest" to propagate new hives. For Serge, the most important selection criterion is the adaption to local conditions without chemical treatments. Untreated local stock will be the best for your location. These bees are not available from distant queen breeders.

Queen rearing:

There are many methods of queen rearing, Miller, Alley, Doolittle, and Cloake Board to name a few.

Queen cups are easy to make. You can use many things for a mold, from elaborate multi cup molds to a wooden dowel. The cups need to be attached to a wooden bar so that they can be handled without damage. The bar can then be fitted into a special frame and introduced into the hive.

You need a lot of nurse bees to raise queens. Remove all the open brood so that the nurse bees concentrate on the queen cells.

Four days before grafting select a source colony. The source colony should be well fed and there should be a nectar flow on. There should be a lot of bees in the colony.

Locate the queen and put her in the middle of the brood nest with egg laying space. Place a queen excluder above and below her. The box below should have only sealed brood. The box above should have mostly open brood.

One day before grafting remove the box containing the queen and place it and her in a separate colony. Replace that box in the original hive with a box containing the frame with the queen cups. The nurse bees will prepare the queen cups to receive the grafts.

To graft you will need magnifying glasses, good light, and a grafting tool.

On grafting day remove the frame with the queen cups from the hive. Remove any open frames with open brood and give to other colonies. Remove a frame from the queen-right colony and use the eggs to graft into the queen cups. After grafting, place the frame with the queen cups back into the center of the nurse hive. Make sure that there are plenty of nurse bees. Also, there should be pollen, nectar, and uncapped honey near by for the nurse bees to feed to the queen larvae.

One day after grafting you should observe nurse bees feeding and drawing out the queen cups. Nine days later inspect for queen cells.

Make up nucs containing adult bees, sealed and emerging brood, pollen and nectar. The next day put in the queen cells. They should be placed near the center of the nuc. Pin the cell to the side of a frame of brood.

To be successful in queen rearing you will need a large drone population.

Why produce new colonies? You help propagate the species. You preserve genetic diversity and foster adaptation of the local bee population to local conditions. You become a self sufficient bee keeper.

Important Reminders

There is no club meeting scheduled for July. Come and join in the fun at the Marin County Fair.

Mark your calendar for the annual Marin Beekeepers potluck, August 7th at Draper Farms. More information in next month's Beek News.

Have You Completed Your Census?

The 2010 Marin County Bee Census Survey deadline has been extended to May 9th. This survey tracks hive success/failure from April 1, 2009 - March 31, 2010. Over time, we are hoping the annual survey results will help us track the local bee population. (You can even enter data on feral hives you are watching.)

Please take about 10 minutes to complete. If cookies are enabled on your computer, you will be able to return to the survey at a later time if necessary.

A link to the survey is available at the Marin Beekeepers website: marincountybeekeepers.org

Thank you for your time and participation!

Please contact Bonnie Bollengier if you have any questions: bonbollengier@yahoo.com

Spring Workshops

This spring Club Member David Peterson taught a Split Workshop and a beginner beekeeping class, NewBees 101. He offers these functions as fundraisers for the Club.

The Split Workshop was new this year and very popular, with twenty-eight Club Members participating. The primary Workshop was at his apiary in Corte Madera. They were able to hold classroom portion outdoors in great weather with Mt. Tam as a backdrop. Then they moved into the apiary and made five splits from only two of the six hives.

The splits were made with the expectation of new queens being raised. Several of the nucs were started from frames with existing swarm cells both capped and uncapped. Of the 10 plus splits made, all but two resulted in queen-right nucs.

This was the third year for the NewBees 101 Class with six participants. There was about two hours of classroom discussions and another two or three hours in the apiary where each student had their own hive to inspect. The NewBees all learned to identify workers and drones and successfully located the queen. It's was a great opportunity to get some hands on experience. And this year, no one dropped a super or a frame.

Zia Queens Arrive

The conclusion of the Marin County Beekeepers Spring 2010 nuc order began with opening the door to the Draper Farms barn on the morning of Saturday, April 3 to see no less than 70 three-frame nucs buzzing away. Listening to the early morning hum of so many bees was a real pleasure. All of the nuc purchasers were very excited to pick up their new bees, and in an impressive display of teamwork and organization, all but one of the 70 nucs were checked out by junior bee club assistant organizer Lily Chambers in less than one hour. Mark and Melanie from Zia Queenbees were on hand to answer questions about the bees, still on their feet and giving intelligent, thoughtful advice in spite of the fact that they only had a few hours sleep after spending the previous day packing up all of the nucs, and then driving them up to Marin from Porterville. It has been interesting hearing the various reports on the listserv regarding the progress of everyone's nucs, a few issues were reported, which Jerry Draper forwarded to Mark and Melanie for a response. We also collected nearly $75 in donations for the club during the pickup, thank you to all of the nuc purchasers who contributed, and to all of the members who contributed input during the process of selecting a supplier. Thanks also to Mea and Jerry for getting us in touch with Zia Queenbees, allowing us to use the barn as a pickup location, and for hosting Mark and Melanie for the weekend. Finally, a huge thank you to Tim Chambers for organizing the club purchase of bees for the second year. Tim wanted to thank all the club members who put up with his bossy emails and did such a great job of getting orders in and picking up their nucs right on time. In all, it was a terrific example of what the bee club can accomplish, and a big first step towards achieving our survivor stock goals.

Fair News

The 2010 Marin County Fair is fast approaching. This is a fun annual July 4th event in which we can all participate on two levels.

First -- staffing the bee booth inside the exhibit hall during the Fair. This is our club's opportunity to do outreach and get the word out about our little "trusts" and hopefully dispel some misinformation. We get to talk about bees, show off the observation hive, look for the queen and enjoy the various reactions. Even as a "newbie" you have more knowledge than most of the public. The club also receives a donation from the Fair for our participation.

We staff the bee booth with 2 people during each 3- to 4-hour time slot. In exchange, each staffer receives a pass to get into the Fair and each time slot will have one car pass to the exhibitors' parking lot in back of the exhibit hall. The rest of the day you can enjoy the other parts of the Fair. Check out the website, http://www.marinfair.org/2010/, for entertainment (all included with entry), special events and attractions, especially the fireworks display each night at 9:30 p.m.

The sign-up schedule will be circulated during the next two meetings. Please sign up and join in the fun!

Second -- a little good-hearted competition with other beekeepers on all types of hive products: honey, beeswax, and candles. Cash prizes are associated with the first 5 places. There are two big prizes, the Best of Show and the Barney Salvisberg Award. All the exhibits are on prominent display at the bee booth during the fair (ribbons included) for your friends and neighbors to see, and we can showcase the many different hive products produced locally in Marin.

The important dates are:

May 13

Entry form deadline for exhibits. Fair participants from last year you should have received an entry package. If not, or if you are entering for the first time, there will be entry forms and category descriptions for the Honey Department at the next meeting. It is also available on the Fair website, http://www.marinfair.org/2010/, under Competitive Exhibits. Please don't be shy; enter as many categories as you wish even if you are not yet sure that you will have an entry prepared.

June 11 &12

Drop off exhibits in the Fair building at the back of the Fairgrounds

Friday, June 11: 3:00 to 7:00 p.m.
Saturday, June 12: 10:00 a.m. to 5:00 p.m.

We can accept late entries even if you hadn't submitted a form, but please make every effort to send in your forms by May 13.

June 13

Judging by John Gipson

June 20

Finalize Bee Booth sign-up

July 1-5

MARIN COUNTY FAIR!

Farm Day

Marin County Beekeepers participated in the annual Farm Day. Approximately 1500 kids came to the event and had an opportunity to see bees at work in an observation hive, learn the difference between bees and yellow jackets, and see an empty hive and beekeeping equipment.