



# Local Buzz

## President's Message

Ron Slay, President

Hi everybody, spring has sprung and bee work continues. The packages I purchased from Oliverez honey bees (great company) have been installed and fed. The colonies are back from almonds, fat and happy, and now it's nuc making time big time. Hope you're enjoying your bees. That's what it's all about.

## April 2nd Meeting - 7:00 PM

Grass Valley Veteran's Memorial Building  
255 South Auburn Street in Grass Valley

We will show the documentary, "The Quest for Local Honey". Please join us and the producers of the film before the meeting at a No-host dinner at Lin-Q buffet.

## No Host Dinner - 5:30 PM

There will be a no host dinner at Lin-Q buffet just before the meeting. Everyone is invited. 682 Freeman Ln. Grass Valley, in the Raley's shopping Center



## Bee Bits

Randy Oliver, Contributor

This spring is shaping up be like last year's -- cool and wet. If so, then last year there was plenty of pollen, but little nectar until late, due to the cool weather. Be on the lookout for starvation.

Excerpt from an article of mine in press in ABJ:

This winter when I moved my strong hives to almond pollination, I left the dinks behind in my bee yards in the foothills. The apparent reason for many of these colonies being dinks is that they are fighting a virus or Nosema infection, which they may eventually get the better of. I've learned that if you simply leave them to their ways, they will often dwindle down to a couple of frames of bees, and then either ramp up their antiviral response or gain the upper hand over Nosema, and turn around, vibrantly recovering with the first pollen flows as though nothing had happened!

I feel that in many cases in which the queen is blamed, the actual culprit is a virus or Nosema infection of the workers, as these queens often show every indication of being able to lay vigorously, given a healthy cohort of foragers to bring home the bacon. In my neck of the woods, if the colony has "turned around" by late February, it will generally be fine. As it happened, late this February I enjoyed a visit by Bee Culture editor Kim Flottum, accompanied by photographer Kodua Galieti. I took them out to look at some of the recovering dinks (Fig. 2). Kodua snapped some photos, which she has generously granted me permission to use—see more of her photos at [www.koduaphotography.com/](http://www.koduaphotography.com/).



Figure 2. A recovering dink in late February, building up on early alder pollen. This colony was a bit stronger than three frames of bees, but clearly is on the road to recovery! It does not appear that this colony being a dink was the fault of the queen. But note the barely adequate bee to brood ratio—this amount of bees will have a hard time keeping the brood warm in the event of a cold snap!

Practical application: I find that a low bee to brood ratio is a typical sign of a colony struggling with a virus or Nosema infection—sick bees abandon the hive. Should the colony in the photo above manage to hatch out its brood before a cold snap, then it will then have a whole new crop of healthy young bees, and a good crack at complete recovery.

### **The Anatomy of Colony Collapse**

Unfortunately, one of the dinks in the same yard told a different story (Fig. 3). It had also built up similarly to the colony pictured above, but then had a relapse during a two-day cold snap—cold snaps being a common precursor to sudden colony collapse. If the bees and brood get chilled, the colony may go into a rapid downhill spiral. I've previously described in detail the progression of colony collapse--see <http://scientificbeekeeping.com/sick-bees-part-2-a-model-of-colony-collapse/>



Figure 3. This colony is in the middle of a sudden collapse. You can easily see the outline of the brood area, delineated by the crescents of freshly-packed pollen, which must have been covered by bees a few days prior. This colony continued to collapse quickly, and finally died in a cold snap a week later—with only silver-dollar sized patch of dead bees remaining.

Note also the lack of stored nectar around the brood area—this is despite the fact that a nectar flow was on, and adjacent colonies were whitening comb. This is exactly what I observed when I inoculated colonies with IAPV—they would collapse hungry due to lack of foragers, even in the midst of plenty. Plus the bees in sick colonies seem to be unable to utilize honey stored in close proximity to the brood nest. Collapse can then come suddenly (Fig. 4) in the event of even a minor chill, although the sick bees leave the nest, rather than dying in the typical pathetic cluster indicative of starvation (Fig. 8).

Practical application: sudden collapse can happen seemingly overnight. But it is, in my experience, preceded by a low bee to brood ratio and lack of nectar foraging, which are signs to be aware of. Sick colonies may or may not take syrup.



Figure 4. Collapse came quickly, as evidenced by this fresh, white pupa outside the cluster. Abandoned larvae and pupae soon die and turn gray, and can be used to estimate the amount of time since bees were covering the brood.



Figure 5. The queen appeared healthy and robust, as evidenced by fresh eggs in nearly every single cell in the abandoned brood area (two eggs in some cells). Note the lack of signs of varroa (no guanine deposits, deformed wings, nor partially emerged adults). Also note the presence of “snotty brood.”

The queen, however, had not given up (Fig. 5). This is typical in colony collapse—the disease does not appear to be directly attributable to the queen. It's just that the bees get sick and fly off to die!

**Practical application: In deadouts, check to see whether varroa/DWV were the culprits. Inspect the remnants of the brood nest for white guanine deposits on the cell “ceilings,” bees with deformed wings, and partially uncapped mature worker brood, often with deformed wings. However, DWV can also take down a colony with few of those signs present.**

I'd like to draw your attention to the snotty brood. The diseased brood generally matched the signs of EFB, but was not quite typical. Dr. Jeff Pettis now uses the catchy term “Idiopathic Brood Disease Syndrome” for this atypical sick brood, which means “we haven't completely figured out what causes it yet”. So this poor colony looked like it was going to make it, but then lost its battle with the pathogens. Note that this yard was in a pesticide-free area, and there was no sign of mites.

## **Goodies Sign-up**

**Karla Hanson, Coordinator**

Please let me know if you can bring a treat for any of the coming meetings. [queenbeez@att.net](mailto:queenbeez@att.net)

## **Raffle Prizes**

We always need more contributions to the monthly raffle! Almost everyone loves having more plants. Be creative. For every item you bring, you receive a free raffle ticket. The raffle helps with the club's expenses. Thanks!

## **Library**

Anyone interested in setting NCBA library policy please email Randy [randy@randyoliver.com](mailto:randy@randyoliver.com)

## **From the Librarian**

**Tynowyn Slattery, Librarian, Reviewing 2 new books**

*Basic Health Publications User's Guide to Propolis, Royal Jelly, Honey, and Bee Pollen.*

by C. Leigh Broadhurst, Ph.D. 92 pages

*Propolis Power Plus*

by Carlson Wade & Joan A. Friedrich, Ph.D. 48 pages

These books are so short they are close to being pamphlets, but that would give a false impression of the informational punch they both deliver; there seems to be a whole new type of "health using bee products" publishing going on as compared to the encouraging but not very scientifically supported books of the past.

While "*Propolis Power Plus*" is the one to check out if you want to find good general information about the benefits, history, and production of propolis without your eyes crossing from the vocabulary, the "*User's Guide...*", is a truly amazing read; enough double-blind placebo controlled study references to make our resident scientist happy but presented in a format that directly and plainly addresses why the bee products work and how to use them.

If you are interested in more than a cursory look at health from the hive, this is the book for you.

I just can't pass mentioning that the last book is only 3 ¾ inches wide; you have to get a good grip on it to keep it from popping out of your hands and while I usually, don't advocate bending paper back book spines too far,

the text is so close in on the binding as to make it necessary to keep a firm pressure on both pages; giving a rather physical, however minor, meaning to pursuing an education.

Library books are checked out for 1 month, if you want to extend it for a second month just call or e-mail . Books not returned after 2 months can be mailed to my home address:

Tynowyn Slattery  
20493 Rome Road, Nevada City, CA 95959

265-6318 ~ [swoolman@saber.net](mailto:swoolman@saber.net)

## **2012 Swarm Collection Hotline**

### **Lynn Williams, Contributor**

Swarm season is upon us. If you are interested in being called upon to collect bee swarms this year then please email me at [iamlynn@hughes.net](mailto:iamlynn@hughes.net) or call me at 530-675-2924. I will prepare the 2012 list and then either Karla Hanson or I will try to get in touch with you to collect a swarm. Note that when we get a swarm call we need to be able to get in touch with you right away as it becomes too time consuming and not practical to leave a phone message and wait for a return call.

We need to make the assignment as soon as possible after a new swarm call is received. Even if you were on last year's swarm collection hotline list we need to hear from you this year to keep you on the list. When you reply give me your name, phone number, and what areas you wish to serve. Note that we get many calls to the Yuba City/Marysville area so let us know if you will go that far. Have a great bee season.

## **Buzz Editor Farewell**



After 6 years as editor of the your Local Buzz, Leslie Gault has relinquished her role. Many thanks to Leslie for the hours of timely work and continued patience which helped make this publication possible during those years. It is the efforts of volunteer's like Leslie that make this club so fantastic. Gary Gustafson is the new editor and welcomes ideas on content and format for the Local Buzz. Check the back cover for contribution deadlines.

## **April 2, 2012 Program Details**

### **Janet Brisson, Contributor**

Our exciting April Program will feature Rhi Winders and Karin Meadows, producers of the new documentary, 'The Quest for Local Honey' which will be shown after the refreshment break.

An upbeat film on where our food comes from, keeping it local and what you can do to help pollinators. Out of 400 entries to the 2012 Yuba River Wild & Scenic Film Festival, this film was 1 of the 100 that made it and it received rave reviews. It was premiered in Nevada City a few weeks ago and we got tickets because our house and I were in it.

Going to this premiere was a little nerve racking. I hadn't seen the movie yet, although I mailed a copy to my mom down south. She kept telling me it was great, but I know things had gone awry. That's when I discovered I couldn't act my way out of a paper bag.

A little background, one of the producers, Rhi Winders used to live with us back in 2004/2005, right before we start selling our screened bottom boards. She and her then boyfriend Michael came out to Grass Valley from upstate New York so Michael could attend the College of Arvada. We knew her as Jen. Jen was so allergic to bee venom that she had to take injections of bee parts as a child to help boost her immunity to them. Her first

time in a fully encased bee suit, she had to sit down, she was so dizzy with fear. She loved working in the garden and canning food and we had a great time together. She took the name Rhi, but we and everyone in New York still calls her Jen.

After finishing her stint with us, Jen and Michael went their separate ways. Jen ended up in Nevada City doing social work for our county. She met the love of her life, musician Jay Tausig and they were joined in one of the most unique ceremonies that we have ever attended. They had a Weirding instead of a Wedding, exchanged Wings instead of Rings and we all had to be in costume that had wings or feathers involved. During the Weirding, they had their ring fingers tattooed with a design that circled the finger (the Ring). Baby Violet joined the family last October.

Somewhere along the way, she was asked to act in a music video and caught the producing bug. So 5 years later, we get a call, Jen wants to produce a documentary about bees and could she come over and film us. And the adventure began, 'The Quest for Local Honey'.

So the acting? Well, Jen and her producing partner Karin Meadows, came over for days and days, filming me talking and beekeeping. They even sent me up in a plane. But all that film that they took, something was wrong with the sound, so they needed me to repeat some of the things that I spoke about. This is about 2 or 3 years after the initial filming. She had some things scripted, and I just couldn't do it. I kept forgetting what I was supposed to say and sounded about as wooden as statue. Finally I asked her to ask me questions to answer and that did the trick. If I can just talk, that works.

The film was great, Kim Flottum, the editor of 'Bee Culture' was at the premier along with Randy & Stephanie and a few other members. It's a very local film, you will recognize a lot of us. And best of all, in the film, there is a bee crawling on an ungloved hand with a ring tattooed on the finger. I guess I did my job of encouraging beekeeping.

Jen and Karin will be selling copies of the documentary in DVD form for \$15.00.

Please join us for and the producers before the meeting at the No-host dinner at Lin-Q buffet in Grass Valley 5:30 PM.

## **This Month's Recipe**

**Submitted by Sue Tally**

Sue writes "For the February Beekeepers meeting, I baked and brought in a loaf of "fruit and fiber bread", and someone requested the recipe. I very much enjoy the "Local Buzz". Best regards, Sue Tally"

**Fruit and Fiber Bread** - Makes two loaves

Original recipe attributed to Marg Clark from "Christmas Thyme at Oak Hill Farm" with Sue's additions.

2 cups boiling water	2 cups whole wheat flour
1 ½ cup chopped prunes	2 teaspoons baking powder
½ cup raisins	1 teaspoon baking soda
3 eggs	1 teaspoon ground cinnamon
¾ cup firmly packed light brown sugar	½ teaspoon ground cloves
1 cup chopped nuts	2 cups bran

Sue's additions: add 1 diced orange, or small can mandarin orange pieces, 1 teaspoon orange zest. Substitute ¼ cup orange juice for water. Diced pineapple will add extra flavor, too.

Preheat oven to 350 degrees, or 325 if using glass pans. Pour boiling water over the prunes and raisins. Set aside. In a large bowl, beat eggs until light, continue beating while adding brown sugar until light and creamy. Sift 1 cup flour with the baking powder, baking soda, cinnamon and cloves, and stir into the sugar mixture. Now stir in half of the prune mixtures, and then the rest of the flour and bran. Stir in remainder of the prune mixture and the nuts. Pour into 2 greased and lightly floured 9 X 5 inch loaf pans. Bake for about 45 to 55 minutes, or until done.

## March Minutes

### Jack Meeks, Secretary

V-Pres Ferrell opened with Q&A: Should old, dark frames of comb be replaced? Yes, they carry remnants of Nosema and Varroa and uneven brood. When new foundation is built out and used by the queen, the old frames can be moved to the side until empty, and recycled. PROGRAM: Dr. Eric Mussen, UC Davis Entomology Extension. Labeling of honey is confusing. To increase shelf life, commercial producers routinely heat raw honey and filter out pollen and honey crystals, which act as nuclei for crystallization, which consumers of bottled honey may mistake as cloudiness or spoilage. Local honey sold in CA off-premises must be graded--"raw" honey with bits of wax and bees knees is Grade "D" but, if you run it through a nylon paint filter, you call it "Grade A" with your source "Wildflower" and your address printed on your label. Honey still averages \$6 to \$8 per pound. U.S. consumes more honey than we produce--South America and Asia fill the demand. Current research on the gene sequences of Varroa destructor aims to find a biochemical pathway that can be disrupted by some agent which will not harm bees. Genomes of Nosema species have been determined. Watch out for a small fast moving white mite Tropilaelaps clareii. Dr. Mussen's bimonthly e-mail newsletter may be ordered at <https://lists.ucdavis.edu/wws/subscribe/ucdavisbeenews> Then look for a small box "your email address" type yours in, and click SUBMIT. Next edition in April.

## Pollen, a Gift from the Flowers

### Diane Benton, Contributor

Here in the foothills our almond trees generally do not bloom until March. However, every February beekeepers move their bees in to 1,000's of acres of central California's almond fields to pollinate the crops. The bees fly from flower to flower pollinating the almond blossoms and gathering pollen and nectar during the 4 weeks they are left in the fields.

There are two kinds of pollen: anemophile, which literal means "friend of the wind", and entomophile, which literally means "friend of the insect." The former is dispersed by the air and is what causes allergic reactions like hay fever. The later is gathered by the honey bee while traveling from flower to flower. When combined with the bee's enzymes, the pollen becomes what we know as bee pollen. It is a storehouse of vitamins, minerals, proteins, fats, carbs, amino acids and more. In fact, it is the only food which contains, in perfect balance, all 22 known essential nutritional elements.

At this time of year beekeepers usually allow their bees to keep the pollen they collect from the almonds to feed their new offspring. Our queen bees are producing lots of new babies for springtime. The almond honey is also left in the hive to feed the bees plus it is one of the few honeys that people do not find tasty. Pollen is the best source of protein for brood rearing. Have you planted an almond tree in your backyard yet?



An almond blossom in March at 2,300 feet elevation in Grass Valley. At the end of each long white stamen is the yellow pollen powder, the male element of the plant that fertilizes "like" plants.



On a sunny March day in Grass Valley a honey bee returns to the hive with a pollen basket attached to her leg.

The Nevada County Beekeepers Association is dedicated to apiculture education and promotion of the art and science of beekeeping among beekeepers, agriculturists, and the general public. This is a "not for profit" organization.

Meetings are held the first Monday of each month at 7 PM at the Grass Valley Veteran's Memorial Building at 255 South Auburn Street in Grass Valley. All visitors are welcome.

The newsletter is published monthly as a service to the membership. Articles, recipes, commentary, and news items are welcomed and encouraged. The deadline for submissions to the May issue is April 26th. Submit to [garyg@newpress.com](mailto:garyg@newpress.com)

Advertising space (3" by 2") is usually available and need not be bee-related. Advertising rates are \$7 per year for NCBA members and \$16 per year for non-members.

## Nevada County Beekeepers Association

### Officers

President: Rob Slay..... 263-5618  
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### Committee Chairs

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Librarian: Tynowyn Slattery..... 265-6318  
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Honey Extractor: Karla Hanson..... 265-3756

## Nevada County Beekeepers Association



c/o Steve Reynolds  
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First Class Mail

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