



BUZZWORD



WEST SOUND BEEKEEPERS ASSOCIATION

<http://www.westsoundbees.org>

Proudly serving bees, their keepers, and the public in Kitsap County, WA and beyond!

JUNE 2014

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OW! OW! OW! (see story on page 3)

THIS MONTH'S EVENTS

WEST SOUND BEEKEEPERS ASSOCIATION APIARY ACTIVITIES

Date: **Tuesday, 5/20/2014**
 Time: 3:00 pm to 7:00 pm
 Location: Stedman's Bee Supplies
 3763 NW Anderson Hill Rd, Silverdale, WA

WEST SOUND BEEKEEPERS ASSOCIATION GENERAL MEMBERSHIP MEETING

Date: **Tuesday, 6/17/2014**
 Time: 7:00 pm to 8:30 pm
 Location: Stedman's Bee Supplies

WSBA PRESENTS: HANDS-ON CLASS

Date: **Saturday, 6/7/2014** ~ REGISTRATION REQUIRED
 Time: 8:00 am to 10:00 am, 10:00 am to 12:00 pm, 12:00 pm to 2:00 pm
 Location: Stedman's Bee Supplies

WSBA PRESENTS: HANDS-ON QUEEN-REARING CLASS

Date: **Sunday, 6/8/2014 & 6/22/2014** ~ REGISTRATION REQUIRED
 Time: 1:00 pm
 Location: Stedman's Bee Supplies

WSBA PRESENTS: BEEKEEPING IN THE PACIFIC NORTHWEST

Date: **Saturday, 6/28/2014** ~ REGISTRATION REQUIRED
 Time: 8:30 am to 4:30 pm
 Location: Stedman's Bee Supplies

TREASURER'S REPORT

June 2014

(Bank statement dated 05/31/2014)

Money Market Reserve account: \$4506.25

Savings account: \$3889.21

Checking account: \$8057.24

Activity for the month of May

Dues, and class registration paid

419.00

Deposit 05/15/14

419.00

Dues, fabric and class registration paid

475.00

Deposit 05/28/14

475.00

Total Deposits for May

\$894.00

Checks Cleared in May:

Apiary Expense/Sugar

41.96

Total Checks cleared May

\$41.96

Total signed up for Beekeeping in the Pacific NW class = **2**

Total signed up for Queen Rearing class = **11**

Patches Paid = **5**

Total membership Dues paid for 2014 = 139

Elizabeth Bianchi

WSBA Treasurer

REQUEST FOR BUZZWORD CONTRIBUTIONS

Whether you are new to West Sound Beekeepers Association, new to beekeeping or have been at it for many a year, we are always interested in observations and input from our members. Maybe you have an interesting story, a question you'd like to get out to the members or a photo or two you'd like to share? Your contributions to the Buzzword are always welcome!! Please send your contributions to biz@kimredmond.com. If you want to share your photos please be sure to include your comments and/or descriptions.

And, let's see those hives!! We know you've had fun painting your new equipment – so share your photos!

BEEKS ABROAD

~Darren Gordon & Pam Woods

I'm in Gavirate, Italy (on Lake Varese, in the north), visiting my beekeeping friend Alessandro, who I met 3 years ago during his visit to the United States.



We visited his apiaries during the sweet chestnut nectar flow.

On the way to the apiary Alessandro asked if I had ever worked with Africanized bees before. I thought he was just making conversation, like one would ask "How much honey do your hives produce?" or "Do you like gladiator movies?" At the apiary, he offered me a pair of gloves, and he said "I wear gloves." I declined the gloves. I soon realized these would be the **second** most aggressive bees I've ever worked with. While not Africanized, Italian bees can be very aggressive, even during a nectar flow. I received countless stings to my hands, neck and face. My lightweight travel veil proved to be inadequate protection at this first apiary.



At the second apiary I was given a pair of tall winter boots in addition to gloves and a much more substantial beekeeping suit, and Alessandro told me that these bees at the second apiary were much worse than the first. He was right. These were **the** most aggressive bees I've ever worked with.

I'll be here in Italy for another month, building a few Warre hives for Alessandro and his friends. I'll send more photos in the future. Ciao, ciao, ciao! ~Darren

GMO BEES

By David O'Brochta – via Catch the Buzz

A breakthrough in the efforts to genetically modify honey bees was recently reported by Christina Schulte and colleagues from Heinrich Heine University in the *Proceedings of the National Academy of Sciences of the United States of America*.

Schulte et al. reported the creation of a honey bee containing a “foreign” gene — in this case, one that made some of the cells in the bee glow. This is a first in bee research. These researchers did not establish a colony of genetically-modified bees; they only showed that genetically-manipulated queens could produce genetically-modified drones in the lab. It was a proof of concept.

We have known the genome sequence of the honey bee, *Apis mellifera*, since 2006. The bee genome helps bee biologists learn how honey bees tick, and it has already provided insights. The genome is rich in genes associated with smell, but it has relatively fewer genes associated with taste and immune functions, reflecting evolutionary adaptations associated with their unique lifestyle.

Using genetic technologies in the laboratory to actually manipulate the bee genome in living bees will lead to deeper insights, such as how they fight infections like foulbrood disease or parasites like *Varroa* mites, as well as the genetic basis for bee behavior.

Imagine you know a little bit about cars and you want to figure out what makes them run. A manual is available, but it's in some kind of code. One approach would be to take a hammer and, starting with one part at a time, break things and then see how the “mutated” car functions.

“Oh look, now it doesn't start — that must be a starter thingy,” you might deduce.

“Now all the lights and the radio don't work — that must be an electrical thingamabob.”

And so on. Pretty soon you would know a lot about how the car works and the role of many of its parts, and the coded manual would make more sense too.

This is pretty much how geneticists might approach the problem of understanding how bees function. Geneticists would not use a hammer, but they would use genetic technologies to manipulate the genome of living bees to see how those alterations affected the organism.

Today there are many technologies that enable scientists to insert genes into chromosomes. In the case of bees, applying those technologies has proven very difficult. This is because insect-genome-modification technologies require physically injecting these technologies (usually bits of DNA) into honey bee eggs, having the eggs hatch and develop into fertile queens, and then getting the queens to reproduce. However, bees do not like having their eggs injected.

The key to Schulte et al.'s success was their innovative approaches to manipulating and controlling bee reproduction and behavior in the laboratory so they could successfully inject their eggs. They have forged an important path that others can follow, albeit a challenging one.

Just as the human genome enables human biology to be understood for the purposes of developing therapeutics and solutions to unwanted conditions, these results represent the beginning of a similar phase of bee research.

David O'Brochta is the director of the [Insect Genetic Technology Research Coordination Network \(IGTRCN\)](#) and is a professor in the [Department of Entomology](#) and the [Institute for Bioscience and Biotechnology Research](#) at the University of Maryland, College Park. He has an active research laboratory focused on insect genetics and molecular genetics with interests in the development of insect genetic technologies and their application to the study of the physiological genetics of mosquitoes, with particular interest in their disease-vector capabilities. Professor O'Brochta teaches at the undergraduate and graduate levels, is the Head of the Institute for Bioscience and Biotechnology Research's Insect Transformation Facility, and he is the editor of the Royal Entomological Society's journal *Insect Molecular Biology*.

HONEY BEE GENOTYPES AND THE ENVIRONMENT

From IBRA – via Catch the Buzz

In recent years, much attention has been focused on the global problem of honey bee colony losses. Among the many explanations for these losses, variability in the genetic makeup and vitality of honey bee populations might help to explain some of the variability in honey bee colony losses experienced in different regions. This has led to the innovative honey bee Genotype-Environment Interactions (GEI) experiment carried out by members of the international honey bee research association COLOSS. The results are published today in a Special Issue of the *Journal of Apicultural Research*.

A total of 621 colonies of 16 different genetic origins were set up in 21 apiaries in 11 different European countries managed by 15 research partners. Each location housed the local strain of bee together with two of "foreign" origins. The colonies were set up in the summer of 2009 and were managed and evaluated according to a standard protocol used by all participants until 2012.

IBRA Science Director Norman Carreck says: *"The results of these experiments show that the locally adapted strains of honey bee consistently performed better than the "foreign" strains. This may seem logical to many bee scientists, but may come as something of a shock for many beekeepers who believe that purchased queens are likely to be in some way "better" than the bees that they already have in their own hives. There is growing evidence of the adverse effects of the global trade in honey bees, which has led to the spread of novel pests and diseases. These papers which provide evidence that locally-adapted honey bee strains consistently perform better than imported strains may thus strengthen local bee breeding programmes, and encourage the use of locally bred queens over those imported from elsewhere"*.

HONEY CUCUMBER SALAD

from the National Honey Board



Ingredients

3 medium - cucumbers, thinly sliced and halved
1/4 cup - honey
1/2 cup - white balsamic vinegar, (can also use white wine vinegar)
1/4 cup - water
2 tablespoons - red onion, diced
salt

Directions

Place cucumbers in bowl and sprinkle with salt. Toss and set aside. In a small mixing bowl, stir together honey, white balsamic vinegar, water and diced red onions. Pour the mixture over the cucumbers and toss. Allow the salad to marinate in the refrigerator about 1 hour prior to serving.

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A HONEY MOON?

"No human has seen tonight's full *honey* moon in almost 100 years"

<http://sploid.gizmodo.com/no-human-has-seen-tonights-honey-moon-in-almost-100-yea-1590096626/+caseychan>



STEDMAN'S!

MEMBERSHIP FORM

Member dues support the Association's goals of promoting better understanding and appreciation for honey bees and beekeeping by providing community awareness of the positive effects of beekeeping and topnotch educational beekeeping classes for all experience levels.

Being a paid member of West Sound Beekeepers Association also puts the Association's extensive library at your disposal, allows you the use of the Association's extractor, provides you with the opportunity to have input on the direction the Association takes, makes you eligible to be an officer of the Association and puts you in touch with a lot of fun beekeepers! For only \$24, every member of your household becomes a member – what a great deal!

To join or renew your membership simply fill out the following form and bring it, along with your payment, to the next monthly meeting. Or you can mail the form with your payment to the WSBA Treasurer (address below.)

****PLEASE MAKE CHECKS PAYABLE TO WSBA****

NAME: _____
MAILING ADDRESS: _____
PHONE & EMAIL: _____

Mail this form along with your check to: Elizabeth Bianchi, WSBA Treasurer
15017 118th Ave NW
Gig Harbor, WA 98329