



### Next Meeting

Wednesday, February 11      Time: 7 PM  
Gateway Centre Suites      1313 E. Maple St.  
The Rainier Room, Ste. 301      Bellingham, WA

### OUR NEW VENUE

Remember, we have a new meeting place; for complete information and directions, go to: <http://gatewaytotaloffice.com/TheRainierSeminarRoom>

### FEATURED SPEAKER FOR FEBRUARY



*Dr. Bruce Eckholm*

Originally a beekeeper from the Seattle area, honey bee biologist Bruce Eckholm earned his PhD in Entomology at the University of Arizona in Tucson. He spent six years at the USDA Carl Hayden Bee Research Center, where he investigated colony-level genetic influences on the physiology and behavioral ecology of honey bees. Bruce has authored/co-authored several original research papers in leading scientific journals, as well as a book chapter in *Honey Bee Colony Health: Challenges and Sustainable Solutions*. He now works as an independent research scientist and small-scale farmer on Whidbey Island.

In addition to farming, Bruce collaborates with other honey bee scientists from around the country. With the Tucson bee lab, he is currently developing a web-based tool for almond growers to model their orchards under different weather conditions and colony strength profiles. The tool predicts almond yields and will ultimately help the almond industry gain an understanding of the scale of colony losses. Other research activities at the interface between colony genetics, foraging, and honey bee nutrition are in development as well.

His talk title for our February meeting will be *"Honey bee intracolony genetic diversity increases pollen foraging efficiency"*

In essence, when a queen mates with many drones, her offspring form a colony comprised of multiple patrilineages with high levels of genetic diversity. This mating strategy of the queen, known as polyandry, increases colony performance by enhancing task efficiency within the hive. Bruce will present one such example, "pollen foraging" which improves as a function of increased colony diversity. The genetic composition of the colony plays an important role in the efficiency of pollen collection; colonies headed by well-mated queens are better able to optimize the effectiveness of their foraging efforts.



### Refreshments

Anyone who cares to share, bring something yummy to give us an excuse to socialize and schmooze about bees.  
(Don't forget clean-up!)



## THINGS TO DO IN FEBRUARY

- ◆ Order your nucs or packages. MBBA members are again putting together a group order for packages; contact Gary Clueit for more information.

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## EXCITING NEWS FROM BEE CULTURE MAGAZINE

**Codenamed 'MiteNot'. This technology is a simple, compostable and pesticide-free way to sterilize *Varroa destructor* mites.**

Eloptia is in early stage development of a simple, pesticide-free way to remove varroa destructor mites in bee hives. Groundbreaking new technology, code named 'MiteNot' is currently in research, development and testing with the University of Minnesota Bee Lab.

**Eloptia's 'MiteNot' project is the most innovative and holds the most promise to turn the bee crisis around than any other idea that has come along in a very long time—maybe ever.” --Marla Spivak**

“To save the bees, beekeepers and bee researchers need a new, non-chemical way to control mite parasites in honey bee colonies. Eloptia's 'MiteNot' project is the most innovative and holds the most promise to turn the bee crisis around than any other idea that has come along in a very long time—maybe ever.” --Marla Spivak, Distinguished McKnight University Professor Apiculture/Social Insects, University of Minnesota.

Varroa destructor mites exist in almost all hives in North America. If left untreated, evidence supports mites kill honey bee colonies and may be a factor in colony collapse disorder. 'MiteNot' uses a compostable circuit board that senses the stages of the bee broods reproductive cycle and applies heat at a specific temperature and time to sterilize the mites. The heat is applied when the honeycomb cells have been capped and the temperature stabilizes. This is the approximate time when female mites lay eggs but before the male mites can fertilize, thus interrupting the mites' lifecycle.

Although this is a complicated process, 'MiteNot' is very easy for beekeepers to use. Just one frame per beehive needs to be swapped for a 'MiteNot' frame. Eco-conscious and well-engineered, 'MiteNot' is housed within a frame and wax covered compostable circuit board. The circuit board is created from renewable resources, such as cornstarch. The circuit board is covered in wax, making it undifferentiated in use and appearance compared to a standard honeycomb foundation. Beekeepers can continually reuse the 'MiteNot' frame and have the ability to insert a new wax-covered circuit board as necessary.

“We are confident that we will bring the 'MiteNot' to market. We are on target to deliver an effective, affordable, and non-toxic solution to both commercial and hobbyist beekeepers to control varroa destructor mites. Additionally, we are excited about the other potential applications of our compostable circuit technology to solve other colony challenges.

The applications of this technology extend within

and beyond agriculture.” --Will MacHugh, CEO Eloptia

'MiteNot' is currently in research, development and testing. Eloptia is looking for commercial beekeepers and academic institutions to participate in additional testing. If the testing continues to be positive, Eloptia hopes to make this a simple, non-toxic way to eliminate varroa destructor mites. Eloptia is targeting market availability by fall 2015.



## FOCUS ON EDUCATION



### ***COURSES FROM THE HONEYBEE CENTRE IN SURREY, BC***

A wonderful resource that offers a lot of family-friendly events, classes, and an excellent retail honey store (with a lot of other bee products as well) is just over the border in Surrey. Check out all the info at <http://www.honeybeecentre.com>.

On February 18, they'll be offering a two-hour course on beeswax lip balm and salve making. Register for this \$19 class on their site; it's also offered later in February and in March.

***There are still a few spaces available in Miguel's workshop at WCC! An accomplished beekeeper, Miguel's teaching segment at last year's MBBA field day drew rave reviews.***

#### ***Beginning Beekeeping with MBBA member Miguel Boriss***

This new workshop at Whatcom Community College covers the basics of beekeeping, including setting up an apiary, managing your bees through the seasons, and being a good beekeeping steward in your neighborhood. The one-session workshop will be held on Saturday, February 28 from 9 am to noon. Registration is \$39, and participants are encouraged to register early. Call 360.383.3200 or register online at [www.whatcomcommunityed.com](http://www.whatcomcommunityed.com).

### ***BEEKEEPING COURSE WITH SHELLEY ARMSTRONG***

Another north-of-the-border opportunity is highly recommended by a couple of MBBA members who have taken Shelley's course.

#### ***Hands-on Bee Keeping Course To be offered throughout Spring and Summer 2015***

This course is for anyone interested in learning about honey bee hive management with a very hands-on approach. No previous experience or knowledge of beekeeping is required.

We will meet in five sessions of five hours each throughout the spring and summer to allow for maximum exposure to a large range of topics throughout the beekeeping season. There will be weekday and weekend times available to suit many schedules.

The cost will be \$325. **Early bird discount to \$299 if you register with payment by February 14, 2015.**

Class size will be small to facilitate lots of open discussion and maximize time in the hives for everyone. The focus of our sessions will be on regular hive management, identifying and treating bee diseases, and gaining an understanding of bee behavior and biology. Additional supportive learning material will be provided online.

**Location: 6328 264 Street, Aldergrove  
Shelley Armstrong  
Dancing Bee Apiary  
604-341-8929**