November 2014

OLYMPIA BEEKEEPERS ASSOCIATION

NEWS AND INTEREST FROM THE NOV 10, 2014 MEETING

Secretary and Treasurer Report, President's Message, Up-coming Program

President's Message

Hi everyone,

The holidays are now in full swing, our bees are tucked away and I'm looking forward to the celebrations and the new year.

In this season of gratitude I'd like to say what an immense pleasure it has been to serve our association in the past year. There are so many remarkable members in the OBA and getting to know some of you a little better and seeing some new faces, too, has been wonderfully fun and enriching. We've had a really full year as a club that included a fabulous Bee Fair and film screening in collaboration with Evergreen State College; the launch of our club apiary; lots of new outreach events to participate in; summer meetings; and an epic day of bee-learning with Michael Bush in October.

Thanks to Gail Booth, Glen Buschmann, Duane McBride, Tricia Shaw, Paul Longwell and Mary Haynes who contributed their time, talents and energy to a very successful outreach event at the WET Science Center. This is the kind of experience that raises community awareness about bees and beekeeping. We were very well received by the center's staff and guests that day. (a record count of guests for a Saturday there!)

To the club officers who give their additional time to make our association "work" I thank you. Dana is relentless in getting the Beeline out, maintaining our membership records, handling each meeting's raffle, getting email notices out and overseeing the website. Andrea has been there every time to go the extra mile to manage funds for special events and stay on top of our treasury. Mary has

been engaging her secretary duties and helping out in other ways. Mechele is always willing to help in whatever capacity she can and helped make the room beautiful for our Michael Bush event. Our education team of Bob Smith and Renzy Davenport is first rate. Paul Longwell has updated and expanded the library and Jim Rieck is growing our mentorship program. Rich Kalman and Bert Lewis got our club apiary running. Gail Booth has been our swarm team driving force. David Bruun and his program team have a fantastic presenter line-up scheduled for the coming year and Dave makes sure we're technologically prepped for each meeting. Kathy Miles deserves a huge shout out for her unfailing efforts to make sure we have a refreshment table at each meeting. Glen Buschmann has been very generous with his time to help educate the public on native pollinators for many of our outreach events. We're also very pleased to have our Washington State Association president, Mark Emrich as OBA immediate past president to keep us apprised on what's happening at the state level at each meeting. And to all of you, for bringing yourselves, your ideas, raffle items, sweet treats and other contributions, it never goes unnoticed or unappreciated. None of what we do happens without you.

I hope to see you at the Christmas extravaganza on December 8th. Santa's elves have been busy as bees planning and preparing a really wonderful evening and it is sure to be filled with merriment, good food, Christmas cheer and a few surprises. There is no regular OBA meeting that night. The apprentice class will be conducted at 6:00 that evening as usual.

Until then, on behalf of the OBA Board and club officers, we wish you and yours a joyful, healthy holiday season and a honey of a new year!

Laurie

“Don’t forget to bring your plate and utensils to eat all the great food”

Secretary's Report

Olympia Beekeepers Association Meeting
November 10, 2014

Call to order at 7:07 p.m.

Old Business

Several amendments were made and accepted to the September OBK minutes by Mark Emrich. (Include the amended items here)

Treasurer's report included 2,054.36 in checking and 6,461.00 in savings. The report was accepted.

Laurie Pyne reported that the Michael Bush event was a great success, with 95 attendees registered and 91 attending. 54 of the 91 people attending were not club members. Ernie Schmidt commented that he thoroughly enjoyed hosting Michael Bush, staying up until midnight. "He knows a bit about everything!" Ernie was gracious enough to not only host Michael at his home but also transported him to the airport for his flight home. He did get a big "bear hug" on departure!

Roy Manicke tried to get Michael to put a web cam on his observation hive in his living room! (Michael Bush has an observation hive in the living room of his home)

The City Council of Olympia passed a resolution on November 3rd regarding neonicotinoids in support of pollinator health. The city of Olympia does not and will not use neonicotinoids on city property and supports a national moratorium on the pesticides. You can read a copy of the resolution here: http://olympiawa.gov/city-government/city-council-and-mayor/~/media/Files/Executive/CouncilResolutions/Res%20M-1811.pdf

Laurie sent a thank you letter to Mayor Stephen Buxbaum on behalf of OBA.

New attendees were introduced as Wendell and Dylan

Olympia Beekeepers Association was represented at the Wet Science Center in Olympia in October. Duane Schmidt, Gail Booth, Mary Haynes, Tricia Shaw, Glen Buschmann, Paul Longwell and Laurie Pyne represented the club with tables of information. Laurie Pyne presented a PowerPoint on "The Amazing Honeybee".

Membership: Dues are due now. Dana will take your money anytime during the meeting!

New business

Laurie put out a call for members to organize the annual Christmas Party. Pat Sturgill and Paul Longwell volunteered to help to organize. Joanie and Brian Offord will be bringing the turkey and ham. Members will need to bring a potluck dish to share.

Chair reports

Mark Emrich was elected to another term and will continue to be the Washington State Beekeepers Association President for the next year.

Mark says that the current news at State level mostly involves education. He encourages members to look at the State website for changes to the syllabi. Washington State Beekeepers Association has entered into a copyright agreement with instructors in New Mexico and South Carolina. They will be able to print materials for one year and will be charged $1 per student who uses a book. Because the south has top bar and other kinds of hives they will be using some of their own material. Attempts are being made to make the material more user-friendly.

Bert Lewis has begun working on the club apiary. He added a 2nd table and potential hive stand. He reports he has a new steering committee that includes: Becky Anderson, Heather Wood, and John White. Hive Sue Cobey appears to be the weaker hive and Aristotle the strongest!

Gail Booth brought a gift catalogue form the Heifer International program to share with the club. She suggested that we donate bees as we did last year. It provides help for families around the world. Dana Smith moved that we donate $100 to the program.

Mark Emrich commented that Lewis County has 5 beekeepers working in South Africa teaching how to keep bees. He suggested donating a hive to their program. The start up is $60. He proposed sending 2 or 3 units to the African project.

Further discussion ensued. The motion was finally amended to send $90.00 to Heifer International program and $60.00 to the Lewis County members for a South African hive. The motion was seconded and passed.

Bob Smith no one completed certificates this month.

Renzy Davenport reported low numbers in attendance for the Journeyman class.

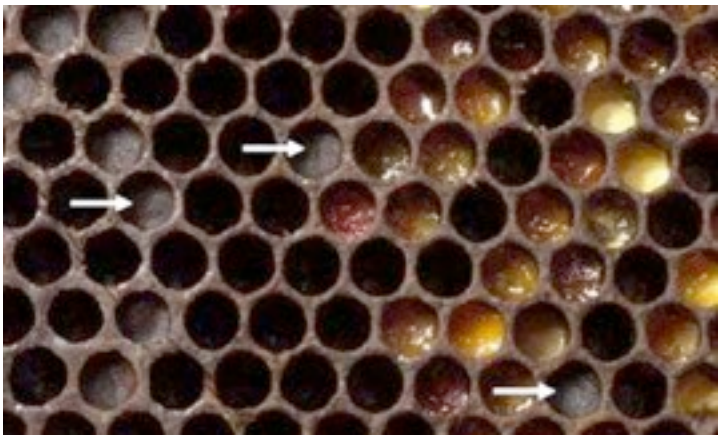
Program

Ron Scholzen on candle making

and

Ernie Schmidt on screened bottom boards.

Honeybees 'entomb' hives to protect against pesticides, say scientists



Honeybees are taking emergency measures to protect their hives from pesticides, in an extraordinary example of the natural world adapting swiftly to our depredations, according to a prominent bee expert.

Scientists have found numerous examples of a new phenomenon – bees "entombing" or sealing up hive cells full of pollen to put them out of use, and protect the rest of the hive from their contents. The pollen stored in the sealed-up cells has been found to contain dramatically higher levels of pesticides and other potentially harmful chemicals than the pollen stored in neighbouring cells, which is used to feed growing young bees.

"This is a novel finding, and very striking. The implication is that the bees are sensing [pesticides] and actually sealing it off. They are recognising that something is wrong with the pollen and encapsulating it," said Jeff Pettis, an entomologist with the US Department of Agriculture. "Bees would not normally seal off pollen."

But the bees' last-ditch efforts to save themselves appear to be unsuccessful – the entombing behaviour is found in many hives that subsequently die off, according to Pettis. "The presence of entombing is the biggest single predictor of colony loss. It's a defence mechanism that has failed." These colonies were likely to already be in trouble, and their death could be attributed to a mix of factors in addition to pesticides, he added.

Bees are also sealing off pollen that contains substances used by beekeepers to control pests such as the varroa mite, another factor in the widespread decline of bee populations. These substances may also be harmful to bees, Pettis said. "Beekeepers - and I am one – need to look at ourselves in the mirror and ask what we are doing," he said. "Certainly [the products] have effects on bees. It's a balancing act – if you do not control the parasite, bees die. If you control the parasite, bees will live but there are side-effects. This has to be managed."

The decline of bee populations has become an increasing concern in recent years. "Colony collapse disorder", the name given to the unexplained death of bee colonies, is affecting hives around the world. Scientists say there are likely to be numerous reasons for the die-off, ranging from agricultural pesticides to bee pests and diseases, pollution, and intensive farming, which reduces bee habitat and replaces multiple food sources with single, less nutritious, sources. Globalisation may also be a factor, as it spreads bee diseases around the world, and some measures taken to halt the deaths – such as massing bees in huge super-hives – can actually contribute to the problem, according to a recent study by the United Nations.

The loss of pollinators could have severe effects on agriculture, scientists have warned.

Pesticides were not likely to be the biggest single cause of bee deaths, Pettis said: "Pesticide is an issue but it is not the driving issue." Some pesticides could be improving life for bees, he noted: for many years, bees were not to be found near cotton plantations because of the many chemicals used, but in the past five years bees have begun to return because the multiple pesticides of old have been replaced with newer so-called systemic pesticides.

Studies he conducted found that bees in areas of intensive agriculture were suffering from poor nutrition compared with bees with a diverse diet, and this then compounded other problems, such as infection with the gut parasite nosema. "It is about the interaction of different factors, and we need to study these interactions more closely," he said.

The entombing phenomenon was first noted in an obscure scientific paper from 2009, but since then scientists have been finding the behaviour more frequently, with the same results.

Bees naturally collect from plants a substance known as propolis, a sort of sticky resin with natural anti-bacterial and anti-fungal qualities. It is used by bees to line the walls of their hives, and to seal off unwanted or dangerous substances – for instance, mice that find their way into hives and die are often found covered in propolis. This is the substance bees are using to entomb the cells.

The bees that entomb cells of pollen are the hives' housekeepers, different from the bees that go out to collect pollen from plants. Pettis said that it seemed pollen-collecting bees could not detect high levels of pesticides, but that the pollen underwent subtle changes when stored. These changes – a lack of microbial activity compared with pollen that has fewer pesticide residues – seemed to be involved in triggering the entombing effect, he explained.

Pettis was speaking in London, where he was visiting British MPs to talk about the decline of bee populations, and meeting European bee scientists.

Clues to Bees' History, Tucked Away in Drawers

Photo

Bombus sylvarum is a species of bee found across Europe.

Credit David Kleijn, NY Times

The future of bees may depend on understanding their past.

Bees are in trouble, any entomologist will tell you. Honeybee colonies in the United States have suffered devastating losses in recent years. But colony collapse disorder, as it's called, affects only the species kept in beehives — the European honeybee, Apis mellifera. There are almost 20,000 species of wild bees, and they aren't faring well, either.

Nearly a third of bumblebee species in the United States are declining. In the Netherlands, more than half of the country's 357 species of wild bees are endangered. Many species of plants, including crops, depend on wild bees to spread their pollen. When they lose their pollinators, they may suffer, too.

"It's essential to know what is causing those declines," said Jeroen Scheper, a graduate student at Alterra, a research institution at Wageningen University in the Netherlands.

But it is not enough to consider the many challenges — from pesticides to parasites — that wild bees face right now. "We need to go back in time," said Mr. Scheper.

Mr. Scheper and other scientists have tried to solve this puzzle by taking advantage of the patient — some might say obsessive — work of naturalists over the past 140 years. Through much of North America and Europe, these unsung heroes carefully tallied sightings of bees year after year. They caught bees, stuck them on pins, and stored their desiccated little bodies by the thousands in museum cabinets.

Those impaled bees have been resting in their darkened drawers, waiting for scientists to pay them a visit. And now they have.

Recently, Ignasi Bartomeus, then a post-doctoral researcher at Rutgers University, and his colleagues tapped this vast supply to reconstruct the history of bees in the Northeast. They searched the bee collections at the American Museum of Natural History, the New York State Museum, and a number of university collections.

All told, they examined more than 40,000 wild bees. They whittled their survey down to just 30,000 specimens for which there was clear information about when and where they had been caught.

Studying the 438 species in their database, they found that the diversity of wild bumblebee species in the region declined by 30 percent between 1872 to 2011. (The diversity of the bees overall declined by a more moderate 15 percent.)

As scientists gain a better understanding of the history of bees, they are also starting to gather clues about what has been driving the changes they are documenting. In their new study, published this week in Proceedings of the National Academy of Sciences, Mr. Scheper and his colleagues analyzed detailed records about bees in the Netherlands to determine how their populations changed during the twentieth century.

Then the scientists looked for what the declining species had in common. They examined a number of possible factors — how common bee species were at the beginning of the century, for example, and how far they typically flew to find food, and how big they grew.

The scientists were even able to study what bees ate all those decades ago. Mr. Scheper and his colleagues visited seven Dutch museums, where they inspected the bee collections. When they peered closely at the insects, they could see pollen grains stuck to the legs of some them.

Placing the pollen grains under a microscope, the scientists identified the plants that the bees had visited. As it turned out, the fate of the bees often was tied to that of the plants they depended on.

The growing intensity of farming in the Netherlands since the 1950s hit many wild plant species hard. "There were a lot more flowers in the landscape before," said Mr. Scheper.

Dutch farmers cleared more land, used more toxic herbicides, and blanketed their farms with fertilizers. Some wild plants were able to survive these challenges, but others became scarce. Mr. Scheper and his colleagues found that the bees that preferred declining plants also declined.

This link held true even for bees that collect pollen from dozens of plant species. The results suggest that without the preferred kind of pollen, the bee larvae suffered.

Mr. Scheper and his colleagues also found that big bees were at greater risk than small ones. He suspects that is because big bees need to eat more. If the plants they depend on get harder to find, they are more likely to suffer than smaller bees.

"The results are compelling and make a lot of sense," said Dr. Bartomeus, who was not involved in the Dutch study. "If your food source is declining, your populations will suffer."

Laura A. Burkle, an ecologist at Montana State University who also was not involved in the new study, cautioned that food might not be the only explanation for the results. The changes in landscape that stripped away pollen might also have ruined bee nesting sites.

"We don't have a solid understanding of which of these main resources is most limiting to bees," said Dr. Burkle.

Mr. Scheper said that policies for restoring bees will have to take their preferred plants into account. "If you want to slow down or reverse the decline of a species, you can't suffice with general measures," he said. "Bee species that need red clover are not helped with dandelions. I know that policy makers prefer a simple and quick answer — 'Just do this and you'll get this.' — but it's not that simple."

Correction: November 26, 2014

An earlier version of this article misspelled the surname of a bee researcher. He is Ignasi Bartomeus, not Baromeus. It also misstated the institution at which Laura A. Burkle works. She is at Montana State University, not the University of Montana.

Invitation: To All who attend the OBA meetings:
Please consider presenting a short (about 5 minute) show-and-tell topic at an OBA meeting. For example, you may:
* review a piece of beekeeping equipment you either constructed or purchased
* recommend a book or video from the club library, or elsewhere
* describe a new twist on an old process for doing something related to bees
* show something you, or someone else, made from a hive product (wax, honey, propolis, royal jelly)
* introduce us to an educational web-resource related to beekeeping
* talk about something else bee-related that our members would find interesting--Bee Creative! Share your Knowledge, Help make our meetings interesting and useful.
Please contact David to get on the agenda (Davidbruun98@hotmail.com)

Reminder:

Plants, books, seeds, and other artifacts are always appreciated for the meeting raffle.

And, if you have a tasty snack to share, everyone enjoys something sweet.

January:

February:

March:

April:

May:

June:
July: Meeting to be held at Farm Bureau Building, 975 Carpenter Rd. Program by Harvard Robbins.

August: Meeting at Farm Bureau - Program will be on Harvesting and Extraction.

September: Time to renew membership.

October: Weeds and Bees

November: Tentatively - Candle Making

December: Christmas Party

Monthly Meetings: held the second Monday of each month.

Place: Chinook Middle School, 4301 6th Ave NE, Lacey, WA

Time: 6:00 pm for Beginning Beekeeper's Certification Program, 7:00 pm for the association meeting. Meetings are held in the Cafeteria. Beekeeping class meets in the central hall Science Room.

Agenda: Each meeting is conducted with old and new business, and a program related to beekeeping. Attendees, if they choose, donate a gift for the raffle table. The Treasurer and Membership Chair sell tickets for $1.00 and at the break there is are refreshments available.