

The Natural SWARM

May 2018

Newsletter of The North Olympic Peninsula Beekeepers Association

The NOPBA promotes the common interest of beekeeping on the Peninsula, strengthens good bee management practices, and encourages good public relations between beekeepers and the general public.

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North Olympic Peninsula Beekeepers' Association

PO Box 3036
Sequim, Washington 98382
www.nopba.org

Membership \$10.00 per year

And the buzz goes on. There have been a few swarms reported around our region with some very healthy colonies coming out winter in great shape. Swarming bees in April may be a harbinger of things to come this season with recent record breaking warm weather and plenty of springtime forage combining to make ideal conditions for bees. The maple flow this year has been incredible. Now lets just hope we don't get hit with record breaking drought later in the summer.

Many new bees are coming into the region as well with package and nuc deliveries finally gaining momentum. In many ways, the later deliveries are a good thing as the fledging colonies with their new queens have an easier time getting off to a strong start. They are sometimes slow to begin taking syrup, but keep feeding. The young wax builders need sugar (and pollen) to draw out their comb. Another incredibly important nutrient for developing larvae is protein which they obtain from pollen.

Speaking of swarms, and following up on last month's visit to Dowsville Apiary, Jerry Dow reports one of his own swarms last week moved into his tree hive.



Jerry Dow (left) with Walt Wielbicki, two premiere top bar experts in front of Jerry's tree hive.

Little wonder after all, what better place for a colony of tree dwelling cavity nesters than a cavity dwelling in a tree? And what an interesting journey this latest generation of bees have had. Jerry began with a captured swarm of these bees' ancestors many years ago, which themselves swarmed into another of his hives a few years later and now, several years later again, have swarmed even once more into the tree hive pictured left. In keeping with Jerry's natural approach to beekeeping, this hive will not be opened nor disturbed in any way. Once again, both Jerry and Walt are more than happy to answer questions and share their mutual enthusiasm for natural top bar beekeeping. See last month's newsletter for more information.

In other exciting news, Jon has contacted both **Sue Cobey** and **Randy Oliver** and they **have both agreed** to come speak for us. This is potentially an incredible opportunity for us to hear from world renowned honey bee experts. Pending membership approval, they will be on the way! Let's do this !!

I'm out of space again - Thanks everyone, Greg

NEWS ALERT



Don't miss the May meeting ! Please join us for an impromptu Q&A with Dr. David Roubik who has agreed to come visit with us about bees. See this month's "Hive Tools" section for a short preview of the work he does.



A small portion of his collection display. Dr. Roubik has identified over 30 species of previously unknown bees.

Dr. David Roubik, Director of the Smithsonian Tropical Research Institute in Panama is a bee specialist. Dr. Roubik has been studying the roles bees play in large tropical ecosystems for over 40 years and was one of the first scientists to pursue the Africanized honey bees as they spread north from Brazil.

"I joined the Smithsonian in Panama to address an urgent need to predict the impact of Africanized honeybees as they spread north from Brazil. I came from an ecology and taxonomy background. My collaborators and I currently explore how the natural role of bees as pollinators, or as producers of human food and benefits, function and are maintained, even as agro-ecosystems push them around. I edit, write and review many publications, because we are advancing rapidly. There are bright spots — because novel communities are often sustainable — at least from a scientific perspective. I see competition among pollinators as a different kind of paradigm in ecology, because losers win and winners may lose. That is because they are within networks and actually feed one another, and change over time. I try to balance my research with field biology, academic depth, museum research, and applied goals, and have a splendid base for that at STRI."

Please Join Us - for an impromptu Q&A session with Dr Roubik, May 6th.

Happy Bee Day

Our President, (a.k.a. Capt. Ben A. Drill), begins his project this season with installation of 228,317 bees and 20 queens. We counted each one... (of the queens)



Our Next Meeting

May 6, 2018 - Port Angeles Library, Carver Room

12:00 noon - 12:50p Beginning Beekeeping Classes continue for the 2018 season. Topics include Splits & Swarms

1:00p - 1:30p NOPBA general business meeting.

1:30 - open tbd Dr. David Roubik, Q&A all and anything about bees.

Highlights

NOPBA continuing series of Beginning Beekeeper classes features splits and swarm management. Course material includes a printed handout (one-time \$5.00 fee) to accompany Mark's curricula.



Our Meeting is on May 6 one week early again this year due to Mother's Day on the 13th



MAY

sun	mon	tue	wed	thu	fri	sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

top left: package installs



left: Jon and Dan obtaining data for a VSH assay



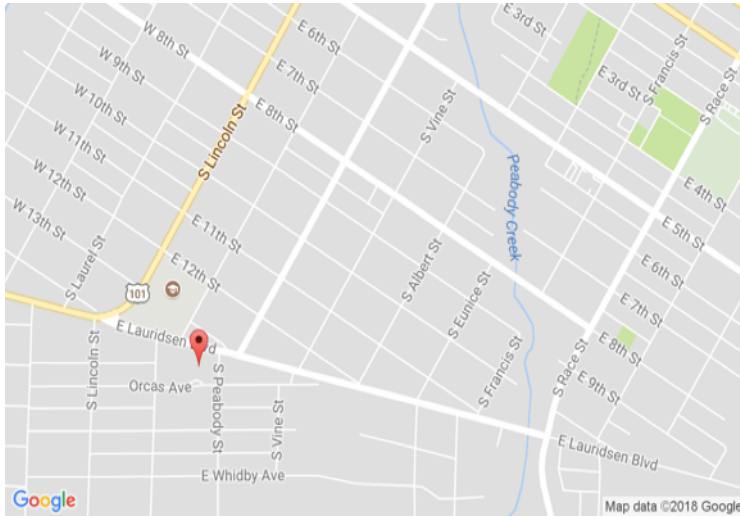


Club Buzz-ness

Meeting Minutes & Announcements

Coming Up

May 6, 2018 - Beginning Beekeeping Classes continue. Throughout the season, this series of one-hour **beginning beekeeping classes will be held starting at noon** prior to our general business meetings which begin at 1:00PM. **Today's class and meeting will be held one week earlier than usual due to Mother's Day.** Classes and meetings are held at the **Port Angeles Library, Carver Room**. 2210 S Peabody, Port Angeles, WA



Meeting Minutes April 8, 2018

The North Olympic Peninsula Beekeepers' Association met at the Port Angeles Public Library. President Jon Sawyer called the meeting to order at 1:05 pm.

President's Announcements Jon brought us up to date on Mike Radford's latest delivery schedule which remains variable. Top bar people are supposed to receive packages this year with everyone else on record of ordering, receiving nucs for the same price.

Vice President's Announcements Vice President Tyrone Beatty is managing the Swarm List and the Mentor/Mentee listings this year. So far only 8 mentors have signed up for 11 mentees, so if you are interested in either role, please let Ty know. A paid membership is needed to participate in either role as well as being included on the swarm list.

As Association Beekeeper, Ty reported that he has ordered 3 nucs destined for the club hives. It was proposed and voted without objection that the club reimburse Ty his expense of \$570 for this purpose.

Meeting Minutes March 11, 2018 - (Cont'd)

Beekeeper/Education report Mark continues his work with various school groups and the Washington Corrections Institution (prisoner's beekeeping program) out at Clallam Bay. He reports the 2 hives they began last year are still alive and that they have four very enthusiastic students ready to continue this year. Mark is very encouraged with their progress.

Mark will represent our association at the "Science Day" celebration on the Hollywood Beach Pier in downtown Port Angeles, Saturday April 28 where he have the booth set up if members want to help greet visitors.

Treasurer's report Chris reported 11 renewals and 4 new members with April balances.

Last month \$4414.46
In: \$140.00
Out: (\$102.48)
Ending Balance: \$4451.98



Treasurer's Report - April 2018	
Previous Balance	4414.46
Deposits	
	140.00
Expenses	
	102.48
New Balance	4451.98

Librarian report - Angela thanked everyone for the returned books, and announced she will be out of town at next month's meeting.

Secretary's Report Don't miss this year's T-Shirt pre-order. Due date is extended to May 6. Pre-order form is here:

<http://bit.ly/2018TShirts>



Meeting adjourned 1:24pm

Respectfully submitted,
Greg Butler
- Secretary

Presentation Topic: Jon Sawyer

Jon presented a quick overview of making splits and divides for the group. A link to his slidedeck is here:

<http://bit.ly/MakingSplits>



Bee Science Stuff

April 9, 2018

Consider this: A grain of salt weighs 58,500 nanograms. It takes only 15 nanograms of pesticide to kill a bee.

Researchers at Washington State University have developed a new material that attracts pesticide residue inside bees. Over time, pollen tinged with small amounts of pesticides accumulates in a bee's body, reducing the lifespan of each bee in a colony. "The new material acts as a magnetic micro-sponge that absorbs ingested toxic residues," said Waled Suliman, a postdoctoral research associate in WSU's Department of Biological Systems Engineering.

News clip : <http://bit.ly/WSUmicro>

Contact: Waled Suliman, postdoctoral research associate, WSU's Department of Biological Systems Engineering, 509-335-7950, walidsalem77@wsu.edu

April 9, 2018

What do olive oil, honey bees, and disease resistance have in common? Researchers at the UBC Foster Lab in Vancouver are beginning to paint a picture of the molecular mechanism behind the complex behavior of varroa sensitive hygiene (VSH), using odorants associated with freeze-killed brood as a model. When I visited the lab, I asked Alison how many honey bee antennae it took to obtain data for this study... she smiled and replied, "oh...about 70,000..."

A death pheromone, oleic acid, triggers hygienic behavior in honey bees (*Apis mellifera* L.) Alison McAfee, Abigail Chapman, Immacolata Iovinella, Ylonna Gallagher-Kurtzke, Troy F. Collins, Heather Higo, Lufiani L. Madilao, Paolo Pelosi & Leonard J. Foster
<http://bit.ly/UBCFosterLab>

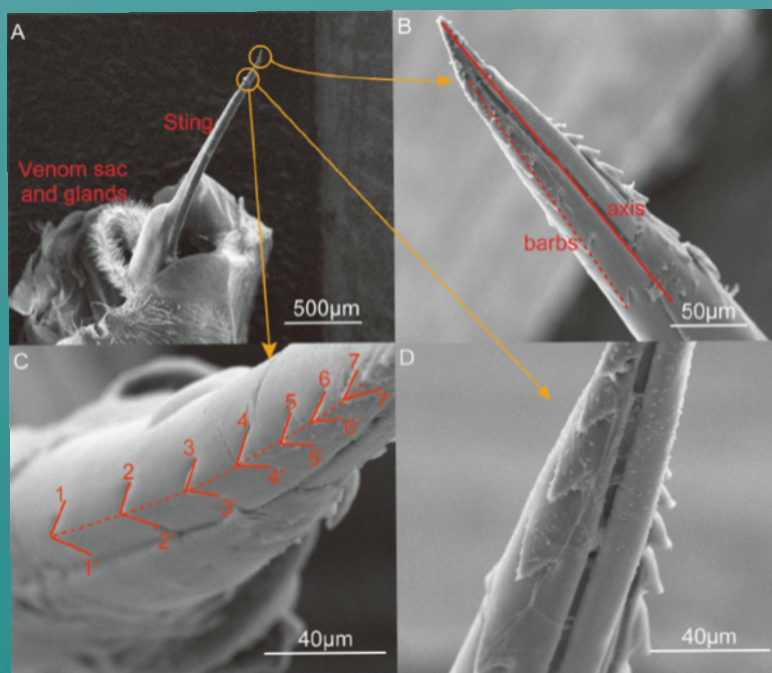
April 25, 2018 Scientific American just picked up on this research too.

<https://www.scientificamerican.com/article/scent-of-death-honeybees-use-odors-to-clean-out-deceased-broods/>



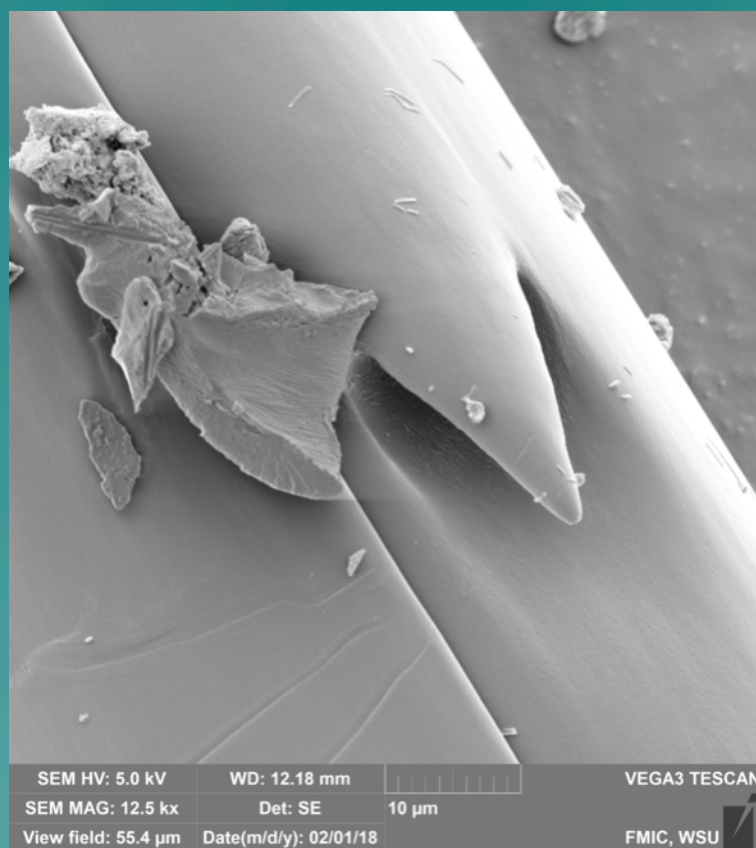
Honey Bees UpClose

A closer look at the honey bee stinger



Above: (A) The needle-like sting, venom sac, and related glands. The stinger is activated by the muscles to penetrate the skin of the victim. (B) Barbs along the axial direction of the sting. The stinger of *Apis mellifera ligustica* has two rows of barbs, each of which comprises about 10 barbs. The row of barbs forms a right-handed helix. (C) Magnified view of the barbs. Barbs are relatively sharper near the tip of the stinger. (D) Magnified view of two rows of barbs.

Below: A mid-section of a single barb magnified 12,500 times



SEM HV: 5.0 kV	WD: 12.18 mm	VEGA3 TESCAN
SEM MAG: 12.5 kx	Det: SE	10 µm
View field: 55.4 µm	Date(m/d/y): 02/01/18	FMIC, WSU

Mark Urnes hosted our first field day of the new season that was held on Saturday April 14. We had a great turnout and enough of a break in the weather to open the hives at his apiary and observe his over-wintered bees. Mark has several overwintered Langstroth hives and the one Warré that was built by Walt a few years ago. The bees are doing incredibly well coming out of winter with a 100% survival rate and building up very nicely. We found lots of brood in all stages of development, many new drones, and all the queens (except for the Warre which was not taken fully apart.) An alcohol wash mite sampling technique was demonstrated on one hive with a count of ZERO obtained, and a sugar shake was done on another hive with a measure taken of 3%.

A big **thanks** to Mark and to all who participated. Another field day is in the works - if you missed this one, another one is coming soon.



Mark explains frame construction



Briefly opening the Warré for the first time in one year.



Dan steps up to get some practice handling frames



Top box of Warré hive with very nice foundation-less comb



Mark points out brood identification

The Library Table

Book & Movie Reviews

The NOPBA Library is managed and maintained by our Librarian Trustee Angela Regan

An enormous assortment of bee related material is available each month at the meetings for NOPBA members to borrow and share, take home and return. Since this is community property, we have to stress the "return" part. The library also accepts donations of books. (The older the better)

Bee Book Review

Bee Time: Lessons From The Hive. (2014).



"The experience of an apiary slows our sense of time, heightens our awareness, and inspires awe." Many of us know or have met Dr. Winston and his book **Bee Time** presents his reflections on three decades spent studying these creatures, and on the lessons they can teach about how humans might better interact with one another and the natural world. It is a wonderful book.

Have a book or movie to review? Let us know!



Hive Tools

Resources, Links, Subscriptions, News, Blogs, and More

May Featured Highlight

A short video featuring Dr. David Roubik's work with bees. *Finding Out How Nature Really Works* : <http://bit.ly/Roubikbees>

Sites of General Interest

Washington State Bee Keepers News, education, events <https://wasba.org>

Bees and Beekeeping Equipment <http://wasba.org/wsba-sponsors/>

Honey Recipes <https://www.honey.com/recipes>

IPM/Honey Bee Health/Projects/Research

Tools for Varroa Management, Honey Bee Health Coalition https://honeybeehealthcoalition.org/wp-content/uploads/2015/08/HBHC-Guide_Varroa-Interactive-PDF.pdf

Bee Informed Partnership, collaborative efforts from across the US focusing on healthier bees <https://beeinformed.org>

USDA Honey Bee Lab, Baton Rouge, Robert Danka <https://www.ars.usda.gov/southeast-area/baton-rouge-la/honeybeelab/>

Washington State University Bee Lab <http://bees.wsu.edu>

WSU Short Queen Breeding Video <http://bit.ly/QueensWSU>

Project Apis m. <https://www.projectapism.org/about-project-apis-m.html>

University of Minnesota Bee Lab, Marla Spivak <https://www.beelab.umn.edu>

Wintering of Colonies <http://capabees.org/content/uploads/2013/02/winteringpdf.pdf>

UC Davis Apiculture http://elninobeelab.ucdavis.edu/apiculture_newsletter.html

Bee related Blogs

Kathy Keatley Garvey <http://ucanr.edu/blogs/bugsqwad/>

Dr. Mark Winston <http://winstonhive.com>

Randy Oliver <http://scientificbeekeeping.com>

Ron Miksha <https://badbeekeepingblog.com>



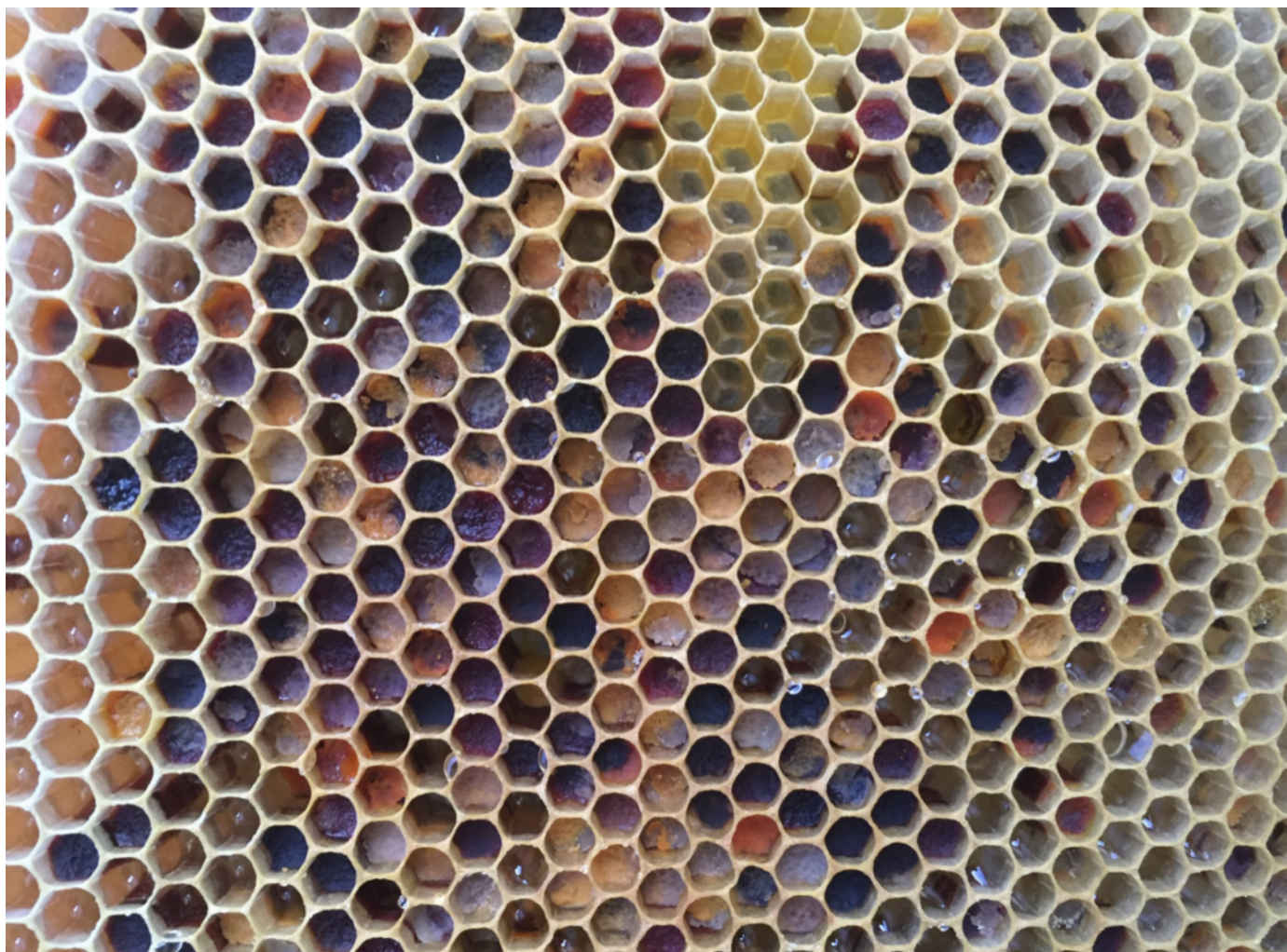
Helpful Hints and How-to's for the Beginning Beekeeper



“I’ll have the Pollen... with a side of Honey”

Learning to recognize the contents of brood frames is interesting and useful. Many pollens have evolved to be attractive to and edible by bees. The most important constituent of pollen is protein and pollens contain anywhere from 6 to 28% protein and are virtually the only source of protein naturally available to bees. Once brought back to the colony by the foragers, the workers treat it to prevent germination, begin a preliminary digestion process, and prepare it for long term storage. The exact chemical nature of the substance produced by the bees hypopharyngeal and mandibular glands (a phytocidal acid) is still not known, but it prevents the pollen from germinating. There is possibly some beneficial bacterial action also taking place as a result of digestive enzymes added by the workers.

The enzymes added with honey when pollen is packed in the cells prevent anaerobic metabolism and fermentation which contribute to the longevity of stored pollen in the cells. When the pollen has been completely processed for storage it is often referred to as “bee bread,” since it is now ready for ingestion and digestion by bees. The pollen digestive process by both larvae and adults is quite complex and not yet well understood. The amount of pollen to rear a single worker has been estimated at 125-145 mg, containing about 30 mg of protein (approx. 1/100 the weight of a sugar cube). A colony’s annual requirements vary, but figures ranging from 15 to 55 kg have been reported (33 to 122 pounds).



A diverse variety of pollens from many floral sources are essential for bee health

North Olympic Peninsula Beekeepers Association



Beginning Beekeeping Class

SUNDAY, MAY 6, 2018

12:00 NOON

PORT ANGELES LIBRARY, CARVER ROOM



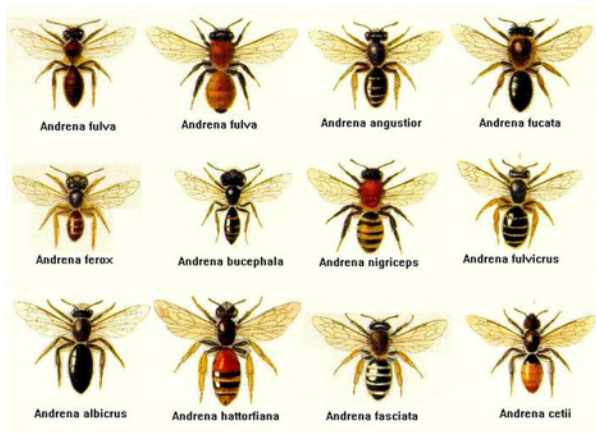
Beginning Beekeeping Classes continue for the new season. The one-hour beginning beekeeping classes follow the season starting at noon prior to our general business meetings which begin at 1:00PM. The classes and meetings are held the second Sunday of the month unless otherwise noted, with no meeting in December. Classes and meetings are held at the Port Angeles Library, Carver Room.

2210 S Peabody, Port Angeles, WA

info@nopba.org Membership \$10.00 per year

Notes From the Wild Side

Meet *Andrena*



The *Andrena* bee (family *Andrenidae*), are also known as "mining bee", "digger bee", and "solitary bee". Many species are medium-sized bees with reddish-golden hair and long, prominent abdomens. Females excavate tunnels in the soil that branch off to individual cells that the female stocks with pollen balls and nectar, on which she lays her eggs. There may be one or two generations per year. The adult has a relatively short and pointed "tongue," unsuitable for general foraging but, within each species, adapted to nectar-gathering from certain types of flowers.

Andrena bees dig holes in the ground to provide a safe nesting place where they can lay their eggs and the young bees can develop before emerging the following year. Unlike honey bees or most bumblebees, *Andrena* species are solitary and work on their own to build a nest and collect pollen for the young to feed on, but there might be many nests concentrated in a small area, giving the impression of colonial activity. Male *Andrena* bee is much smaller than the females counterpart, and not as brightly colored, they play no part in nest building or providing for their offspring.

Harmless pollinators

As the name "Tickle Bee" suggests, *Andrena* bees are totally harmless and will not sting. In fact, they are incredibly useful pollinators in the garden. Their nests will not damage the lawn and the little earth mounds will disappear after a couple of weeks, so there is no need to remove them or try to discourage these little bees... **Simply enjoy them!**

A flyer from our neighbors in Kitsap County:

Saturday, May 19, 2018
AZ Hive Day
&
World Bee Day



We would like to invite interested beekeepers to Debra's home to share, experience and learn a little about the AZ Slovenian hive on Saturday, May 19, 2018. The United Nations declared May 20 (Sunday) World Bee Day. We are doing Saturday for convenience of travel.

Debra has two AZ Style hives that are built in a shelter. She plans on opening the yellow hive at 10 am and the blue hive at 1 pm. Dana will have his 5 frame Nuc and display hives for discussion. At noon we can eat, talk bees and AZ hives.

Things to know:

- We plan on having a simple handout, and information on design.
- Bring something for potluck lunch and drink. Casual set up.
- Bring your bee suit/jacket and veil.
- Donations will be accepted, but not required, towards an AZ hive at the club apiary for education and AZ education costs we are incurring. More information available on request.

Directions will be sent upon request. We want to have an idea of numbers and don't want to publish all info to the public. Debra lives in Tahuya, WA, USA. If you drive far there are places to stay overnight.

Hope to see you here,
Debra Langley-Boyer & Dana Schack
DDBoyerMM@msn.com
360-372-2430

Feel free to share this information.



The Exchange



Buy - Sell - Trade - Want - Need - Giveaway

PRIVATE LANDOWNER, Sequim, near the marina. Interested in pollinator conservation willing to site bees for a small amount of honey. Bee owner to maintain hive(s). Call Carole or Bob, (360) 681-2297
1/4/2018

From Mike Radford, Northwest Bee Supply:

Mike's latest date shows May 5th for nuc deliveries

northwestbeesupply.com



~ **Advertisement Space** is obviously available ~

Please call, email, or catch me at a monthly meeting

THANKS!


Greg Butler
info@nopba.com

360 460-5635



North Olympic Peninsula Beekeepers' Association

Local Websites

 - NOPBA Member



Olympic Wilderness Apiary <http://wildernessbees.com>



Sequim Bee Farm <http://sequimbefarm.com>



Northwest Bee Supply <http://www.northwestbeesupply.com>



Your Website Here

Unassembled Medium 10 Frame Hive Body - \$16
Unassembled Medium Frame - \$1.60
Black Wax Coated Acorn Foundation - \$1.80

Combo Set:
1 Medium 10 Frame Hive Body
10 Medium Frames
10 Black Acorn Foundations

Painted & Assembled - \$69
Assembled - \$59
Unassembled - \$39

Jon Sawyer
Dry Creek Apiary
jon@cunninglogic.com
360-640-3822



~ Your AD Here ~

~ Your AD Here ~

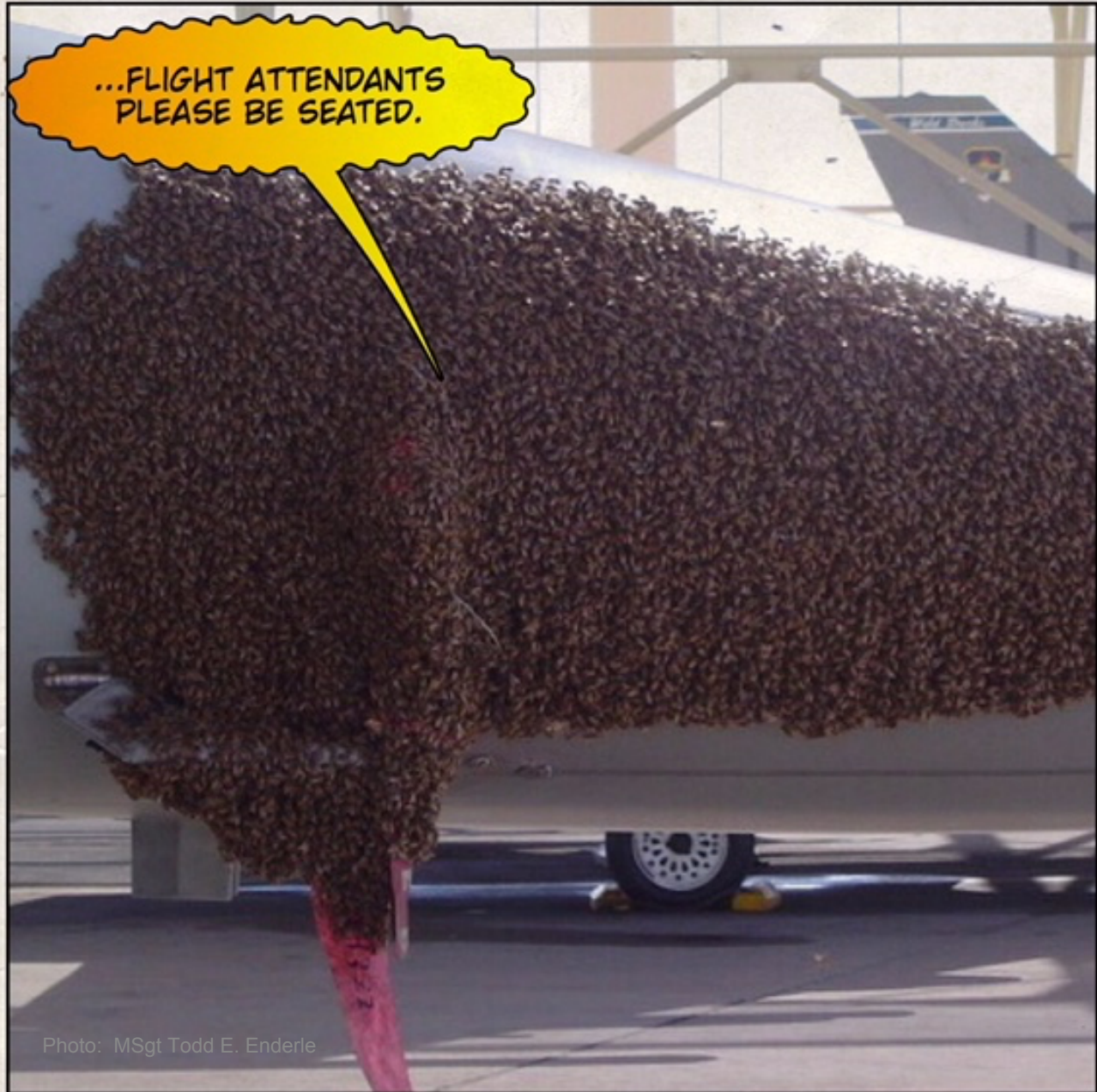


Photo: MSgt Todd E. Enderle



North Olympic Peninsula Beekeepers' Association

New Members are welcome at any time.

Annual Membership is still \$10.00

New Member ☐ Renewal ☐ Donation ☐ Date _____

Name _____

Address _____

City _____ State _____ Zip _____

Email _____

Phone _____

Area(s) of Beekeeping Interest _____

Office Use Only:

Recvd Amt _____ Date _____ Initials _____

NOTES:

Instructions:

1. Fill out form
2. Enclose check for Annual Dues of \$10.00
3. Mail to:

NOPBA
PO Box 3036
Sequim, WA 98382

THANK YOU FOR YOUR SUPPORT