

# The Natural

# SWARM

March 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.

## Inside This Issue:

Welcome  
President's Message  
Next Meeting  
Club Buzz-ness  
Bees In The News  
Upcoming Events  
The Library Table  
Hive Tools  
From the Archives  
Tips & Tricks  
A Moment with the Mentor  
NOPBA Bee Project  
The Exchange  
The Stinger  
New Membership & Renewal



North Olympic Peninsula Beekeepers' Association

PO Box 3036  
Sequim, Washington 98382  
[www.nopba.org](http://www.nopba.org)

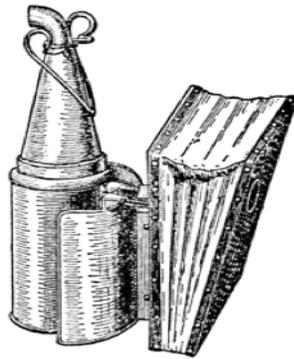
Membership \$10.00 per year

**Several beekeepers from around our region** are reporting BEES IN THE AIR! and POLLEN COMING IN! If this is your situation, congratulations! Needless to say, we are all more than ready for a little break in the chilly weather. We are just on the leading edge of this season's first nectar and pollen flows with the alders, maples, willows and hazelnuts (birches) beginning to break bud. A partial listing of the more important bee-centric forage for our region along with their blooming schedules has been included in this month's edition. Downloadable here: <http://www.pugetsoundbees.org/wp-content/uploads/2014/06/Forage-W-of-Cascades.pdf>

If this will be your first year with bees, congratulations to you as well! Our association includes an informal mentor/mentee program you may want to consider as the first step in getting off to good start. Basically, the program pairs our more experienced members with our newer members and provides a place to get advice for those situations where you run into the inevitable questions that will come along. Many times simply having the ability to discuss a specific local issue in your apiary (rather than watching a YouTube video that doesn't quite apply) will resolve your concerns and put you back on track. Sign up sheets will be available at our next monthly meeting.

**We will have to wait another month** for the kick-off feature highlighting our members and their apiaries. The weather has just not cooperated enough yet. So stay tuned (hopefully next month) for the feature presentation of Dowsville Apiary where we will be meeting Jerry Dow. However, this month we do have an announcement from Jerry where he is offering **THREE of his handmade Tanzanian Top Bar Hives (TTBH) for sale**. Jerry needs to make room in his apiary for new Japanese Warré Hive styles he will be experimenting with. The TTBH hives he has for sale are completely ready to go and even include the drawn comb. They are all ready for bees (or a swarm this summer?) to move in. Details and photographs of these hives are featured in our *Exchange* section.

**A couple of weeks ago I attended the week long 2018 Bee Masters seminar** at the University of British Columbia in Vancouver. The normal two or three minute border crossing into Canada went well beyond five minutes as the border official kept asking me questions about beekeeping. In the end, he wanted



to know how long it would take him to become a beekeeper as the subject has always "interested" him. I told him he could become a bee - *haver* overnight, but it would take a lifetime to become a bee-keeper... with that he welcomed me to Canada and I was finally on my way.

The seminar, as advertised, was not so much about "beekeeping" as it was about honey bee science. The week was filled with presentations and laboratory demonstrations from genetics research, to diagnostics and control of pests and diseases, to pollinator habitats, queen rearing and selection, impacts of pesticides, and other topics relating to basic honey bee biology. I am happy and very proud to report that I did receive a passing grade on the three hour final exam which was really quite challenging. (A requirement for the prospective Canadian Apiary Inspectors). But...I am not even going to pretend I understood everything...for example, **you would not believe** the absurd number of metabolic pathways that have been identified for bees to utilize carbohydrates...

**There were many very interesting topics.** One example. We are familiar with the notion of the "super-organism", where honey bees live as cooperating individuals in overlapping generations to support their survival at the colony level. Dr. Renata Borba presented her study that dealt with bees' collection of plant resins. The therapeutic benefit of propolis at the colony level was measured by looking at the immune activity of individual bees. She found the presence of a robust propolis envelope inside a nest cavity improved the capacity of nurse bees to mount a stronger immune response in the presence of both Chalkbrood and American Foulbrood, compared to bees in colonies with no propolis envelope. (Of course our "Darwinian" friends already knew this, but it's always nice to have measureable confirmation of what we suspect "might" be true.)

So...it turns out the presence of a propolis envelope has the effect of turning down the "RPMs" of the bees' individual immune systems which benefits the entire colony by allowing them to utilize their energies elsewhere rather than having to ramp up to fight off these diseases. In our *HiveTools* section this month, I have provided a link to a more condensed version of our presentation that was recorded earlier at the University of Minnesota. Hope you enjoy.

I'm out of space again. Thanks everyone

-Greg

# Vice President's Message

- by Tyrone Beatty 

Hello all Club Members!

I am truly excited about the prospects of strengthening our local population of bees through our new "Better Bees" Program! In an effort to aid from the get go, I decided to get my new bees this year from Old Sol Bees. The local distributor on the peninsula is Tarboo Valley Bees in Quilcene. I am buying 8 packages from them 2 or 3 of which will be for the club. I thought I would give you a little background on why I picked them versus others.

Old Sol Bees, as a family owned business, has been in the business of sustainable agriculture and healthy environment since its inception on 1997. Since then they have worked with organic gardening, sustainable permaculture and a very specific bee breeding program. They have created a "Survivor Stock" of bees through pressure selected process that weeds out weak traits and supports the stronger ones. Their current bee stock started from Minnesota Hygienic Italians and New World Carniolans. They were able to participate in many of the Dept. of Agriculutres bee breeding programs and were able to be one of the few that took advantage of the USDA Russian mite restitant stock. Throughout the years their stock has been weeded and culled to become what they have now: a mix of Mlnnesotan Hygeinic Italian, Carniolan Feral, Russian, Varroa Sensitive Hygienic(VSH), Supressed Mite Reproduction, (SMR) and most recently Caucasian.



The hope is that these bees will serve as a spring board, in addition to what were are doing here in our club, to strengthen our current bee population. As you can imagine, it sounds pretty exciting to me as I hope it does you! I hope to monitor these new hives as well as my own and hopefully, we will be moving in the right direction!

-Ty



Let's grow some bees. Anyone looking forward to swarm season ?

# Our Next Meeting

March 11, 2018 - Port Angeles Library, Carver Room

**12:00 noon - 12:50p** Beginning Beekeeping Classes continue for the 2018 season. Topics include Beekeeping Equipment

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

**1:30 - open tbd** Topic: Assessing Varroa

### Meeting Highlights

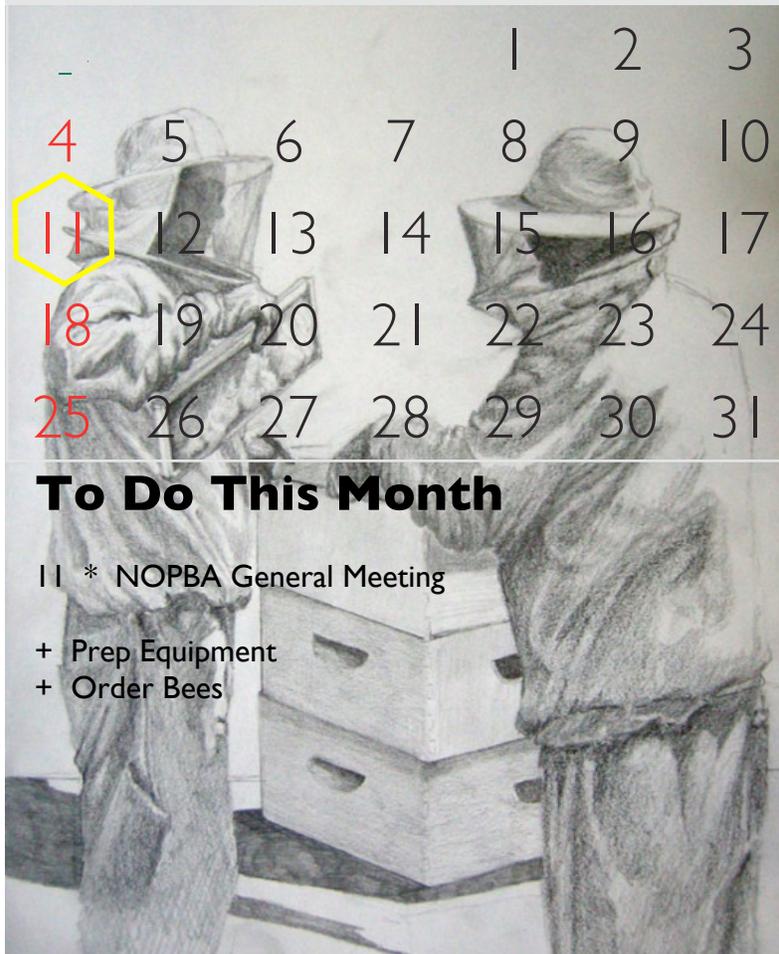
- \* NOPBA continuing series of Beginning Beekeeper classes will feature beekeeping equipment and sources for obtaining bees. Course material includes a printed handout (one-time \$5.00 fee) to accompany Mark's curricula.
- \* Our business meeting will be followed by a short review of Varroa biology and the importance of obtaining sample measurements in order to evaluate management options.
- \* Mentor/Mentee sign-ups will be available

# MARCH

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

## To Do This Month

- 11 \* NOPBA General Meeting
- + Prep Equipment
- + Order Bees



Background in Charcoal Pencil, by Debbie Johnson



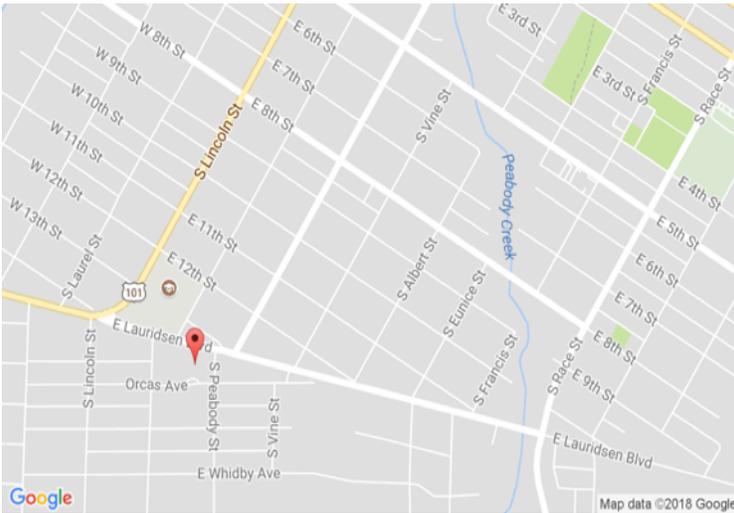
# Club Buzz-ness

## Meeting Minutes & Announcements



### Coming Up

**March 11, 2018 - Beginning Beekeeping Classes** continue for the new season. 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. 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



## Meeting Minutes February 11, 2018

The North Olympic Peninsula Beekeepers Association held a general business meeting at the Port Angeles Library. President Jon Sawyer brought the meeting to order at 1:13pm

President's announcements were as follows:

- the Dept. of Agriculture House Bill 2640, and its passing reducing beekeepers liability if someone were to bring suit to them if harmed by a bee from their orchard.
- registering your apiaries with the Dept. of Agriculture being mandatory but not being enforced. If the bill was passed and your hives were registered then you would be covered to some extent by Bill 2640.
- field days: April's would be for mites, May's would be for Splits, and June would be queens.

Vice President's announcements were as follows:

- signing up for mentor/mentee and the swarm list and the importance of being a member to do so.
- make sure that if you are indeed interested in either to make it known on the meeting sign in sheet, or new member form.
- will have sign up sheets for both next meeting.

## Meeting Minutes February 11, 2018 - (Cont'd)

Beekeeper/Education report:

- Currently has only hive the Warre Hive which is doing spectacular, has worked through one box of honey and working on a second now. Discussed moving it to Sequim. VP will touch base with Mark about doing that.
- also discussed the difference between the types of hives. (Moved to education a little)
- getting into the swing of things with the club's noon education classes. Next month's topic will be equipment and touching on ordering, with following month on installation
- ordering should be good from now through mid march, and price is better at the beginning of the season. Not sure of availability due to various reasons but touched on various venues from which to order bees.

Treasurer's report:

- Last month 4,292.12
- In: \$256, 5 new and 19 renewals, and various donation items
- Out: Paid for domain and web hosting: \$280.17 and PO Box: \$64
- Ending Balance: \$4203.95
- Discussed renewals with any needed updates to emails or contact info and new member sign up with yearly membership fee of \$10.

Librarian report:

- Thanked for returned books
- discussed name tags, for both new and current members. If you don't have a name tag let her know. She also has to add stickers for updated length of time being a beekeeper.

Education:

- a couple of classroom for their pollination sections already in the books: one in Sequim and also here in PA.
- also slated to go back out to the Clallam Bay Correctional Center at the end of Feb first of March. NOT sure if it will be a full course or just a general presentation on bees. Last year, the program they started there did surprisingly well, with even a surplus of honey to extract. There were 2 colonies and not sure how they fared through the winter but that will be evident when Mark touches base with them. There is a whole new group interested but hopefully it will become self sufficient. There were roughly about 30 people enrolled last year but we will see. Program is being run through the auspices of the Sustainable Prison's Program which is run through Evergreen College.
- also like to touch base with some of the schools as well.

New Business again ? None

Motion to adjourn by Barbara Powell and Seconded by Jon Joseph at 1:30pm

Submitted by Tyrone Beatty  
Vice President





## Bees In The News

January 4, 2018

To date, more than 24 viruses have been identified in western honey bees (*Apis mellifera*). These viral infections can result in a range of symptoms, from no obvious phenotype to rapid death and colony loss, depending on the viral species, viral strain, physiological state of the host, and presence of other stressors. However, despite the importance of bees as pollinators of flowering plants in agricultural and natural landscapes and the importance of viruses to bee health, our understanding of bee viruses is surprisingly limited: despite the diversity of bee species and their worldwide distribution, the vast majority of the studies examining bee pathogens have focused on western honey bees (*Apis mellifera*) populations in North America and Europe.

<https://www.biorxiv.org/content/biorxiv/early/2018/01/04/243139.full.pdf>

**February 28, 2018**

The European Food Safety Authority compared the expected levels of neonicotinoid pesticides to which bees are likely to be exposed in the environment to those that cause effects to bees. Whenever the estimation of the environmental contamination was higher than the levels considered safe for bees, a high risk was concluded. For all the outdoor uses of these substances, there was at least one aspect of the assessment indicating a high risk, leading to the conclusion that overall these neonicotinoids represent a risk to bees.

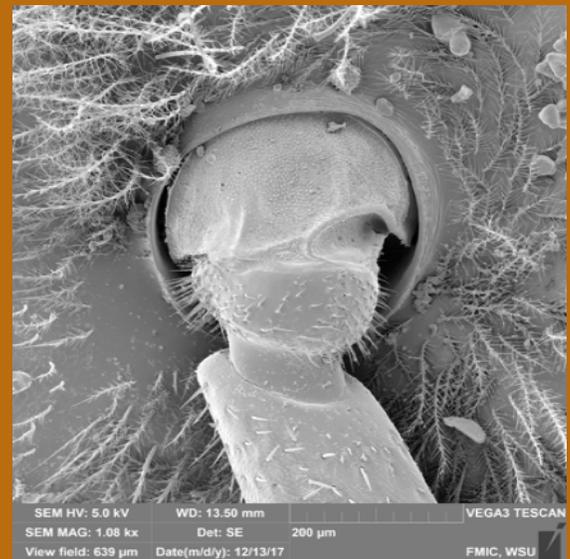
<https://www.efsa.europa.eu/sites/default/files/news/180228-QA-Neonics.pdf>

## Honey Bees Up-Close



PHOTOGRAPH BY Charles Krebs, Issaquah, Washington

More SEM micrographs from Megan Asche at the WSU Bee Lab. This month we take a closer look at the base of an antenna where it emerges from a honey bee's head. Note the distinctive plumose hairs for collecting pollen. The antennae are adult bees' primary sensory organs.



Magnification at 1,550 ×  
The ovoid particles are pollen grains.



# Upcoming Events



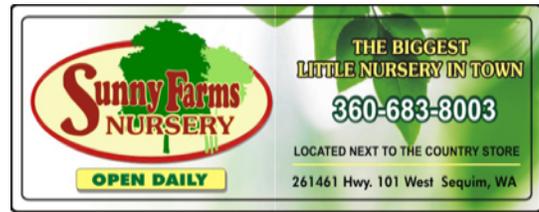
## **Sunny Farms Beginning Beekeeping: 9:00 AM, Saturday, March 10, 2018**

A beginning beekeepers general orientation class will be held to help new beekeepers get off to a good start. An introduction to beekeeping equipment and methods, installing new colonies, handling and feeding your bees, colony resource requirements, and more.

Instructor: Mark Urnes, NOPBA Beekeeping Instructor

Registration: Free

OPEN SEATING, class begins at 9:00AM until about noon. This popular class is usually SRO, so arrive early.



## **Lecture: Honeybees - History and Future: 12:00 pm - 1:00 pm, Thursday April 12, 2018**

Presented by Meg Depew, Sequim Bee Farm. This lecture is part of the Thursday "Brown Bag" series organized by the Clallam County Master Gardeners.

Registration: Free

Location: Clallam County Courthouse, Commissioners' Room

## **Road Trips**

### **Trifecta Beekeeping Event - Hood River, OR Saturday & Sunday May 19 & 20, 2018**

Sponsored by Brushy Mountain Bee Farm

Best Western PLUS Hood River Inn in Hood River, OR

Time: 9:30 am - 4:30 pm

Guest Speakers: Dr. Thomas D Seeley, Dr. Andony Melathopoulos, and Alison McAfee

Topics: Honey Production, Bees & Agriculture, Honey Bee Hygenics & much more

Early Bird Pricing (\$85.69) now through March 31st. After April 1st, moves to the regular price of \$95.88

Also join us Saturday, May 19th, as our Guest Speakers conduct 'in-hive' presentations.

Limited seating available. \$49.37 per person. [Reserve your seat at the pre-event now.](#)

### **Queen Rearing and Bee Breeding Workshop: June 15 & 16, 2018**

Improve understanding of queen rearing, bee breeding systems and selection methods though a combination of presentations and hands-on demonstrations. Includes advanced techniques of instrumental insemination and cryopreservation.

Instructors: Susan Cobey, Jennifer Han, Brandon Hopkins, Melanie Kirby, Tim Lawrence, Nick Naeger and Steve Sheppard. We will also have two outstanding guest speakers from abroad, Jeri Wright from UK to discuss bee nutrition and Gennaro Di Prisco from Italy to present his breeding project in Italy.

Registration is \$275/person

Registration Form: [Queen Rearing and Bee Breeding Workshop Registration Form](#)

Location: Washington State University, Pullman campus



# The Library Table

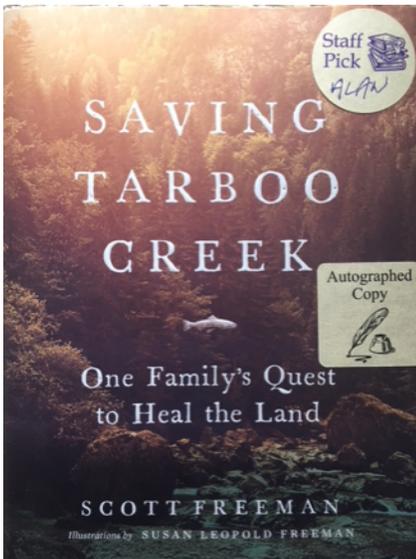
## Book & Movie Reviews

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)

### Habitat Conservation/Restoration Book Review

*Saving Tarboo Creek* (2018).



Although not specifically a book about "bees", *Saving Tarboo Creek* is about the bigger subject of bee habitat and more. Plus... it's local, right here on the Peninsula. In 2004, Scott Freeman and his wife Susan Leopold Freeman (grand-daughter of Aldo Leopold of *Sand County Almanac* fame), bought 17 acres of property straddling Tarboo Creek down by Quilcene where more than a century of ditching, channeling, and clearcutting had degraded an ancient salmon run.

In the modern world of increasing habitat loss, doom and gloom, and industrialized anthropocentrism, this book is an uplifting chronicle of work that these people have done to rehabilitate a degraded fish run in what once was an old growth forest. From choosing the creekbank flora for planting, to tracking the return of the wildlife, to witnessing the returning salmon, the Freemans have proven how people can make a difference that can be seen and felt on the land. I've been needing something refreshing to read and this book did it.

Scott Freeman teaches biology at the University of Washington and is recognized as a world authority on undergraduate biology education. Susan is an artist who illustrated the book.

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



# Hive Tools

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

### March Featured Highlight

Dr. Renata Borba: Propolis and Disease Prevention presents at the University of Minnesota, and talks about the value of honeybee propolis and its uses by bees in disease prevention.

[https://youtu.be/PXd\\_8h9U5EE](https://youtu.be/PXd_8h9U5EE)

### Sites of General Interest

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

**Bees and Beekeeping Equipment** <http://wasba.org/wsbasponsors/>

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

### IPM/Honey Bee Health/Projects/Research

Tools for Varroa Mangement, Honey Bee Health Coalition [https://honeybeehealthcoalition.org/wp-content/uploads/2015/08/HBHC-Guide\\_Varroa-Interactive-PDF.pdf](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>

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://elminobeelab.ucdavis.edu/apiculture\\_newsletter.html](http://elminobeelab.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>



Pollen Color Chart for common honey bee forage



Beekeepers short list of **important pollinator forage** for Western Washington

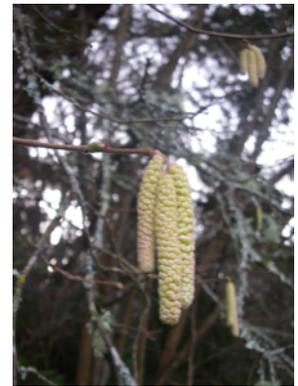
**Pollen / Nectar Plant Check List**  
**West of the Cascade Mountains, Washington**

(List not inclusive of all pollen / nectar plants. Rather, it lists the most important.)

<b>X</b>	<b>Plant Name</b> <i>Bold/Italic indicates very important forage for honeybees;</i> <i>* Indicates plant is considered to be noxious, but is important bee forage.</i>	<b>Bloom Time</b>	<b>Nectar / Pollen (N/P)</b>	<b>Native / Introduced (N/I)</b>
	Filbert / Hazelnut	Jan – Mar	P	N/I
	Alder	Jan – June	N/P	N
	Manzanita	Feb – May	N/P	N
	Willow	Feb – Aug	P	N/I
	Mustards	Feb – Aug	N/P	I
	Current – Wild	Mar – May	N/P	N
	Maple – Broadleaf / Vine	Mar – May	N/P	N
	Cottonwood	Mar – June	P, also Propolis	N
	Dandelion	Mar – Summer	N/P	N/I
	Elder	Mar – July	N/P	N
	Holly	Apr – May	N/P	N
	Oregon Grape	Apr – May	N/P	N
	Pear	Apr – May	N/P	I
	Apple	Apr – May/June	N/P	I
	Cherry	Apr – June	N/P	N/I
	<b>Blueberry – Huckleberry</b>	<b>Apr – June</b>	<b>N/P</b>	<b>N</b>
	Cascara sagrada (Bearberry)	Apr – June	N/P	N
	Honeysuckle	Apr - June	N/P	N/I
	Sunflower	Apr – July	N/P	N
	Brassica Family (in flower)	Apr – July	N/P	I
	<b>*Blackberry</b>	<b>Apr – July</b>	<b>N/P</b>	<b>N</b>
	<b>Raspberry</b>	<b>Apr – July</b>	<b>N/P</b>	<b>N</b>
	Madrona	May	N/P	N
	Cranberry	May – June	N/P	N
	Hawthorn	May – June	N/P	N
	Locust – Black, Yellow	May – July	N/P	N
	Pine	May – July	P, also Propolis	N
	<b>Snowberry / Indian Current</b>	<b>May – Aug</b>	<b>N/P</b>	<b>N</b>
	Bindweed (Morning Glory)	May – Aug	N/P	N/I
	<b>Vetch</b>	<b>May – Aug</b>	<b>N/P</b>	<b>N/I</b>
	<b>Clover</b>	<b>May – Oct</b>	<b>N/P</b>	<b>I</b>
	Buckwheat	May – Oct	N/P	N
	*Knotweed	May – Oct	N/P	I
	<b>Fireweed</b>	<b>June – Aug</b>	<b>N/P</b>	<b>N</b>
	Cucumber	June – Aug	N/P	N/I
	*Ivy, Boston	June - Sept	N/P	I
	Alfafa	June - Sept	N/P	I
	<b>Bird's Foot Trefoil</b>	<b>June - Sept</b>	<b>N/P</b>	<b>I</b>
	<b>*Knapweed (Star Thistle)</b>	<b>June - Oct</b>	<b>N/P</b>	<b>I</b>
	Corn	July – Aug	P	I
	<b>Goldenrod</b>	<b>July – Oct</b>	<b>N/P</b>	<b>N</b>
	Various culinary herbs if allowed to fully flower; thyme, oregano, lavender, marjoram, rosemary, mint, etc.	July – Oct	N/P	N/I
	*Ivy, English	Sept - Nov	N/P	I



Alder catkins



Hazelnut (Birch Family) is the earliest shrub to bloom. Its long catkins are a welcome sight in the garden in late winter. The autumn yellow leaves are one of the brightest in fall.

Sources: Ayers and Harman, 2008, *The Hive and the Honey Bee*, Bee Forage of North American and the Potential for Planting for Bees, Dadant. Burgett, Stringer and Johnston, 1989, *Nectar and Pollen Plants of Oregon and the Pacific Northwest*, Honeystone Press. NASA website: <http://honeybeenet.gsfc.nasa.gov/Honeybees/ForageRegion.php>; downloaded March 1, 2001. Compiled for Master Beekeeper Research Paper by Franclyn Heinecke, 2011

Printable PDF for above list is here: <http://www.pugetsoundbees.org/wp-content/uploads/2014/06/Forage-WV-of-Cascades.pdf>

Other Links:

University of Washington Burke Museum. More than 2.4 million plant, fungal, lichen, and algal specimen records from the Pacific Northwest.

<http://www.burkemuseum.org/research-and-collections/botany-and-herbarium/online-resources>

Northwest Native Plants. A tremendous resource for native plants in our region.

<http://nativeplantspnw.com>

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



## Springtime Management Options

(excerpted from Ontario Beekeepers among other sources)

### For Queenless Colonies that are alive but “weak” (1-2 frames of bees)

If the colony has no eggs or brood (queenless), shake whatever bees are left into another colony, but make sure there are no signs of brood diseases. (Chalkbrood, AFB, excessive mites)

### But if the colony is queenright and has eggs and/or brood:

#### Option 1 - Boost

- consolidate the hive into a single brood chamber - close off any top entrance to reduce robbing - move cluster frame(s) to the middle of the box - (just scooch them over) - move distant honey frames closer to cluster
- leave entrance reducer in place
- boost population by donating nurse bees from stronger colonies
- gradually add frames of capped brood (if bees can handle covering the brood area)

#### Option 2 - Spring Combine *(note: this time honored method of strengthening bees has been proven for over 100 years)*

##### Combine with another colony:

- consolidate the weak queenright hive into a single brood chamber
- select a queenright strong colony at a nearby location
- gently remove strong colony's lid and inner cover with minimal disturbance (do not smoke either colony)
- place full sheet of newspaper on top bars
- make several slits in the newspaper
- put queen excluder on top of newspaper
- place weak queenright colony directly on top of strong queenright colony separated with queen excluder
- feed weak colony from the top

##### After 1 week:

Check weak colony for eggs, brood, queen

- if queenless, shake bees out, remove top box
- if queenright, wait for buildup

##### Once the weak colony has strengthened:

- keep as a two-queen colony until dandelion bloom

#### OR

- split into two colonies (remove top colony and place in a new spot with bottom board and lid)

## For Colonies that are dead:

What to do with a "deadout"

- brush dead bees off frames into disposal bags
  - scrape the bottom board clean (spray with 10% bleach)
  - scrape inner cover clean
  - any leftover honey frames can be given to alive colonies if there are no indications of brood diseases
  - provide entire brood box to a "strong" colony that needs space for eggs, food and bees - "retire" older frames (darker comb) and replace with new frames with foundation
  - store unused frames in closed cold storage, block bees and rodents from entering empty hive
  - spray 10% bleach solution to inside and outside of box(es) and let air dry
- Prophylactic antibiotic measures (such as Fumigellin-B) are NOT recommended for other colonies. If you suspect Nosema, get a test done first.

## If you find a dead colony, it could be due to:

### **Starvation**

- light in weight, bees with heads in cells (bees cluster w/ heads in cells, but heads in cells with light stores might indicate starvation)

### **Mite Damage**

- few bees, deformed wings, mites visible, dead brood

### **Queen Problems**

- queen has died, there were queen cells, drone cells, spotty dead brood pattern

### **Excessive Moisture**

- mold, moisture, dampness. All the mold you see did not kill the bees, it was more than likely excess moisture from improperly vented hive that killed the bees which became a perfect environment for mold growth.

### **Dysentery**

- fecal stains on top bars, front & top entrance, look for Brood Diseases (not necessarily Nosema)
- AFB - extremely contagious bacterial infection, look for punctured depressed cappings, foul smell, scale deposits inside cells, ropiness of cell contents. If AFB confirmed, double bag frames and haul to landfill or burn if it is not fire season.
- EFB - cells not punctured like AFB, larvae shrunken and twisted inside uncapped cells

### **Robbed out**

- Chewed cappings, residue at entrance

### **Rodents**

- chewed combs, wax pieces, nest materials

*Decisions we make in April effect our bees in September. Decisions we make in September effect our bees the following April.*

## For Colonies that are alive & “normal” (3-5 frames of bees)

Verify colony is queenright (no need to locate queen yet, just observe eggs, brood):

- sample mites / nosema for season baseline.
- reverse brood chambers if a double brood chamber only if bees are all in top box
- check the brood for disease, (mummies, punctured cappings, twisted larvae) laying pattern, eggs normal - center the cluster if needed - no need to pull cluster frames, just gently skooch it over.
- move feed frames closer to cluster
- feed colony if stores are low, begin pollen supplement
- close off top entrance to prevent robbing
- leave entrance reducer reduced

## For Colonies that are “boiling” (6+ frames of bees) - Congratulations

- sample mites / nosema for season baseline
- reverse brood chambers if a double brood chamber and bees in top box
- remove entrance reducer
- add empty drawn frames when a nectar source becomes available - optionally exchange “strong” colony’s spot with a nearby “weaker” colony mid-day when foragers are flying.
- have honey supers ready for early flows (maple, willow, dandelion)
- once reliable shirt-sleeve weather happens, and mature drones are hanging around, consider dividing up bees, eggs, and brood for a walk away split or make nucs.
- or... do nothing and let them swarm (if that’s what they want, that’s what they’ll do anyway..)

### **Warning!**

- strong colonies will be the first to starve during bad weather and later dearths
- during hive inspections, you will **NOT** see mites with visual observation. If you actually do see mites, sample immediately and evaluate alternatives.
- once you begin supplementing pollen do not stop until dandelion bloom



# A Moment with the Mentor

-by Walt 

*NOPBA Mentor, Walt Wielbicki is our top bar expert. This month he shares photographs of summer bees happily using top bar equipment that he made. If your interest is foundationless top bar (Warré, KTBH, TTBH, Layens) talk to Walt ! He knows as much about this subject as anyone.*



Do you have a question about beekeeping, beekeeping equipment, bees, or honey?

Send it in... one of our NOPBA mentors is here to help !

[info@nopba.org](mailto:info@nopba.org)

## North Olympic Peninsula Beekeepers Association



# Beginning Beekeeping Classes

Continuing Series

(It's never too late...please join us)

**SUNDAY, MARCH 11, 2018  
12:00 NOON**

**PORT ANGELES LIBRARY, CARVER ROOM  
2210 S PEABODY**



**Beginning Beekeeping Classes** continue for the new season. A series of 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](mailto:info@nopba.org) Membership \$10.00 per year

# NOPBA Bee Project

The NOPBA Bee Project remains in the planning stages. We are seeking the help of local beekeepers with this project aimed at increasing survival of locally overwintered queens by selecting for the heritable trait of Varroa Sensitive Hygiene (VSH).

## Background:

Review of relevant VSH literature is on-going. Collected listings of reference material are now available for download. Interested project participants may access the growing drive folder being maintained here: <http://bit.ly/2H1Bs3l>.

## Agenda of items for discussion:

1. Goals and timeline: What do we want to accomplish by this time next year? Spell it out on a piece of paper...
2. How will we measure interim progress/successes? Intermediate step progress, generate project timelines? (see 6.)
3. Determine how many queens club will start with? Dan is a tremendous resource for this project. Under Dan's guidance and approval, we should incorporate Olympic Wilderness Apiary queens (OWA stock) into this program as soon as possible. (personally, considering Dan's commercial status, I think he should "approve" about everything we do.) To take full advantage of Dan's leadership and experience, we must expect to fully compensate Dan for his queen stock, just as any breeding program would do. So possibly selling our queens could offset the expense for this purpose. Who wants to track income/expense for club financials if we go that route? Ideas? Obtain agreement w/ OWA from the beginning. How much involvement does NOPBA want?
4. How many mating nucs will need to be maintained? How many can we handle? Record keeping system?
5. What is our priority for selection criteria the first year? Plans for evaluating the queen mothers? Does anyone see need for freeze killed brood (FKB) assay since it does not seem to correlate with VSH anymore?
6. Need to identify time lines for precision record keeping (items for consideration)

Timelines definitions are interrelated - (*Jon - software for calendar calculator? A mobile app for this could be quite handy - and marketable to bee breeders...*)

"How long to":

- Install and accept breeder queen(s)
  - Initial queen laying / I.I. queens laying
  - Drones ready
  - Make up starters
  - Graft
  - Starters put into finishers
  - Cell culling ( oddballs capped too early/ misshapen cells/ not enough R jelly, etc)
  - Move cells into mating nucs
  - Evaluate mated daughters/ assay brood for VSH
  - rinse and repeat
6. Who wants mating nucs? Who wants to help **build** mating nucs? Who wants to donate material to build mating nucs? Where will mating nucs be? How will we track/maintain them? (VSH assays will help determine open mating or instrumental insemination - so that will be later)
  7. Be thinking about what we do with queens? (Need Dan's input again)
  8. If we will be needing more nurse bees along the way, maybe club project participants could donate bees, get a queen in return? Need a method to track who donated what and where their frames are in the mating yard(s). Need a single record keeping system for all this....
  9. Inventory. Fundraising. Who has what? What needs to be tracked? What equipment do we still need? What equipment items will the club pay for? Need cost estimates for potential budget. What is our budget? Need approvals. Apply for grant \$\$? Submit article for trade publications next year?
  10. Single drone I.I. comes in after first VSH assay? Drone(s) from where? Tracking mechanism for drone germplasm? Who was queen mother, etc?
  11. Need queen rearing and bee breeding workshops/presentations for participants/observers.
  12. Meeting schedules - could be a couple of times a week, and quite a few "all day" weekends. Who wants to document and update project status?

# 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:

The website says it all. Go to the Shop Now drop down menu and everything is there. You may need to refresh your page. Call me 907-360-8182.

We have some packages for the TB and folks with only westems. But everyone else got upgrade if already ordered to a five frame Nuc for no extra cost. NUCs are going to be better for all. I haven't been able in the past to get a NUC source but found a real good one.

[northwestbeesupply.com](http://northwestbeesupply.com)



~ Advertisement Space is obviously available ~

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

THANKS!

Greg Butler  
[info@nopba.com](mailto:info@nopba.com)

360 460-5635



## Local Websites



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

 **Sequim Bee Farm** <http://sequimbeefarm.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](mailto:jon@cunninglogic.com)  
360-640-3822



~ Your AD Here ~

~ Your AD Here ~

# The Exchange

Handmade Local Bee Hives



**Jerry Dow is making room** for new Japanese Warre style hives in his apiary and is offering the three hives shown on this page **FOR SALE**. Jerry is happy to answer any questions. Give him a call at 360-808-0181



*"I have 3 Tanzanian Top Bar Hives [TTBH] that I will not be using this year and I would like to offer them for sale. They are complete with my Eco-base, top insulation and rain roof. They include the top bars and some drawn comb. These hives have windows on both sides and are built with 1-1/2" to 2" thick walls. They are all hand built by me, in good working condition, ready to go and in a condition that may be attractive to passing swarms. I need the room in my apiary for the new Japanese Warre style hives that I am experimenting with."*



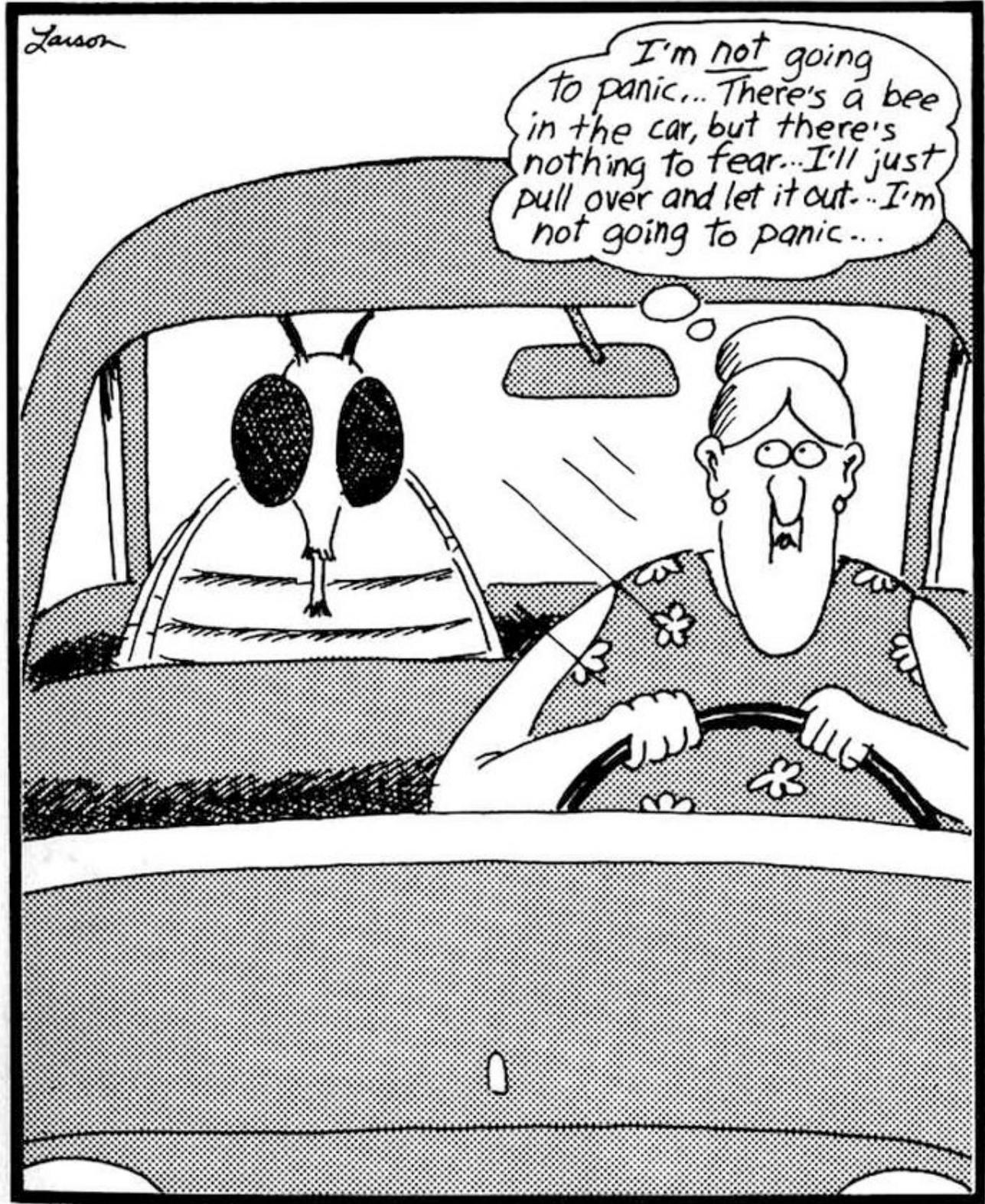
**"These hives are heavy and would require a truck bed to move with 2 persons. I will deliver locally if required, but with my back, etc., I would require some help. These hives are great observation hives, etc.."**

*Basically my TTBH's require a flat concrete block base or similar as shown, then just set in place and forget them. No boxes to ever lift or move in the future. This is the time to get these into a new place/home ready for swarms or new packages. These hives are the easiest hives that I have to start a package in of all hives. Just hang the queen from a top bar in her cage and set the open box in the rear of the hive, close the hive and the next day all of the bees will be with the queen and you remove the empty package box and replace the top bars, add a feeder.*



*My TTBH's are perfect for new or experienced beekeepers in my opinion, no heavy lifting, etc.. Just setup and leave the bees alone. \$375 individually, or all three for \$900.00 "*







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**