



# EJ'S NEWS

EJ is East Jefferson Beekeepers Association's Mascot.

Volume 11

Gloria Neal, Editor

January 2022

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East Jefferson Beekeepers'  
Meeting

Saturday, January 8, 2022

Chimacum Grange

9572 Rhody Drive, Chimacum

**Masks Required**

Board meeting 9:30 a.m.

Club meeting 10:00 a.m.

**MORE MEETING  
INFORMATION  
on Page 3**

## THE PREZ SEZ

January 2022

Dear Fellow Beekeepers,

Happy New Year.

I trust your hives are coping with the cold and snowy weather. Remember, this is the norm in much of the northern portion of our county so our recent experience shouldn't impact our hives much if you went into the winter well prepared.

You can be well prepared for any season by attending our meetings and taking the classes. Experienced beekeepers are encouraged to participate in the classes to refresh your knowledge and to add insights for the beginning beekeepers. We look forward to strong participation in 2022.

**Dave**

### WHAT'S THE DIFFERENCE BETWEEN A SUMMER AND WINTER HONEY BEE?

Winter bees spend their lives within the hive where they care for the queen, help the colony with temperature regulation, and as spring approaches, raise the brood that will inherit the colony in the new year. Winter bees can live 6 months, summer bees only 6 weeks.

"In late August to early September, the workers feed heavily on pollen, [bringing] their hypopharyngeal glands back into the plump form of the young nursing bee... [and] a considerable amount of fat, protein, and a storage carbohydrate called glycogen is stored in the body" (Hooper 2010). The difference is that winter hive bees are not exposed to brood, and therefore their hypopharyngeal glands are not stimulated to produce royal jelly in order to feed larval bees.

*Once that gland is stimulated, the aging process begins.* Until then, the bees remain as if suspended in time at "1 week old." Only when they start feeding brood does their life-clock start ticking again ....

**2022 EXECUTIVE BOARD****President:** David Morris**Vice President:** Rich Thomas**Secretary:** Susi Thomas**Treasurer:** Catherine Slaton**Trustees:**

Mike Kelley

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**ON-LINE CLASSES**

Mike Kelley, Rich &amp; Susi Thomas

**APPRENTICE CLASSES**

Rich Thomas et al.

**COMMUNICATIONS**

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**ACTIVITIES-EVENTS**

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**NEWSLETTER**

Gloria Neal

# LETTER FROM THE EDITOR

Hello EJ Beekeepers:

2022 is here and we are looking forward to lots of EJBee club activities like our on-line classes, but also getting back to our in-person classes. Classes have been set up so you can attend in person, have your questions answered, and then later review the same class on-line again at your convenience, and get more answers if needed. If you're anything like me, when I was a new beekeeper, it sometimes took hearing the beekeeping techniques a couple times to keep them all straight. So consider taking the classes again. If you are a paid-up member, both classes are free to you. And if you know of someone who is considering becoming a beekeeper, encourage them to come to our meeting in January.

Now is the time to check your stored bee equipment for repairs or replacement. Having everything in repair will give you an advantage as the spring season approaches.

Also, now is a good time to check your bee journal and map out any changes you might want to make in caring for your bees in 2022. If you didn't keep a journal last year, I would encourage you to do that this year. It can be a valuable resource for any beekeeper.

And with this snow, don't forget to check your hive entrances and clean out any dead bees clogging the opening.

Lifting the hive from the bottom back can also give you an idea of weight and whether your colony still has plenty of food stores to last through the winter.

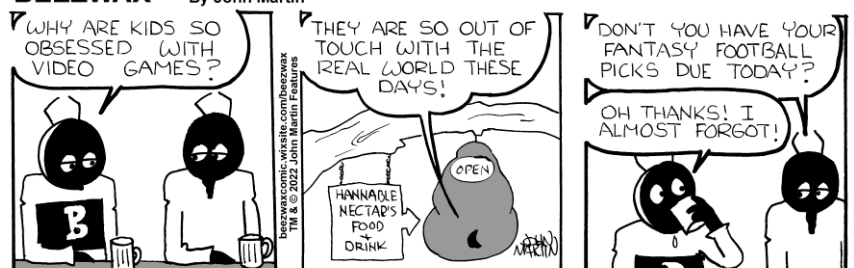
*That's the buzz for January.*

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**BEEZWAX**

By John Martin





## FIRST EJBEES' MEETING OF 2022 COMING UP IN JANUARY!

### **New Time, New Place, New Faces in the New Year**

Members, prospective members, and guests: please come to the first EJBees' meeting of the year on January 8, 2022. Meet at the Chimacum Grange, 9572 Rhody Dr. (Hwy 19), Chimacum, WA, which is across the highway from the Tri-Area Community Center and the Chimacum Schools.

Board meeting is at 9:30 a.m., and a 1-hour general meeting starts at 10:00 a.m. **Masks are required inside the building.**

Meet the 2022 Board members, hear plans for the year's activities, and learn some details about the upcoming, updated Beginning Beekeeping Course starting February 12. Some comments on the 2021 online class, apiary visits, and mentoring program will be offered by last year's participants.

Don't forget that annual membership dues are \$24/individual or \$36/family. Membership offers several benefits, such as access to our classes free of charge (*one must be a member to participate*); a mentor to help you get your apiary up and running; a discount on bee supplies at Tarboo Valley Woodenware and Honey Bees; and much more.

Dues can be paid in person at the January/February meetings, or by mail. To register by mail, simply send your check made out to EJBA along with name(s), full contact information, and intention to take the beginning class, if that is the case, to **EJBA, PO Box 1984, Port Townsend, WA 98368.**

It will be a pleasure to see all our friends and fellow beekeepers again in the new year, and to give a warm welcome to newcomers as well.

Susi

### **TAKE IT AGAIN, SAM! (The EJBees Beginning Beekeeping Course, that is!)**

We would like to encourage all of those who took the **Online** Beginning Beekeeping Course *last* year to become active BEEKEEPERS *this* year, and if possible, to participate in the 2022 **In-Person** Beginning Beekeeping Course. The live classes are being offered at Chimacum Grange every other week from February 12 through April 9, taught by experienced beekeepers from our bee club. These 2-hour sessions will bring new perspectives and new information to add to the online class material that you have already visited one time through. In addition, we will schedule an apiary visit for those who want a hands-on experience. [**Note:** masks will be required for the indoor classes at the Grange.]

Along with the illustrated, spoken presentations, the classes include demonstrations of woodenware, tools, and bee-handling techniques to make new beekeepers comfortable when working with honey bees.

Concurrent with the course in Chimacum, the corresponding units of the online version will be posted on the EJBA blog site, [ejbees.com](http://ejbees.com), where they will remain for the year. Those taking the classes in person can use the online presentations for review, while participants in remote locations or those who prefer to avoid an indoor class setting can complete the full course virtually via their own Internet connection.

Questions may be asked both online and in person, and they will be answered in the appropriate format. All class members will receive the **passwords** to access the presentations online.

This course contains a LOT of important and useful information and is well worth a thorough review. So.... take it again, Sam (& Mary & John & everyone else, too!).

Susi

## TIPS & TRICKS *from Susi*

### January 2022: A Monthly Offering of Useful Hints for Beekeepers

- Check all stored wax comb for wax moths. To kill the moths, put infested frames into a freezer for 2 days. Alternatively, during freezing weather, place your infested frames outside, covered, for 2 days.
- Order queens in January for delivery in April.
- Check and replace quilt board shavings at 1-month intervals. Dry damp shavings in a paper grocery bag placed near a woodstove, then reuse shavings.



Wax moths on stored comb



New queen in travel cage



Quilt board with shavings

*If you would like to submit your own tip or trick, please send it to [richandsusi@cablespeed.com](mailto:richandsusi@cablespeed.com)  
East Jefferson Beekeepers Association*

### Spring Fever?

On summer days my bee suit is awkward to move about in. The suit is a men's small that seems incredibly spacious. The upside is that I can pull the back of the suit to the front to check for hitch hiking bees in spring and summer. In the winter the upside is having plenty of room to layer up underneath the suit when it's 20 degrees F, and hive entrances are blocked with snow and you're kneeling in front of your hives repurposing your bee brush as a bottom board sweeper.

Poor bees dotting the snow. Always rough to see the body count, as if some sort of plague has struck the hives here at year's end. I was happy to read a recent post on Honey Bee Suite's blog reminding me that with the winter's solstice comes the beginning of the bee season. It won't be long before the bee populations are increasing.

<https://www.honeybeesuite.com/the-winter-solstice-day-one-of-bee-season/>

Walking to the duck house a few days ago when the temperature hadn't cracked 25 in days, there in the fresh snow, and 30 feet from any hive, a dead bee right in my path. Why would a bee, be flying in such cold temps? Especially when honey and piles of white sugar are there for the taking? Do bees get cabin fever? Was she blown off course during a cleansing flight?

And what's this popping up in the garden? The hellebores are in bloom, just waiting for a visit from the bees once warmer air coaxes them out of the hives. The crocus has poked through the soil, and it won't be long before willow and maple are in bloom. Before we know it we'll be knee deep in swarms and splits.

*Catherine*



Summer bees work so hard, their life span is only 3 to 6 weeks long.

Winter bees, however are completely different in their make up. They are bees of survival. Winter bees can live up to 6 months in the hive, helping to keep it warm as they cluster.

While summer bees leave the hive hundreds of times a day, a winter bee will stay inside for months at a time.

These flights are called cleansing flights for the bees. In essence, they use them to finally go to the bathroom, not wanting to do so inside of their hive.

In fact, the only time bees leave the hive in the winter is when the outside temperature climbs to 50 degrees or higher.

**From 'This is my garden'**

## Don't Cry for Me (*I'm Altruistic*)



Beekeepers might be concerned to find some dead bees in the snow outside the hives. This is an ongoing process throughout the year, but it can be a little unnerving right now, because it is made obvious when the bees are sharply outlined against the bright white background.

As long as there are not *piles* of dead bees in front of a hive, there is no reason to panic.

This well-known phenomenon is called "altruistic self-removal," or "social apoptosis," in which diseased or infested bees will take themselves out of the hive to avoid spreading disease or parasitic infestation. Here are a couple of quotes from scholarly articles:

- The most significant context for altruistic self-removal is presumably the prevention of disease transmission by infected workers, because many pathogens can quickly spread through and devastate a colony once they are established.
- A higher susceptibility of infested or wounded worker brood associated with efficient hygienic behaviour in adult workers is expected to reinforce the social immunity of a honey bee colony infested by brood parasites or pathogens, and may contribute to colony survival.

*Rich*

Worker honey bees exhibit altruism, meaning they perform selfless actions that benefit another while decreasing their own fitness, by dividing labor and other acts for the good of the colony.

## Propolis for a Clean Hive

*Excerpted from Kathy Keatley Garvey, "Bug Squad" Blog, University of California Davis, Agriculture and Natural Resources*

"The inside of a bee hive is considered to be a pretty clean environment. The bees produce honey there, and we eat it. But why are honey bees and their hive so clean? It is in their genes.

"Honey bees are . . . responding to stimuli with behaviors that have served them well for millions of years. Building wax combs to use for food storage and baby bee production allows the bees to keep tens of thousands of bees huddled close together. However, if any type of microbial outbreak occurs, all this closeness could lead to an epidemic and colony death.

"Honey bees exhibit a behavior that deals with that problem. They collect resins from various plant sources. They return to the hive with these sticky masses where their sisters help to unload them. Beekeepers call this substance bee glue (*propolis*) because it is used to fill small cracks in the hive and [to] cement the boxes together.

"It also is mixed with beeswax and used as a thin varnish to line the walls of the hives and sometimes portion[s] of combs.

"Those resins have surprising antimicrobial properties that are effective against bacteria, fungi, and viruses. So, the bees are encased in a shell of antibiotics. Some have suggested that the inside of a hive is as clean as a hospital room (*but we are not quite sure about that[!]*).



Propolis in the hive for sealing cracks and protecting the bees from microbial infection

Susi

Propolis is also used as an **antioxidant and anti-inflammatory agent**.

People sometimes apply propolis directly to the skin for wound cleansing, cold sores, as a mouth rinse for speeding healing following oral surgery; and for the treatment of minor burns.

Thanks to Walter Schicker and others for sharing this incredible article with us

You may recall that in September a volcano erupted on the Spanish Island of La Palma. Many people were forced to flee the area, and among those were a number of beekeepers (La Palma is home to over 100 beekeepers). Fifty days after the eruption, one beekeeper returned and was amazed to find that the bees in five of his six hives - just 600 metres from the volcano and buried under volcanic ash - had survived. The bees had sealed any gaps in the hives with propolis to keep toxic fumes out, and relied on honey already stored in their hives for food. It never ceases to amaze me just how incredible bees are 🐝

Photo credit: Elías González, La Palma Bee Keepers Association, via EPA-EFE/Shutterstock



**Thanks be to God  
For honey bees,  
For flowers  
and friends,  
and mountain breeze  
for honest work—  
A dream fulfilled;  
A country life,  
We paid the bills.  
For food to eat-  
Enough to spare.  
Our honey traveled  
Everywhere.  
From down the Pike  
Across the land,  
The sweetness spread  
From bees to man.  
And candles glowed  
When it was dark,  
From golden beeswax  
On the hearth.**

*Doris Mech*

**A hive's bees will fly a total of 40,000 miles to produce a pound of honey.**

By Doris Mech of Maple Valley  
From "JOY with Honey" Cookbook

## VARIETIES OF HONEY

There are several hundred varieties of honey produced in different parts of the world. The United States alone produces over 200 kinds. The commonest honey in USA is clover honey. It accounts for about 70% of all honey sales.

Many travelers enjoy purchasing honey unique to a given geographic area: orange blossom honey from California, buckwheat honey from New York State, tupelo honey from Florida, fireweed honey from Washington State. To the seasonal traveler, taking a small jar of honey home is like taking home a little part of the land itself.

There are strong flavored honeys and delicately flavored honeys, distinctively floral honeys, and even fruity flavored honeys. The delightful difference is due not only to taste, but also in a large extent to odor. One of the most heavenly scents on earth is experienced when one walks into a "honey house" when the beekeeper is extracting fresh huckleberry honey from the comb.

"But don't you have any 'bee honey'?" This question is occasionally asked at our honey stand in Seattle's famous Pike Place Market. "Yes," we chuckle, "It's all honey made by the bees." The name given in each honey is related to the predominant blossoms the honey bees have been working. A given type may vary slightly from year to year, depending on the weather conditions, but the honey connoisseur can distinguish the difference.

In the greater Puget Sound area of Washington state, we produce some of the most delicious honeys to be found anywhere. They include **maple blossom** (most aromatic, exotic), **raspberry honey** (scrumptiously sweet) **wild blackberry** (fruity), **wild huckleberry** (butterscotch), **snowberry** (delicate), and our ever-popular **fireweed honey** (delightfully light). Personal favorites are a matter of taste.

### LOCAL HONEY RECIPES

<https://bit.ly/3HvBXSz>

#### About this event:

Using locally-sourced honey, chef Jessica Tijerina shows us recipes using honey as the highlight ingredient: a sweet and savory sticky salmon; a natural honey, lemon and ginger cough drop; and sweet and salty whipped honey butter.

*Jessica Tijerina, Tijerina Global Spices*

**Please RSVP in advance. You will receive a confirmation email from Eventbrite that contains a Zoom link or phone number to join the class.**

**Monday January 10 6PM to 7:30PM PST**

Join Seward Community Co-op for free virtual classes with community instructors! Learn more about us at [www.seward.coop](http://www.seward.coop)

Thanks to Jim Gurney for sharing this link.

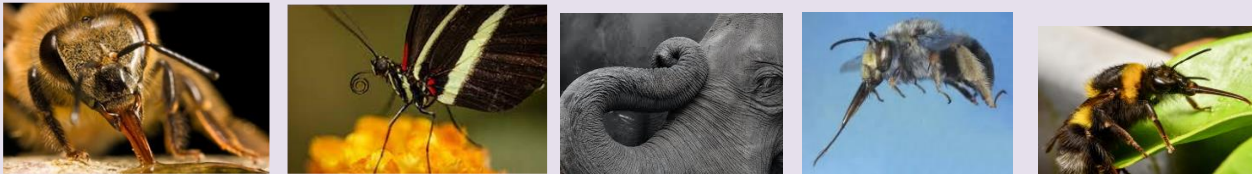


## BEE BIOLOGY

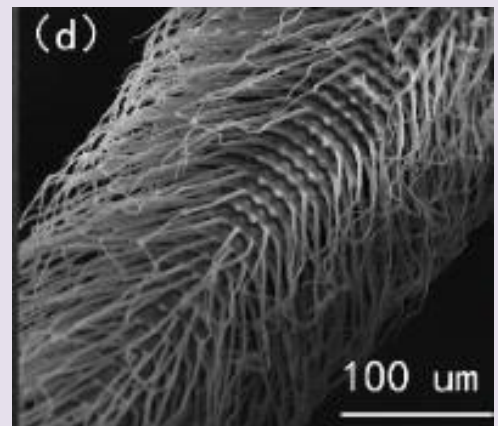
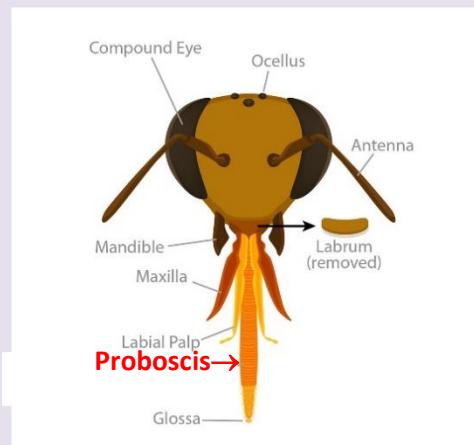
### Proboscis, anyone?

I don't know about you, but as a kid, I always associated that lovely word, **proboscis**, with elephants...well, maybe later on with tapirs, armadillos, echidnas, and other such exotic creatures I read about, too. Those are all vertebrate animals, and the term refers to their particular and peculiar type of *nose*.

In contrast, among invertebrates such as bees and butterflies, the term describes the tubular, usually extendible *tongue* and its associated *mouthparts* for sucking nectar and water. In popular parlance concerning insects, the terms "proboscis" and "tongue" are often used interchangeably.



**The honey bee proboscis.** In bees, the proboscis is a rather complicated item with various layers of structural sheathing that form a sturdy sucking tube, which, when in use, is reinforced and held in place by the clamp of the bee's strong mandibles. When not being used, the many-jointed appendage folds up neatly in a special groove on the underside of the head.



Inside the proboscis is a smaller, narrower tube that is the actual tongue (*glossa*, or salivary canal). It is covered with over 10,000 hairs that are especially dense on the bowl-like tip.

How does this specialized, double drinking-straw system work? When the bee is feeding on tiny amounts thick, syrupy nectar in a flower, the tongue is extended up and down at a rapid pace to quickly lap up the droplets that glom onto the densely packed, 100 μm-long hairs at each dip into the pot. Every time the tongue is pulled back into the proboscis, a hollow, muscular bulb in the bee's head works like a pump to suck the nectar off the tongue and pass it on toward the honey crop.

When the bee consumes a thinner nectar, or water, the tongue remains quietly extended while the same pump works to suck the pool of liquid through the larger, stiffer proboscis-tube and move it to the same destination.



### Proboscis, anyone? (continued)

and forth to give the floor a good group-scrub. (Read more about this behavior at <https://www.honeybeesuite.com/washboarding-bees-arockin-and-alickin/>.)

**Conclusion: a matter of taste.** No matter one's taste in the style or length of a bee's proboscis, the basic functions of every fashion of bee tongue is to lap and to suck liquids and pass them on toward the honey crop; to exchange such liquids with nestmates by trophallaxis; to groom and clean oneself, the queen and fellow workers; and to communicate.

But wait, there's more! The mouthparts—especially the long, hairy *glossa* with its even hairier curved tip for lapping—also have *taste receptors* on their surfaces: tiny hairs to detect sweet tastes, primarily.

These are not the most sensitive, versatile, or numerous of the bee's taste receptors, by far.....but that is a matter for our next installment, which will focus on "the honey bee's good taste."



Proboscis, anyone?

Susi

## RESOURCES

### TARBOO VALLEY WOODENWARE & HONEYBEES

**Frank Neal-**  
**Ph. # 360-301-1850...**

**5% discount to EJB club members  
for bee supplies**

NEW WEBSITE: [tarboovalleywoodenware.com](http://tarboovalleywoodenware.com)  
NEW EMAIL: [gloria@tarboovalleywoodenware.com](mailto:gloria@tarboovalleywoodenware.com)

**PLEASE CALL AHEAD!**  
**We have our new supply of bee boxes in...**