

The LCBA BUZZ



Providing Education in Sustainable Beekeeping

November 2023

Congratulations to Our New Board Members

Congratulations and welcome to our new board members for 2024: Theresa Arlotto will be serving as Treasurer, Naomi Elliott as Apiary and Mentorship Coordinator, Steve Howard as President, and Joe Angelo and Dottie Blackstone as Community Outreach Co-Coordinators. We have a strong team going into next year!



Board Members

President: Steven Howard, sfhoward45@msn.com

Vice President: Bill Cummings, billdabeekeeper@gmail.com

Secretary: Monica Mansfield, monicacmansfield@gmail.com

Treasurer: Naomi Elliott, naomielliott@live.com

Community Outreach Coordinator: Lauren Mizar, laurenmizar@gmail.com

Education Coordinator: Noel Sharp, nsharp928@gmail.com

Mentorship Coordinator: Cody Warren, codywarren68@gmail.com

The Board meets on the 4th Wednesday of each month. Members who would like to address a board meeting may contact the Secretary to have their concerns placed on the agenda.

One would think that because our bees have been put to bed, all honey supers have been removed and extracted, moisture boxes have been put on and bees given candy, that the work is done for the year. Not so. It is still a busy time for us.

We just held a great Bee Products Workshop over the November 18th weekend. We had a great turnout and learned how to make some great products that also happen to make great stocking stuffers. See page 4 for the recipes.

We are planning our upcoming Christmas Party on December 2nd at St. Timothy's Church in Chehalis. Club members have obtained great gift certificates for the scholarship raffle from many of our local businesses

who support our club. In late December, we hope to choose two or three new scholarship winners and will be teaching these young students to be successful beekeepers.

On January 6, 2023, we will start our six week class on Beginning Beekeeping at Centralia College.

We have a great lineup of instructors with many years of beekeeping experience. We had 40 individuals tentatively sign up at the Youth Spring Fair and the SWWF. I can easily see 50 new students officially sign up. This year our course is listed in the Centralia College's Continuing Education Catalog. We will be looking for assistance in helping mentor all these new beekeepers.

-Steven Howard
LCBA President



www.LewisCountyBeekeepers.org

Upcoming Events

December 2: Annual Christmas Party Potluck

- Club will supply ham, meatballs, rolls and drinks. Please bring your favorite side dish.
- Steve will teach how to make mead.
- Time: 3-6PM
- Location: St. Timothy's Church, 1826 SW Snively Ave, Chehalis

December 25: Announce Youth Scholarship Winners

January 6-February 10: LCBA Beginning Beekeeping Class

- Cost: \$50
- Six Saturday classes, 9am-noon
- Location: Centralia College, Washington Hall, Room 103
- Sign up through Centralia College

January 10: Dr. Tim Lawrence

"The Life and Times of Drones"

- Video from PNW Beekeeping Conference
- Time: 6-8:30PM
- Location: Centralia College, Washington Hall, Room 103

February 14: Dr. Thomas Sealy

"Nature Based Beekeeping"

- Video from PNW Beekeeping Conference
- Time: 6-8:30PM
- Location: Centralia College, Washington Hall, Room 103

March 13: Speaker TBD

- Setup for bee orders
- Time: 5-8:30PM (Note one hour earlier)
- Location: Centralia College, Washington Hall, Room 103

YOU ARE INVITED TO The LCBA Christmas Party

Date

SATURDAY, DECEMBER 2, 2023

Location

ST. TIMOTHY'S CHURCH

1826 SW SNIVELY AVE, CHEHALIS

Time

2:30 PM: MEAD MAKING
DEMONSTRATION & TASTING

3:00 PM: SET UP

3:30-6:00 PM: DINNER

The club will provide ham, meatballs, coffee, tea, water and all utensils.

Please bring family & friends, a side dish or dessert, and an item for our raffle.

We will be hosting a raffle to raise money for our LCBA Youth Scholarships. Items will include gift certificates from local vendors, beekeeping supplies, and white elephants from our members.

April 10: Speaker TBD

- Time: 6-8:30PM
- Location: Centralia College, Washington Hall, Room 103

June 22: Pollinator Knowledge & Fun Fest

- Location: Medicine Creek Winery, Lacey, WA

September 28-29: WSBA's PNW Beekeeping Conference

- Location: Olympia, WA



PRODUCTS FROM THE HIVE WORKSHOP

November 18, 2023



PRODUCTS FROM THE HIVE WORKSHOP

Recipes

Lip Balm

Taught by Lauren Mizar

1 part beeswax

1 part shea butter (Raw African Shea Butter, 100% pure, natural, unrefined)

2 parts coconut oil (organic, extra virgin, raw & cold pressed)

Essential oil (optional)

To fill 5 tins (0.5 oz each):

2 tablespoons beeswax

2 tablespoons shea butter

4 tablespoons coconut oil

Measure these ingredients out and put into a microwave safe cup or mug. A glass measuring cup is ideal. Place the cup into a pan of low boiling water that covers about half the cup, stir occasionally until all ingredients are completely melted. This takes about 5 minutes. Remove the cup from the boiling water and stir in 6-10 drops of an essential oil for fragrance. Each essential oil is different in intensity. Pour your liquid lip balm mixture into each tin. Let cool until solid. Enjoy your lovely organic homemade lip balm. Product expires in about a year.

Plantain (or other herb) Salve

Taught by Noel Sharp

1/3 cup dried plantain (or other foraged plant)

1/2 cup olive oil (or other carrier oil like sweet almond oil)

Beeswax pastilles

Essential oils (if desired)

To infuse your oil:

1. Infuse plantain in carrier oil for 1 week or longer. Keep in a cool, dark location.

2. Strain into a clean glass jar.

To make the salve:

Depending on the texture you want your salve to be, the ratio of oil to wax can be altered. For a harder consistency, try 2:1 oil to wax. For an ointment, try 4:1 oil to wax.

1. Melt beeswax using a double boiler. Add infused oil and keep stirring until melted.

2. Remove from heat and add essential oils.

3. Mix and pour into tin jars. Don't cover until cooled as this introduces moisture and can cause spoilage.

Beeswax Candles

Taught by Steve Howard

Mix one pound beeswax with 1/2 pound coconut oil. Melt to no more than 165 degrees and pour into candle molds. Let cool until solid.





NOVEMBER MEETING MINUTES

BY MONICA MANSFIELD

Meeting started at 6:30pm.

Steve welcomed everyone and went over the board member elections. Our new board members are Theresa Arlotto as Treasurer, Naomi Elliott as Apiary and Mentorship Coordinator, Steve Howard as President, and Joe Angelo and Dottie Blackstone as Community Outreach Co-Coordinators.

Steve introduced our speaker for the evening, Cassie Cichorz, who works at WSU as outreach, educating the public on the Northern Giant Hornet. Cassie brought some great visual aids, including dead, preserved hornets and their nest.

Some interesting facts from her presentation:

- The Northern Giant Hornet first appeared in 2019 and they found the first nest in 2020. The last nest they found was in 2021.
- The hornets are apex predators who feed on proteins such as bees and wasps.
- Their stinger is the size of a thumb tack and requires a special bee suit that their stinger cannot penetrate.
- They are very territorial of their nest and will attack.

- It takes 5 Northern Giant Hornets 90 minutes to kill every bee in a hive. They systematically cut off the head of every single bee.
- To make a trap for these hornets (which will also work for wasps), combine $\frac{1}{2}$ cup of orange juice and $\frac{1}{2}$ cup of rice cooking wine in a bottle with square holes. Your bees won't get caught in the trap because they are not attracted to the alcohol. If you catch any, immediately report them to the WSDA.
- To sign up for updates from WSDA about the hornets, go to www.agr.wa.gov/hornets.

After Cassie's presentation, one of our members, Bev Phoenix, showed the group the hive box lifter that her son made for her using a dolly and a wench. She says it really helps if you have a bad back and to reach out to her if you have any questions.

Monica discussed the new format for the newsletter and encouraged members to contribute original honey recipes (even better with photos), articles about bees in the news, and ideas for articles.

Noel showed the club how to access the menu

NOVEMBER MEETING MINUTES

on our new website.

Steve went over our six month agenda, highlighting our upcoming Products from the Hive workshop on November 18th and our Christmas party on December 2nd.

Noel discussed the upcoming Products from the Hive workshop. It will cost \$10 to help pay for supplies. The workshop will take place at Bill's workshop and there will be three stations where members can make lip balms, salves and candles.

Lauren talked about the upcoming Christmas party. We had to find a new location and will be holding it at St. Timothy's Episcopal Church. Party invitations will be emailed shortly. There will be a mead making demonstration and tasting by Steve. We will also have a raffle to raise money for our youth scholarships. Please bring a side dish or dessert.

Noel talked about our youth scholarships. We have not had any applications turned in yet. We had sixteen people who showed interest at various events, but no one has applied yet. Let Noel know if you would like to serve on the scholarship committee to review applications when they do come in.

Naomi reported our current financials:

- Checking: \$2,888.41
- Savings: \$9,008.94
- Youth Scholarship Savings: \$3,522.84

Monica talked about our recent financial audit. Steve, Bill and Naomi each presented a year's worth of financials from 2021-2023. Monica and Theresa acted as impartial observers. All of the years' numbers matched up, except for an uncashed check to Cody.

Naomi updated us on the club's apiary. The boxes with wax moths in them have been put back in the shed. The entrance reducers were taken off and we can't find 2 of them. A flat of glass quart jars and a couple of buckets maybe from the last honey spin out are there. She put more wood shavings in the long box, because they were low. Other than that

everything looks good. She'll be going back to put covers and cinder blocks on top this week.

Steve showed everyone the EZ Vap he bought to treat his hives with OA.

Bill told us about the insulation setup he is creating for his hives, and showed us the design he made.

Monica told us about the insulation she bought for her hives. She is using the 10 Frame Easy on Hive Cover from Mann Lake, and The Crown top insulation from Hive Hugger.

The meeting ended at 9pm. 



Cassie Cichorz from WSDA shows the club the special bee suit she must wear when working with the Northern Giant Hornet.



LCBA member Bev Phoenix shows the club the automatic hive lifter her son made for her using a dolly and a wench.



THE PRESIDENT'S BUZZ

By Steven Howard

6 THINGS TO DO IN YOUR HIVES RIGHT NOW

>>> TREAT FOR VARROA MITES

Treating your bees for varroa mites should be at the very top of everyone's list in beekeeping. It seems that no matter how many times one treats, there is still evidence of mites. I treated with my oxalic acid vaporizer in February once. In mid-May, I treated with OAE. I did not treat again until after the super came off in mid-August, and that was a three week treatment with Amitraz (Apivar). I hit them once with an oxalic acid vaporizer in early October, and I just completed a three week treatment with an oxalic acid vaporizer in November. A recent check of the mite drop showed many more than I would have liked.

>>> ADD ENTRANCE REDUCERS

Entrance reducers should have been installed on your weaker hives when the yellow jackets were numerous. I leave mine on the larger opening mostly through the winter, unless I see some evidence it should be on the smaller opening.

>>> REMOVE DEAD BEES FROM BOTTOM BOARD

I have noticed, so far, there has not been a big die off of the older workers, which happens when we get our first prolonged freezing temperatures. We have only had a few nights of freezing weather. Make sure that you take some kind of scraping device and remove all the dead bees from the hive bottom board and the entrance.

>>> ADD MOISTURE BOXES

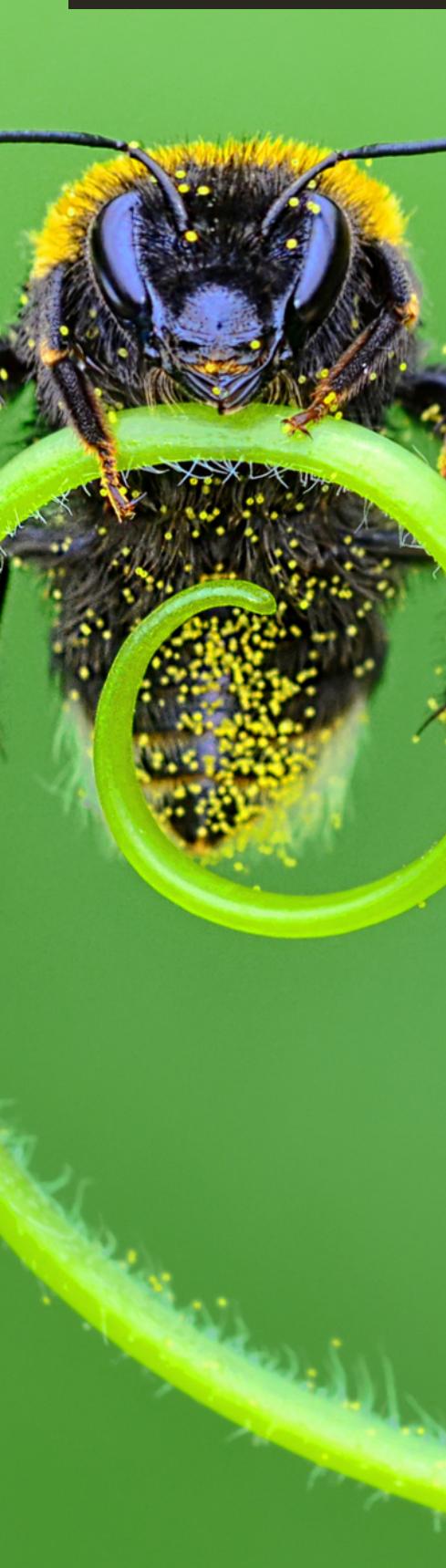
Your moisture boxes should have been installed at least a month ago. Make sure you have at least 3" of wood chips. I replace my upper burlap cover every two weeks. You don't want moisture dripping on the wood chips, which will seep onto the bees.

>>> ADD HIVE COVERS

These should be on to help deflect rain off the telescoping top.

>>> FEED BEE CANDY

Make sure you are feeding bee candy to your bees to supplement their diet. The bees have moved up into the upper brood box. Place your bee candy right on top of your top frames. We have only had a few days of freezing cold weather. The bees seem to be more active than usual. I am finding that they are consuming about three pounds of candy per month. 

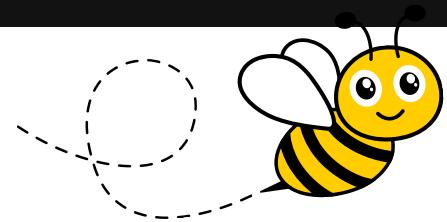


FEED YOUR BEES THIS FALL & WINTER

Candy Board

Ingredients:

1 1/8 cups water
5 lbs. dry cane sugar
2 Tbsp. Honey B Healthy
1 tsp. Durvet vitamins/electrolytes (Farm Store)



Method:

1. Prepare a candy baking sheet by lining it with parchment paper.
2. Mix electrolytes in with the Honey B Healthy and set aside.
3. Bring water to boil in a large pot. Mix in the sugar. Stir constantly until the temperature is just below 250 degrees F. If you don't stir constantly, the mix will caramelize.
4. When it is almost 250 degrees F, stir in the electrolytes/Honey B Healthy mix.
5. Keep stirring until the mixture reaches 250 degrees F, then pour onto the parchment-lined baking sheet. It helps to have one person pour, while the other spreads the mix out with a wooden spoon because the mixture sets quickly.
6. Let the mixture cool overnight. You can put it in the freezer or just put the cookie sheet on your garage floor. Before it sets, score it down the middle so it is easier to snap in half.
7. After it has cooled, place the candy on top of the frames and underneath your moisture box as early as October.

Winter Sugar Patty

Ingredients:

5 lbs. pure cane sugar
1 cup light corn syrup to soften the patty
1 pound pollen patty torn into smaller pieces to add a small amount of protein
1 cup apple cider vinegar and/or 1/2 tsp. citric acid to help break down larger sugar molecules
1 Tbsp. Honey B Healthy or similar product
You can add a small amount of minerals and vitamins if desired

Method:

1. Mix ingredients together in a bread mixer.
2. Make a serving sized ball and place on a paper bag or parchment paper
3. Smash to 1/2 inch thick and let sit for a day to harden and then serve to your bees

No Cook Sugar Brick

"This is a simple alternative to a cooked sugar brick for your bees...I found it took a few minutes to fully mix (using a stand or hand mixer is best), and a day or so to fully harden. No thermometer, heat or handling hot sugar needed."

-Contributed by LCBA member Bev Phoenix

Ingredients:

5 lbs. pure cane sugar
3/4 cup water with a splash of white vinegar
A little ProHealth or Honey B Healthy, if desired

Method:

1. Mix until uniformly moist.
2. Press onto paper plate or parchment paper and let air dry. Be sure to make it thin enough to fit on top of the frames.



HOW TO USE A VAPORIZER FOR OA

By Steven Howard

This is the time of year that you'll want to treat for varroa mites in order to keep their population down and increase your hives' odds for surviving the winter.

This oxalic acid treatment will only kill the phoretic mites. The original instructions recommend doing this three times, one week apart, to make sure all phoretic mites get treated. It is best to treat in the early morning hours while the foragers are still in the hive.

I do not usually wear a suit or gloves. I know my ornery hives. Nor do I wear glasses or use a respirator, but I make sure to stay upwind of the fumes.

Directions:

1. Use one gram ($\frac{1}{4}$ tsp.) per hive body in the wand's tray. (I use $\frac{3}{8}$ tsp per hive body.)
2. Place wand into the front entrance of the hive, about $\frac{1}{2}$ to $\frac{3}{4}$ back. Immediately push the damp rag all around the front opening and wand with your hive tool. The bees may come out at you.
3. Using your hive tool, clean off the mite tray if you are using a screened bottom board.
4. Tape off any secondary opening in the hive body. (We sometimes drill a $\frac{5}{8}$ " hole in the hive body for a secondary entrance.)
5. Attach the vaporizer cables to the battery, red to + and black to -.
6. Immediately start the timer on your cell phone.
7. Unplug the cables from the battery after $2\frac{1}{2}$ - 3 minutes.
8. At the 5 1/2-minute mark, remove the wand from the hive. Now the bees will really come at you. Leave the damp cloth in place for another 4-5 minutes.
9. If you have other hives to do, repeat these steps from the beginning.

I suggest that if you immediately go to the second hive that you wrap the damp cloth around the hot wand briefly to cool it off before you add the second round of oxalic acid.

Depending on how charged your battery is and how much oxalic acid you put in the tray, adjust your time so that all the oxalic acid is vaporized and so that you are not heating the wand tray while it is empty. 

Equipment needed:

- Vaporizer
- 12 -volt battery (fully charged)
- Oxalic acid w/measuring spoon
- 16" old damp rag
- Timer
- Bee suit
- Gloves
- Respirator
- Smoker
- Hive tool
- Safety glasses
- Duct tape



STUDYING THE BEES



<https://beeinformed.org>

The Bee Informed Partnership is a national collaboration of leading research labs and universities in agricultural science to better understand honey bee declines in the United States. They maintain partnerships among a wide range of disciplines including traditional honey bee science, economics, statistics, and medical research. They not only have leading honey bee researchers, but their board represents commercial beekeeping industries and their technical transfer team specialists, lab and IT teams are some of the most experienced in this field.

Project Apis m.

<https://www.projectapism.org>

Project Apis m. (PAm) is the go-to organization at the interface of research, honey bees, and agriculture. Since 2006, they have infused over \$10 million into honey bee research and \$2.9 million into forage programs, resulting in science-driven resources for bees and beekeepers.

They work closely with commercial beekeepers, growers, and scientists in the USA and Canada to identify challenges as they arise. They then fund projects and direct strategic efforts focused on practical questions. PAm offers graduate scholarships to develop the next generation of bee scientists and has expanding efforts to put forage on the landscape where bees need it most.

Continuous release of oregano oil effectively and safely controls Varroa destructor infestations in honey bee colonies in a northern climate

A 2017 study tested the efficacy of a variety of miticides and delivery methods for treating varroa mites. Their results demonstrate that oregano oil delivered with electric vaporizers that continuously released oil vapors in the hives can achieve a high level of varroa mite control (>97% efficacy). Conversely, delivery carriers designed to rapidly release miticides diluted in solvents (e.g. ethanol solutions in pads), yielded the lowest rate of mite control (<58%). Therefore, it is concluded that the efficacy of natural miticides in hives, is highly dependent on the delivery systems used. Read more about the study:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5547185/>

Varroa destructor feeds primarily on honey bee fat body tissue and not hemolymph

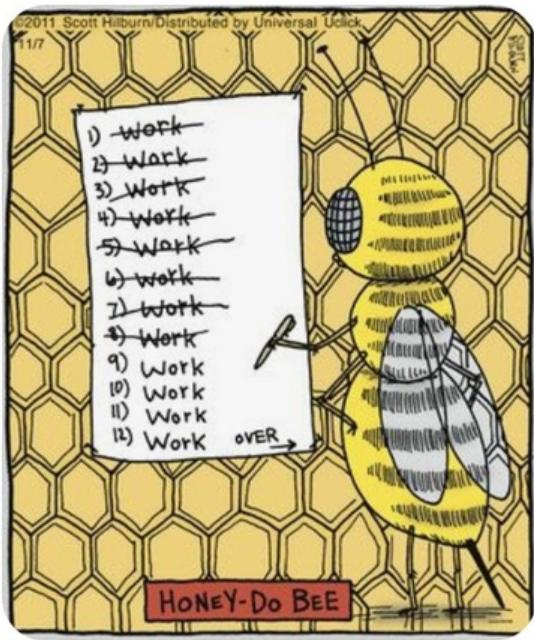
A 2019 study has shed new light on the varroa mite. Varroa destructor causes considerable damage to honey bees and subsequently the field of apiculture through just one process: feeding. For five decades, we have believed that these mites consume hemolymph like a tick consumes blood, and that Varroa cause harm primarily by vectoring viruses. This study shows that they cause damage more directly. Varroa externally digest and consume fat body tissue rather than blood. These findings explain the failure of some previous attempts at developing effectively targeted treatment strategies for Varroa control. Furthermore, it provides some explanation for the diverse array of debilitating pathologies associated with Varroa that were unexplained by hemolymph removal alone. Our work provides a path forward for the development of novel treatment strategies for Varroa. Read more about the study:

<https://www.pnas.org/doi/abs/10.1073/pnas.1818371116>

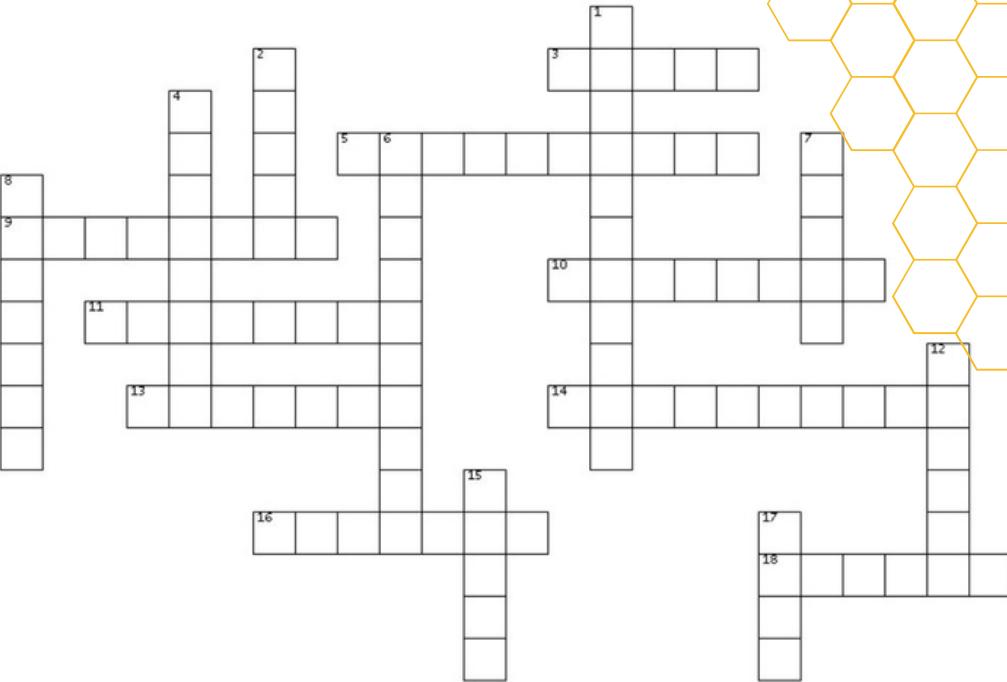
Sunflower-Associated Reductions in Varroa Mite Infestation of Honey Bee Colonies

A 2022 study has found that increased sunflower pollen availability correlated with reduced Varroa mite infestation in landscapes and pollen-supplemented colonies. At the landscape level, each doubling of sunflower crop area was associated with a 28% reduction in mite infestation. In field trials, late-summer supplementation of colonies with sunflower pollen reduced mite infestation by 2.75-fold relative to artificial pollen. United States sunflower crop acreage has declined by 2% per year since 1980, however, suggesting reduced availability of this floral resource. Although further research is needed to determine whether the observed effects represent direct inhibition of mite fecundity or mite-limiting reductions in honey bee brood-rearing, our findings suggest the potential for sunflower plantings or pollen supplements to counteract a major driver of honey bee losses worldwide.

<https://academic.oup.com/jee/article/116/1/68/6961488>



Crossword Puzzle

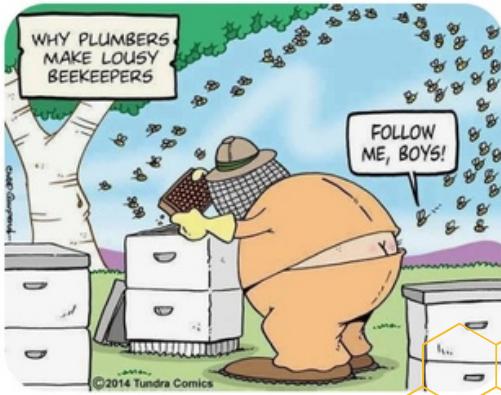


ACROSS

- 3. There is only one
- 5. Common PNW forage for bees
- 9. No queen here
- 10. The bees do this on really hot days
- 11. Mason jar feeder
- 13. Put this on the entrance to protect from robbers
- 14. Honey bee phylum
- 16. Used to make candles, lip balms and salves
- 18. Type of patty for protein

DOWN

1. Type of cell that replaces an old queen
2. This guy takes the longest to emerge from his cell
4. One way to winterize your hive
6. This oil attracts swarms
7. It hurts you and kills them
8. Shape of the comb
12. Bee dance
15. Sweet board to feed in winter
17. _____ mellifera



Answer: (No peeking!)

