

The

LCBA BUZZ

January/February 2024



Providing Education in Sustainable Beekeeping

Congratulations to Our New Scholarship Winner

Congratulations to our Youth Scholarship winner, Joe Pester! Our Scholarship Committee was very impressed with this bright young man and thinks he has what it takes to be a great beekeeper. Steve Howard will be mentoring him and we look forward to hearing about his beekeeping journey.

Time to Renew Your Membership

It is that time of year to renew your membership to Lewis County Beekeepers Association. If you haven't already renewed, please bring a new application and a check or cash to the next meeting. You can download the membership application from our website. Regular and Family memberships are \$40, Junior memberships (under 21) are \$20, and Youth memberships (under 18) are free.

We have a busy 2024 ahead of us! Right now, we are holding our beginning beekeeping class at Centralia College. The class is going well, and we have club members with a variety of perspectives and experience levels teaching this year. In mid-March, we'll be setting up for bee orders at the monthly club meeting and holding our first workshop of the year, a hive assembly workshop at Bill Cummings' workshop. You can check out all of our upcoming events on page 2.

Thanks to all of the club members who contributed to this month's newsletter. Lauren Mizar wrote a witty poem about our Christmas Party, Naomi Elliott contributed her original recipe for Quince Paste with Honey, Phil Wilson submitted some great stories about bees in the news, and of course Steve

Howard wrote his always helpful column, *The President's Buzz*. I gathered some beauty recipes you can make at home using your honey and wax to combat dry winter skin, and wrote up directions on how I've been diffusing oregano oil in my hives to treat varroa mites.

Going forward, I'll be putting out our club's newsletter every other month to make it more manageable for myself. Our club is full of very talented people and it's been great having so many club members contribute to this month's newsletter. I hope more of you will send me your personal recipes, photos, articles, interesting news stories and studies you find. Please email me at monicacmansfield@gmail.com.

*-Monica Mansfield
LCBA Secretary*

Board Members

President: Steven Howard, sfhoward45@msn.com

Vice President: Bill Cummings, billdabeekeeper@gmail.com

Secretary: Monica Mansfield, monicacmansfield@gmail.com

Treasurer: Theresa Arlotto, theresaar@protonmail.com

Community Outreach Coordinator: Joe Angelo, joe.angelo52@yahoo.com &

Dottie Blackstone, dotblackstone@gmail.com

Education Coordinator: Noel Sharp, nsharp928@gmail.com

Mentorship Coordinator/Apiary Manager: Naomi Elliott, naomielliott@live.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.



www.LewisCountyBeekeepers.org

Upcoming Events

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

February 3: Lotion Bar Workshop

- Each participant will leave with a silicone mold filled with 6 lotion bars.
- Time: 2:30PM
- Location: Woods Bees, Centralia
- Contact: Email bees@woodsbeeco.com
- Cost: \$15

February 14: Dr. Thomas Seeley

"Nature Based Beekeeping"

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

February 24: Lip Balm Workshop

- Each participant will leave with 5 tubes and 5 jars.
- Time: 2:30PM
- Location: Woods Bees, Centralia
- Contact: Email bees@woodsbeeco.com
- Cost: \$15

March 9: Beekeeper Swap Meet

- Time: 10AM-3PM
- Location: Oakview Grange, 2715 N. Pearl St, Centralia
- Call Woods Bees at (360) 623-3359 to rent a vendor space

March 13: Kay Crawford

"Slovenian Hives"

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

March 16: Hive Assembly Workshop

- Time: 10AM-2PM
- Location: Bill Cummings' workshop

March 23: Deodorant Workshop

- Each participant will leave with one 2 oz. stick and one travel size.
- Time: 2:30PM
- Location: Woods Bees, Centralia
- Contact: Email bees@woodsbeeco.com
- Cost: \$15



April 10: Speaker TBD

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

April: Bee Pick Up

- Bee pick up site and time TBD

May 3-5: Youth Spring Fair

- Location: Southwest Washington Fairgrounds

May 8: Dewey Caron

"Annual Honey Bee Survey"

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

May 11: Hive Inspection Workshop

- Time: TBD
- Location: Steve Howard's or LCBA Apiary

June 22: Pollinator Knowledge & Fun Fest

- Location: Medicine Creek Winery, Lacey, WA

July 13: Annual Summer Picnic

- Location: Alexander-Lintott Park, space 2, Chehalis
- Time: 3-6PM

August 3: Super Removal & Extracting Workshop

- Time: TBD
- Location: Steve Howard's Apiary

August 13-18: Southwest Washington Fair

September 7: Varroa Treatment Workshop

- Time: TBD
- Location: LCBA Apiary

September 28-29: WSBA's PNW Beekeeping Conference

- Location: Olympia, WA

THE CHRISTMAS PARTY

By Lauren Mizar

'Twas the afternoon of the party
When all across town
Board members were dropping
Cold and flu bugs around

But mead, cider, and coffee
Brewed in the church kitchen
In hopes that the others
Were feeling quite bitchin'

LCBA members
Nestled warm at Saint Tim's
Savory dishes and desserts
Piled up to the rims

When what to our wondering eyes should appear
But a table full of gifts:
Power tools and bee gear.

After all the good eats
The raffle began
With much of the winnings
Going to the Weaver Clan.

With bellies all full
Prizes in every hand
The clean up was swift
All tidy and grand.

Thanks to everyone's teamwork
It turned out alright
Merry Christmas to all
And to all a good night





JANUARY MEETING MINUTES

BY MONICA MANSFIELD

Meeting started at 6:30pm.

Steve welcomed everyone and reminded the club it is time for membership renewals. Everyone needs to fill out a new membership application. You can download an application from the home page of our website. Regular and Family memberships are \$40, Junior memberships (under 21) are \$20, and Youth memberships (under 18) are free.

Steve informed the club that Cody's wife suffered a stroke and passed around a card for the club to sign. We are all wishing them well.

We have raffle boards to sign up for. All money collected will go to our Youth Scholarship fund. Some of the items being raffled are honey, a hat, and a screened bottom board.

Our secretary, Monica, was going to talk about how she has been using oregano oil to treat varroa mites in her hive, but was unable to make the meeting in person due to the snow. She is joining us on Zoom instead. You can read about what she is doing on page 7 of the newsletter.

We watched a video from Dr. Thomas Seeley's

presentation at the NW Beekeeping Conference. He is a research biologist from Cornell University and has written multiple books on honey bees, including *The Lives of Bees*, *Honeybee Democracy*, *Following the Wild Bees*, and *The Habits of Highly Effective Honeybees*. You can read about some of the key takeaways from his presentation in *The President's Buzz* on page 6.

Noel told the club about our first session of the beginning beekeeping class. There were 26 students. Steve Howard, Bob Harris, Theresa Arlotto and Gottfried Fritz were instructors. There was a hiccup with the college not opening the doors on time, but other than that everything flowed smoothly.

The website is still a work in progress. We would like to update the over-wintering page to reflect the new research on using insulation.

We had two applicants for our 2024 Youth Scholarship. The Scholarship Committee selected Joe Pester. Congratulations!

Steve passed around printed copies of our last two newsletters for members to look at. Monica also redesigned our club's brochure and Steve passed some of those around as well.

JANUARY MEETING MINUTES

Theresa updated the club on our finances:

- Checking: \$3,377.16
- Savings: \$9,009.08
- Scholarship Savings: \$4,033.90
- Petty Cash: \$110.00

We had a successful Christmas party in December, despite half of our board members falling ill at the last minute. We had a lot of great donations for the raffle and raised a good amount of money.

At the club's apiary, we currently have three hives: two Langstroth and one long bar. Our long bar hive is the strongest. We lost 3-4 hives this year.

Dottie and Joey will be working on more community outreach this year with local 4-H clubs, schools, and Scouts. They are working on getting the Chronicle to write a story about the club and possibly looking into the local radio station.

Steve told the club about Monica's oregano oil experiment for treating varroa mites. She included a study in the last newsletter that showed diffusing oregano oil in your hives for 4 weeks had a 97% success rate with little to no mortality for the bees. She bought a battery-powered, waterless essential oil diffuser on Amazon to diffuse the oregano essential oil. She stacked a medium super on top of a moisture box and put it on top of the hive. She put the diffuser in the boxes on the medium setting. She had to take the diffuser out to recharge it about every 36 hours. She had a significant mite drop on her mite board and the treatment didn't seem to have any negative effect on the bees. You can read more about her

experiment on page 7.

Steve updated the club on his apiary. He has lost two hives this season. He has been changing out the burlap in his moisture box every two weeks and putting in candy. He has been treating varroa mites with oxalic acid in a vaporizer once a month when the temperature gets over 45 degrees F with 2 grams of oxalic acid.

John told the club that this time of year he treats for mites with OA three times, every 4-5 days. He likes OA because it leaves hardly any residue in the comb. He uses Apiguard in August and OA at Christmas.

Steve has started negotiating nuc prices for the club. We will be setting up at 5pm, an hour earlier, at the March meeting to take orders.

Kay Crawford has Slovenian hives in Onalaska and will be speaking about them to the club at the March meeting.

Unfortunately, the videos from the PNW Beekeeping Conference didn't turn out. We were looking forward to showing them at the club meetings, but won't be able to now.

Bill went over our six month agenda. We have a hive assembly workshop coming up in March, the Spring Fair in May, and the Knowledge Fun Fest at Medicine Creek Winery in June. You can see the complete lineup on page 2.

The meeting ended at 8:30pm. 



THE PRESIDENT'S BUZZ

By Steven Howard



As we move forward into mid-winter with our beekeeping, we usually find that we take the biggest hit with bee colony loss. Sometimes there is no rhyme or reason why one loses a hive. One can do all the things like regular treating for varroa, moisture control, insulation, feeding, scraping out the dead bees and having the bees under a cover, yet we still lose them.

At our January program we had a video presentation from Dr. Thomas Seeley, based on his book, *The Lives of Bees*. This was the same talk he made at the recent Pacific Northwest Beekeeping Conference. The take away was that without man's intervention, bees thrive out in the wild as feral colonies. We as beekeepers have taken a round peg and tried to fit it into a square hole trying to manipulate the bees to suit our needs.

Dr. Seeley was asked the question, "What are some unanswered questions on the lives of bees that still keep you up at night?" His response was, "Improving the insulation of the hive. Hives in the wild are better insulated than domesticated hives." He indicated that if the colony is well insulated on top, there is a pocket of warm air around the bees, they are not in a tight cluster and are able to easily move to access the honey reserves. The dew point is lower in the hive and the bees are not getting "rained" on.

See this link for the video presentation:

<https://www.youtube.com/watch?v=fHk6ntN4DFk>

We have an ambitious schedule for 2024. See the six-month agenda in this newsletter. We are currently teaching beginning bee classes at the college. We are currently in discussion with our local vendors for bee prices for 2024. We also have a hive assembly workshop coming up soon. We will be taking orders at the March meeting for bee purchases. It is time to renew your membership. 🐝

MY OREGANO OIL EXPERIMENT

By Monica Mansfield

In the November newsletter, I included a study I found about using oregano essential oil in our hives to treat varroa mites. The 2017 study concluded “that a continuous release of natural miticides is important to achieve safe and high rates of varroa mite control in hives. They also show that oregano oil is effective for the control of *V. destructor* infestations in honey bee colonies.” When they diffused the oregano oil in the hive for four weeks straight, they actually had a 97% success rate getting rid of the mites, with next to no mortality for the bees.

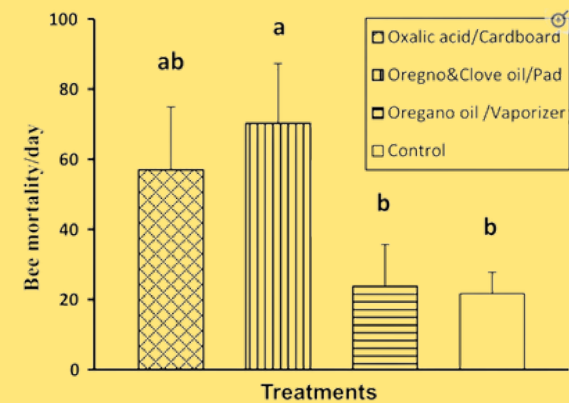
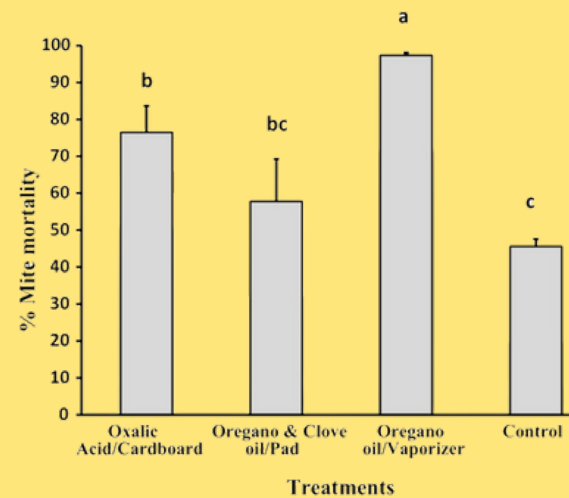
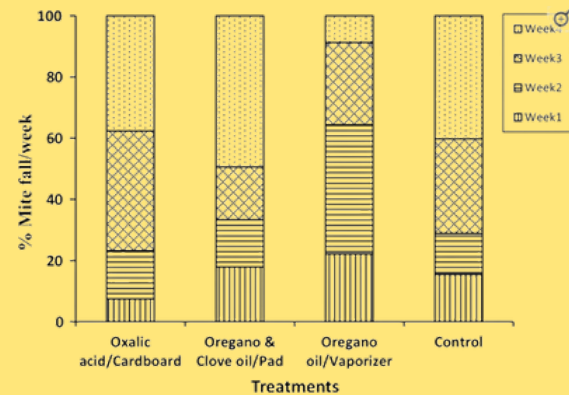
They used an extension cord to power a Febreze diffuser for their experiment. The scientists admitted that the biggest obstacle to this type of treatment method was that the equipment does not exist yet and most beekeepers probably do not have electricity available to their apiaries.



The study was so intriguing to me that I spent a lot of time trying to figure out how to replicate it in my own hives. I would have to run a pretty long extension cord out to my beehives for an electric diffuser, so that wasn't an option. The only essential oil diffusers I was aware of at the time used water, and I didn't want to add moisture to my hives.

I ended up finding a battery-powered, rechargeable, waterless essential oil diffuser on Amazon that I purchased for my experiment. It cost about \$50. I liked that it was rechargeable and that it had so many settings options.

Graphs from the Study

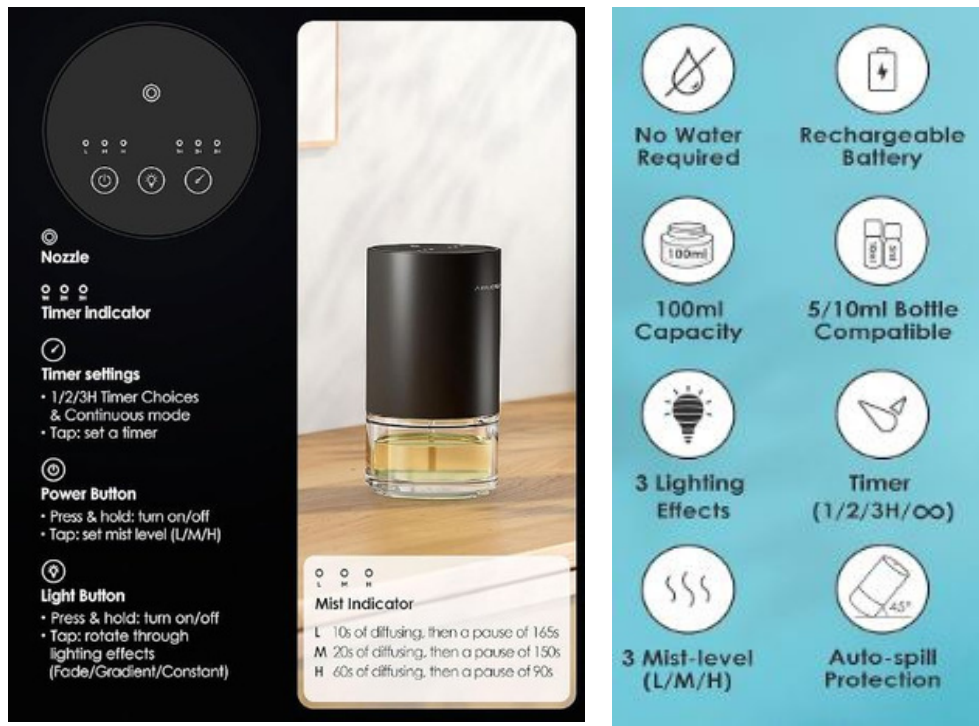


Source:

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

MONICA'S OREGANO OIL EXPERIMENT

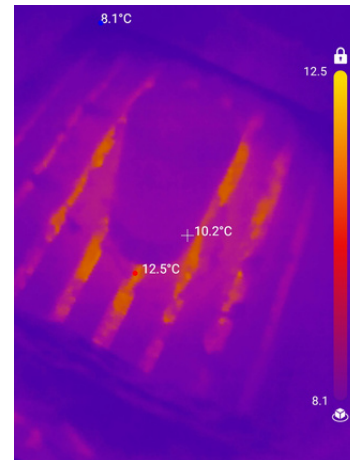
You can run the diffuser for just a few hours or continuously, until the battery runs out. It runs for about 36 hours and then takes about three hours to recharge. It has a low, medium and high setting. The low setting diffuses the oil for 10 seconds, then pauses for 165 seconds. The medium setting diffuses for 20 seconds and then pauses for 150 seconds. The high setting diffuses for 60 seconds and then pauses for 90 seconds.



Airversa Waterless Diffuser for Essential Oil Nebulizer

Link: <https://amzn.to/3SJE3qw>

I placed the diffuser inside of a moisture box topped with a medium super, and placed the boxes on top of the hive. I also insulated the inside of the boxes with some foam and bubble wrap I had lying around because I am insulating my hives for the winter and didn't want condensation forming on the side walls. I started with the low setting for a few days, and when I saw it didn't bother the bees at all, I switched it to the medium setting. The bees didn't try to get away from the oregano oil at all and continued hanging out at the top of the hive while it was diffusing.



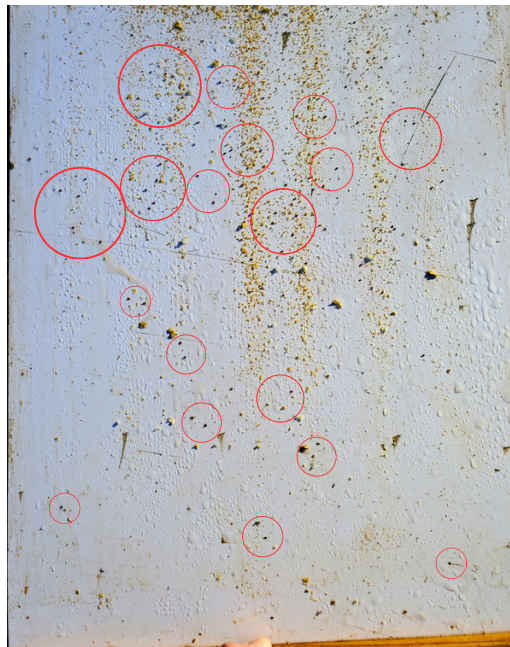
How I stacked a medium super on top of a moisture box to house the diffuser on top of my hive. The thermal picture shows the bees hanging out right underneath the diffuser while it is running.

MONICA'S OREGANO OIL EXPERIMENT

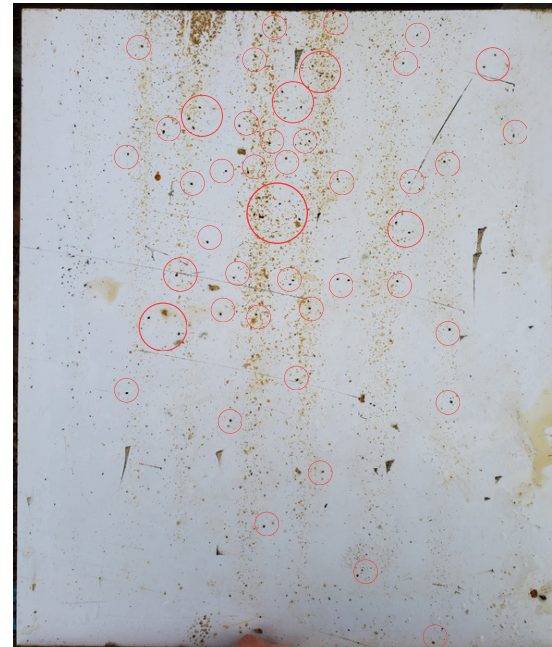
I took pictures of the mite drop on my mite boards throughout the process. In the study, most of the mites dropped in the first two weeks. Before I started the treatment, I wasn't seeing any mites drop onto my boards, however I saw a significant mite drop after I started diffusing the oregano oil. I was cautious, so I only treated for five days, took a week off to make sure it wasn't harming the bees, then treated again for 12 days. I intended to go for a full four weeks, but I stopped the treatment early because we had a cold snap and I wanted to take the top boxes off during the cold weather to preserve warmth in the hives. After the cold snap ended, I started up the treatment again. This time I saw a much smaller mite drop. I'm guessing that means I knocked the mite population down quite a bit with the first treatment. I plan on going the full 4 weeks this time to make sure I get as many of those little buggers as possible before beekeeping season really kicks off this spring.



Dec 16 (after 5 days of treatment)




Dec 23 (7 days after last treatment)



Jan 4 (after 12 days of treatment)

I'm very pleased with my oregano oil experiment. Although I know OA is relatively safe and effective, I have seen a few studies talk about how OA can damage brood, and it makes me wonder if it isn't doing some damage to our bees, even if it isn't killing them. If I'm supposed to wear a mask because OA is toxic to my respiratory system, are we really sure it isn't toxic to the bees *at all*? They sure wanted to get out of the hive when I vaporized OA, whereas the oregano oil doesn't seem to irritate them at all. I can't help but wonder.

Oregano oil also has all kinds of benefits beyond being an effective miticide. It is antibacterial, antifungal, antiviral, anti-parasitic, anti-inflammatory, anti-cancerous, full of antioxidants and helpful terpenes, and good for the gut microbiome. It also repels a variety of pests including mites, moths, aphids, beetles, fleas and ants. I'll never forget my first experience making oregano tea to fight a nasty cold years ago. I had been feeling really terrible, but I felt better within an hour of drinking the oregano tea. That experience really opened me up to using plants as medicine, and made me respect the power of oregano in particular. It's not just for making spaghetti.

So while there are no studies to currently back up my thoughts here, I can't help but hypothesize that diffusing oregano oil in our hives *might* do so much more good than just fight varroa mites. It might be improving the overall environment in our hives, especially during the wet, cold winter months when mold is so prevalent. It could possibly be repelling a variety of pests and preventing a variety of bacterial, fungal and viral diseases. We won't know for sure until scientists take it upon themselves to study it more, which unfortunately may not happen unless or until a large corporation thinks they can profit off of this. However, I will say my bees seem mighty healthy for this first-year beekeeper (*so far...I still have plenty of time to make plenty of mistakes!*), but I do plan to continue diffusing oregano essential oil as my main varroa mite treatment method for now. 

HONEY FOR SKINCARE



Honey Sugar Scrub

Ingredients

- 1 tablespoon raw honey
- 1 tablespoon white or brown sugar
- 1 tablespoon olive oil
- Lavender essential oil

Instructions

1. Add honey and sugar in a bowl.
2. Now, add essential oil and mix well. You can adjust the proportion according to your need of use.

How To Apply

1. Apply the honey sugar scrub to your skin and gently massage the skin for 3-5 minutes and rinse it off after 15 minutes.
2. Repeat this at least once a week. If your skin tolerates it well, use the scrub up to three times per week.

Source: <https://alluringsoul.com/diy-honey-sugar-scrub/>



Honey Body Butter

Ingredients

- 73.5 g sunflower oil
- 24 g mango butter
- 2 g beeswax
- 0.5 g essential oil of your choice
- 0.1 g Vitamin E oil

Instructions

1. Weigh out your butter, beeswax and carrier oils.
2. Melt butter, beeswax and carrier oils gently in a bain-marie or water bath. If you wish, you can first melt the harder ingredients with a higher melting point (mango butter, beeswax), then add softer ingredients with a lower melting point (carrier oils). This prevents overheating ingredients.
3. Once melted, remove the mixture from the heat.
4. Add your essential oils, Vitamin E if you use it, and any other heat-sensitive ingredients. This is best done by weighing these ingredients as you add.
5. Mix well.
6. Pour into containers. It's important not to allow drops of water from the bain-marie to get into the product, so you may need to dry it with a cloth before pouring.

Steps 4-6 need to be completed quickly, as wax products will be set up quickly as soon as they cool. It's a magical process watching them form before your very eyes.

Source: <https://greenbeautymama.com/homemade-body-butter-with-beeswax/>

Benefits on Honey on Your Skin

- Packed full of vitamins, minerals & antioxidants
- A humectant, which helps your skin absorb and retain moisture
- Beneficial for acne
- Calming to the skin
- Increases circulation to give you a natural glow
- Anti-microbial, which makes it good for wound healing
- Antifungal, which makes it good for treating topical fungal issues like ringworm or athlete's foot

Honey Mask

You can spread plain raw honey on your face and leave it on for 15 minutes as a mask. If you'd like to add something extra, try adding these to your honey before applying to your skin:

- Aloe vera and lemon for dark spots
- Cinnamon for acne
- Turmeric and water for wrinkles
- Coconut oil or olive oil for dry skin
- Yogurt to brighten skin



STUDYING THE BEES



Apis mellifera anatoliaca Venom Exerted Anti-Inflammatory Activity on LPS-Stimulated Mammalian Macrophages by Reducing the Production of the Inflammatory Cytokines

Previous studies have shown bee venom to have immense potential as an anti-inflammatory drug candidate. In this study, we focused on the venom of *Apis mellifera anatoliaca* and characterized its content by HPLC. Our results suggest that the *Apis mellifera anatoliaca* venom does not have anticancer drug candidate potential, whereas it can efficiently be used against inflammatory and autoimmune disorders.

Read more:

<https://link.springer.com/article/10.1007/s12010-022-04284-x>

Laboratory and field studies on the efficacy of essential oils in controlling varroasis on *Apis mellifera ligustica* Spinola and *Apis mellifera macedonica* Rüttner

From the results of these trials that lasted about three years, according to the scientific literature, we conclude that essential oils could be an effective and sustainable tool to control *V. destructor* by integrating them with other means.

Read more: <https://iris.unimol.it/handle/11695/126845>

The Influence of Formic Acid, Oxalic Acid and Essential Oils on the Free Acidity in Honey

The aim of the study was to monitor the changes in the free acidity of honey after administration of three anti-varroic treatments with the use of formic acid (FA), oxalic acid (OA) and essential oils as the active substances in commercial preparation. Treatments by OA and Bisanar® are more suitable to suppress varroosis during the summer without significant increase of free acidity in honey.

Read more:

<https://office.sjas-journal.org/index.php/sjas/article/view/807>

Evaluating the Efficacy of 30 Different Essential Oils against *Varroa destructor* and Honey Bee Workers (*Apis mellifera*)

Essential oils and their components are generally known for their acaricidal effects and are used as an alternative to control the population of the *Varroa destructor* instead of synthetic acaricides. In this study, 30 different essential oils were screened by using a glass-vial residual bioassay. The results suggest that the most suitable oils are peppermint and manuka (SR > 9), followed by oregano, litsea (SR > 5), carrot, and cinnamon (SR > 4). All these oils seem to be better than thymol (SR < 3.2), which is commonly used in beekeeping practice.

Read more:

<https://www.mdpi.com/2075-4450/12/11/1045>

Glyphosate and a glyphosate-based herbicide affect bumblebee gut microbiota

We studied whether glyphosate, the world's most widely used pesticide, affects the bumblebee gut microbiota. Overall, 50% of the bacterial genera detected in the bee gut microbiota were classified as potentially resistant to glyphosate, while 36% were classified as sensitive. Healthy core microbiota have been shown to protect bees from parasite infections, change metabolism, and decrease mortality. Thus, the heavy use of glyphosate-based herbicides may have implications on bees and ecosystems.

Read more:

https://academic.oup.com/femsec/article/99/7/fiad065/7198109?login=true&itm_medium=sidebar&itm_source=trendmd-widget&itm_campaign=FEMS_Microbiology_Ecology&itm_content=FEMS_Microbiology_Ecology_0





BEES IN THE NEWS

What Is Swamp Honey?

Before you dismiss anything from the swamp as a less-than-appetizing snack, think again. People have been eating honey from the South's marshes for centuries thanks to the sweet nectar from honeybee hives found in and near swampland. What makes this honey so special? Swamp honey is another name for honey harvested from tupelo and other common marsh species—think gallberry trees, black gum trees, and other swamp dominate varieties.

Read more: <https://www.msn.com/en-us/news/offbeat/what-is-swamp-honey/ar-AA1d4nCG?ocid=msedgdhp&pc=U531&cvid=a101c5c5ae96485c8bdcec6b038cb073&ei=529>

Is Honey Good for People with Diabetes?

When it comes to which sugar alternatives are safe to consume for people with diabetes, honey can leave many of us scratching our heads. While this natural sweetener does raise blood sugar, it isn't necessarily off limits. Here's what to consider before you add a spoonful to your tea, drizzle it on toast or stir into recipes.

Read more: <https://www.msn.com/en-us/health/nutrition/is-honey-good-for-people-with-diabetes/ar-AAZLaxR?ocid=msedgdhp&pc=U531&cvid=a101c5c5ae96485c8bdcec6b038cb073&ei=540#image=AA12T7Eh%7C4>

4 Undeniable Benefits of Honey

Honey, a natural and delicious sweetener, has been cherished for centuries, not only for its delightful taste but also for its numerous health benefits. This golden liquid is produced by honeybees from the nectar of flowers and is filled with essential nutrients, antioxidants, and healing properties. Let's explore four undeniable benefits of honey that make it a must-have in your pantry:

Read more: <https://www.msn.com/en-us/health/nutrition/4-undeniable-benefits-of-honey/ar-AA1eGups>

How to tell real honey from fake: The matchstick test might surprise you

Authentic honey often has a white residue on the surface due to a natural process, a feature absent in artificial products. There are also telltale signs when honey is dissolved. Real honey sinks to the bottom when added to water, while artificial honey dissolves almost instantly. The matchstick test will verify it's authenticity.

Read more: <https://www.msn.com/en-us/foodanddrink/foodnews/how-to-tell-real-honey-from-fake-the-matchstick-test-might-surprise-you/ar-BB1h5oJL?ocid=hpmsn&cvid=13ceef050a0449bb91720d0b50748521&ei=20>

Bees are making less honey, and five decades of data reveals why

Honey production in the United States has experienced a noticeable decline since the 1990s, a trend that has puzzled both honey producers and scientists. A new study conducted by researchers at Penn State University has shed light on this mystery, revealing key insights drawn from an extensive analysis of data spanning five decades.

Read more: <https://www.msn.com/en-us/news/us/bees-are-making-less-honey-and-five-decades-of-data-reveals-why/ar-AA1mt5Fx>

What Americans want even more than sugar: honey

The US imports more sugars and sugar confectionary than any country in the world—it spent \$6.48 billion dollars for sugar in 2022. But growth in demand for honey in the US has increased significantly over the last three decades, according to data from the USDA. While per capita consumption of sugar has increased by about 7% since 1990, honey consumption has seen an almost 60% increase in growth.

Read more: <https://www.msn.com/en-us/money/companies/what-americans-want-even-more-than-sugar-honey/ar-AA1flvJi?ocid=msedgdhp&pc=U531&cvid=a101c5c5ae96485c8bdcec6b038cb073&ei=548>

QUINCE PASTE WITH HONEY

(Dulce de Membrillo con Miel)

Contributed by Naomi Elliott

Directions

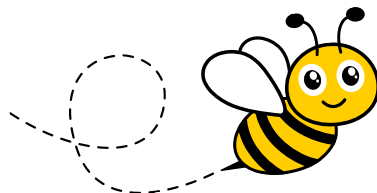
1. Clean the quince removing the fuzz. Use organic quince if available. Commercial quince may have been coated with wax. Quarter and core. The fruit is very hard and tart. Do not peel. Fill the pot with water until it is approximately one inch above the fruit. Add the lemon peel and vanilla beans.
2. Boil until the quince is fork-tender, about 1 hour.
3. Remove from heat. Strain the fruit, discard lemon peel. Reserve the vanilla beans.
4. Peel the skin (Optional: Leave the skin on if desired. It will cook down.)
5. Puree the cooked quince with a blender, food processor, hand blender, or food mill.
6. Measure the pureed quince, one cup at a time. Mix with $\frac{3}{4}$ cup honey.
7. Add 1 tsp of fresh lemon juice for each cup of quince. (Ratio: 1 cup fruit : $\frac{3}{4}$ honey : 1 tsp lemon juice)
8. Note: For a more intense vanilla flavor, split the vanilla beans and scrape out the seeds. Add to taste.
9. Mix well and place in the pot.
10. Place over medium-low to low heat. Use lower heat settings to avoid scorching the honey. Cover pot with a splatter guard to avoid burns and a mess on the stove.
11. Simmer for 2 to 3 hours. Stir frequently, more often as the paste begins to thicken.

Reducing the paste is key to setting up successfully:

- a. The paste will be harder to stir,
 - b. A wooden spoon will 'stand up' straight in the paste without falling,
 - c. The color of the paste will vary from a beautiful, dark pink/salmon to a dark ruby color depending the type of quince used.
- Optional: Add extra ingredients as paste begins to thicken: nuts, cinnamon, vanilla, or your favorite spices

12. Line the baking dish with parchment paper. Adjust the size to the amount of paste available. Transfer the paste into the dish. Use a spatula to evenly smooth the top.
13. There are two options available for the next step:
 - a. Cover the paste with a second layer of parchment paper, and refrigerate it overnight, or
 - b. Allow the paste to dry out even further, depending on the moisture content of the honey, using the dehydrate setting of your oven. Or, a warm oven @ 200 degrees with the fan on, or leave the door slightly open. Allow to dry for 2 hours in the oven. Invert onto a baking sheet. Peel off the parchment, and let cool completely.

Note: The second option will result in a thicker paste and deeper color. Optimum flavors develop in 4-6 weeks.



Ingredients

Note: Recipe is based on proportions. Adjust as needed for the number of quinces you have. Approximately 3 grapefruit-sized quince are used in this recipe.

- Quince: golden yellow (avoid green fruit), fragrant, free from major blemishes
- Honey ($\frac{3}{4}$ cups to one cup pureed quince paste)
- Rind of 1 lemon - Peel into strips
- Whole vanilla beans (optional) @ 1 for every 4-5 quince
- Lemon juice
- Water

Equipment

- Large heavy-based pot
- 8" x 8" x 1" Baking dish
- Food processor or blender
- Parchment paper

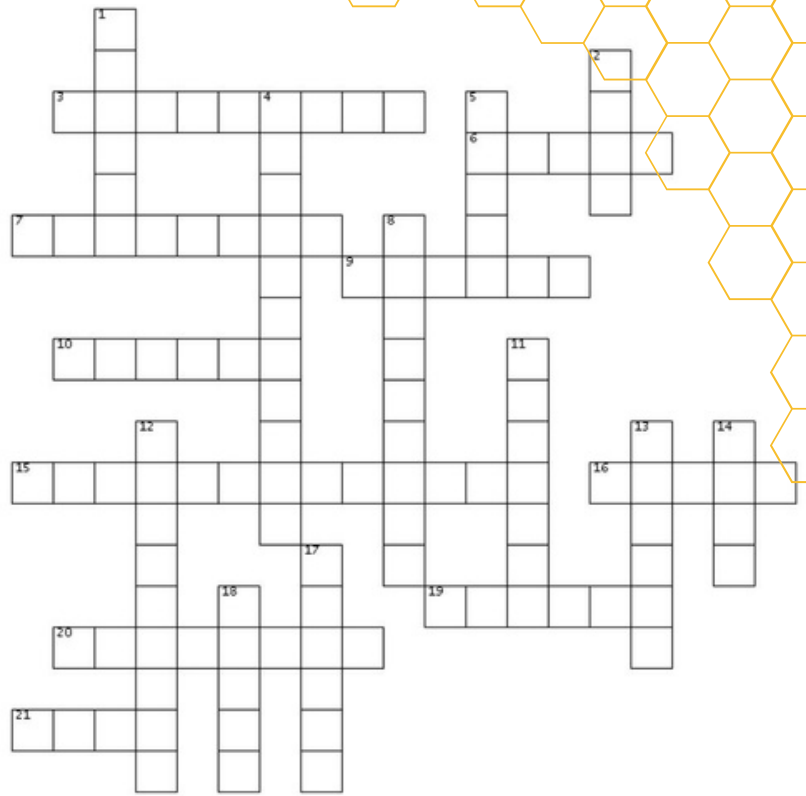
Storage options

- Wrap cooled and dry paste in parchment paper and foil in the fridge. Will keep for many months, at least a year.
- Store in an airtight container, and cut pieces as you need them.
- Cut into squares and store in the container. Place a piece of parchment paper between each slice to avoid sticking.

Serving options

- Slice of manchego sheep cheese on artisan bread
- Aged goat cheese
- Creamy brie
- Crackers
- Fresh walnuts
- Add to a charcuterie board

Crossword Buzzle



ACROSS

- 3. The mouth parts of the bee that form the sucking tube and tongue
- 6. Type of bee that takes care of brood
- 7. Stop the queen from getting to the supers
- 9. Middle section of the honey bee, that attaches to wings and legs
- 10. Type of bee dance
- 15. Four stages a bee passes through in their life
- 16. Stinger injects this
- 19. Northern Giant _____
- 20. Bee glue
- 21. Third stage in honey bee metamorphosis

DOWN

- 1. Type of acid to treat varroa mites
- 2. Loves to rob the bees
- 4. Replacement queen cell
- 5. Type of cover under the telescoping cover
- 8. Chemical secreted by bees that influence behavior of other bees
- 11. Huddled together for warmth
- 12. Hardy, gentle, Eastern European bees
- 13. When there is no food available
- 14. Where the honey goes
- 17. Location of the hives
- 18. Type of jelly fed to queens

Answer: (No peeking!)

