

NEBEEC

News You Can Use

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NEBEEC (Northeast Beekeepers Education Collaborative) has the goal of bringing beekeepers in the Northeastern US the best available and most current knowledge for practical beekeeping success. Currently, our major contribution toward this goal is a monthly newsletter which provides summaries of recent local bee club presentations, important journal articles and peer-reviewed papers, timely information from bee inspectors as well as notices about upcoming events.

NEBEEC also has an opt-in, collaborative Slack-based community for members to interact in. This community also has an embedded and customized AI chatbot for answering member beekeeping questions.

NEBEEC doesn't have membership fees. We do plan to incorporate it as a non-profit organization as one step to help us pay for the costs of software licenses.

We greatly value and appreciate your feedback, suggestions and contributions to make NEBEEC successful. If you have suggestions on items to include in future newsletters or any improvements, please contact us at nebeec@gmail.com

If this newsletter was forwarded to you, please consider subscribing at nebeec.com. You can also join our Slack community at the same time. You can also find all previous newsletters on that site.

Beekeeping Nuggets



Well, I'm definitely missing my bees and March feels like it's a long time from now. So, it's been time for a few remaining chores. Supers freeze-cycled and stacked inside - check. Queen excluders scraped down - check. Rendering this year's cappings - check. Next up will be adding extra wax to foundation in frames for next year. But after that my list is basically empty.

In my location, November 2025 was much colder than November 2024 — **average daily highs were a full 6 degrees lower this year** and there were significantly fewer flying days and hours. Was a warm November better than a cool November from a food consumption perspective? My scales seem to say that it doesn't make much difference.

A coalition of American and Canadian organizations have put together a document titled "North American Bee Strategy" for their respective governments. The document proposes steps to help bees and the honey business. The two main issues they address are: (1) the fraudulent honey importation issue and, (2) the lack of diligent prevention against and preparation for *Tropilaelaps* mites. It's a worthwhile read: <https://honeybeehealthcoalition.org/nabs/>

According to the Mann Lake website **Norroa** is now approved in 37 states including Connecticut, Rhode Island and Vermont. We haven't had a recent update on when it will be reviewed for Massachusetts, Maine or New Hampshire. And, no, there is no indication that Norroa harms bees in any way despite what may have suggested at a large meeting recently.

In case you missed it, the new labeling for Api-Bioxal allows for 4g/brood box. See the **Betterbee** podcast below for more information.

If you are an early tenure beekeeper looking for more education, check out the **Norfolk County Beekeepers Association Intermediate Bee School**. The first session this year is February 11th. I took it several years ago and really enjoyed it. See <https://www.norfolkbees.org/intermediate-bee-school.html>. It is Zoom only and, from the NCBA website — "Recordings will be saved for future viewing when allowed by the presenter". Are there other organizations in the northeastern US offering similar schools? We'd love to hear about them and promote them.

Recent Events



Connecticut Beekeepers Association Conference — November 6, 2025

Bee Health: Nutrition, Pesticides and Climate Change and the Impacts on Honeybee Health - Dr Priya Chakraba Basu

Main Takeaways:

- Honeybee nutrition is complex — thinking “nectar” and “pollen” alone is insufficient.
- Macro-nutrients: Carbohydrates from nectar and honey, lipids from pollen and proteins from pollen.
- Micro-nutrients: Phytochemicals (from nectar and pollen), vitamins (mostly from pollen), minerals (mostly from pollen) and phytosterols (mostly from pollen).
- Water foragers favor mineralized water for sources of calcium, magnesium and potassium) - especially when pollen is scarce. Note: contrast this with the research paper below which found that bees favor distilled water.
- Pollen diversity, availability over time and quality are all critical for honeybee health. Bees in a given environment may well be getting sub-optimal nutrition from available pollen in part of a or all year.
- Washington State University is working on a “Bee Nutrition Database” to help beekeepers collaborate on and gain information on the floral quality of their area.
- Editor’s Note: It has been widely observed that long-term diminishment of soil nutrients in the US is translating into significant changes in the nutritional quality of fruits and vegetables. That same issue may be playing out in some areas for honeybee forage as well.
- The second section of this talk was about findings on reduction of royal jelly quality in colonies foraging on pollen contaminated with pesticides.
- Multiple important micronutrients were found to be significantly less in royal jelly produced from contaminated pollen.
- Royal jelly itself was not found to contain pesticides.

Mass Bee Fall Meeting — November 8, 2025

Commercial Beekeeping Issues - Dave Hackenburg- Hackenburg Apiaries

Main Takeaways:

- The US once produced 7-800 million pounds of honey — that is now 130 million pounds.
- “Honey” consumption in the US is about 700 million pounds.
- With very cheap honey from overseas, commercial operations pay only \$1.75-\$2.00/lb — making it almost impossible for US producers. Many are holding 2 years' worth of unsold honey as a result.
- Fake honey used to be seen only in industrial contexts, now being sold to consumers (e.g., at Costco).
- Almond pollination income is necessary for most large-scale commercial beekeepers.
- Bee forage is massively reduced from the past and continues to be lost.
- Pesticides are a huge problem — e.g., sudden Florida loss of ~60,000 colonies, environmental accumulation and ubiquity, etc.
- Commercial beekeepers saw 65-80 % losses in the last year from a mixture of causes — reported Amitraz resistance being one of them.
- Regulation of pesticides is nearly impossible apart from acute human impact due to the commercial interests of large scale agricultural and chemical businesses.
- There are no honey standards in the US — adulterated honey is ubiquitous.
- Honey Integrity Act (HR.2162, Senate S.1028) introduced in early 2025 but has not progressed in either the House or Senate.
- ELAP program under pressure to reduce costs — such as ratcheting up minimum percentage losses required to make claims.
- Honey Collection pilot program — to track produced honey via legally verifiable chain of custody has been created.

Mike Palmer - French Hill Apiaries, St. Albans, Vermont

Main Takeaways:

- Get pollen substitute on colonies two weeks before Red Maple pollen.
- Dandelion and stone fruit trees are first bloom.
- Do first Varroa treatment in May, Formic Pro if weather is warm enough.
- Oxalic acid if not — cellulosaes pad long release rather than OAV.
- Will use ApiGuard, does not use Apivar.
- Will reverse deeps — queens will move up to lay but not down. Helps ensure nectar gets stored outside the brood nest and decreases swarm pressure.
- Moves brood frames as necessary to equalize colonies.

- Supers go on at beginning of dandelion/fruit bloom.
- Always stay a full super ahead — i.e., don't wait until a super is 70% full to add.
- Doesn't use queen excluders — will reverse supers if brood found when 2nd round of supers goes on.
- Monitor carefully for brood diseases.
- Mike requeens if chalkbrood is found.
- Raises queens with temperament being a primary selection criterion. As a result, he doesn't wear a bee suit or gloves.
- Raised 1000 queens in 2024, sold 600.
- Makes 300 nucs each year to replace losses and to sell.
- When requeening he uses a 3"x5" hardware cloth push-in cage. This allows queen to start laying before she is released, improving acceptance.
- Laying worker colonies will accept new queens 75% of the time if supplemented with emerging brood.
- Mike likes OA dribble more than OAV and when brood-less but with colonies raising brood deeper and deeper into the year this is less available.
- Interested in trying out Norroa despite cost — plan to try it in spring.
- Mike pulls supers before Goldenrod to let bees have any honey produced from late flow.
- After the fall flow ends, Mike weighs colonies and feeds 1 gallon of 2:1 syrup per 10 pound deficit to his target weight.
- Feeds using 1 gallon epoxy lined paint cans with feeder holes on lid.
- For winter, wraps with reusable 78" long tar paper.
- Adds rigid foam insulation above inner cover and duct tapes over inner cover hole to prevent bees from accessing and chewing insulation.
- Wire mouse guard length of front entrance.
- Has been testing trapped pollen at Cornell — started seeing pesticides in 2022, notably from corn-related pesticides. These are now endemic in the environment because pollen trapping for these tests is done before corn is treated in Vermont.

MDAR Apiary Team

Live Tropilaelaps mites were found on a Apis Dorsata colony on a ship outside of and destined for a New Jersey port. This has emphasized for many people how perilous the situation currently is. Also, of major concern are reports of beekeepers being called to take away swarms found near US ports.

Massachusetts American Foulbrood cases reports were considerably lower in 2025 than 2024.

10% of MDAR-sampled bees were infected with Tracheal mites. This reemphasizes the need to diversify miticide treatments or, at least, ensure that Formic acid or Thymol-based products are part of mite treatment regimens.

Dave Wade - Adding Used Wax to Make Comb

Main Takeaways:

- Wax glands produce wax every 12 hours.
- After mid-July, bees greatly reduce wax production.
- Adding bits of wax (the right way) will prompt bees to build comb much later into the season.
- Dave has done numerous experiments which have shown how to give bees wax so that they will use it and various ways to utilize it — from getting clean new frames built out to repairing sections in an otherwise built out frame.
- For more details on Dave's work, see <https://www.youtube.com/watch?v=bj60t74xc9s>

Franklin County - Beekeeping and Black Bears - November 17, 2025

Dave Wattle of MassWildlife did an excellent presentation on black bears which is available on the MassWildlife Youtube channel. Unless you are fully up on the state of black bears this is a must-watch video: <https://www.youtube.com/watch?v=Jn-8GGCL6Gs>

Main Takeaways:

- Bears have spread at a very high rate from western Massachusetts, eastward starting around 1980. Dave showed maps with observed bear densities through the years since.
- There are estimated to be 4500-5000 black bears in Massachusetts(!) — they are now ubiquitous north to south from the New York border to route 128.
- Bears are opportunistic omnivores — berries, human trash, deer carcasses, bee hives, berries, chickens, bird feeders, etc.
- Bears will habituate to areas and food sources — avoid giving them motivation to be in your area entirely.
- Electric fencing is a must for beekeepers — resources linked from the YouTube video have detailed instructions on how to build a bear resistant fence and the presentation itself spends a lot of time on this area. If you wait until you've had a bear attack your chances of keeping subsequent attacks away are significantly reduced — just do it.

At Home Beekeeping Series - Julia Mahood - November 18, 2025

This talk was titled “*Recordkeeping: Do better, feel better*”. As of December 3rd the recording was still available at: <https://www.facebook.com/LawrenceCountyextension/videos>.

Julia talks about various approaches to apiary record keeping with many examples of the system she uses and other beekeepers use. If record keeping is still a challenge check out the recording to, hopefully, find a system that will work for you.

Editor's note: One of my goals for this year was to follow through with record keeping and recording for the full year this year. It's a bit time-consuming and tedious but having the history for each colony has been very helpful. For 2026 I need to make it easier to know how old each queen is and her origin (most of mine are unmarked) – pulling that from a year's worth of recorded inspection histories is annoying.

Sustainable Beekeepers Guild of Michigan - Bob Binnie - November 20, 2025

So far, the video of this presentation is not available on the SBGMI website for members, nor on its YouTube channel. Bob gave a sobering presentation on the degree of contamination of our environment of pesticides including miticides.

Some takeaways:

- Non-organic miticides are lipophilic and accumulate in comb.
- Coumophos and Fluvalinate are found in all combs, however created. Even comb created anew without foundation!
- Similarly, tests show that a lot of pollen is laden with pesticides.
- Jennifer Berry showed that replacing comb in as little as 2-3 years can improve colony performance. This is more the case for migratory beekeepers with higher exposures.
- Bob guesses that the economic cutover for replacing comb is 8-12 years for colonies left in one location. This is surprising to me because Bob had previously suggested that 5 years was a better economic target.
- Editor's Note: At EAS 2023 Bob suggested replacing comb every 5 years in his featured talk. In 2025 I finally started marking new brood frames with a year and started trying to replace 2 frames per brood box. It's not fun tossing built comb and I didn't fully follow through last year. But that goal is on my 2026 list.
- Honey generally doesn't contain synthetic pesticides because they are generally not hydrophilic.
- Not only are there many different pesticides in the environment, but there are also observed cases of antagonistic effects on bees when they are combined. Very little research has been done in this area.
- Bob has moved from synthetic miticides to organic treatments (e.g., Formic acid, Oxalic acid) and is striving toward treatment free beekeeping with his queen breeding program.

NY Bee Wellness webinar with Randy Oliver - October 28, 2025

This was reviewed last month. The full video is now available - <https://www.youtube.com/watch?v=1DT2HTyF2-k>

Upcoming Events



Connecticut Beekeepers Association – December 11, 2025. Bill Hesbach leads the CBA monthly Q&A for members on Zoom on the 2nd Thursday of each month. These meetings are also recorded and are available for replay via the CBA website and (currently) made public on their YouTube channel. <https://www.ctbees.org/event-details/bee-talks-2025-12-11-18-30>.

Boston Area Beekeepers Association – December 18, 2025. Jennifer Keller is presenting on the impacts of and recovery from the 2024's Hurricane Helene in North Carolina beekeeping. I had the privilege of taking Jennifer's queen grafting course at EAS in 2023. She is a great communicator and I'm sure this will be a compelling presentation. <https://bostonbeekeepers.org/single-event/natural-disaster-impacts-on-bees-presentation-12-18/>.

Norfolk County Beekeepers Association – January 5th, 2026. Meeting will feature Cory Stevens speaking about VSH Queens and Queen Rearing - Zoom only. <https://www.norfolkbees.org/>.

Massachusetts Department of Agricultural Resources (MDAR) – January 7, 2026, 7-9pm, "MDAR Apiary Program End of Year Review". MDAR has several Zoom and in-person meetings throughout the year. I always find these meetings informative. They are not recorded but we will do our best to report on them. https://us06web.zoom.us/webinar/register/WN_VG6PBLHYRUq7Wvy2jnAdeg#/registration

North American Honeybee Expo – January 8-10. This is a large and still growing show which will be held January 8-10 in Louisville, Kentucky at the Kentucky Expo Center. It's known for a massive vendor floor and huge honey show as well as excellent speakers. Speakers currently include Bob Binnie, Frederick Dunn, Maggie Gill, Charles Linder, Ray Olivarez, Randy Oliver, Jeff Pettis, Cory Stevens, Robyn Underwood and Kamon Reynolds. <https://www.nahbexpo.com/>.

American Beekeeping Federation 2026 Conference and Trade Show – January 6-10, Mobile, Alabama. Keynote speakers will be Dr. Priyadarshini (Priya) Chakrabarti Basu of Washington State University and Dr. Dave Tarpy of North Carolina State University. <https://abfnet.org/2026-abf-conference/>.

At Home Beekeeping Series — January 27, 2026. Cameron Jack will be presenting on “Using Oxalic Acid Effectively”. See <https://www.aces.edu/blog/topics/bees-pollinators/at-home-beekeeping-series/>

Connecticut Beekeepers Association — February 19, 2026 6:30-8:00pm. Hangry Bees: Environment Impacts Temperament in Addition to Genetics with Dr. Elizabeth Walsh. Dr. Walsh will discuss her research in honey bee health challenges, looking at how nutritionally-stressed honey bees respond with increased aggression while also looking at genetic and environmental factors. <https://www.ctbees.org/guest-speaker-series>

At Home Beekeeping Series — February 24, 2026. Dan Aurell will be presenting on “Treating Newly Split Colonies with Organic Varroacides”. See <https://www.aces.edu/blog/topics/bees-pollinators/at-home-beekeeping-series/>

Sustainable Beekeepers Guild of Michigan — March 7, 2026. 2026 Virtual Winter Conference begins. Speakers will include Dr. Ralph Buchler, Dr. Gard Otis, Dr. Zac Lamas, Lutz Eggert, Corinne Jordan, William Hesbach. SBGMI is an excellent organization with lots of member benefits including discounts, past conference videos, etc. Their annual virtual conferences continue to have first class speakers on a variety of topics but queen breeding for varroa resistance is their core ethic. <https://sbgmi.org/product/2026-virtual-winter-conference-registration>.

Podcasts



Beekeeping Today Podcast — December 1, 2025 episode is “Honey Bee Viruses with Dr. Declan Schroeder” has several important points about honeybee viruses: <https://www.beekeepingtodaypodcast.com/362-Honey-Bee-Viruses/>

Some takeaways:

- A new study finds that honeybees do not appear to vector viruses to bumblebees despite popular press articles to the contrary.
- Honeybee viruses are becoming more virulent over time.
- The primary risk to bees with varroa is their ability to massively enhance the propagation of viruses — by an order of magnitude or more.
- Keeping varroa levels very low at all the time gives you the best chance of avoiding viral damage. Early and mid-season imprecision when sampling nurse bees is a challenge.

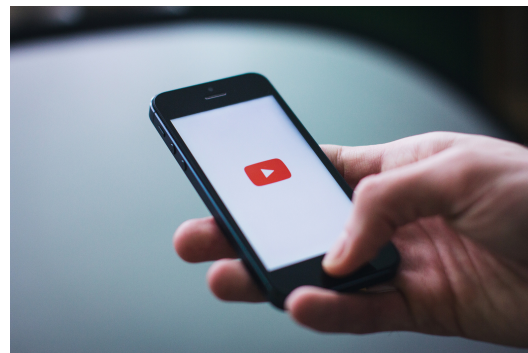
- Beekeeper activity can be an important biosecurity failure point - use of the same clothing between hives and apiaries, insufficiently cleaned tools between hives and apiaries, moving bees, queens or frames between colonies, densely packing hives in an apiary (which promotes bee drift), etc.

Two Bees in a Podcast – November 18, 2025 episode is “Understanding the Effects of Apiary Population Density on Colonies” with Dr. Ashley Mortensen, a scientist with the Plant and Food Research Group at the Institute of Bioeconomy Science in New Zealand. The idea of this work is to try to understand how to quickly and systematically determine whether a given apiary site is too densely populated for available forage. The idea is to give beekeepers a way to react and make changes early enough to improve honey yields. This work is in its early days and has a lot of challenges to overcome. But, it is an interesting investigation path that could well yield important information even if the full goal isn’t realized. <https://podcasts.apple.com/us/podcast/episode-220-understanding-the-effects-of/id1494010558?i=1000737320253>

Two Bees in a Podcast – November 11, 2025 episode is “Building a Beekeeping Business with Tara Chapman”. They talk about her newly published book “For the Bees: A Handbook for Happy Beekeeping” which is targeted as an approachable but complete book for new beekeepers. She also talks a lot about their successful agritourism business built around her bee operation. <https://podcasts.apple.com/us/podcast/episode-219-building-a-beekeeping-business-with/id1494010558?i=1000736262848>

YouTube Channels

National Honey Show – Randy Oliver presented last year on “Reading the combs - Understanding bee biology over the course of a season”. There are some great tips in here. It’s worth a rewatch. <https://www.youtube.com/watch?v=6HoL-Wpr--4>.



Betterbee – The latest video is “Interview with the Experts: Dr. Cameron Jack on the Oxalic Acid 4g Increase”. As the title suggests, it is primarily talking about the important update in the Api-Bioxal label - allowing dosing up to 4 grams per brood box. Cameron and David Peck also talk about the frustrations and delays in getting this and similar changes approved. There is also discussion of Cameron’s broader findings on effective oxalic acid usage and the challenges in different environments with different application methods. For example, high humidity environments degrade VarroSan strips much more quickly than the treatment period requires. <https://www.youtube.com/watch?v=vUBFeg2S2Cg>.

The Way to Bee – YouTube Channel and Podcast with Fredrick Dunn does lots of interesting videos including a Q&A every Friday of a selection of previously submitted questions. The Q&As are available as a podcast and all videos are available on YouTube. <https://www.youtube.com/@FrederickDunn/videos>

WSU Bee Program — PhD student Molly Quade presents on “Entomopathogenic Metarhizium for Varroa Control”. This is a dive on Washington State’s attempts to create a safe and effective fungus to kill varroa. If you have a general interest in biology and future-looking approaches to varroa control this is a very interesting talk. Molly is an excellent presenter (and researcher). The work shows real promise in the lab, and they are working toward field trials in 2026. Molly was also featured in the November 17th Beekeeping Today podcast if that format is better for you.

<https://www.youtube.com/watch?v=aSndz3Z39gw>

Recent Journal Articles of Note



American Bee Journal, December 2025, p. 1327-1333, “**Oxalic Acid Titration**”, Randy Oliver. In this article Randy goes through his work figuring out how to measure residual oxalic acid levels on bees following treatment. He shows the rapid reduction in OA levels and speculates about the lethal acid levels for varroa and safe levels for bees. It is another data point that affirms that successive treatments of OA should be very safe because the acid is essentially neutralized within a handful of days. This is a bit of a foundational article in the series. Next month’s column in this series will talk about the results of OA vaporization treatments.

American Bee Journal, December 2025, p 1343-1345, “**Plain Talk Beekeeping - Lower Energy Beekeeping - Making do with less**”, James Tew. In Jim’s Honey Bee Obscura podcast and his ABJ articles, Jim talks about the changes and compromises he is making as a beekeeper as he ages. They are lighthearted but often practical considerations for those of us getting older and one back tweak from big trouble. It seems like this is a genre that could be better developed. “Beekeeping Hacks and Tools for Seniors” perhaps.

Bee Culture, December 2025, p 39-41, Interview with Kirk Webster. This is a nice article about Kirk focusing on his recently published book “**Many Best Kept Secrets: A Wonderful and Unusual Life around Honey Bees**”. From the article “...part biography, part beekeeping manual, and part history book”. Kirk’s success as an independent, no-treatment beekeeper for many years is interesting in itself but the whole arc of his journey and philosophy made me want to read this self-published and quite substantial book. More on it next month.

Research Updates



Assessing low-dose lithium salts for Varroa mite (*Varroa destructor*) management in honeybees (*Apis mellifera*): field efficacy and health implications – F Clerger, L Kafle, PE Philémon – Experimental and Applied Acarology, 2025

This is an interesting area of study that I wasn't previously aware of – exploring whether very low amounts of lithium salts can control *Varroa destructor*. The authors have published previous papers on this as have a modest number of other groups. The most promising application is lithium chloride at 14g/hive which was seen to have 100% efficacy against varroa while not increasing bee mortality or reducing brood rearing. Lithium chloride is readily available and quite inexpensive and, with this very low application rate, even if there is residue in honey, the additional concentration would be extremely small. As with many such promising varroa treatments, commercialization and approval are huge obstacles. This paper is currently paywalled though I was able to acquire the full text with some work.

<https://link.springer.com/article/10.1007/s10493-025-01082-y>

Study of honey bee (*Apis mellifera*) water preferences: do bees really like dirty water? – Le Bivic, P., Alaux, C., Domalain, J. et al. Apidologie 56, 99 (2025)

This is a modest study on water foraging preferences of honeybees which has a seemingly contrarian result to what people frequently observe. Specifically, they found that bees show a strong preference for distilled water over any mineralized water. Most beekeepers and beekeeping lore will tell you the opposite - that bees will seek out “dirty” water, swimming pools, etc. I have water sources close enough to each of my apiaries that bees have never been interested in any water I put out but I may try distilled water next year as an experiment.

<https://link.springer.com/article/10.1007/s13592-025-01219-3>

Gear



A new company is developing a fireless smoker. They are running a Kickstarter-funded development process and plan to ship in May 2026. Personally, I'll wait to see how this plays out rather than being an early deployer and I'd like to understand the safety of the fumes of the liquid fuels they will be using.

<https://www.kickstarter.com/projects/1309949597/techbee-smoker>

The Easy See clear veil face has been a wonderful thing for me. I've been using this for the last 4 years and have found it to make inspections much easier. Along with getting my cataracts corrected this has made my old eyes a lot more effective. <https://www.theeasysee.com/>

Thank you for reading!



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