June 2026

THE BEE HERDER

Published by the Medina County Beekeepers Association

MEDINA beekeepers

MCBA Monthly Meeting
June 15th, 2026

Medina County Library
210 S. Broadway, Medina OH 44256
Rooms A and B

Questions & Answers 6:30-7:00 PM
General Meeting 7:00-8:00 PM

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https://agri.ohio.gov/divisions/plant-health/apiary-program

MCBA June Meeting

Monday, June 15th, 2026

Speaker: Brad Deering, State Apiary Inspector

Topic: State of the honeybees in Ohio

Join us for a data-driven overview of the "state of the honeybees" where the State Inspector combines field inspection results with broader trends affecting beekeeping across the state. We expect to hear how important honeybees are to Ohio agriculture, while also discussing ongoing challenges such as colony losses, varroa mites, and the spread of diseases like foulbrood. Brad typically presents findings and data from the Ohio Department of Agriculture's inspection program, including common issues observed in apiaries, with an emphasis on best management practices to maintain healthy colonies.

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Upcoming Events

June 22nd-28th – Pollinator week

June 24th – Invasive Species Management Workshop

OSU Extension, 6pm-7pm (4046 Medina Rd.)

July 18th – Bee Festival 2026

August 3rd-9th – Medina County Fair

August – Club Picnic (@Krabill Lodge)

September – Ag Day

December 9th – Christmas Party

MCBA July Meeting

Monday, June 15th, 2026

Speaker: NA

Topic: Fair booth Preparation / Cleanup

Join us to help prepare the Fair Booth for sale at this year's Medina County Fair. There may also be a final meeting to prepare sellers and get everyone on the same page for the sale of their honey during the fair.

Location: Medina County Fairgrounds, 720 W. Smith Road, Medina OH 44256

General Meeting 6:00-7:30 PM

MCBA Mission Statement

To promote beekeeping, broaden the knowledge and understanding of honeybees (and all pollinators) and the challenges they face in today's world, and educate by teaching best practices and techniques in apiary management.

President's Corner

By Peggy Garnes

It's a hot one for sure!!! We went from cold to cook and the bees are working hard to keep those hives cool. At least the swarming has slowed for the time now.

If you are entering the fair this year, start your creamed honey now to test your recipe. Cut comb boxes should get on quickly to get those frames done in time and you could use your best honey frames for entries as well.

A big "Thank You" to the club members that volunteered their time for World Bee Day event. The event was attended by almost 500 children. There will opportunity

for visiting schools in November for the Honey Breakfast presentations – let me know if you are interested.

The club has had several requests for presenters at school and summer camps – please let me know if you want to participate. I will be at the OSU camp on June 18 for their camp-three talks to 20 kids per session and home by 4. I can always use some extra hands!

World Bee Day

Our meeting this month will host Brad Deering, our state apiarist. Lots of very interesting information on the bees in Ohio – don't miss this one!

Well, stay hydrated, hug your family, and enjoy your summer bees!

Ten Minutes with the Bees – The bee yard in June

By Paul Kosmos (republished from June 2018)

June is an important month for northeast Ohio beekeepers, with the majority of honey production happening in June and early July. The "Ohio Trees for Bees" page of the Ohio State University Extension website shows photos of the leaves and flowers of the Black locust, Basswood (Linden), and Catalpa trees (https://ohioline.osu.edu/factsheet/ent-71).

If you installed a package this year on new foundation, your bees would have probably drawn-out comb in both brood boxes and the queen should be laying in the second brood box. Keep feeding until all of the frames are drawn out. Your overwintered hives should be strong - plenty of bees between the frames covering swaths of brood, forager bees bringing in pollen and nectar, and bees working in the honey supers. Watch for swarms and if you have not yet done so, put honey supers on your overwintered hives for the honey flow. You might also want to put a pollen trap on a strong hive. Some beekeepers keep the pollen trap open and collect pollen all summer, others recommend keeping the trap open for about three days to collect pollen and closed for several days to let the bees store pollen.

If you haven't yet put out wasp traps, now it is the time to do so. Take a look at the European Hornet that one of our members trapped in his bee yard and brought to the May meeting (in a vase covered with plastic wrap). European hornets are predators that can feed on bees, and strip bark and harvest the sap of bushes and trees such as ash, birch, roses and lilacs (https://beeinformed.org/2011/10/21/hornet-predators/).

And, of course, don't forget about pesky varroa mites. Do a monthly alcohol wash to measure mite counts and consider treatment if you have over 6 mites in your ½ cup sample of bees. When the temperature is between 50 and 90 degrees, you can use the MiteAway product. You can also make plans for walk away splits after the honey flow to provide a brood break.

(http://www.indianahoney.org/uncategorized/alcohol-wash-to-get-a-mite-count-in-a-beehive/)

We'll talk more about post-honey flow management in the next newsletter. We'll also talk about winter planning. Even though the summer has just started, the days will get shorter after the summer solstice on June 21. Beekeepers often say that winter planning should start in June.

Honey's composition and its impact on the human body

By Clint Allen

Honey is a complex natural substance produced by honeybees (Apis mellifera) from the nectar of flowers. It has been valued for millennia as both a food and a medicinal agent. Chemically, honey is primarily a supersaturated sugar solution, but it contains over 200 distinct compounds that contribute to its unique properties and biological activities. Its composition varies significantly based on floral (nectar) sources, geographical origin, climate, and processing, leading to substantial differences in color, flavor, texture, and bioactivity among varieties. This article examines the precise chemical makeup of honey, factors influencing its variability, and the scientific evidence for its effects on human health.

Honey consists predominantly of carbohydrates, which account for approximately 80–85% of its weight on a wet basis. The main sugars are the monosaccharides fructose (typically ~38–40%) and glucose (~30–34%), with smaller amounts of sucrose (~1–2%), maltose, and over 20 other oligosaccharides and minor sugars. The fructose-to-glucose ratio is generally around 1.23, though this can fluctuate. These sugars arise from the enzymatic inversion of sucrose in nectar by bee invertase and contribute to honey's high osmotic pressure and low water activity, which inhibit microbial growth.

Water content typically ranges from 15–20%, with values below 18.5–20% considered optimal for stability to prevent fermentation. Higher moisture levels increase the risk of yeast activity and spoilage. Proteins and amino acids constitute a small fraction (~0.3–0.5%, up to ~0.7% in some samples). These include enzymes contributed by bees and amino acids such as proline (often the most abundant, used as a ripeness indicator; >200 mg/kg is typical for unadulterated honey), along with lysine, phenylalanine, aspartic acid, and glutamic acid. Common enzymes include invertase (which hydrolyzes sucrose), diastase (amylase), glucose oxidase (produces gluconic acid and hydrogen peroxide), and catalase. These enzymes influence ripening, flavor, and antimicrobial properties.

Organic acids, comprising ~0.5% of honey, contribute to its acidity (pH usually 3.4–6.1, average ~3.9). Gluconic acid is predominant, formed via glucose oxidase activity, alongside citric, malic, and formic acids. This acidity enhances flavor and preservation. Minerals (ash content ~0.2–0.6%, higher in darker honeys) include potassium (often the most abundant, ~one-third of total minerals), calcium, magnesium, sodium, phosphorus, iron, zinc, and trace elements. Darker honeys generally contain higher mineral levels due to floral source differences.

Phenolic compounds, flavonoids, and other phytochemicals are responsible for much of honey's antioxidant capacity. These plant-derived secondary metabolites vary widely and include compounds like quercetin. Vitamins are present in minor amounts, notably vitamin C (ascorbic acid), B vitamins (e.g., niacin,

riboflavin), and others. Volatile compounds (>600 identified) provide aroma and are largely plant-derived. Hydroxymethylfurfural (HMF) forms during heating or prolonged storage from fructose dehydration and serves as a quality indicator (typically <40 mg/kg in high-quality honey).

Manuka honey exemplifies dramatic compositional variation. Derived from Leptospermum scoparium nectar, it contains high levels of methylglyoxal (MGO), formed from dihydroxyacetone (DHA) during maturation. MGO concentrations can reach hundreds of mg/kg—up to 100-fold higher than conventional honeys—conferring potent non-peroxide antibacterial activity. Other unique markers include leptosperin.

Variation with Nectar Sources and Drastic Compositional Differences

Honey composition is not uniform; it is heavily influenced by the botanical origin of the nectar. Monofloral honeys (from predominantly one plant species) differ markedly from multifloral or honeydew honeys (from insect exudates on plants). For instance, light-colored clover or acacia honeys tend to have milder flavors, higher fructose, and lower mineral/polyphenol content, while dark buckwheat or chestnut honeys are richer in minerals, phenolics, and exhibit stronger antioxidant and antimicrobial properties.

Sugar profiles vary: rhododendron nectar may yield honey with ~18.9% glucose and 43.4% fructose, while acacia shows ~18.0% glucose and 46.7% fructose. Polyphenol content can range dramatically, e.g., 28 mg/100g in acacia vs. 434 mg/100g in buckwheat. Specific phenolics like gallic acid or quercetin levels differ by source and even geography for the same flower. Enzyme activities (diastase, invertase) and amino acid profiles also depend on flora and bee species. Environmental factors like soil, climate, and season further modulate these traits. Honeydew honeys often have higher oligosaccharides and minerals compared to floral nectars.

Such variability explains why some honeys (e.g., Manuka) possess unique bioactive compounds absent or minimal in others, leading to specialized health applications. Analytical methods like pollen analysis, HPLC for sugars/phenolics, and mineral profiling help authenticate origin and quality.

Honey's health effects stem from its synergistic components: high sugar osmotic effects, acidity, hydrogen peroxide (from glucose oxidase), MGO in certain varieties, antioxidants (phenolics, flavonoids), and enzymes. It exhibits broad antimicrobial activity against bacteria (including antibiotic-resistant strains), fungi, and some viruses. Mechanisms include osmotic dehydration of microbes, low pH, hydrogen peroxide, and non-peroxide agents like MGO. Clinical uses include wound healing (topical application promotes tissue regeneration, reduces inflammation, and prevents infection), cough suppression (more effective than some over-the-counter remedies in children), and sore throat relief.

Antioxidant and anti-inflammatory effects arise from polyphenols that scavenge free radicals, reducing oxidative stress linked to chronic diseases. Regular consumption may modestly improve lipid profiles (lower LDL cholesterol and triglycerides, raise HDL), support cardiovascular health, and lower blood pressure via antioxidant mechanisms. Anti-inflammatory properties help in conditions like ulcerative colitis or general inflammation.

Honey shows potential antidiabetic effects when used moderately as a sugar substitute due to its lower glycemic index in some varieties (fructose-dominant), though high sugar content requires caution for diabetics. It may aid gastrointestinal health by combating pathogens causing diarrhea and supporting gut microbiota. Immunomodulatory and anticancer properties have been observed in preclinical studies, partly via apoptosis induction and reduced oxidative damage, but human evidence is emerging.

Nutritionally, honey provides quick energy from carbohydrates, trace minerals contributing to daily needs (e.g., manganese, potassium), and small amounts of vitamins. However, benefits are dose-dependent; typical medicinal doses are 50–80g or more, while excessive intake adds calories and sugars. Raw, unprocessed honey retains more enzymes and bioactives than heated varieties.

Variations matter clinically: Manuka honey's high MGO makes it superior for wound care and infections, while darker polyphenol-rich honeys excel in antioxidant applications. Not all honeys are equivalent; floral source determines efficacy.

Safety considerations include avoiding honey in infants under 1 year due to Clostridium botulinum spore risk (though rare in properly processed honey). Allergies to pollen or bee proteins are possible. Adulteration with sugars or overheating degrades quality.

Honey's exact composition—dominated by fructose and glucose, with diverse minor bioactive constituents—underpins its remarkable stability and therapeutic potential. Nectar source-driven variability creates a spectrum of products, from everyday sweeteners to specialized medicinal honeys like Manuka. Scientific research supports traditional uses and reveals mechanisms for antioxidant, antimicrobial, wound-healing, and metabolic benefits, positioning honey as a functional food. Future studies should focus on standardized clinical trials for specific varieties and optimal dosing to fully harness its health impacts. As a natural product with minimal processing, high-quality honey remains a valuable addition to human diets and medicine.

Nucleus Hives Available

We have some exciting news for members looking to expand their apiaries this season. Several nucleus colonies (nucs) are currently available and ready for placement in new or existing hives. For those interested in established stock, we have two nucs featuring strong overwintered queens that have already demonstrated their resilience and productivity. In addition, three nucs are available with new spring queens, offering fresh genetics and excellent potential for growth throughout the season.

All nucs are priced at $175 each and will be sold on a first-come, first-served basis, so early inquiries are encouraged. Whether you are looking to replace winter losses, increase colony numbers, or try out new queen lines, these nucs provide a great opportunity. Each nuc comes with a healthy cluster of bees and the necessary resources to help ensure a successful start.

If you're interested in purchasing or would like more details, please reach out directly to Shari Baker. She can be contacted via email at Shari.Baker.MCBA@gmail.com. You may also text her at 330-807-6563; texting before calling is preferred.

Don't miss out on this opportunity to strengthen your apiary for the season ahead. Availability is limited, and these nucs are expected to go quickly!

Ohio House Bill 911 and Potential impacts on Hobby Beekeepers

By Clint Allen

Ohio House Bill 911 (HB 911), introduced on May 13, 2026, is legislation aimed at updating and clarifying state laws governing the registration and placement of apiaries. The bill specifically focuses on restricting where new apiaries can be established in relation to existing registered operations, with an emphasis on reducing

conflicts between beekeepers and improving overall colony health.

At the core of HB 911 is a provision that would prohibit the establishment of a new apiary within three miles of an existing registered apiary unless certain conditions are met. These conditions include obtaining permission from the existing beekeeper, operating a non-commercial apiary, maintaining fewer than ten hives, or placing hives on property owned by the beekeeper. The intent of this restriction is to reduce overcrowding of colonies, which can lead to increased competition for forage, reduced honey production, and a higher risk of disease and pest transmission between hives.

The bill also reinforces and modifies Ohio's current apiary registration requirements. Beekeepers would still be required to register their apiaries annually with the Ohio Department of Agriculture, providing location details and maintaining proper identification at each site. Additionally, HB 911 would prevent the state from issuing new apiary registrations unless the applicant complies with the new location restrictions outlined in the bill. These provisions are intended to improve compliance with existing law and ensure better tracking and management of apiaries statewide.

For hobby beekeepers, the impact of HB 911 is expected to be relatively limited but still important to understand. The bill includes explicit exemptions for small-scale and non-commercial beekeeping operations, including apiaries with fewer than ten hives and those maintained strictly for personal or recreational purposes. This means that most hobbyists will likely not be subject to the three-mile restriction, allowing them to continue keeping bees on their own property or in small numbers without additional barriers.

However, hobbyists who are expanding toward larger operations or transitioning into commercial activity could be affected. Once an apiary exceeds the "small operation" threshold or is considered commercial, the beekeeper would need to comply with location restrictions and may need permission to establish new yards near existing registered apiaries. This could influence where growing beekeepers choose to locate future colonies and may require more coordination with neighboring beekeepers.

As of now, HB 911 is still in the early stages of the legislative process. The bill has been introduced in the Ohio House of Representatives and referred to the House Agriculture Committee as of May 20, 2026. It has not yet been voted out of committee or advanced to the full House for consideration. The next steps in the process include committee review, possible amendments, and a committee vote before the bill can move to the House floor.

If the bill passes the House, it will then proceed to the Ohio Senate, where it will undergo a similar committee and voting process. Following passage in both chambers, the bill would be sent to the Governor for signature or veto. Until it completes these steps and is signed into law, HB 911 remains a proposal and has no immediate legal effect on Ohio beekeepers.

Beekeepers of all levels must stay informed as the bill progresses, as future amendments or interpretations could further shape its impact on the beekeeping community.

Club Bee Yard Notes

Library Bees

Nuc pulled from hive at club yard #1. Green marked July 2024 queen. Will need to pull the bees in late August for construction at the library.

June 2

Took the bees out and cleaned the hive. Gave a new frame of nectar, one of pollen and nectar, and gave some fresh brood. Hive looks good. Watch for more dysentery on the glass.

May 19

Installed bees.

Bee bread and nectar in top and bottom frame. Second frame has pollen and larvae. The remaining two frames are mixed brood, mostly capped.

Library staff will give them syrup.

Club Yard #2

May 16

Oxalic dribble on both hives

South Hive–8 frame. BIAS, moved 8 frames of deeps into one box, kept medium box on. Did not find queen, will need to mark her.

10 Frame hive: no queen, loud bees, used blue queen from nuc. Nuc was very small, one 2 frames of bees and not many resources, and brood. Added queen in cage with attendants, fondant, they hopefully will accept her, release her. Check in 10 days.

2026 Bee Yard

Club Bee yard #1

#1– east hive - all medium library resource hives

#2–north hive

#3–west hive

#4 - resource hive between hive 2 & 3

Identified as Right and Left hives from the front orientation of hives.

May 16

Stand 3 – R-Nuc - Less than a handful of very sluggish bees, no Queen, no brood. A few spots of dysentery in hive. Clean and disinfectant frames before reusing.

Stand 4 (3 splits from swarm)

L-Nuc - Original nuc before swarm. Lots of bees and drones. No Queen or eggs seen. Check back in a week.

R-Nuc - Swarm with a few brood frames added. Bees are making a few queen cells on donated frames. Left queen cells just in case the original queen is lost. Lots of bees and drones. No Queen or eggs seen. Check back in a week.

ProNuc - split from original nuc. Lots of bees and drones. No Queen, queen cells, or eggs seen. Check back in a week.

All three look good and are quiet like a queen is present. May have missed a brand-new queen, or she could have been out on a mating flight.

Stand 2

L-Nuc - Calm and quiet. Still has some capped brood. No Queen cells seen. Split was made 14 days ago. (I failed to check notes and assumed split was older.) Leave another week or two and check back for queen or eggs

Hive 2 - 2024 queen. hive still very small (2025 library observation hive) Did see a small number of eggs and brood in all stages.

Club Meeting Minutes

Call to order: The club meeting was held at the Medina Library and was called to order at 6:00 p.m. Members of the Board in attendance were President Peggy Garnes; Vice President Greg Johnson, Directors, Steve Moysan, and Secretary, Sharon Carpenter.

1. Club bee yard: Bee yards have been inspected and are doing well.
2. Earth day went well.
3. World Bee Day is on May 20th. More volunteers are needed. We are hoping to have the library observation hive installed by this date.
4. The Medina Bee Festival's is on July 18th. The Sign-up-Genius is ready for this event.
5. Fair News: Honey prices have increased slightly for the 2026 fair. The memorial cabinet arrived and looked great. Criteria for what will be posted

in it will be discussed and settled at a later date. Rodeo tickets and fair entrance tickets were given to our club and will be dispersed among members.

6. The Bee Herder, website and Facebook page are going great as usual.
7. Speaker/meeting lign-up: June - State Bee Inspector; September – Melanie Seal from Blue Sky, Nutrition; October – Peggy Desantos, Ventilated vs condensing beehive; November – Getting ready for spring.
8. Bee Park: They will be having a planting day on May 30th, volunteers are needed for both days.
9. There is a public education day on Kelly's Island, which includes bee keeping. Medina Beekeepers are scheduled to participate on August 29th. We need to discuss the topics we will be presenting.
10. The Queen rearing class is being organized and will consist of a Zoom meeting for background information. Two days of meeting in the bee yard to do the grafting and placing into nuc boxes and a day to pick up the equipment and successfully grafted queens.

New Business:

1. We have a call to help with a cut-out located in Valley City. We will need to get a group together.

Adjournment

The meeting was adjourned at 6:25 p.m.

From Around the Web

Bumblebees have tiny brains, but they can solve problems like chimps and elephants

https://www.npr.org/2026/06/07/nx-s1-5846947/bumblebees-problem-solving-research?utm_source=npr_newsletter&utm_medium=email&utm_content=20260608&utm_term=10805057&utm_campaign=news&utm_id=75038837&orgid=727&uniquet=3ZGhRWRVM0QMYGCkZhrMjw&utm_att1=

A diet of royal jelly isn't the only thing that makes a queen bee

https://apnews.com/article/queen-bee-worker-honeybee-wax-hive-49420a2c62fd9f44588a01bf33d89f2b

Representative Melanie Miller Testifies in House Committee on Commercial Apiary Legislation

https://www.ohiohouse.gov/members/melanie-miller/news/representative-melanie-miller-testifies-in-house-committee-on-commercial-apiary-legislation-145178

Worker bees build a 'royal palace' for the honeybee queen

https://www.reuters.com/science/worker-bees-build-royal-palace-honeybee-queen-2026-06-10/

Ideas & Suggestions

This newsletter is for you, our members. If you have any ideas for content, format, corrections, or anything else, please, don't hesitate to reach out to me, Clint Allen via email.

Citations & References

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LegalClarity. *Ohio Beekeeping Laws: Registration, Zoning, and Penalties.* April 7, 2026. https://legalclarity.org/ohio-beekeeping-laws-regulations-and-requirements-to-know/