

THE BEELINE

Official Newsletter of the Central Iowa Beekeepers Association



ISSUE: Summer 2022

Editor: Laura Miller

CIBA MEMBER MEETING & PROGRAM

Saturday, May 21, 2022 5:00 p.m.

Northridge Baptist Church

3700 6th Avenue, Des Moines

Topic: *How to Merchandise Your Beekeeping Products*

Short business meeting at 5 p.m., with pizza, snacks and beverages (courtesy of CIBA) during the break, followed by the program by Sara Todd, the Holton Homestead, Elkhart. More on **page 3**.

CIBA SUMMER FIELD DAY

Saturday, July 16, 2022 All-day program

Location TBA

This meeting usually is devoted to getting a hands-on look at beekeeping. We visit member apiaries, research hives and other locations. Details are not yet finalized. More on **page 3**.

Questions? Call Program Chair Don Sievers, (515) 460-6004

DEADLINE FOR NEXT NEWSLETTER:

August 10, 2022

Email submissions and comments to:

Laura Miller, Beeline_editor@yahoo.com

We encourage you to receive the newsletter via email; however, we understand if electronic delivery is not for you! You may update your subscription by contacting Linn Wilbur, lwilbur50201@gmail.com

Happiness is seeing a bee on a flower you planted!!

FROM THE PRESIDENT, JAMIE BEYER

As you read through this month's BEELINE you will see how successful our auction was for sellers as well as buyers. There were a lot of satisfied beekeepers that day even though the wind was a bit tough to endure.

As I looked through the crowd, I noticed some long-standing supporters of CIBA. There was **Curt Bronnenburg** of Spring Valley Honey Farms and **Pat Ennis** of P&P Honey. Both of these commercial beekeepers support not only our auction but also Iowa Honey Bee Day and so many CIBA programs. **Andy Joseph**, our state apiarist, was there to inspect live bees and built comb. He also is a sideline beekeeper who sells honey.

The reason I am talking about this is that there are so many commercial beekeepers who make money selling stuff to us in many ways. Whether it is queens, packages or equipment, we depend on them. I personally only do business with commercial outlets that support CIBA and the Iowa Honey Producers Association (IHPA) and I encourage you to do the same. They give in so many ways – by attending our events, donating money, donating time, promoting the organizations and freely giving advice.

Other commercial operations I want to acknowledge are **Jason Foley** of Foley's Russian Bees and **Phil Ebert** of Ebert Honey, who give so much without compensation. Of course, Jason is president of IHPA and Phil writes a column for the IHPA's publication, the *Buzz*.

Then there are those operators who have the philosophy that "what is mine is mine and what is yours is mine." They are in it only for an immediate profit. Even though they benefit from the effort we put in to promote beekeeping in the state, they do not support us and our efforts to help beekeepers. So look at where you buy your beekeeping stuff and think about it. Ask those vendors how they support bee groups.

Just being a member of CIBA is vital to our future of disseminating unbiased information. So thank you for being a member. -- *Jamie*

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Table of Contents: Hover over any section of the Table of Contents, then press the CTRL button on your keyboard to create a pointing finger image. Press the left mouse button on any section of the Table of Contents to go directly to that section.

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CIBA Club Meetings/Communications

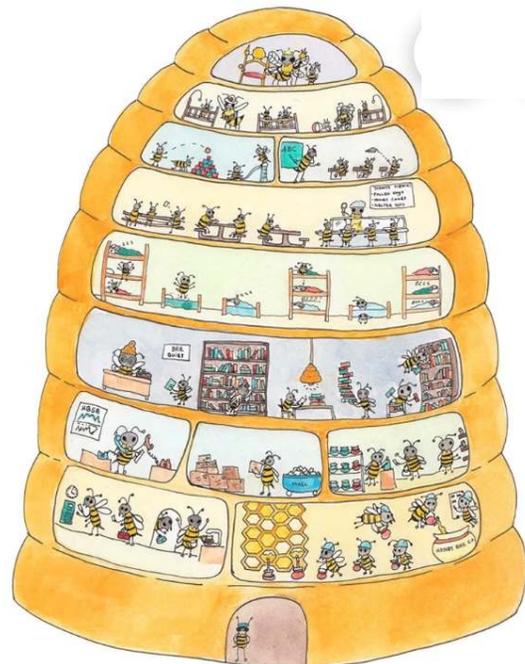
CIBA meetings and programs are on the third Saturday of January, March, May, July, September and November.

The official CIBA newsletter, the **BEELINE**, is published four times a year on the first day of January (Winter, beginning in 2023); March (Spring); May (Summer) and September (Fall). A special Student Edition is published each January for people enrolled in central Iowa beekeeping classes.

CIBA members also receive the **CIBA Newscast** email from the president on months when the BEELINE is not published (not available for members who choose to receive CIBA info only via USPS).

CIBA Bee Bits, an email newsletter with helpful hints about beekeeping, comes out the 15th of each month (not posted on the CIBA website and available only for CIBA members who receive CIBA info electronically).

Home Sweet Home



CIBA Program Updates

May 21: Marketing Your Products

Date: Saturday, May 21

Time: 5 p.m.

Where: Northridge Baptist Church, 3700 Sixth Avenue, Des Moines

Schedule: Short business meeting at 5 p.m., with pizza, snacks and beverages (courtesy of CIBA) during the break, followed by the program, How to Merchandise Your Beekeeping Products by **Sara Todd**, the Holton Homestead, Elkhart.



Join us for food, a chance to talk bees with other beekeepers and what we know will be a fantastic program on how to market bee products. We heard many good comments about Sara Todd's presentation last November at the Iowa Honey Producers Association annual conference.

Sara is a third-generation beekeeper. Her family has kept bees together since the 1980s. She's passionate about marketing, which you'll see when you visit the Holton Homestead website (<https://holtonhomestead.com>) where bee products abound. She sells creamed, infused, hot, orange blossom, flavored and wild flower honey, also lots of candles, wax, soap, gift boxes and other farm products. They have a retail store on their farm and their products are in other retail locations. She has a fascinating story heaped with enthusiasm that you will not want to miss!

It's Field Day Time Again – July 16!

Mark your calendars for CIBA's summer field day on Saturday, July 16. This meeting usually is devoted to getting a hands-on look at beekeeping. We visit member apiaries, research hives and other locations. Details are not yet finalized but you can bet that this event will be a good one.

If you have ideas for a field day, or apiaries that you want to visit as a group, please contact **Don Sievers**, who leads the program committee, at (515) 460-6004 or dwsievers4@gmail.com. We always like to hear your ideas and we love to have volunteers!

Other CIBA Business

Join Us for CIBA Board Meetings

CIBA officers and directors have online board meetings the second Monday of each month beginning at 7 p.m. (the Zoom link opens at 6:30 p.m.). Discussions vary depending on issues and the need for future planning. Meetings are open to all CIBA members. You are encouraged to attend to learn more about CIBA and contribute to running the association. An agenda for each meeting is available from any officer or director a few days prior to each meeting. Contact information for the officers and directors are on the back page of each BEELINE issue or on the CIBA website.

If you are not familiar with Zoom, here is a resource page to learn more:

<https://support.zoom.us/hc/en-us/categories/200101697-Getting-Started-with-Zoom> To connect via phone, find a local number at <https://us02web.zoom.us/j/89302432393>

Here are the Zoom links for the next 4 months for connecting via the internet:

May 9: <https://us02web.zoom.us/j/89302432393?pwd=WkhxcC9BekYrUmdYbzMxbzBJTmt6Zz09>

Meeting ID: 893 0243 2393 & Passcode: 553189

June 13 <https://us02web.zoom.us/j/82508608344?pwd=SUMzT0ZKMkQjWisYUG52a3RMcWdQQT09>

Meeting ID: 825 0860 8344 & Passcode: 725508

July 11 <https://us02web.zoom.us/j/81904077164?pwd=bVd1Sm8xWHdITkhqOUdwS2RLR1FIUT09>

Meeting ID: 819 0407 7164 & Passcode: 496823

August 8 <https://us02web.zoom.us/j/87390004149?pwd=cVEzcmFUUHNKZ1N6dklvTmorc25xdz09>

Meeting ID: 873 9000 4149 & Passcode: 989758

Discussion Continues on Community Apiary

Discussion about a community apiary took another turn in March when the CIBA board was given a proposal to operate a demonstration apiary with Iowa State University (ISU) and the Great Plains Master Beekeeper (GPMB) program at the University of Nebraska-Lincoln.

Submitted by ISU extension bee specialist Randall Cass, the proposal invited CIBA to partner with ISU in setting up an apiary this year at the ISU Horticulture Research Station north of Ames near Gilbert. It would be a demonstration site hosting monthly “open apiary” days, field days, classes and certification offered by the GPMB program. Volunteers from both the Iowa beekeeping community and ISU student body would maintain the site, which would be a collaboration of CIBA, ISU and the GPMB program.

CIBA members have discussed operating a community apiary for several years. One obstacle has been the high cost of insurance, which is reduced for educational nonprofit groups. CIBA’s application with the IRS for status as a 501(c)3 organization is in process (see page 7 in the Winter 2021 BEELINE).

Directors talked about the ISU proposal at their March 14 meeting. Action was tabled after members raised questions about financial liability, insurance, the number of volunteers needed, and its location in Story County versus other locations in the Des Moines area that have been considered for a CIBA apiary.

CIBA director **Ray Knapp, Jr.** leads CIBA’s community apiary committee and is gathering information, opinions and questions about the ISU proposal as well as CIBA’s plans to have its own apiary. Please contact Ray at (515) 249-1899 or rknappjr@hotmail.com, and stay tuned for details!

Meet New CIBA Board Member: Donald Sievers

I have been a beekeeper for 14 years. When I was about 60 years old, my wife thought I needed a hobby. I had recently planted a small orchard on our farm just south of Slater where we live. One of my clients had an orchard and told me I needed to get some bees if I wanted any fruit. We happened to be going to the Ames library that evening, so I got a couple of bee books and was hooked. A week later I was building bee boxes every night.

I have three hives now but have had as many as 12. I prefer to keep my hive numbers at an adequate level to pollinate my trees, survive the winters, and provide enough honey for family and friends.

Arvin Foell (state bee inspector and former CIBA president) had been a client and friend of mine for many years. Once I got bees, I contacted him to learn more about beekeeping. He provided a tremendous wealth of practical information and invited me to a CIBA meeting. There I had the opportunity to meet John Johnson, Glen Stanley and others willing to share their knowledge.

I hope to strengthen the organization and continue to provide education for new beekeepers. My biggest challenge is keeping my bees alive in the winter. I love watching my bees collect nectar on my fruit trees and carry the pollen back to the hive. I think young beekeepers need to find a mentor and then try to learn as much as possible about bees.

I am a retired veterinarian. I practiced in Slater for 41 years. My wife, Marilyn, is allergic to bees but she is very much in favor of the bees. We have epi pens everywhere. We have four adult children and 10 grandchildren.



CIBA Auction News

Annual Event Returns, Live and In-person!

Submitted by Newsletter Editor Laura Miller

The Field of Dreams adage seemed to be true: If you build it, they will come. And come they did! The 2022 Annual CIBA Spring Auction on April 21 was a success, even by pre-pandemic standards.

For the first time since 2019, CIBA hosted its annual auction live and in-person at the Washington Township School near Minburn. Gale-force winds and temperatures in the 30s and 40s did not keep people away. The auction attracted 11 consigners and more than 80 registered buyers (56 snagged a deal on one or more item).

For more than 4 hours, auctioneers **Bill Van Roekel** and **Roy Kraft** called for bids on all types of bee equipment including several hives of live bees. The commission paid by sellers go in our general fund and make up our group's largest fundraiser. A report of auction proceeds will be given as part of the CIBA treasurer's report at the May CIBA meeting.

Inside the building, bidders warmed up with coffee, hot chocolate, donuts and cinnamon rolls, all offered at the Queen Café, with proceeds supporting the CIBA royalty program. Many thanks to donors, consigners, buyers, volunteers and anyone else who stopped by.

Thank You, Queen Program Donors!

Submitted by Susan Kelly, CIBA Royalty Program Committee

Thanks to everyone at the Winter Seminar who bid in our inaugural silent auction to raise funds for the CIBA royalty program. We made more than \$500 at that one event in March! A big thank you to **Ann Wilbur** who donated two beautiful quilts (see photo on page 9), and **Chris Crandall** who made two honey-themed baskets to sell at the silent auction.

It was nice to be back in person for our annual auction in Minburn a couple of weeks ago. Many people donated food that we sold at the Queen Café, with all proceeds going to the queen program. Thanks to the donors and everyone who purchased food, drinks and snacks on that cold, windy day.

I also want to give a huge shout-out to everyone who donated beekeeping items sold at the auction in the queen lot – with all funds supporting our queen program. Special recognition goes to **Curt and Connie Bronnenburg** of Spring Valley Honey Farms for donating two packages of bees and four queens, to **Jim Crandall** who donated six nuc boxes (and so much more!) as well as **Laura Miller** and **Jamie Beyer** who donated items to the queen lot. We raised at least \$500 for the queen program.

We strive to improve the CIBA royalty program every year, but that takes money. Thanks to all who have donated, food, auction items, educational tools and money for the program. It has been my joy to see the program grow and expand since I became chair in 2019. This year **Johnathan Preston** donated an observation hive for Queen Olivia to use in her presentations. We also have purchased a teaching hive and educational posters that can be used from year to year by future queens and ambassadors. Your support of this program has been phenomenal! If you want Queen Olivia to present or come to at an event, please contact me at CIBAQeenChair@gmail.com.



Top: Mike Sander helps organize items. Second from top: The two Olivias – Olivia Kelly and Queen Olivia Moody – provided incredible help throughout the auction. Third from top: Volunteers and buyers warm up inside the building, where Val Just and Linn Wilbur staffed the pay station. Bottom photo: One beekeeping business sold everything at the auction.

The Queen's Corner: Abuzz with Activity

Submitted by CIBA Queen Olivia Moody

I am happy to say that my duties as your honey queen have been picking up! On March 30, I attended Iowa Honey Bee Day at the Capitol in Des Moines, along with queens from other beekeeping groups in Iowa (see photo). I spoke with various legislators as well as lobbyists for Iowa beekeepers. I also attended a subcommittee meeting about the Choose Iowa initiative and gave honey sticks to everyone in attendance. It was a great opportunity to connect with fellow beekeepers as well as legislators!

In April my schedule included a presentation at the Des Moines public library and helping auctioneers at the CIBA equipment auction. I would like to thank **Johnathan Preston**, who donated an observation hive to the program. I am excited to use this hive for my presentations. It's a great way for people to see the magic behind the honey they eat!



Here to serve: Queen Olivia (right) working Miriam (left) and Elianna Kelly at the Queen Café on auction day.



Royalty Abounds: CIBA Honey Queen Olivia Moody (back row, left) was among the royalty attending Iowa Honey Bee Day in Des Moines on March 30. They were (front row left to right) Britta McCollum, Boone River Honey Queen; Veronica Vonderohe, North Iowa Honey Queen; (back row left to right) Olivia Moody, Central Iowa Honey Queen; Allison Hager, Iowa Honey Queen; Rachel Vakulich, East Central Honey Queen; Vanessa Vonderohe, North Iowa Honey Queen candidate.

A black banner for the Central Iowa Beekeepers Association website. On the left is the CIBA logo, a hexagon with 'CIBA' and 'Central Iowa Beekeepers Association' around it. To the right, the text reads 'Welcome to the Central Iowa Beekeepers Association'. Below this is a navigation menu with links: Home, Events, About, Programs, Resources, Give Us a Buzz, and Community Service.

CIBA on the Web Draws Lots of Visitors

Submitted by CIBA Webmaster Val Just

Here is the scoop on our new website! At the end of 2020, we fast-tracked roll-out of our new website, www.centraliowabeekeeperspassoc.org, built on the WIX platform. Looking at recent site use stats, it's obvious that our web site has been an amazing tool ever since!

Our mission is to "Promote the craft, science and future of beekeeping," and this website is doing just that. It's a one-stop-shop for you to stay in touch and to find helpful beekeeping resources. The site also helps educate non-members as well as encourage beekeepers to join CIBA.

Using the web site, we can efficiently administer CIBA fundraisers and annual activities, including our winter seminar, auction and summer field day. For example, we post forms and extensive information about our events on the site, including the ability to pre-register as a bidder or seller at our auction. Previously these activities were done in person, requiring more volunteers and effort to handle that information. Anyone browsing the web can see our activity calendar with details about member meetings and other events. We also post information about activities of our partners, such as the Iowa Honey Producers Association.

Here's a look at views of some of our pages on the site, which demonstrates the usefulness of our web site: CIBA pages with the most views are either associated with fundraisers or with our beekeeping educational mission.

We continue to gain new visitors. In just in the last 30 days, there were 346 unique visitors, some returning for more than one session, with the average visit around 5 minutes.

According to Google, our site bounce rate (sessions that begin and end on the same page) is lower than similar sites. The bounce rate is 62% for new visitors and 49% for returning visitors, compared to a typical bounce rate of 80%.

CIBA's primary traffic source are surfers using Google, with Facebook our secondary medium. Five percent of viewers are international in origin, with 95% within the United States. Iowa viewers are 68% of the incoming activity, with Minnesota and Illinois closely following.

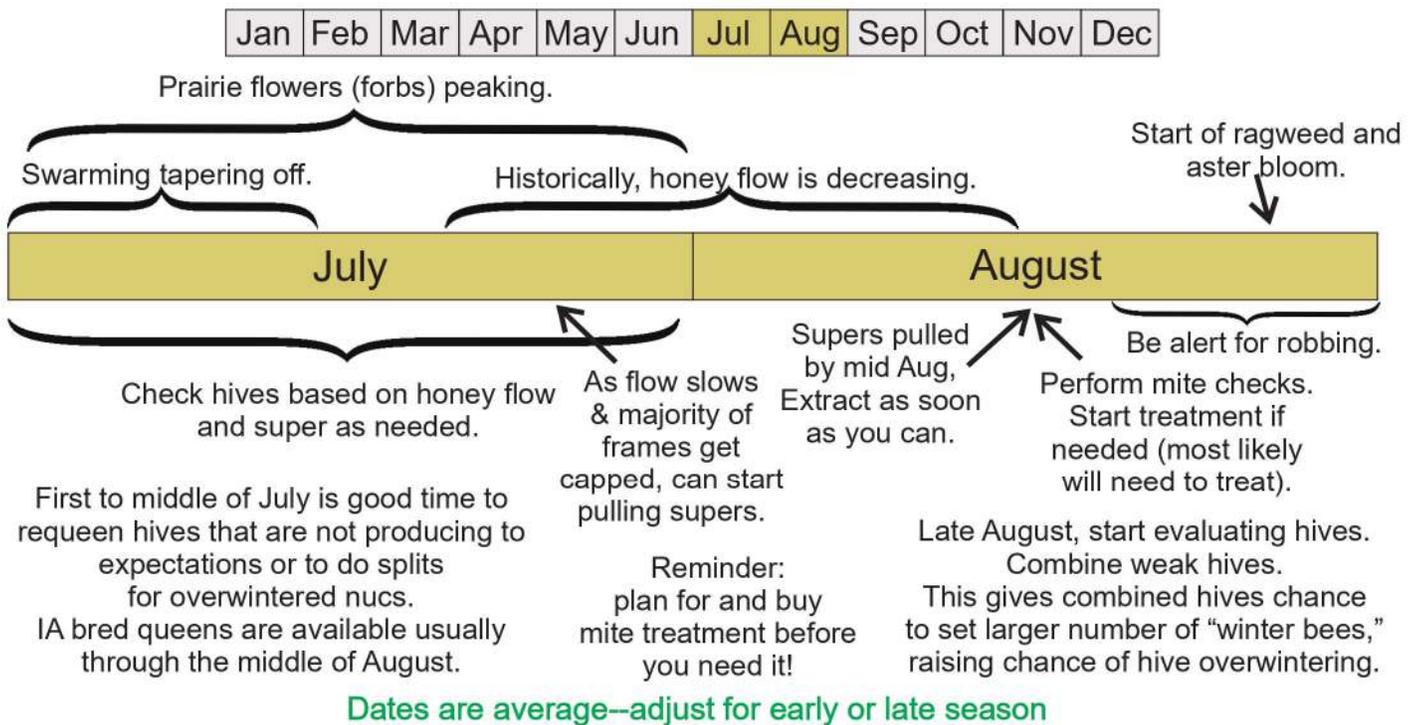
PAGE VISITS - LAST 30 DAYS				
Entry page	Page views	Site sessions	Associated with Education/Mission	Associated with our Fundraisers
Home Page	332	209	Yes	Yes
/About 2022 auction	266	227		Yes
/Winter-seminar-march-2022	142	82	Yes	Yes
/2022-iowa-honey-bee-day	64	54	Yes	
/So You Want to Be a Beekeeper	50	42	Yes	
/Membership	33	27		Yes
/Our-fundraisers	31	23		Yes
/Margaret FAQ's	28	25	Yes	
/Our-annual-auction	22	19		Yes
/Beecheck-hive-registry	22	20	Yes	
/Iowa-honey-bee-day	20	17	Yes	
/State-resources	20	18	Yes	
/Queen-ambassador-program	16	11	Yes	
/The-beeline-newsletter	12	10	Yes	

NEW OR RETURNING VISITORS – LAST 30 DAYS					
New or returning visitor	Page views	Site sessions	Unique visitors	Site bounce rate**	Avg. session duration (minutes/seconds)
New visitors	953	474	346	62.00%	04m 50s
Returning visitors	221	96	59	49.00%	05m 29s

**Typical site bounce rate (sessions that begin and end on the same page) for similar sites is 80% per Google.

TRAFFIC SOURCE			
Traffic source	Site sessions	Page views	Unique visitors
Google	244	532	170
Facebook	154	237	129
Direct	101	211	69
Bing	22	82	17

Central Iowa Timeline of Beekeeping Tasks



Editor's Note: The Central Iowa Timeline for Beekeeping Tasks is based on a framework developed by CIBA member Linn Wilbur that has been reviewed by CIBA directors prior to publication in this newsletter. The timeline covers the months until the next BEELINE is published to give members a better idea for planning time and tasks related to their bee operation. Contact any board member with questions or comments about this timeline. Tasks and dates are approximate, based on average temperatures in central Iowa. Copyright 2022 Central Iowa Beekeepers Association

Eight Things You Missed at the CIBA Winter Seminar

Submitted by Newsletter Editor Laura Miller

Here's a look at only some of what you missed if you did not attend CIBA's annual winter seminar on March 19 in Grimes. Make sure you don't miss anything next year and join us!

1. **Lots of sunshine:** Although no snow hampered travel to the event as it has at past winter seminars, ice covered parts of the parking lot as people arrived at the Grimes Community Center. Not to worry, the afternoon speaker joined us via Zoom from his office in New York.
2. **Potential headache.** Small hive beetles are a persistent problem in southern states, and ISU extension bee specialist **Randall Cass** reported seeing a hive in Iowa last season that had been "slimed-out" by larva of the small hive beetle.
3. **Equipment standardization is key.** State apiarist **Andy Joseph** offered his experience and advice for beekeepers looking to "scale up" their operation from a hobby to a sideline business.
4. **Delicious food, of course!** Once again the CIBA Food Committee came through with gourmet lunches from Palmer's Deli and an assortment of goodies during breaks. For her magical baking prowess, CIBA honored long-time volunteer **Joann Eubanks** (see photo at right).
5. **All about buzz.** Researcher **Dr. Carol Fassbinder-Orth** has studied numerous characteristics of bees, including the sound they make by vibrating their wings. She has identified nine different conditions of a hive according to the buzz made by those bees.
6. **The Search Committee.** Researcher **Dr. Tom Seeley** said 300-500 scout bees are the hive's best flight navigators as they search for a new home before a swarm occurs. They're also the "rabble-rousers" when they try to convince the rest of the colony about the quality of the home they have found.
7. **It All Adds Up.** According to researcher **Dr. Tom Seeley**, a healthy bee colony will collect more than 12 gallons of water, a half-pound of propolis, 50 pounds of pollen and more than 200 pounds of nectar during an average season.
8. **Lots of bee talk.** Isn't that the best part of these meetings? We had 89 people registered for this event representing hobby, sideline and commercial operations.



Above, left: We celebrated CIBA's 75th anniversary at the Winter Seminar with delicious cakes served by (left to right) Cindy Spiker, Keri Kenoyer and Chris Crandall. Above, middle: noted bee researcher and author Tom Seeley joined our seminar via Zoom. Right: Members donated a table full of beautiful items to kick off CIBA's inaugural silent auction, including two amazing quilts from Ann Wilbur.

CIBA Member Contributions

Things to Consider When Adding Honey Supers

Submitted by Mike Sander, Past CIBA President

When I was asked to write about supering bee hives, I was a little puzzled. It seems simple: you add supers before nectar flow, or when the bee population grows and you want to keep the hive from swarming.

Then I started thinking about what we often say as beekeepers: Ask three beekeepers a question and you'll get four different answers. So what would the other two beekeepers say? Now as I listen to conversations, the answer depends on different scenarios and circumstances that may be present. So what things might a beekeeper encounter, and what's my advice?

Is it different for a first- or second-year beekeeper? Probably. Most first-year beekeepers probably have new equipment with undrawn foundation. In this case, you likely would be installing your first honey super because the bees need more space (and the bulk of the honey flow already may have taken place). Second-year beekeepers likely have some comb drawn out from the previous year. In this case, you will want to add a super before bees start to plug the brood nest with nectar. You also may want to add two supers at once because comb already is drawn and the bees won't need to feel crowded before they build comb.

You probably wonder: exactly when do we add supers? That's a great question, and almost impossible for me to answer. Some people add supers when dandelions start to bloom. Others advise adding supers when you see new white wax on top of frames, while others say the first of May. All are good general indications, but in my experience you could be a little late. It depends on where your hives are located. Hives in a city tend to be in a little warmer climate. I have found that plants often bloom earlier in a city and that by April 10 I already see nectar deposited in brood nests of hives located in Des Moines. My hives located in rural areas outside Des Moines will be at least a week or so later.

Here's another observation: I hear that beekeepers living south of me are supering earlier, and those living north of me (Ames) seem to be a little later. Of course, all of this is weather dependent. If it is cold and rainy at the wrong times, the bees will not be flying, and they may miss some of the early nectar flows.

Your goals and management also may play a role. If you are not managing for honey, you likely have split your hive and bees may need some time for the population to recover before you install supers. If you manage for honey production and have not split hives, you likely will have large colonies, in which case you may want to add supers sooner to help alleviate hive congestion. I have been told that putting an entrance shim above every two supers can help reduce congestion and reduce the swarm impulse, but I have not tried it yet.

Nectar sources in your area also may be different than where my hives are located. Find someone who keeps bees in your area and ask for their advice. And you can make your own observations. If you notice liquid dripping from frames when you pull them for inspection, it's time to add a honey super. It's also time to add a super if you see cells in the brood nest being filled with nectar before the queen can return to lay more eggs. (Nectar in the comb usually is a clear, shiny-looking fluid.)

Where do we put that second round of supers: on top of the stack or on the bottom next to the brood box? Either is fine. I typically place supers with undrawn comb closest to the brood nest. I think drawn supers can go on top of the stack because I use upper entrances to reduce congestion and the swarm impulse. Placing the second round of supers on top also keeps you from having to lift all those heavy supers full of honey. If you are not using upper entrances, placing empty supers underneath full ones may be a good option. However, placing empty comb close to the brood box later in the season will allow the queen to easily find and lay eggs there (which you do not want in honey supers).

In summary, it's really a matter of getting into your hives every week to 10 days to see for yourself when bees start to bring nectar into the hive. As soon as you see the brood nest shrinking in size due to nectar storage, or bees are covering nearly all the frames, it's time for a super.

What's the Connection between Ukraine and Honey Bees?

Submitted by Keri Kenoyer, CIBA Food Committee Chair and Marketing Committee Chair

While pondering ideas for CIBA Facebook posts, I wondered how Ukrainian beekeepers were faring in the war. After a nudge from our editor, I found a fascinating connection! Ukraine is the number one European country and one of the top five in the world for honey production. Ukraine has the world's highest per capita honey production. The country has about 400,000 beekeepers, or 1 beekeeper for every 107 Ukrainians (the U.S ratio is 1 in 1,500!).

Beekeeping in Ukraine dates to Kievan Rus in the Middle Ages, detailed in the country's first Code of Laws by Yaroslav the Wise. This hobby has been passed from generation to generation, each keeping the tradition alive while embracing new technologies and trends. Many Ukrainians keep bees in their urban back yards, up to 10 or more colonies. Their equipment, with minor modifications, is similar to what's used in the U.S. The retail price for honey also is similar, about \$8.53 per pound.



One name that kept coming up was Petro Prokopovych. In 1798 he resigned his military commission to retire at his brother's apiary. He developed a fascination for bees, studying the biology of bee colonies. He wanted to develop methods that caused the least disturbance and damage to bees. Sixteen years later, Prokopovych created the first removable beehive frames that allowed an easier honey harvest than the previous practice of killing all bees with smoke before taking the honey. While modified, this frame is still used today by millions of beekeepers around the world.

Prokopovych also invented a crude wooden partition with openings passable only by worker bees, now called a queen excluder. It became possible to harvest honey without contaminating the brood. Prokopovych had another passion – teaching – and what better topic than beekeeping and the science of bee health. He created the world's first beekeeping school in 1828 that prepared hundreds of qualified beekeepers over its 53 years of existence.

The Ukraine National Beekeeping Museum located in Kiev honors Prokopovych and is one of the world's largest beekeeping museums (now on my bucket list of places to visit!). It has several displays featuring a variety of historical beekeeping artifacts and scientific research. The grounds include a library as well as a laboratory for research. Check it out at: www.outdoorplace.org/beekeeping/museum.

Called the founder of commercial beekeeping, Prokopovych considered beekeeping the most profitable branch of agriculture and he proved it. He owned 6,600 colonies and became wealthy.

Today's world paints a different picture. The war in Ukraine has deeply hurt its rich beekeeping culture. Many Ukrainian beekeepers have lost their apiaries, equipment and facilities, which will reduce the amount of honey produced and drastically decrease Ukrainian beekeepers' income and way of life. Many efforts are underway to raise funds to help beekeepers affected the most. If you want to help, be sure to do your due diligence that you are giving to a legitimate organization.



Making Great 'Traditional' Meads

Submitted by Andrew Joseph, State Apiarist, Iowa Department of Agriculture and Land Stewardship



Editor's Note: This document is not intended to be a complete "how to" for mead-making. It is intended to supplement a basic understanding of brewing equipment, terminology and processes. The recipes are for 5-gallon quantities.

Dry Mead

10 lbs. honey
Approximately 4.2 gallons water
2 Tablespoons each - Nutrient and Energizer
Yeast

Medium Mead

12.5 to 14 lbs. honey
Approximately 4 gallons water
2 Tablespoons each - Nutrient and Energizer
Yeast

Sweet Mead

15 to 18 lbs. honey
Approximately 3.5 gallons water
2 Tablespoons each - Nutrient and Energizer
Yeast

Sanitization

Clean and sanitize (using properly prepared solutions of bleach, Starsan, Iodophor or other) every single thing which will come in contact with your mead. **This is the most critical component to producing a good, finished mead.**

The "Brewing" Process

There is a lot of debate over how to treat the ingredients of mead. Should everything be boiled for a length of time, brought to pasteurization then cooled or assembled using only enough heat to allow the honey to thin and flow? Everyone has a level of comfort vs. concern over contaminants, bacteria, wild yeasts, etc. in the honey and water. Heating honey certainly drives off some of its volatiles changing your perception of its smell/taste. It's possible that choosing to not heat your must it may increase its susceptibility to infection, but some of the best meadmakers are choosing the "no heat" method in producing their award-winning meads.

Nutrients and Energizer

Honey doesn't provide all the requirements for proper yeast health and vigor. Deprived yeast can produce "off" flavors in your final product. Lacking good nutrition, fermentation can/will be slow and may become "stuck."

There are several products available to help out your yeast. Most common around here are Crosby & Baker brand yeast nutrient, Fermax and yeast energizer. Also available are Wyeast Nutrient, Ferm-aid K, DAP and several others. Everyone has their own methods and preferences. Use what you can get your hands on until you find what works best for you. Follow the label regarding amounts before experimenting with future batches. You can add the nutrients and energizer all at once upon pitching the yeast or you can stagger the additions = 1/2 at pitching the yeast (day 0), 1/4 on day 2, and the final 1/4 on day 4.

Fermentation

If sanitary practices are necessary for a good mead, then a healthy fermentation is the key to a great mead. Each yeast strain has its own requirements concern fermentation temperature. I like to keep my fermentation in the mid-to-upper 60s Fahrenheit. This works pretty well with most yeast strains. Generally, cooler temps result in more "fruity" characteristics in the finished mead. Hotter fermentation temperatures result in more alcoholic "hotness" (due to increased fusels being produced).

It's important to give the yeast plenty of oxygen during the "early" (specifically: prior to the 1/3 sugar break; generally: the first 3-4 days) stages of fermentation. Just prior to pitching the yeast, I whip air into my must very vigorously for a couple minutes using a "mix-stir" aerator and a cordless drill. There are several other techniques: stirring, splashing, shaking, aeration stone, etc. At later stages, avoid exposure of the mead to oxygen at all costs.

Note on Yeasts:

- Mead/wine yeasts may be found at any good brewing supply store. Northern Brewer and More Beer are two good online stores. There are countless other online outlets as well, of course.
- For dry meads, I like: Lalvin EC-1118, Wyeast Dry Mead, White Labs Champagne.
- For medium to sweet meads, I like: Lalvin 71B, Lalvin D47, Wyeast Sweet Mead.
- For a 5-gallon batch of mead, I use 10 grams (typically two 5g packs) of dry yeast or a 1 liter starter of liquid yeast.
- I always re-hydrate dry yeasts in water (ideally with a product called GoFerm) before pitching into the must. Follow the yeast packet instructions for proper re-hydration.

Periodically, the mead should be racked (siphoned) off its lees (sediment) into another vessel. This is to prevent "off" flavors from the dead yeast cells and other precipitates from being absorbed into your mead. Take care in sanitization and minimize any exposure to air during this process. A first racking should be conducted as primary fermentation slows (3 weeks or so). The mead will require only a couple additional rackings over its fermentation/aging stages.

Some Technical Junk

- Also using the "mix-stir," I de-gas my mead each day through the first week of fermentation. This reduces the CO₂ in the mead, which improves the pH, which is good for maintaining a healthy population of yeast throughout the fermentation. If you choose to do this, be very careful (cautiously slow) to avoid a volcano of foam overflowing your fermenter.
- The pH of the must drops over the course of fermentation. This is due to dissolved CO₂ (carbonic acid) and the production of alcohol. Yeast needs a pH of at least 3.5 to remain healthy. You can check this using pH-sensitive color strips (inexpensive). You can periodically adjust the pH to a healthy range of 3.8 to 4.0 or so. Calcium carbonate is commonly used: 1/2 teaspoon addition, stir, re-check pH, repeat if necessary. I've recently switched to using 10ml additions of a 2 Mole KOH solution for a number of reasons, but it is a bit more "hassle" than CaCO₃.
- A hydrometer is a nice tool for several reasons. A hydrometer measures the specific gravity of a liquid. It is good practice to note the "original gravity" (OG) just after combining all ingredients prior to pitching yeast. As fermentation takes place, the specific gravity drops. "Final gravity" (FG) is reached when fermentation is complete. Noting specific gravity at points during the fermentation process allows you to accurately keep an eye on its progress. Determining points during fermentation, such as the 1/3 sugar break, for example, is useful if using a schedule of aerations and/or staggered nutrient additions. Comparison of OG to FG allows calculation of alcohol content in the finished mead.

Additional Info:

- Be careful of the internet. There's an amazing amount of bad information on mead-making out there. That said, the internet is great for finding suppliers of quality equipment and ingredients.
- A good web resource is www.gotmead.com
- A great book is Ken Schramm's *The Compleat Meadmaker* (yes, that how he spells "complete")

Basic Equipment

- Brew-pot
 - If you choose to heat your must, you'll need a several gallon pot.
 - Also good for gently warming honey jars (in water) for better flow.
- Carboys or food-safe bucket w/ sealable lid
 - Many people use a bucket for the primary fermentation, then rack into a carboy for secondary/aging.
 - The "primary" fermentor needs to have a good bit of headspace, the "secondary" fermentor should have as little as possible.
- Airlock & stopper
- Thermometer
- Measuring spoons
- Scale
- Racking cane/Siphon tube
 - For racking the mead, I use a product called an "Autosiphon." It's a nice "luxury" item.
- Cleaner & Sanitizers
 - Many options. I like to clean by soaking in Oxyclean (followed by several tap water rinses).
 - I like to sanitize with either Star San or Iodophor. Both have pros & cons. Both work well.
 - A carboy brush is a nice tool.
- Funnel
- Large spoon
- Bottles, corks or caps, and related gear (details depend on your own bottling plans)

Optional Equipment

- Hydrometer, sample jar, & wine thief (for checking specific gravity throughout the fermentation)
- "Mix-Stir" & Drill (for de-gassing the mead)
- pH test strips
- 2 qt. Container (if making a starter from liquid yeast and/or using KOH for pH adjustments)

Student Interest in Bees Soars at Iowa State

Submitted by Dr. Amy Toth, Professor, Departments of Ecology, Evolution, and Organismal Biology and Entomology, Iowa State University

In the past decade, I have seen a tremendous growth in interest in bees among college students. Along with increased research on bees and pollinator health here at Iowa State University and worldwide, public awareness of bees and their importance as beneficial insects to humanity has skyrocketed. It seems as if people have never cared more about bees! And leave it to college students to have a finger on the pulse of what is cool. (Meanwhile, old-timers can smile smugly; we've known a long time that bees are pretty much the coolest organisms on the planet.)

Given this explosion of interest, I'd like to update CIBA members about bee-related activities among ISU students.

In fall 2020, Extension Specialist Randall Cass and I began teaching a new class, "Bee biology, beekeeping, and bee management." The COVID-19 pandemic didn't make it easy - lectures were online, covering a variety of topics from bee anatomy and colony organization, queens and mating, bee behavior and genetics, wild bee diversity, to the practical aspects of hive management.

But the best part is the hands-on portion. We brought hives to campus, allowing each student opportunities to experience basic skills and even extract honey. We repeated the class in 2021, this time with fully in-person lectures. We had guest lectures from ISU faculty and graduate students, also wonderful presentations by local beekeepers, including **Pat Ennis** and **Jamie Beyer**.

Students absolutely LOVED this class. It has filled to capacity both times (50 students), received top evaluations from students, and are frequently asked when we'll teach it again (answer: every year for the foreseeable future). Importantly, many students have gone on to start beekeeping, do research on bees, and/or volunteer in our research apiary. I have been a professor for 12 years, taught dozens of classes and over 1,500 students, but the "buzz" around the bee class is like no other. Bees really have a way of engaging students!

Another activity for student involvement is in research. Several ISU labs employ undergraduate students as assistants, field techs and researchers. More than 100 students have assisted in my laboratory with bee and wasp research. Other labs with bee research projects also have worked with large numbers of students. Many go to graduate school, science careers and become hobby beekeepers.

Given this high level of student interest, I created an internship program, "The Bee Squad," in 2020. It was funded by a grant from the ISU College of Agriculture and Life Sciences (with donations from the Rossman and Manatt families). It focused on recruiting top ISU students for summer research internships working on bees by offering competitive pay, close mentoring, the opportunity to complete a project and present at a regional conference. Most importantly, we focused on opportunities for students from historically underrepresented groups.

The Bee Squad has been a great success. We had four excellent students in 2021, two entering graduate school, one to vet school, and another joining the work force in pollinator conservation. With college support, we can offer it again to 4 more students in 2022 and are looking for ways to make it financially sustainable in the future.

Why should CIBA members be interested in all this? First, if you need an apprentice, field hand or even a volunteer, we can connect you with college students who might be interested. And, from their studies and time here, they might even – in fact they should – know something!



Dr. Toth uses teaching hives with the class in 2020. The class valuable outdoor active learning experiences to students during the COVID-19 pandemic. Photo courtesy Chris Gannon, ISU.

Second, if you know a young person who loves bees and is considering college, send them to us! We love students who have prior bee experience and interest — they have been among our best workers. We will give them an in-depth, personalized experience that can help them get where they want to go in a future career.

The final lesson is that young people are really “hungry” for bees. In a time of confusing uncertainty, the ability to connect with a fascinating creature and its intricate way of life, learn a practical skill, and do something that might help sustain our food system appeals to people more than ever. Today’s news is full of stories about youth struggling with isolation and loss in the pandemic, mental health challenges, and feeling they have lost their way. I have witnessed the real, positive effects engaging with bees can have on today’s youth. Help spread the buzz to a young person near you!

To learn more:

<https://www.cals.iastate.edu/features/2020/hands-learning-bees>

<https://bees.cals.iastate.edu/>

<https://www.tothlab.org/>

From the Editor:



Some Great Resources to Check Out

In our spring issue, I asked for your input about where you get your bee information. Of course, my “go-to” sources are other beekeepers, especially those I’ve met through CIBA and other bee-related activities. I’ve been trying to keep bees since about 2010 and I STILL feel like a newbie, always learning.

My first mentor was the late **John Johnson**. He was the ultimate teacher always willing to offer his time and advice. You’ll find a collection of his columns that have appeared in the BEELINE newsletter on the CIBA website, www.centraliowabeekeepingassoc.org – look under the “resources” tab for the “Lessons from John Johnson” page.

Another great resource was compiled by longtime CIBA member **Margaret Hala**. Her regular column in the BEELINE used a question-and-answer format, all of which are on the CIBA website. This is what first drew me to CIBA – her answers were exactly what I wanted to know. Take a look, again on the CIBA website, www.centraliowabeekeepingassoc.org – under the “resources” tab for the “Margaret’s FAQs” page.

I haven’t subscribed yet, but I’d love to get my hands on back issues of two bee magazines recommended by a couple CIBA directors. They are the *American Bee Journal* and *Bee Culture*, and both have great websites.

Other great sources of information are other bee organizations. CIBA webmaster Val Just has found lots of great information from these bee clubs: Heart of Illinois Beekeepers Association (<https://hoibeas.org/>) and the Northeastern Kansas Beekeepers Association (<http://www.nekba.org>).

One of the most interesting resources I’ve found is Scientific Beekeeping, a website managed by California commercial beekeeper and entomologist Randy Oliver. He’s a “data over dogma” guy who scours the academic websites for information he can translate into practical uses.

And when it comes to videos, YouTube is a bottomless resource. I’ve found great videos from the Northwest New Jersey Beekeepers Association, Kamon Reynolds under Tennessee’s Bees, and the Honey Bee Health Coalition.

Extension services also are great research-based sources of information. You should start with Iowa State University, which has one page with links to videos, handouts, research reports, and much more:

<https://bees.cals.iastate.edu>

Now that I got you started, I hope you find what you want – and more. We all know the Internet can be a fascinating place to lose yourself and your sense of time. **Happy beekeeping!**

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