

The Bee Line



Newsletter of the Maine State Beekeepers Association | mainebeekeepers.org

August/September 2022

Vol 40, Issue 4

Bad News Bears...	1
President's Message...	3
Strategies to Minimize Swarming...	6
Events with Kennebec Beekeepers...	6
Dealing With An Aggressive Colony...	7
MSBA Annual Meeting Information ...	8
Tips and Tricks...	11
Ask a Master Beekeeper...	12
Varroa: Fight The Mite...	13

Bad News Bears

by Mike McNally

Recently we had a bear attack some bee hives in Brunswick, off Rt. 123, next to the Town Commons and across the road from The Mere Creek Golf Course. Peter Selmayr, owner of the hives, indicated in a personal communication that he felt fortunate he only lost two queens and five brood frames. A big thank you to Peter for sounding the alarm! It was just two doors down from Carolyn Nichol's hives, where the Sagadahoc Club held an open hive event the very next day with Jen Lund presiding. I'm not sure why the bear did not amble over to her hives since they were no more that 100 yards away from her neighbor. She was totally unaware of the bear threat. It is rumored that this same bear was spotted on the other side of the Town Commons with a couple of small cubs in tow feasting on bird seed from feeders.

This was not the first instance of a bear in the area. In 2019, I was playing golf at Mere Creek and found bear scat on tee #4. I was very surprised! Likely a commentary on my golf game. Also, I have hives towards the end of Jordan Avenue in Brunswick. The owner of the property runs a small vegetable farm and had a run-in with a bear eating his corn a few years ago. So far no bears have hit my hives; I'm keeping my fingers crossed. Wouldn't you know it, just yesterday an alert went out regarding a bear being spotted on the Lewiston Rd. near the Topsham-Lisbon Falls line. A brief video captured what appeared to be a young yearling bear crossing a dirt road.

It is not unusual to see yearling bears this time of the year since this is when they typically separate from the sow. The sow will come into estrus and breed in the summer months. She will give birth from one to four cubs while in hibernation, usually in the month of January. Cubs at birth usually weigh less than a pound. Black bear females usually breed only once every two to three years. It is not uncommon for black bear males to kill young cubs to cause the sows to enter estrus early thus allowing them to breed the females before they would normally be ready.



*Black bear to the left of the hives
Photo courtesy of Peter Selmayr*

What does the future look like as far as beekeepers and bears are concerned? Expect more encounters in the future. The Maine black bear population continues to climb and according to many sources we have the highest bear population of any state in the lower 48. In 1984 it was estimated that we had 18,000 state wide, approximately 23,000 during 2000-2005 and in 2010, 30,000. According to a few sources there now may be as many as 36,000 black bears in the state of Maine. In my opinion two things are responsible for this population explosion: clear cutting that started with the Spruce Budworm

infestation and the gradual decline of licensed hunters in the state. When an area is clear cut the first thing we see is raspberries bushes taking over as a succession plant. This will gradually be replaced again by spruce and fir but until that happens raspberries are a good food source for bears.

What can we do to protect our hives? The answer is SHOCKING!!! Yes that is right, SHOCKING!!! This means that electrical fencing may need to be placed around our hives to protect our bees. OMG!!! Where do I go to find this stuff? I have checked; go to your local farm supply store, Tractor Supply, Lowes or Home Depot. They should have what you need. The first and probably the most important item to buy will be the energizer. This is the piece of equipment that delivers the SHOCK. There are two basic types. The first is the AC type that runs on alternating current and the second type is a DC energizer that runs on direct current. If your hives are close to your home or barn that has access to a 110 amp outlet then the AC system is the way to go. It is by far the cheapest and requires the least amount of maintenance. If your apiary is remote then you will need all the equipment for an AC set up plus a deep charge marine type battery and charger. The DC system needs to have batteries maintained and recharged on a regular basis. This may require a second battery to swap out while the first is being recharged. Additional equipment required includes insulated posts, electrical ferrules, bare 12 or 14 gauge wire, insulated 12 or 14 gauge wire and galvanized grounding posts with attachments allowing the grounding posts to be attached in a series. Finally, your fence wire is attached to the positive energizer

Continued on page 4

MSBA Board

Upcoming Board Meeting: August 18 & Sept 15 (7-9 pm)

Executive Committee

President

Judith Stanton, 376-7888
president@mainebeekeepers.org

Vice President

Jane Dunstan, 586-6800
vp@mainebeekeepers.org

Secretary

Thalassa Raasch, 747-7057
secretary@mainebeekeepers.org

Treasurer

Keith Kettelhut, 926-5554
treasurer@mainebeekeepers.org

Past President

David Spicer
549-5480
dave@spicerbees.com

Ex-Officio Members

EAS Director

Janet Anker
director.me@easternapiculture.org
jsbees@gmail.com
460-0725

Maine State Apiarist and Bee Inspector

Jennifer Lund
jennifer.lund@maine.gov
office: 287-7562
mobile: 441-5822

Membership Chairperson

Sheri Zimmerman
(405) 761-4098
membership@mainebeekeepers.org

At Large Members

2022

Robert Foster, 656-2193
kayakon@roadrunner.com

Tim Moran, (347) 559-1512
deke.moran@gmail.com

2023

David LeGloahec, 514-3693
dlegloah47@gwi.net

2024

Kevin McDonnell 229-7023
Mbeeguy1@gmail.com

Lynne Lindsey 350-3423
llindsey54@myfairpoint.net

MSBA Chapters

Androscoggin County Beekeepers

Bill Hiss, 576-4497
whiss@bates.edu

Cumberland County Beekeepers

Chris Baldinelli
treemonkey31@yahoo.com

Kennebec Beekeepers

Brittney Fairfield
Brittney.Fairfield@gmail.com

Knox-Lincoln County Beekeepers

Maisie Sturtevant, 380-6174
maisiebeekcb@gmail.com

Northern Penobscot Beekeepers

Maddy Hartford-Stewart
madaleneofmaine@gmail.com

Oxford Hills Honey Bee Club

Christopher Easton
cpeaston@megalink.net

Penobscot County Beekeepers

Jason Peters
cuttingedgelandinc@yahoo.com

Penquis Beekeepers

Sheila Heneise
ssheneise@gmail.com

Sagadahoc County Beekeepers

Dan Dolan
daniel_dolan_66@msn.com

Tri-County Beekeepers

Erich Bensheimer
Ebensheimer@gmail.com

Waldo County Beekeepers

Doug Calhoun
dcamaine@fairpoint.net

Washington County Beekeepers

Al May, 255-2017
alfredjmay@hotmail.com

Western Maine Beekeepers

Amy Lesko
rstonecowgirl@yahoo.com

York County Beekeepers

Beth Goodwin
goodwin.elizabeth@gmail.com

Chapter Liaison

Vacant



Call for Advertisers and Content!

Print Ads and Content

The Bee Line requests and welcomes member contributions! Please contact the Editor with your comments, photos, calendar events and articles to be considered for inclusion. **The Bee Line** gives advertisers exposure to over 900 readers.

ALL CONTENT IS DUE 15 DAYS PRIOR TO THE PUBLISHING DATE.

Issues are published bimonthly: Feb/Mar, Apr/May, Jun/Jul, Aug/Sep, Oct/Nov, Dec/Jan

PRINT AD RATES, Per Issue: Quarter Page \$30,
Business-Card Size \$15

Volume Pricing Available: BUY 5 ADS & GET 6TH FREE!
Provide ad copy/ad to the Editor (High Quality PDF with fonts embedded; call for spec sheet).

Online Ads

The MSBA website attracts interest throughout Maine and beyond. Ads appear at the bottom of each page and cost \$60 for one year.

WEB AD SIZE: 260 px x 303 px

Existing Bee Line newsletter ads shrink perfectly to fit website dimensions.

*Please provide a URL if you wish to have your ad linked.

Editor: Jane Dunstan
rmlamas1@gmail.com
586-6800

President's Message



So far the summer beekeeping season has been more or less uneventful. By a stroke of luck I was able to thwart a swarm when I discovered queen cells, with the marked queen still in the hive. Only one other sneaky colony got away with it, which I can live with. Then I found out that a bear living in Brunswick – the next town over from me – had wrecked a backyard apiary very close to a busy road that eventually leads down to my bee yards. I am now in the process of installing a solar-powered electric fence, which I never thought I'd have to do, living where I live. Honey production was going really well but has come to a halt due to the lack of rain. Two thirds of the state is experiencing a "moderate drought" and I've sadly watched bees and butterflies ignoring masses of wilting milkweed growing around my hives because there is no nectar to be had there.

After a two-year virtual hiatus, the MSBA Annual Meeting will once again be held in-person on October 15th. Members of the hosting chapter Kennebec Beekeepers Association have been hard at work organizing the daylong event, which will take place at the University of Maine at Augusta, just off I-295. We've secured two great speakers: Dr. Tom Seeley, Cornell University professor and acclaimed author of several books on honey bee behavior, including *Honeybee Democracy* and *The Wisdom of the Hive*, and Dr. Lewis Bartlett, a faculty research scientist on honey bee biology and health at the University of Georgia. There is a fascinating 3-part series on YouTube about a research project Lewis



Photo courtesy of SCBA

participated in along with Jennifer Berry on the efficacy of repeated oxalic acid treatments. As always, state apiarist Jen Lund will entertain us with her great sense of humor and annual "State of the State" address.

There will be all of the traditional conference aspects, including a blind honey tasting contest, national and local vendor booths, breakfast treats and a buffet luncheon, and plenty of time for bee talk. One of the major highlights is the raffle, in which you can take a chance on scores of donated items, many of which are related to beekeeping. Everyone who pre-registers for the meeting will receive one free raffle ticket. So save the date and save a small jar (~ 4 oz) of your best-tasting honey to bring along!

I encourage members to submit nominations for three important awards that will be presented at the Annual Meeting: Beekeeper of the Year, Junior Beekeeper of the Year, and Lifetime Achievement. Candidates may be nominated by a chapter or any MSBA member in good standing (meaning you've paid your dues). Details are on page 10 and a form is available for download on the website, or send a request to me at president@mainebeekeepers.org.

I'd like to give profuse thanks to the Sennetts of Swan's Honey in Albion. Lincoln responded to our drive for sponsorships to underwrite speaker fees in the third year of our webinar series, offering an in-kind donation of nucs. All sales proceeds went directly to MSBA. Thank you also to those who purchased them!

Judith Stanton



Photo courtesy of SCBA



Continued from page 1

Bad News Bears

pole and your ground setup attached to your negative energizer pole. Turn it on and you are in business keeping Mr. or Mrs. Bruin away.



Black bear to the left of the trees
Photo courtesy of Peter Selmayr

Just a couple more things before I end. Modern energizers are engineered in such a fashion as not to cause harm to people, kids, or animals. This is not to say if you accidentally touch it you might hear Debbie

Boone's song, YOU LIGHT UP MY LIFE, but it should not kill you. Vegetation should be kept short around the fencing so it will not ground itself out. Since energizers "pulse" and do not work on a continuous electrical feed, heat from the resistance does not build up causing potential fires. Your energizer should be capable of putting out 5,000-7,000 volts and .07 to 1.2 joules of energy and current for bear fences. Speak to a good salesperson that is knowledgeable about the equipment they are selling you. Both Peter and Carolyn set up electric fencing that day which took less than an hour!

I also highly recommend that you read, Montana Fish Wildlife and Parks article, *Deterring Bears with Electrical Fencing: A Beginners Guide*. I also recommend you read Maine Inland Fisheries and Wildlife, *Bears under Big Game Management Plan*. It will give you a good feel for what is happening to the black bear population in the state of Maine. May the force be with you, pun intended.

Editors Note: Wellscoft Fence Systems, LLC (wellscoft.com) also sells fencing to protect bees from bears called ElectroNet. It is 35" high with nine horizontal and vertical struts every 12" and sold in 82' or 164' rolls. Premier1 (premier1supplies.com) sells Bear QuikFence in 50' and 100' rolls and offers a starter pack with energizer (may be on backorder).



Photo courtesy of Andrew Dewey



MSBA's nominating committee selects candidates for election at the Annual Meeting each October. This year the committee is focusing on recruiting Members at Large. These are representatives of MSBA's nearly 1,000 active members as a whole instead of a specific chapter.

What do board members do? They help guide MSBA in achieving its mission. They participate in monthly board meetings, currently held via Zoom on the 3rd Thursday of each month. They engage on one or more committees. They are the roving ambassadors of MSBA.

What are the required qualifications?

The required qualifications are simple. In order to serve on the board candidates must be members of MSBA, adults (because of insurance), and willing to do the job. They ideally bring desired skills and expertise to the board.

What talents/skills is the committee looking for?

At this time grant writing, fundraising, video production, Wordpress editing, public speaking, and nonfiction writing are some areas that would be helpful. Prior experience in working on a board of directors is a plus.

Some of the activities that members at large could be asked to do include supporting educational outreach, writing articles for the Bee Line newsletter, assisting with social media content, serving as liaison with new and established chapters and revising the MSBA bylaws.

Candidates should have good foundational knowledge and recognition of the challenges facing honey bees and their keepers.

What positions are currently open?

Two three-year terms (ending at the Annual Meeting in 2025) and one two-year term (ending at the Annual Meeting in 2024) as members at large are available. An incumbent in one of the three-year positions would like to continue.

If you think you or someone you know would make a great board member, please contact the committee ASAP. Emails can be addressed to andrew@beeberrywoods.com, or mail can be sent to committee chair Andrew Dewey at PO Box 58, Jonesboro, ME 04648.

While the committee wants to complete its work by mid-July, nominations can be made from the floor of the Annual Meeting.

Swan's Honey

Full line of containers and jars
Strong Five-Frame Nucleus Hives
\$150 (Incl. reusable nuc box)

Dealer for
DADANT,
MANN LAKE,
ACORN, GAMBER,
HUMBLE ABODES,
BRUSHY MOUNTAIN,
NOD APIARY PRODUCTS

332 Bessey Ridge Road, Albion, ME, 04910
swanshoney@roadrunner.com
Swanshoney.com (207)437-2251
store open 8-3 Monday- Saturday

Spicer Bees

MAINE BEEKEEPERS'
ONE STOP SHOP!

Join us for Open Hive Saturdays
A free event open to all (bring veil). Details on our site.

Woodenware – Assembled & Unassembled	Smokers
Foundations – Wax & Plastic	Hive Tools
Protective Gear – Gloves, Jackets, Veils	Jars
Insulated Hive Wrap	Medications
Queens – Caucasians, Italians,	Classes
Maine's Best Bee (Northern Raised)	Much, much, more!

207-549-0441

WWW.SPICERBEES.COM

373 Hunts Meadow Road ◊ Whitefield, ME 04353
(Just 15 minutes east of Augusta)

DADANT & SONS

QUALITY — SERVICE — VALUE
Since 1863

*Your one-stop shopping center
for beekeeping supplies.*

2925 W 4th St. Bldg 3, Unit 2 • Williamsport, PA 17701

Ph. (570) 980-9831 Fax (570) 980-9781

TOLL-FREE: 877-532-3268

www.dadant.com

- AP23 Pollen Sub
- Brood Builder
- Woodenware — Hives
- Extracting Equipment
- Protective Clothing
- Bee Medications

- Mite Treatments
- Honey Containers
- Honey Handling Products
- Plastic Frames & Foundation

- Smokers
- Hand Tools
- Beeswax Foundation
- Wine & Mead Making Accessories
- Books; American Bee Journal

Bee Culture®

The Magazine of American Beekeeping

Subscribe Today!
12 Print Issues for \$30

One year print & digital bundle \$35

subscribe at
www.beeeculture.com

Strategies to Minimize Swarming With Overwintered Colonies

by Kevin McDonnell

I operate a small apiary of eight to ten colonies and typically a couple of nucs in York County. My goal as a hobby beekeeper is to stay at this size, roughly 10 full size and two to four nucleus colonies. I find this number keeps me plenty busy!

I had the good fortune of coming through winter with nine strong hives. All were healthy with very low varroa counts. My challenge entering the spring swarm season was to manage the bees' swarm impulse without having to grow the apiary too large to do so, as I am not interested in having 18 or more colonies by performing a lot of splits.

In order to minimize swarming in a small apiary, these are some of the standard techniques I employed to inhibit the swarm tendency as they started to grow in early spring:

- Reversed the hive boxes on colonies that had fewer bees in the lowest brood box

- Equalized the colonies where it made sense although did not do a great deal of this since they were all pretty strong without a lot of size variation

- Supersed early, some as early as mid-April this year. The need for early supering meant I did one super at a time so as to not create too much space for them during the cool (cold) April and May weather this year. My big limitation as a small beekeeper who has expanded the apiary in the last couple years was having sufficient drawn comb for supering. I had available 14 boxes (I use eight frames so not as heavy) for the nine

colonies which is not a lot. As I ran out of drawn comb I checker boarded the drawn and undrawn comb to allow the addition of more supers.

- Because of my drawn comb limitation, as soon as was possible, I removed full honey frames, spun out the honey and put them back providing more space for the incoming nectar. I under supered the newly emptied supers.

- I inspected the colonies every seven to ten days and removed queen cells once I established the presence of a queen

- On the learning front, I found that I added queen excluders too early. I have often heard them called honey excluders and I experienced some of that this spring. My bees in several colonies were not moving the nectar through the excluder resulting in brood space being filled with nectar with empty supers. I removed them from all the hives and the bees started moving the nectar up to the supers.

- The last thing I tried was requeening a couple of the strongest hives that had older queens with new queens. The idea being the new queen will have stronger queen pheromone making it less likely the colony will swarm. To date, that has been successful but it is a statistically insignificant sample size and at this point swarm season is not over.

In the end, with the above actions I still ended up splitting two colonies that were relentless queen cell producers which convinced me that nothing but a split was going to stop them. Two colonies swarmed despite the preventive actions; the timing of my inspections allowed them sufficient time to cap a tucked away queen cell and head for better confines. The good news is that we have had a good nectar flow in southern Maine this spring (despite the lack of rain) and with strong healthy colonies the bees have already capped a good amount of honey!

Events with the Kennebec Beekeepers

by Sheri Zimmerman

The Kennebec Beekeepers are excited to be hosting this year's annual state meeting in Augusta on October 15th. We are working hard to ensure a great in person meeting for everyone to attend.

For our June meeting we had special guest speaker Carolyn Nichols demonstrating how to make mead. She gave a fantastic presentation and we were able to sample three different mead drinks and all were delicious! We also had a guest who relocated from Arizona bring his own mead made with honey from that locale.

Our recent book club selection was *Bee People and the Bugs They Love* by Frank Mortimer. It's a great read for anyone, regardless if you are a beekeeper or not. If you're looking for a fun and educational read we highly recommend this book.

Jen Lund will be coming to Viles Arboretum for an open hive this month followed by a pot luck lunch. We are looking forward to learning from our state apiarist the best way to test and treat for varroa and other diseases/pests. Our open hive events are open for the public to attend. For more information about the Kennebec Beekeepers Association check out our Facebook page. We meet at Viles Arboretum the second Thursday of the month at 6:30 pm.



Kennebec Beekeepers' colonies at Viles
Photo courtesy of Sheri Zimmerman

Dealing With An Aggressive Colony

by Dean Jackson
Frye Mountain View Farm

First, I would like to say that I have learned that beekeepers can come up with different solutions to solve the same problem and if it works, it is not wrong.

I had grown up with my father keeping honey bees since I can remember. We used to line bees, find a colony in a tree and sometimes go back in the spring and cut the tree down, put the colony in a box and bring it home.

Lining bees, or sometimes we called it bee hunting, is when you catch a bee with a box. The bee is then placed on comb with sugar water. The bee will fill up and go back to its colony. The first time or two it will circle to mark the spot and you have to try to see which way it goes. You time them in order to get an approximate distance. After a while they will fly in a straight line but they bring friends so my Dad used chalk that he flaked off and mixed with water and then took a piece of grass and marked the bee. That way you can get an accurate time to gauge distance.



Bee box and paddle to catch the bee on the bottom. Box with comb placed atop a post. Once the bee is in the box it will fly to the top of the screen. Box is then placed over the comb, sliding door is opened and paddle is placed over the screen causing the bee to go down and start drinking the sugar water. The box is then slowly lifted while you wait for the bee to leave.

Photos courtesy of Dean Jackson

Once you determine the direction and distance, you can try to get closer and get another angle or just enter the woods and look for them. This was done in the fall and we would go back in the spring to collect the colony.

When my father passed away, he left behind one colony and I decided to keep it going. With the help of some friends and mentors I was able to become successful at overwintering colonies. I teamed up with a retired friend and we started grafting our own queens and as of this writing we are at around 40 colonies. We sell some nucleus colonies as well as some queens.

Our goal is to produce bees that are gentle in demeanor, overwinter well and produce honey. We will select our breeder queens from that criteria in hopes of producing more with the same traits. We do not want any colonies in our apiary that do not fit with those criteria. If one displays any variety of unwanted characteristics, the approach has been to requeen.

Most people do not like aggressive bees. They are intimidating and it can be nearly impossible to perform inspections or any other routine maintenance. The obvious way to solve this issue is to remove the old queen and give the colony a new queen bred for traits that you desire. The most common method is introducing a caged queen into the colony after removing the old queen. This has not always worked for us.

My friend bought a nucleus colony from Florida which arrived in early spring. At first, they did not seem testy or hostile however as time went on, they became extremely aggressive. They were simply miserable to deal with. When the cover on this very populated, double deep hive was cracked, they would erupt from the opening and hit you in the veil like a series of darts. Given their aggressive stance, our solution with this colony was to drop a ripe queen cell with a cell protector into the top box hoping the queen would emerge and supercede the existing queen. In this case it did work

wonderfully. We checked in a couple of weeks and the original marked queen was gone and a new laying queen was present. Although it did take time for the existing bees to die off and the new queen's genetics to take over, this method has not worked for us every time.

The most recent method we attempted with a less than docile colony did work very well. We had a colony that was very similar to the one from Florida. It was very large and a beast to deal with when the cover was opened. We tried the queen cell method in the late summer, but it did not work. They made it through the winter into spring in a double brood box. We pulled resources from them very early wanting to keep them small so that they were not so difficult to deal with until our first batch of queen cells were ready. We also did not want them producing drones. We kept them down to two to four frames of brood and utilized an equalizing strategy where we would give the excess frames of brood to smaller colonies that could use a boost in resources. When our queen cells were



ready, we dispatched the old queen and split this colony in half by using a double screen divider board, putting a queen cell in both the top and bottom boxes. This gave us two opportunities to get a mated queen. We ended up with a mated queen in the top box however had no luck in the bottom. We simply removed the double screen divider board and combined them into one colony. Several months later, they are now very gentle to work with and producing honey.



October 15, 2022

9 am - 5 pm (registration begins at 8 am)

MAINE STATE BEEKEEPERS ASSOCIATION ANNUAL MEETING

University of Maine at Augusta
46 University Drive, Augusta, ME

Sponsored by Kennebec Beekeepers Association

Dr. Lewis Bartlett

Dr. Thomas Seeley

Jennifer Lund, Maine State Apiarist

MSBA Annual Meeting Program

- | | |
|--------------|---|
| 7:00 - 8:00 | Vendor set up |
| 8:00 - 8:50 | Registration/Coffee/Vendors/Raffle ticket sales |
| 8:50 - 9:00 | Welcome by MSBA President, Judith Stanton |
| 9:00 - 10:30 | Dr. Lewis Bartlett: "How do bees wash their hands? Hydrogen Peroxide in the hive." Bees work very hard |

to try and keep their hive clean and disease free, especially when it comes to protecting their precious and vulnerable larvae. In this lecture, we'll cover some of the unique biology honey bees have that helps them protect against bugs both small and big, and new research updates from my lab group on how honey works so well as an antimicrobial.

10:30 - 10:45 Break

10:45 - 11:30 **Dr. Thomas Seeley:** "Behavioral Wonders of Honey Bees." Four to five short stories about honey bee behavior will be shared based on a chapter from a book which has been submitted for publication titled *Bee Works: Solving 20 Mysteries of Honey Bee Behavior*.

11:30 - 12:00 Business Meeting

12:00 - 1:15 Lunch

1:15 - 1:45 **Jennifer Lund:** State of the State address

1:45 - 2:00 Break; Last raffle ticket sales

2:00 - 3:30 **Dr. Lewis Bartlett:** "Managing parasites in the hive: old techniques and new frontiers." New studies on how best to beat parasites in the colony are coming out every year – what basic principles can we always rely on, what works where and what doesn't, and what new efforts are on the horizon? We'll focus on new updates about organic and synthetic Varroa control, EPA labels, oxalic acid, small hives

3:30 - 5:00 Honey Tasting awards, raffle and close

Dr. Thomas Dyer Seeley is the Horace White Professor in Biology in the Department of Neurobiology and Behavior at Cornell University. He is the author of several books on honeybee behavior, including *Honeybee Democracy* and *The Wisdom of the Hive: The Social Physiology of Honeybee Colonies*. He was the recipient of the Humboldt Prize in Biology in 2001 and currently resides in Maine.



Dr. Lewis Bartlett is a faculty research scientist at the University of Georgia between the departments of Entomology and Ecology. He works on infectious disease and parasite control alongside honey bee biology and health. He has worked with and kept bees for over ten years across the UK, California, and Georgia. Some of his recent research includes the effect of pesticide exposure on bee health, new parasite controls, crowding of honey bees, and the mechanisms bees use to keep themselves clean.



Maine State Apiarist and Bee Inspector **Jennifer Lund** will present "State of the State" in which she will share what she has observed in her hive inspections throughout Maine over the past year and also discuss the beekeeper survey results. Jen earned a master's degree in Entomology from the University of Maine, where she was a research technician before becoming the State Apiarist. She has almost 20 years of entomological experience.



Registration for 2022 MSBA Annual Meeting

NAME/S (PLEASE PRINT) _____

STREET _____

CITY/TOWN _____

STATE _____

ZIP CODE _____

PHONE _____

EMAIL _____

Before October 5 _____ @ \$35.00 each Total: \$ _____

After October 5 _____ @ \$45.00 each Total: \$ _____

I am bringing _____ guests (included above)

*2022 MSBA Membership is required to attend the Annual Meeting;
please submit membership dues if necessary.*

2022 MSBA Dues:	New	Renewing	Current
Single Membership	_____ @ \$15.00 each	Total: \$ _____	
Household Membership	_____ @ \$22.50 each	Total: \$ _____	
Total Registration and Membership Enclosed		\$ _____	

**Please make check payable to
MSBA and mail to:**

MSBA Annual Meeting
c/o Keith Kettlehut
189 Auburn Pownal Road
Durham, ME 04222

Early Bird Registration Deadline:

October 5, 2022

Chapter(s) you are a member of:

Registration may also be done online at mainebeekeepers.org

Raffle & Tickets The raffle tables are always filled with numerous donated items from beekeepers and businesses. Donations of items to be raffled off are welcome and you may arrange to donate yours prior to the day of the annual meeting or bring it with you that day. Bee-related items are always great, however other things are accepted. There will be several folks wearing painter's aprons, selling tickets throughout the day. Everyone who pre-registers for the meeting receives one free raffle ticket at the registration table.

Blind Honey Tasting Contest Bring a small jar of your best honey with your name and address on the jar to enter the Blind Honey Tasting Contest! All that matters is how good the honey tastes to those judging. All jars are covered to prevent you from seeing the color of the honey or any other visual identifiers that may create bias. Members may sample the entrees during the day and vote on their favorite jar. Winners of the tasting contest will be announced at the end of the meeting.

Directions Once you have exited I-295 either northbound or southbound, watch for signs directing you to Jewett Hall on the campus of University of Maine at Augusta, 46 University Drive, Augusta, ME



Beekeeper of the Year and Lifetime Achievement Award Nominations



Mike McNally 2019 Beekeeper of the Year
Photo courtesy of Josh Botting

The MSBA Beekeeper of the Year Award is given annually to a beekeeper who, over a period of years, has demonstrated and promoted good honey bee management practices, and participated as a volunteer in the beekeeping community.

The candidate must be a current member of the MSBA and can be nominated by a local chapter, a member in good standing of the MSBA or the MSBA Board of Directors. They must also currently own or manage honey bee colonies in the state of Maine.

The nomination letter should outline what the candidate has done to promote beekeeping and educate beekeepers, prospective beekeepers and the non-beekeeping public over a period of time. Activities such as teaching short courses or bee schools, presentations to community organizations, demonstrations at fairs (county, state, horticulture or environmental), volunteering for MSBA and local beekeeping organizations, and media interviews will all be considered.

A Junior Beekeeper of the Year Award is also given when suitable nominations are received. That person must also be a member in good standing of the MSBA.

The Lifetime Achievement Award recognizes a beekeeper or a beekeeping couple who have over a period of years promoted beekeeping in Maine. Nomination letters should describe how they have reached out to the general public and other beekeepers, and should include examples

of supportive activities such as teaching bee school or other instructional venues, speaking to the general public, and mentoring and serving as a source of knowledge to new beekeepers.

The board will evaluate any nominations submitted and those chosen for the award will be announced at the Annual Meeting. A plaque honoring the recipient will be presented.

A nomination form may be downloaded from the MSBA website's annual meeting page found under education, or a PDF can be e-mailed to you by contacting Judith Stanton at 376-7888 or jws77@me.com.

Please send to the MSBA president no later than **September 12, 2022**. Awards will be presented at the Annual Meeting on October 15th.

Completed forms should be submitted to: president@mainebeekeepers.org or Judith Stanton
32 Hawthorne Ln
Harpwell, ME 04079



WEBINARS

August 30th 7 pm "Sustainability" with Geoff MacLean. Let's have sustainable apiaries. Do you want to stop buying packages or nucs every spring? Let's discuss how you can do a May split and then make up and overwinter a couple of June nucs with your own bees instead.

September 28th 7 pm "The Art of Mead Making; The Magic of Water, Honey and Yeast" with Carolyn Nichols. You won't want to miss this webinar that will guide you in the creation of mead, the world's oldest form of fermentation. The workshop will focus on small batch artisanal flavors, incorporate basic kitchen chemistry and is designed for the novice mead maker.

October 26th 7 pm "Bears and Bees" with Jennifer Vashon, State Black Bear and Canada Lynx Biologist from Maine Department of Inland Fisheries and Wildlife. Jennifer will discuss the bear population in Maine, conflict management and specifically why and when bears and bees collide. She will provide recommendations for beekeepers.

Tips and Tricks

by Jason Peters

Managing 6 Frame Nucs

Sometimes you come across something that just works surprisingly well. Many years ago, one of my good friends introduced me to 6 frame nucs that he had designed and had been using for many years in his commercial operation. His success with keeping and wintering bees in these smaller units inspired me to give it a try.



Photo courtesy of Jason Peters

These six frame units, like our standard four and five frame nucs and our resource hives, are our insurance policy against winter losses and act as the “support staff” for the rest of our operation. In the spring, we use these to replace dead-outs and also to provide brood frames to boost weaker colonies and our cell building colonies.

Making up nucs at the right time can also dovetail nicely with swarm prevention and equalizing before the primary honey flow. In the spring, we use resources from other overwintered nucleus colonies and ripe queen cells as we can get them started earlier in the season and provide a break in the brood cycle. This offers us the opportunity to use a very efficient and effective means of treating for varroa with oxalic acid. Later in the season (toward the end of the honey flow), we use mated queens when making up our nucs. One advantage to making these up later in the season is that the bees have already paid for themselves and don’t require the same amount of management throughout the season. Since six 6-frame nucs have the same outside dimensions of four 10-frame Langstroth hives, these can be palletized and wrapped together and even supered in common during the honey flow.



Photo courtesy of Jason Peters

Unfortunately, there isn’t much of a demand for manufacturers to produce 6-frame nucs so options are limited to making your own out of wood or purchasing Polystyrene

units. We have many that we have made ourselves following our friend’s design as well as some that we have purchased. Set-up with young queens of good genetics, a good testing/ treatment plan and given enough resources, 6-frame nucs always seem to impress me.

In our operation, we manage and winter a large number of nucleus colonies in various configurations as they serve as a great preliminary test for our queens and are less costly to treat and feed than our full size colonies. No matter what number of hives you manage, keeping some nucleus colonies around is very useful and they are always in demand in early spring when beekeepers find they need to replace winter losses. Having an established locally produced queen and three or four frames of brood is a much better “deal” than a package being sold at the same time and can help reduce the need to bring in bees from sources outside of our region that may not be as well adapted to our local environmental and pathogenic pressures.



Photo courtesy of Jason Peters

Summer Tips ...



-Overcome with heat in that bee suit? Saturate a bandana with cold water, wring it out, form a triangle and fold it several times until it measures about three inches wide and place in your freezer for 10-15 minutes before you go out to your hives. Just before zipping up your veil, remove the folded bandana from the freezer and tie it around your forehead so it rests just above your temples or loosely around your neck.

-Bees require LOTS OF FRESH WATER daily which they utilize for evaporative cooling (spreading a thin film of water over capped brood or on the rims of cells containing eggs and/or larvae), maintaining humidity, diluting stored honey and digestion. It is estimated bees require a quart of water each day and even more when it is hot. Place sponges, large rocks or flat pieces of wood in deep livestock bowls for bees to light upon in order to drink and prevent drowning. Boardman feeders are a good way to supply water right at the hive entrance.



Bees are bringing in nectar and filling the brood nest area rather than bringing it up to the honey supers. Do you have suggestions as to how to remedy this?

This really isn't a problem so long as you understand the underlying biology. Foragers hand off nectar to younger bees. If too much nectar is coming in too quickly for the house bees to put in the permanent storage, the house bees will often temporarily store it in the brood nest, with the intent of moving it to long-term storage when foraging is done for the day. They do however need a place to move the nectar. The kicker is foundation in honey supers is usually not seen as a viable storage option. Other bees are responsible for drawing that foundation out. Having drawn comb for honey supers is the only option I know in this scenario. If you need more super comb drawn, it makes sense to intermix what comb you have with your undrawn comb. New beekeepers who don't yet have drawn super comb are in trouble. If the bees don't have a place to move the nectar to, it stays in the brood nest, restricting where the queen can lay. *Andrew Dewey, Master Beekeeper*

When the bees seem to prefer the brood nest to the honey supers I have a question. Are you supering with drawn comb or foundation? Often, unless there is a tremendous nectar flow on, bees seem to be reluctant to draw out foundation. A quick remedy for this is to insert the super between the brood boxes until the bees draw out some of the wax then return it to the top of the hive. Sometimes just adding a feeder of sugar water to the top of the hive will get the bees started. Just don't put so

much sugar water on that the bees start storing it as honey. *Rick Cooper, Master Beekeeper*

I have perhaps the "hottest hive" ever! I have mustered the courage to divide and conquer this hive by taking each box off and placing them in separate areas each with an inner cover and proceed to go from one box to another in search of the queen to dispose of prior to requeening. Is there a better way to accomplish this task?

The divide and conquer strategy is a good one – although there are times when working with stinging insects is not pleasant! That is when good protective equipment proves worthwhile! Though, the hive may be "hot" for a number of non-queen-related reasons – for example, skunks may be eating bees at night. Look for and rectify issues there before replacing the queen. The bees may be upset because they don't have a queen. If you are a rookie, getting some help (eyes on) in figuring out what you are dealing with from a more experienced beekeeper is a prudent idea. If you are dealing with a queenless colony, commercially available queen pheromone can help. *Andrew Dewey, Master Beekeeper*

I really don't know that I could come up with a better way of doing the requeening. I have generally saved my very nice and very expensive full coverage bee suit for this job. Yes, I will use gloves for this. *Rick Cooper, Master Beekeeper*

I have set my colonies on cinder blocks but I am constantly resetting the blocks in order to level the hives due to the ground shifting. Is there a preferred base that will not shift between seasons?

If your soil is unstable, then any hive stand design you use will need periodic adjustment. Digging and installing a proper foundation for the cinder blocks can help – conversely choosing another place for your apiary (where the soil is more stable) may

be your best solution. Changing apiary locations is a pain, especially when bear fencing is involved. Another idea that is a more partial solution, is to install 2-3" of crushed stone under your cinder blocks – in effect elevating them. It may be enough to reduce necessary periodic adjustments. *Andrew Dewey, Master Beekeeper*

We put in 4x4s like fence posts – deep enough so that freeze-thaw cycles don't cause them to shift – one on each corner and a couple more along the edges if you want more than a couple of hives (see picture). Don't worry about the posts being level – just have them square and set close enough together so that the hive bottoms will rest on the finished stand. Attach 2x8" boards to the outsides of the posts so that they are level and then cut off the posts even with the top of the 2x8s. Add a couple of 2x8 cross braces between the two sides if the stand is for multiple hives. Space hives apart and you will have a place to put the overturned outer cover to stack hive parts during inspections – easier on the back than stacking on the ground! *Carol Cottrill, Master Beekeeper*



I have seen some nice hive stands over the years. Some are cedar and hold up pretty well from year to year. The most serious problem we have here in Maine is that we get frost into the ground every year. I cannot say how deep the frost gets on any year but I am thinking in years of little snow it might go as far down a couple of feet. Pipes inserted into the ground and angle iron welded up to make a frame might work but not everyone welds, myself included. Pressure treated posts and lumber might also work and would not require welding. *Rick Cooper, Master Beekeeper*

VARROA: FIGHT THE MITE

by Jane Dunstan

In the **FIGHT THE MITE** series various components of varroa mite management are examined. This issue uncovers *halting the occurrence of deadouts due to mites*.

While there are a number of reasons commonly attributed to colony loss over winter, the greatest percentage of reported losses by beekeepers is due to varroa mites and resulting viruses. As beekeepers we have no control over weather, climate or natural disasters. We have a great deal of control over ensuring our colonies have large clusters going into winter, adequate food stores and that we have eradicated the greatest percentage of mites prior to closing the hive up for winter. Management practices and styles are all over the continuum in beekeeping which constitutes the "art" of keeping bees. The science of beekeeping is far less creative and far more prescriptive: Treat your bees; especially your winter bees.

For those of you who have followed this column, my passion for winter bees is obvious. They are the population of bees who are physiologically and anatomically different than their spring and summer sisters; who know how to cluster and who

are equipped with increased stores of vitellogenin, enlarged hypopharyngeal glands to produce royal jelly and a suspended aging process which enables them to live for up to six months versus 35 days. These amazing bees begin emerging in mid August, just about the time when varroa mites begin their drastic increase in population within the colony.

This is where we as beekeepers should be called to action. Alcohol wash your colonies to determine mite levels. These winter bees cannot afford to emerge from their cell, already parasitized by varroa, already sporting less fat body tissue which is where vitellogenin is produced only to begin life in an infested colony where parasitism will continue by phoretic mites. These bees are responsible for feeding young bees pollen when it is not available to forage upon, heat creation and maintenance within the cluster and serve as the bridge between one season and the next. To say they are important to the colony is an understatement.



When you treat, what you treat with and whether you assess the efficacy of treatment after the fact all impact winter survival. Hands down, without question, creating a nearly mite free environment for winter bees is the single most important intervention beekeepers can do for overwintering success and the prevention of deadouts, IMHO.

We are fortunate to have a plethora of information available to us concerning miticides, when and how to use and apply them in the Honey Bee Health Coalition materials free and available for download in addition to the varroa management guide. If you have further questions about treating your colonies reach out to your mentors, other experienced beekeepers with historical overwintering success or our own Jen Lund. Your actions this summer and fall will have a profound impact on whether you successfully overwinter your colonies. It is not too late to make a difference in the life of your colony. Those very special winter bees will thank you for it!

5 frame NUC's • Package Bees • Queens



Matt Roy **Maria Roy**
Owner Marketing
207-229-9125 207-590-3195

219 Back Nippen Road
Buxton, ME 04093

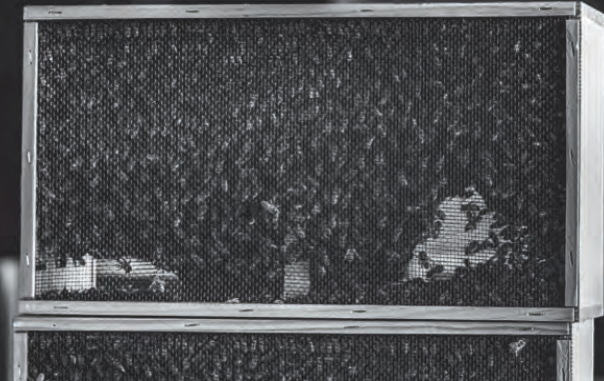
royalhoneybees@gmail.com
royalbeesandhoney.com

Royal Bees & HONEY

100% Pure Raw Honey - Made Locally by The Roy's

PACKAGE BEES

**SHIPPED DIRECT TO YOUR DOOR
OR PICK-UP AT ANY OF OUR LOCATIONS**



QUANTITIES LIMITED! BOOK ONLINE OR CALL TO ORDER!

MANN LAKE
WE KNOW BEES

800-880-7694
www.mannlakeld.com

Hackensack, MN • Wilkes-Barre, PA • Woodland, CA • Marshall, TX

Bee Whisperer



**We have a full
range of
beekeeping
supplies**

3lb packages in April-May
standard/mite-resistant
Saskatraz nucs and
queens May-July

**Maine made,
Woodenware,
Smokers & more**

Bee Whisperer
236 Main Road South
Hampden, ME, 04444
207 299 6948
petercowin@tds.net

Find us on the web at beewhisperer.us
Like us on facebook

Cooper Charolais Farm & Apiary



42 Montgomery Road
Windham, Maine 04062

BEE WOODENWARE

Complete hives and three sizes of supers
— assembled & painted —
all hand-crafted in our shop.

Assembled frames with wax.
Jackets, veils, smokers and other supplies.

BUZZ & PAULA COOPER
Cell 207-232-3807

BACK RIDGE BEE FARM & SUPPLY



LOCAL HONEY * PACKAGE BEES

**Full Line of
Beekeeping Supplies**

594 Acadia Highway
Orland, Maine 04472
(207) 479-1584 * (207) 930-0099
BackRidgeBeeFarm.com
info@backridgebeefarm.com



HUMBLE ABODES

manufacturers of quality apiary woodenware

636 Coopers Mills Road Windsor, Maine 04363
(207) 549-5501 | 1(877) 4-BEE-BOX



frames • hive bodies & supers
bottom boards • outer covers
inner covers • hive stands

Come visit our factory store for all of your
woodenware and beekeeping supply needs!

1-877-4-BEE-BOX • 1-877-423-3269
info@humbleabodesmaine.com



Backwoods

B E E F A R M

BackwoodsBeeFarm.com
207-893-2847

Full line of beekeeping supplies
Maine Made woodenware in all sizes

Nucs, Queens, Package Bees
Northern Queens When Available

 Check Us Out
On Facebook!

EAS Master Beekeepers Chris & Vanessa Rogers
106 Page Road, Windham, ME 04062



Betterbee®

Beekeepers Serving Beekeepers

800-632-3379 **betterbee.com**

Check out our new & tried and true products!



HUMBLE ABODES
MAINE MADE
HARVEST MOON HONEY

hive equipment • live bees & queens
honey processing & extracting equipment
queen rearing supplies • honey candy & straws
custom labels • over 200 candle molds
and great customer service!

BetterC mb **BROODMINDER** **LYSON**

FOR THE HIVE & FROM THE HIVE

OPEN 6 DAYS A WEEK! Tues-Sat 10-6 • Sun 10-2

... is good for me ...
the honey exchange
... what's good for the ...



Gifts including candles, jewelry, books, and more!
Specialty foods made with honey
Mead, wine, and beer
Full-service honey extraction
Beekeeping supplies and classes
Everything a backyard beekeeper needs!

Stop by: 494 Stevens Avenue Portland ME 04103
Phil & Meghan Gaven | 773-9333
thehoneyexchange.com | [@honeyexchange](https://www.instagram.com/honeyexchange)

WWW.MEBW.ORG



MAINE BEE WELLNESS

Beekeeping with the bees in Maine

INFO@MEBW.ORG



THE BEE LINE | Newsletter of the MSBA

Jane Dunstan, *Editor*
612 North Newcastle Road
Newcastle, Maine 04553
mainebeekeepers.org

mainebeekeepers.org

Join the Maine State Beekeepers Association today — **via the MSBA website** or this mail form!

LAST NAME

FIRST NAME

STREET

CITY/TOWN

STATE

ZIP

PHONE

CELL

EMAIL

Membership Type*

- | | |
|--|----------|
| <input type="checkbox"/> Annual Individual | \$ 15.00 |
| <input type="checkbox"/> Annual Family | \$ 22.50 |
| <input type="checkbox"/> 5-Year Individual | \$ 68.00 |
| <input type="checkbox"/> 5-Year Family | \$100.00 |
| <input type="checkbox"/> Lifetime Individual | \$180.00 |
| <input type="checkbox"/> Lifetime Family | \$270.00 |
| <input type="checkbox"/> Extra Gift Donation | \$ _____ |

Total Payment \$ _____

*Memberships are for one year from the date of receipt, include a subscription to MSBA's bimonthly newsletter *The Bee Line*, and are a prerequisite of attending the MSBA Annual Meeting.



Make check payable to

Maine State Beekeepers Association

Send to

Keith Kettelhut, *MSBA Treasurer*
189 Auburn Pownal Road
Durham, Maine 04222
treasurer@mainebeekeepers.org
207-926-5554

Current Age	# of Years Beekeeping	Greatest # of Hives	Current # of Hives	Chapter(s) You Are a Member of

Membership: ☐ New or ☐ Renewal

The Bee Line delivery: ☐ Email or ☐ US Mail