

the Norfolk Bee

FEBRUARY 2022 • NORFOLKBEEES.ORG

NEXT CLUB MEETING

FEBRUARY 7, 2022

7:30 to 9:00 pm

Hosted via Zoom Meeting

An email will be sent with a meeting invite. This will include a meeting ID # and a password.

In advance of the meeting, please download and install the free Zoom app to your computer, phone or tablet. If this is new technology for you, perhaps you can do a test meeting with a friend.

<https://vimeo.com/616977404>

Dear Fellow Beekeepers,

Hope you are staying warm and that your bees are snug, cozy, and have plenty of food available. Remember, at the end of January the queen starts laying again. A little dab of pollen patty at this time could be beneficial, but not too much. Swarm season will be here before you know it.

I checked on my hives on Thursday, replenished the fondant, and made sure they were secure for the storm. Everyone looked good. In all my years, this has been my most successful year so far. I only lost one hive in early winter due to a terrible mite problem that I couldn't get under control. So I now have 8 hives and 2 NUCs going fairly strong. What did I do differently this year? I have no clue. Maybe it was the queen rearing class I took. Maybe I switched my focus a bit, maybe I paid more attention, maybe I treated for mites better. Maybe it was the early spring oxalic vaporization treatment in May. Maybe it was a low mite year. Stay tuned. Hopefully they all make it. Fingers Crossed.

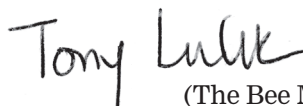
Bee School started this past Tuesday. With over 100 students enrolled, it's gonna be a good year. It took me a few minutes to get the cobwebs cleared out, but we had fun and covered a ton of material. So much to cover in such a short time. April will be here before you know it. One of the silver linings of COVID is we can all sit in the comfort of our homes and relax. Though I do miss the personal connections with everyone. Last year, if we met in person, the first 5 classes would have been canceled as it snowed every Tuesday.

Intermediate Bee School opened registration last week. Spread the news. It's gonna be another fantastic year. With Ed and Marion at the helm, you are in for some great classes. Hopefully I can pop into a few of them myself this year. I'm never too old to learn something.

The Queen Program will be starting up again soon. Kevin Keane will be able to tell us the success of the queens that were purchased when spring arrives. Now Kevin has come up with another new program. Right now we are calling it the *NUC Sustainability Program*. We are hoping to be able to raise our own NUCs from within the club in order to provide beginner bee students with early nucs and reduce our relying on packages from the south. I will be doing a presentation at the February meeting to explain everything we have so far.

Scholarships are open for the Cornell Master Beekeeper Course 2023-2024. Cornell is still accepting applications. If you need any information please contact me directly.

Yours in Beekeeping,


(The Bee Man)





NCBA BOARD MEMBERS

2020-2022:

PRESIDENT

Tony Lulek

VICE PRESIDENT

Dana Wilson

TREASURER

Stephen Green

RECORDING SECRETARY

Edward Rock

CORRESPONDING SECRETARY

Kevin Keane

MEMBERS AT LARGE

Carin Cohen, Joel Richards,
and Jenna Tibbetts

NCBA BEE SCHOOLS:

INTRODUCTORY SCHOOL DIRECTOR

Tony Lulek

INTRODUCTORY SCHOOL ADMINISTRATOR

Dana Wilson

INTERMEDIATE SCHOOL

DIRECTOR

Ed Szymanski

INTERMEDIATE SCHOOL ADMINISTRATOR

Marian Szymanski

NCBA TECH GURU

Greg Rushton

APPAREL

Lauralyn Smith

DOOR PRIZE/RAFFLE

Kathy Varney

HOSPITALITY

Rose Thornton and Carin Cohen

EXTRACTORS

Brianda Younie

MEMBERSHIP/FACEBOOK/GOOGLE

Rose Thornton

Deb Spielman

LIBRARIAN

Michael Simone

PROGRAMS

Ed and Marian Szymanski

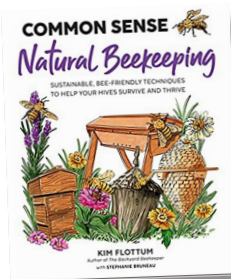


News from the Landing Board

The February 7th Meeting Agenda

February: Stephanie Bruneau - Common Sense

Natural Beekeeping - Stephanie Bruneau is a beekeeper, environmental educator, artist, writer and mama to two junior beekeepers in training. She is passionate about bees, natural living, and raising healthy, creative and curious kids. Stephanie is the author of **The Benevolent Bee** (Quarry Press, 2017) and **Common Sense Natural Beekeeping**, with co-author Kim Flottum (Quarry Press, 2021).



Managed honey bee colonies face unprecedented challenges, including a growing loss rate with every passing year. Outside of human management, however, wild honey bee colonies are not only surviving, they're thriving. In her talk, Common Sense Natural Beekeeping, author and naturalist Stephanie Bruneau will discuss how we can learn from the way honey bees live in the wild, and use this knowledge to inform our decision making in our managed colonies. She will talk about hive management strategies that respect the natural intelligence of the bee, leading to better outcomes for bees and beekeepers alike. Beekeepers today have myriad choices to make that affect their bees' health and productivity. From housing to nutrition, pest management and more, Stephanie will discuss Common Sense Natural Beekeeping as a sustainable alternative for natural hive management.

Join the Nominating Committee!

At our February meeting, this Monday, we need to set up a Nominating Committee to nominate club officers for the next two years. Please consider joining. The purpose of the Nominating Committee is to create a slate of candidates to be voted on by the Club as a whole. The slate will be voted on at a future meeting.

Looking for a NCBA Scholarship Czar

The club is looking for a volunteer to coordinate our many scholarship programs (Norfolk Aggi College Scholarship, Club Members' College Scholarship, Club Members' Cornell Master Beekeeper Scholarship, and the Subsidized Queen Program). Any interested members can reach out to Tony Lulek for more information.

Spring Bee Conference

*Hosted by Worcester County &
Hampden County Beekeepers*

We would like to invite all Beekeepers to our Spring Conference for no charge. Enjoy and learn more about our precious little bees that struggle to survive. We have brought in two Big Name speakers, Dr. Jamie Ellis from the U. of Florida and Dr. Julianna Rangel-Posada from Texas A&M, to enhance our knowledge for both beginner and senior beekeepers. A luncheon available for only \$12.00, but order online by 2/26. You may also bring your own lunch. We will have a free door prize raffle at the end with bee equipment and package of bees. Get your free ticket upon entrance to auditorium.

Best, Ken and Mark, Chairman

Saturday March 5, 2022 8:00 AM-3:30 PM

LIFE SONG CHURCH HALL

65 Gilmore Dr., Sutton, Mass (off ROUTE 146)

8AM-9AM Coffee and Danish and Bee Talk

9:00-9:15 AM Worcester and Hamden County Presidents Welcome and announcements.

9:15-10:30 AM Dr. Julianna Rangel-Posada, Associate Professor of Apiculture at Texas A&M University, College Texas Station, Topic: Factors that affect the reproductive quality of honey bee queens and drones.

10:30-12 Noon Dr. Jamie Ellis University of Florida

Addressing the sustainability of beekeeping. In many ways, beekeeping is harder than ever. Colony loss rates are high in many areas around the world. Old pests and pathogens continue to cause problems. New pests and pathogens threaten colony health. In this climate, university faculty are challenged to address the problems facing honey bees in an ever-changing colony health environment. Herein, Dr. Ellis will discuss what he and his team are doing to address bee colony health, with an eye toward improving the sustainability of beekeeping in the U.S. and beyond.

12 Noon-1 PM Catered Lunch \$12.00 order online or by mail.

1:00 PM-2:15 PM Dr. Julianna Rangel-Posada Topic: Nutritional ecology of honey bees in a changing landscape tying in pollen issues.

2:15PM-3:30 PM Dr. Jamie Ellis

A year in the life of a honey bee colony. Honey bees live in perennial colonies. One result of this is that they must survive yearly fluctuations in temperature, rainfall, forage availability, stressors, etc. Survival and reproduction are the ultimate goals of any organism and honey bee colonies are no different. In this lecture, Dr. Ellis will discuss the yearly lifecycle of a honey bee colony and what it does to survive given the ever-changing conditions it faces.

3:30 Free Door Prize Raffle and Presidents closing remarks

EVENT LINK FOR SHARING - <https://wcbamembers.wildapricot.org/event-4664838>

Mentors Needed For 2022



With 98 students from 78 households, taking Bee School this year, there is again a tremendous need for club members to step forward and become a mentor.

You might be telling yourself that you don't know enough or have enough experience to be a mentor. That is not so. Even second year beekeepers have enough knowledge to become mentors. Most issues are easy to handle and questions are on the basic level. These questions include: is this capped honey or capped brood, when to add the second brood box, is my queen still in the hive, etc. If you do come across a problem, beyond your capabilities, the board, advanced mentors, and bee school staff are ready and able to help.

An added bonus, many club members have discovered being a mentor has improved their own skills as beekeepers. There are issues you might not have faced in your hives yet here it is in your mentees. This is a time to apply your knowledge gained from the club meetings and apply the correct solution.

Last year 47 members signed up to be mentors. This year the board is looking for a minimum of 50.

The goal, as has been in past years, is to assign no more than 2 mentees per mentor.

Send you interest in becoming a mentor to dwilson831@gmail.com. Include your First and Last name, address, best phone number to be contacted, and towns you feel you can cover and any restrictions you would like me to know of. If you have any questions before signing up feel free to reach out.

Thank you for participating as a mentor. This is my 8th year administrating the mentor program. Your willingness to participate as mentors gives me the energy and willingness to continue. Keep that enthusiasm up!



Board Meeting Minutes 1/17/22

NCBA BOARD MEETING

JANUARY 17, 2022

7:12 to 7:50 pm

Attending:

Tony Lulek
Dana Wilson
Stephan Greene
Ed Rock
Greg Rushton
Michael Simone,
Deborah Spielman
Jenna Tibbetts
Cara Sullivan
Kevin Keane
Joel Richards
Ed Szymanski
Brianda Younie
Mohamad Khalil
Deb Spielman
Rose Thornton

President's Update – Tony L

- Old & New Business
 - Paid Archie A. \$150 for queens
 - Bob Hickey will be reimbursed for 11 queens he supplied to our members through the re-queening program
 - Jim Lipton – was asking about webcasting once we go back to face-to-face meetings on Zoom.
 - We anticipate simulcasting meetings moving forward once in-person meetings take place.
- Master Beekeeping with Cornell (Scholarships)
 - Must be current member of NCBA and in good standing for three years
 - Comments from Ed S. – the amount of information presented is tremendous, and strong application connections. Also, the end of course projects are very applied and “real-world”
 - And we have one candidate currently
- Queen Rearing Scholarship
 - Must be NCBA member in good standing and have attended Bee School and Intermediate Bee School
 - And Wetlands Apiaries is also offering a scholarship for their queen rearing
 - Soap Making Class coming up February 3rd and 10th coming up
 - Connecting with a beekeeper in Africa to share practices – they will be attending Bee School in 2022
- She and her colleagues are from Victoria Falls, Zimbabwe
- The club may want to continue a relationship after they've finished 2022 Bee School. We'll evaluate any additional participation then.

The Board of Directors Meeting is the third Monday of each month.

It's held at 7:00pm via a Zoom Video Meeting.

All members are welcome and encouraged to attend.

- February meeting – we need to name a nominating committee for new club officers
- Anyone interested
 - Suggest Pollinator friendly gardening/ecological landscaping class in early spring as part of club meeting (Jenna)
 - Club considering developing a sustainable Nuc program (Kevin Keene's concept)
- Club members raising LOCAL 2-3 Nucs for new club members and queens purchased from local queen rearers (we'll have an approved list).
- Focus – for our club supplying local NUCs to our Bee School graduates.
- Details to come – this would become available for the 2023 Bee School graduates – Run past Club at February meeting

Vice President's Update – Dana

- Nothing new.

Treasurer Update – Stephen

- Bank balance \$44,835.71 as of 1/17/2022
- Three financial reports accepted.

Recording Secretary: Minutes – Ed R

- Meeting notes accepted
- Nothing new

Corresponding Secretary – Kevin Keane

- Nothing new – new newsletter material due 1/26/22

(Continued on page 6)

Do Mite-Resistant Honey Bees also Show Resistance to Viruses?

by Ed Szymanski

For the final project in my last class in the Cornell Master Beekeeper program, I had the assignment to choose a peer-reviewed research paper and analyze it according to a rubric we were given. In the journal PLOS ONE, I found a paper by Barbara Locke, Eva Forsgren, and Joachim de Miranda on research done on the possible Virus resistance of a group of bee colonies on the island of Gotland, Sweden. This turned out to be a very interesting paper, and I want to share what I learned from this.

In this research, the authors are testing the theory that some mite-resistant honey bee colonies have actually developed resistance to Varroa-vectored viruses, allowing them to survive despite uncontrolled mite populations.

14 mite-resistant colonies (MR) and 11 mite-susceptible colonies (MS) were used in the study. Mite counts were determined using soapy water washes on approx. 200 bees. Virus types present and virus levels were tested using RNA extraction and reverse transcription-quantitative PCR. 10 viruses were detected in an initial sample. This list was narrowed down to Deformed Wing Virus (DWV), Black Queen Cell Virus (BQCV), Sacbrood Virus (SBV), and Kashmir Bee Virus (KBV) for further study. Data was collected, transformed and statistically analyzed to determine the effects of viruses, mite infestation and population on the colonies. No mite treatments were done on any colonies. The colonies were left in the field over winter and mortality was recorded. In all cases, mortality was determined to be Varroa-related, as no signs of starvation or other disease were noted.

The mite-susceptible colonies (MS) decreased in population from July-October at a higher rate than the mite-resistant colonies (MR). This was correlated to mite infestation levels. In the MR colonies, the brood production rate decreased at a higher rate compared to the MS colonies. From July into autumn, mite populations were significantly lower in the MR colonies, although mite infestation levels increased in both colony types during the season. Deformed Wing Virus (DWV) levels were practically the same for both colony types. A significant

finding was that Black Queen Cell Virus (BQCV) levels decreased significantly in the MR colonies from summer to autumn, while they increased in the MS colonies. The same trend was noted for Sacbrood Virus (SBV). No such trends were noted for Kashmir Bee Virus (KBV). Mite infestation rates in the MR colonies were above a threshold level for winter survival (0.3 mites/bee) referenced from an earlier study. T. All of the MR colonies survived the winter, while all of the MS colonies did not. This suggests tolerance or resistance to viruses.

One surprising finding was that DWV levels in autumn were similar between the two colony types tested, suggesting that, since high DWV levels were not a cause of winter mortality in the MR bees, the MR bees are tolerant of, or resistant to, DWV. I had not considered that mite-resistant bees could actually tolerate levels of DWV that would kill non-resistant colonies. I was also surprised to learn that the MR colonies decreased brood production at a higher rate going into autumn. I have seen in my own colonies that Carniolan and Saskatraz bees seem to become broodless sooner in fall than Italian bees, but the association with mite resistance was surprising, although it makes perfect sense. I had thought it was a trait that brought improved winter survival through decreased food consumption, when in fact it appears to be that the decrease in brood population results in decreased levels of the deadly viruses BQCV and SBV.

This paper brings insight into the reasons why mite-resistant bees are mite resistant. Conventional thinking is that hygienic behavior (removal of mite and virus infested brood) was the main reason behind the mite tolerance of the bees, when in fact, tolerance or resistance to viruses, along with brood population reduction in the late season, may be equally important. The work also demonstrated that the MR bees showed markedly improved winter survival over the MS bees. It makes me think that the increase in my own winter survival rates may be attributed to natural selection over the years as we raised new bees from our survivors and intentionally added bees

(Continued on page 6)

(Continued from page 5)

with mite-tolerant qualities to keep a good genetic mix in the apiary. This makes me want to look further into the research to see if the points raised in this work have been developed further.

What can we take away from this? Knowing that mite resistant bees can develop resistance to viruses, and that they can manage themselves in such a way that virus levels are diminished, is a game-changing revelation to conscientious beekeepers trying to improve their survival rates. But, resistance to disease and viruses can never be developed in colonies that don't survive long enough to reproduce and carry those traits forward. Buying bees with no mite or virus tolerance, having them die over

winter, and then buying more in the spring is a vicious cycle that will never resolve itself. Beekeepers need to pay attention to what type of bees they are bringing in to their operations. Adding mite-resistant stock to the apiary, along with diligent care in nutrition and mite control, will ensure that some colonies will survive the winter. Then, by raising new queens from these survivors, and occasionally adding new resistant stock, their apiaries will be populated with bees that have developed resistance to the deadly viruses. Once a certain level of tolerance is achieved in an apiary, factors such as drift between colonies will be less significant. It also means that these survivor colonies will send drones carrying these traits out and will pass them on to the surrounding community.

(Board meeting minutes, continued from page 4)

Committees:

- Programs – Ed S and Marion
 - February Stephanie Brunell – Written a book with Kim Flottum on Natural Beekeeping
- Intro to Bee School – Tony
 - Registration - 94 students registered – registration closed now
 - Starts up January 25th, 2022 (Tuesdays) – 10 Classes
 - Meeting with WCBA about our Mentor program
- Intermediate Bee School – Ed & Marion (FYI – First Class in 2021 starting in March – Zoom-Based)
 - Registration will open in January 2022
 - Start classes in March 2022
 - Full syllabus going out in a few weeks. Programming will be similar to last year
- Extractors – Brianda
 - No updates
- Library – Michael Simone
 - No requests yet
 - Make sure to announce Mike again in the newsletter
- Door Prizes – Kara
 - December door prizes were sent
 - Looking to do virtual/digital gift cards – so we can track them
- Website – Greg
 - Queen rearing scholarship isn't live – getting updated shortly
- Membership – Facebook – Google Groups - Rose & Deb
 - Deb is cleaning the rolls
 - 435 renewed members plus 94 from bee school
 - 200+ lapsed members will be deleted from active

member list in February

- Face plus 94 book – only paid members – not much action there this month
- Bee Apparel - Lauralyn
 - Nothing New
- Calendar Committee – Jenna Tibbetts
 - Dates being updated for intermediate been school
- Meeting was adjourned at 7:50 PM



How to use the NCBA Library

To access the 190 books and 30 DVDs available from the NCBA Library, click on the button below. Marvel at the extensive Library Inventory. Submit a digital request form and Michael Simone, the NCBA Librarian, will contact you.

**TAKE ME
TO THE
LIBRARY**

GIANT PRO GRAPHICS

Looking for a local printer for
all your bee product needs?

Look no further!

At Giant Pro Graphics, our goal is to make everything simple and painless for you. We offer our guidance through every step of the production process and are ready to answer any questions you may have honestly and quickly. We know that large print jobs can be an intimidating process, so we make sure to deliver aesthetically pleasing, flawless banners and signs as quickly as possible for you and your business.

What you can do with GPG:

- ✓ Branded lawn signs for your apiary or farm
- ✓ Personalized/branded stickers for honey bottles and other products
- ✓ Custom "No Spraying" signs for your front lawn
- ✓ Small banners for your storefront
- ✓ Large banners for your events
- ✓ Counter easels, display signs, handouts, or brochures for your customers
- ✓ Branded signs for your friends and family
- ✓ And more!

Contact Brittany Murphy at
brittany@giantprographics.com



Visit our fully stocked store in Lincoln,
Rhode Island or visit our online store at:

www.WoodsBees.com

401-305-2355

info@woodsbees.com

Package Bees & Nucs 2019

We have three delivery dates for packages
this spring. Multiple pick-up locations and
delivery available for convenience!

5 Frame Nucs available in deep frame and
medium frame options.

Pick-up expected late May!

Hive Starter Kits

Assembled & unassembled complete hive
kits available for new beekeepers and
beekeepers adding a hive!

We also have:

Woodenware, frames, hive components &
accessories, hive tools, extracting & bottling
equipment, wide selection of protective
gear, & much more!

Our store is run by experienced beekeepers
who are ready to answer any questions you
may have.

Come visit us today!



Barker's Beehive's & Supplies

Stay Local, Support Local, Buy Local

Visit my Online Store

www.barkersbeehives.com

Email: barkersbeehives@gmail.com

(508) 797-7412 – Text or Call – Todd

<http://facebook.com/oxfordfarms>

We sell everything a beekeeper needs!

Full Hives Setups

Hive Kits & Starter Kits

All Woodenware

Frames

Foundation

Feeders

Protective Clothing & Gear

Hive Tools

Pollen Patties w/real protein

Honey Jars

Bee packages, Queens

Medications & Treatments

Onsite mentoring

And more

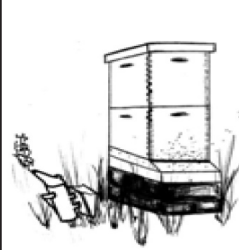
You name it! I can build it!

I'm not only a Craftsman, also a Beekeeper

All wood is from a local mill

All Pricing is less than or Competitive

All Woodenware Nailed & Glued by hand
no Nail Guns



Franklin Honey Company, Inc.

BUY LOCAL

Custom Built Hive Equipment

www.franklinhoney.com

franklinhoney3@gmail.com

Custom Hive stand and Screened Bottom

Board Built as one piece instead of two separate pieces for stability. They are made with galvanized 1/8" screen and white plastic slide-in tray to count mites. Glued and screwed together for long lasting durability.

Slatted Racks Completely assembled, glued and nailed. This gives the bees more room in the hive on rainy days and when they are all in for the night making them less likely to think about swarming due to crowding.

Supers Made out of pine; with pre-drilled finger joints, and handles cut into boards, comes unassembled. Deep, Medium and Shallow available.

Inner Cover Ventilated, wooden inner cover.

Outer Cover covered with Tin Made from 3/4" exterior plywood, completely assembled, glued and screwed. Cover comes with tin cover to protect from outdoor elements.

Complete Hive Setup Includes screened bottom board, two deep supers, 20 frames with wax foundation, inner cover and outer cover.

Hive Frames—Deep, Medium, and Shallow Wooden frame, made out of pine, held together with 10 nails. (Does not include wire or foundation).



I work with professional marketers and communicators to help promote the companies and brands they work for.

Some of the services I provide are:



Branding services

- Logo design
- Brand over haul
- M&A rebranding
- Brand audits
- Brand management



Print collateral design

- Publication design
- Annual report design
- Campaign design
- Research reports
- Infographics



Advertising & social engagement

- Trade show booth design
- Environmental graphics
- Social media assets
- Traditional advertising

Learn more at: neutra-design.com

New Year's Resolution:

Become a NCBA Mentor this year!

Become a mentor in 2022!

Guiding a new beekeeper in the science and art of beekeeping is rewarding and fun!

Sign-ups will begin this spring!



WHO'S YOUR FAVORITE PRESIDENT?

CHESTER BEE ARTHUR

