AMERICAN BEEKEEPING FEDERATION

QUARTERLY

VOL. 82, NO. 2, 2024

Propolis Envelope

ALSO IN THIS ISSUE:

Looking Forward for the ABF Auxiliary

Sweet Success in the Silver State

4-H Essay Contest Winners

KONA QUEEN HAWAII &
PARADISE QUEEN HAWAII
SUMMER
Sale
JULY 1 - OCTOBER 30
$23 PER QUEEN
Kona Italian &
Carniolan/Italian hybrid
KONA QUEEN
HAWAII
EST. 1975
$26 PER QUEEN
Paradise VSH Italian &
Carniolan/VSH Italian hybrid
PARADISE QUEEN
HAWAII
808-328-9016
SALES@KONAQUEEN.COM
Price valid on orders of 100+ and includes FREE SHIPPING!
$4 OFF all other quantities. GUARANTEED live delivery!
www.konaqueen.com | www.paradisequeenhawaii.com
@konaqueenhawaii @konaqueenhi @paradisequeenhi

CONTENTS

Cover image by Anete Lusina: https://www.pexels.com/photo/crop-farmer-taking-honeycomb-from-beehive-5247969/rom Pixabay

SPECIAL FEATURES

10 Sweet Success in the Silver State

11 Propolis Envelope

18 Looking Forward for the ABF Auxiliary

20 4-H Essay Contest Winners

REGULAR FEATURES

5 From the ABF President

6 From the ABF Vice President

8 Advertisers' Index

8 Federation Marketplace

ASSOCIATION NEWS

7 Member Milestones

9 ABF Donations

19 State Delegates

QUEEN'S CORNER

13 Queen Committee Report
by Anna Kettlewell,
Honey Queen Program Committee Chair

14 American Honey Queen Report
by Kaelyn Sumner

15 American Honey Princess Report
by Lainey Bell

AMERICAN BEEKEEPING FEDERATION
QUARTERLY

For advertising sales or general inquiries
please contact: *abfnet.org@gmail.com*

Entire contents ©Copyright 2024 by the American Beekeeping Federation. All rights reserved. Reproduction of the contents of ABF Quarterly in whole or in part by photocopying, entry into a data retrieval system or any other means is strictly forbidden.

ABF Quarterly is published quarterly by the American Beekeeping Federation, Inc. The articles, opinions and ideas expressed by the authors are the sole responsibility of the contributors and do not imply an opinion on the part of the officers or members of the ABF. ABF Quarterly welcomes and encourages contributions and suggestions from its readers. Editorial policy dictates the right to edit or reject any material submitted for publication.

ABF Officers & Board of Directors

OFFICERS

Patty Sundberg (EC)
(1st Term - Expires January 2025)
President
(406) 321-0487
psundberg@hotmail.com

Debbie Seib (EC)
(1st Term - Expires January 2025)
Vice President
(317) 503-0583
seibshoosierhoney@yahoo.com

Dan Winter (EC)
(1st Term - Expires January 2025)
Past President
beeman.dan@icloud.com

Debbie Seib (non-voting)
Executive Transition Director
(317) 503-0583
abfnet.org@gmail.com

DIRECTORS REPRESENTING THE STATE DELEGATES ASSEMBLY

Susan Collins (1st Term-Expires January 2026)

birdandbeehawaii@gmail.com

Robert Duffy (EC) (2nd Term-Expires January 2025)
beekeeperin@aol.com

Lisa Ghezzi (1st Term-Expires January 2026)

lisa.ghezzi@icloud.com

Stephanie Slater (1st Term-Expires January 2025)
stephanie.d.slater@gmail.com

DIRECTORS REPRESENTING COMMERCIAL BEEKEEPERS SPECIAL INTEREST GROUPS (SIG)

Richard Coy (1st Term-Expires January 2026)
richard@coyshoneyfarm.com

Charles Linder (1st Term-Expires January 2025)
gm_charlie@frontier.com

DIRECTORS REPRESENTING SMALL-SCALE/SIDELINER SIG

Brian Reeves (1st Term-Expires January 2025)

bekayr@aol.com

Liz Schroeder (1st Term-Expires January 2026)
liz91201@hotmail.com

DIRECTORS REPRESENTING HONEY PRODUCER-PACKER SIG

Michael Roark (1st Term-Expires January 2026)

michael@roarkacres.com

Blake Shook (EC) (2nd Term-Expires January 2025)
blake@desertcreekhoney.com

DIRECTORS REPRESENTING PACKAGE BEE & QUEEN BREEDERS SIG

Tim Wilbanks (EC) (1st Term-Expires January 2025)

timwilbanksbees@gmail.com

Amanda Wooten (EC) (1st Term-Expires January 2026)
amanda@wootensqueensbees.com

DIRECTORS APPOINTED BY THE PRESIDENT

Kent Pegorsch (1st Term-Expires January 2025
kent@pegorsch.com

William Crawford (1st Term-Expires January 2026)
wcrawford@newenglandapiaries.com

WELCOME

PATTY SUNDBERG, ABF PRESIDENT

Hello Members of ABF,

As I write this, I am currently with one of our sons and his now family of five, welcoming the new addition of our granddaughter this week. The joy that I feel as I look into this little one's eyes comes also with concern for her, our other grandchildren, and their future families. I am not new to beekeeping, the industry, the American Beekeeping Federation, or to leadership. I have been active with ABF in many different areas. Do I profess myself as an expert? No. Do I step up to do and serve others for the betterment of the future? Yes. Everything in life comes with celebration, challenges, change, and people trying to throw you off course, good and bad. It is important to stay focused and not let that get in the way of leadership.

We, the elected officials and other leaders of ABF will be in Washington DC next week. We will do our best to represent you, our members, and all the beekeeping industry. ABF is at work for you and has been. We do this through actions that happen during our annual business meeting in forming of the resolutions. We do this by having active ears and eyes out in the industry locally and internationally sharing their knowledge with us. We try hard to work for honey bees to have a chance for a healthy life. Without healthy bees where would we all be?

We will work to keep funding going in our labs and pound the halls of both Senators and House Representatives for support of a $9 million increase in funding for tropilaelaps mite research and response plan upon its possible arrival to North American. We will share our concern for the good of the honey bee industry's representation in the Farm Bill and encourage there to be the passing of a Farm Bill. We have plans for an extensive visit with USDA, ARS, APHIS, and EPA.

Protection of the ELAP program, conservation and public land access, honey integrity issues, agriculture labor, and H2A program are among the key talking points with our elected officials. We will continue to pursue some way to help with a standard of identity for honey. We will express our support of the USDA Honey bee and Pollinator Research Coordinator position with the Office of the Chief Scientist at USDA and the funding of the position.

Membership in ABF is continuing to grow and return. Our financial status is continuing to stabilize. I appreciate your support in helping make us strong. Your membership is important to the health of the American honey industry.

Our overworked volunteers do not just stop with a leadership role with ABF. Many continue to serve on other boards within their own state and the honey bee industry nationally, including, but not limited to, the Pollinator Stewardship Council (PSC), North American Bee Strategy (NABS), Bee and Butterfly Habitat Fund, Project Apis m. (Pam), Honey Bee Health Coalition (HBHC), and National Honey Board (NHB).

We share a passion for honey bees, our environment, the world, and our future with a goal to help it be the best it can be. You are a part of this great organization, and you too can be a supportive, active player on this team. Reach out to me and share your interests and talents by emailing psundberg@hotmail.com.

Patty Sundberg, President

Debbie Seib,
ABF VICE PRESIDENT

HAVE WE ABANDONED THE LEGISLATIVE AGENDA?

Throughout the history of beekeeping, there have always been challenges for our industry. As issues that affect our industry become a greater threat each year, it opens the way for misinformation regarding our association and leadership. Recently, unfortunate information has been circulating that our focus has transitioned away from the many legislative issues facing our industry.

As the elected Vice-President and Legislative chair, I can guarantee you we have not abandoned the legislative agenda. The ABF Legislative Committee meets every month to discuss industry issues and what can be done to impact them. As you are aware, things move slow in Washington; however, we will continue to push our agenda. ABF officers, past and present, were in Washington, D.C. the second week in June meeting with senators and representatives to voice our concerns on industry issues. These were our "Asks":

- First: We would like a 30% increase in funding to specifically target research on the Tropilaelaps mite heading our way. We made it clear; we do not want to reduce other research funds for this. This 30% equated to $9m. This amount was the same that the other national association made as well.
- Second: We would like $500k to keep the USDA Honey Bee & Pollinator Research Coordinator, Office of Chief Scientist. Currently this position is being filled by Elizabeth (Izzy) Hill. This was the same request made by the other national association as well.

Both associations had the same "Asks" as we are focusing on the two biggest threats to our industry and it shows a united front to our legislative branch.

At each office, we left a document that included 2024 Legislative/ Regulatory Issues from ABF.

Farm Bill

1. The Emergency Livestock Assistance Program (ELAP)
2. Honey Integrity Issues mentioning Congressman Armstrong's HIVE act
3. ARS Honey Research Authorization (see above)
4. Honey Bee Research Coordinator Position at Office of Chief Scientist, USDA (see above)
5. Conversation Issues
6. APHIS Bio-Controls
7. Public Lands Access for Honey Bees
8. Canadian Border and U.S. Honey Bees

2025 Appropriations

1. Honey Bee Research Funding at ARS (see above)
2. Honey Bee Research Coordinator (see above)
3. ELAP
4. APHIS

Other Legislative Issues of Interest to ABF

1. DOL H2-A Regulations on Wage Rates
2. House AG Committee Task Force on Ag Labor
3. Trade Legislation

Our membership is continuing to increase and our goal is to hit 1,000 by year end. Our members new, and those that have been members for

More VP, page 7

MEMBER MILESTONES

for April - June 2024

60 *YEARS*
Arthur Rittenhouse

50 *YEARS*
William Merritt
Ronald Uzzell

45 *YEARS*
Tim May

35 *YEARS*
Donald Berry

30 *YEARS*
Michael Wohlfeld

10 *YEARS*
Michelle Poulk
Maryland State Beekeepers Association, Inc.
Collin County Hobby Beekeepers

5 *YEARS*
Dawn Feltner
Heather Kilkenny
Victoria Kleber
Pat Harrison
Jan Spieth
Nat Wasserstein

Image by Erik Karits from Pixabay

VP, from page 6

years, are reaching out to us as they want to be a part of an industry that is positive in its message. George Eiden is 94 years old and been a member since 1962. While many of our older members are no longer able to attend our conferences, they remain loyal members because they believe “We are all in this together”. I challenge each of our current members to sign up one new member this year.

Speaking of our annual conference, we are currently working on our 2025 Conference and Tradeshow. The Keynote speakers have confirmed, we are working on our three tracks, and have already signed up 18 vendors in our Tradeshow. This is our annual event that brings together beekeepers of all levels together along with industry researchers. For the latest information see our website at: https://abfnet.org/2025-abf-conference/

Feel free to contact me to discuss any of the above topics at seibshoosierhoney@yahoo.com

You are not just a beekeeper, you are a part of an industry.

Federation MARKETPLACE

Interested in advertising in the Federation Marketplace? Email: *abfnet.org@gmail.com*

BEE SUPPLIES

WOOTEN'S QUEENS & BEES, INC.
Proven queens.
(888) 565-8439
www.wootensqueensbees.com

EQUIPMENT

COOKS & BEALS, INC.
Third Generation Family Owned and Operated, providing honey producers with high quality honey extraction equipment built to last through the generations, and customer service you can count on since 1959.
(308) 745-0154
www.cooknbeals.com
info@cooknbeals.com

CREAMPAL
From liquid honey to a creamy, crystal-free spread, the Creampal machine makes the best stable creamed honey in the world. With unmatched quality and possibilities expand your market today!
(450) 373-7535
https://creampal.com/en/
info@creampal.com

QUEENS

WOOTEN'S QUEENS & BEES, INC.
Wooten's Queens & Bees, Inc. offers Park Italian Queens April - September, Nucs in March/April & Pollination Services.
(888) 565-8439
order@wootensqueensbees.com
Robert & Amanda Wooten
Wooten's Queens & Bees, Inc.
P.O Box 464
Palo Cedro, CA 96073
P: (888) 565-8439
F: (530) 549-3624
www.wootensqueensbees.com

ADVERTISERS' INDEX

The Advertisers' Index is compiled as a service to our readers and advertisers. The publisher is not liable for errors or omissions, although every effort is made to ensure its accuracy. Be sure to let our advertisers know you found them through *ABF Quarterly*.

Kona Queen Hawaii 2
Cook & Beals 8

COOK & BEALS INC
HONEY EXTRACTING EQUIPMENT
www.cooknbeals.com
Celebrating 65 Years
1959-2024

Serving the Industry since 1959
Family owned and operated

Doing our best to meet your Honey Extraction Needs

221 S. 7th St / PO Box 220
Loup City, NE 68853

1-308-745-0154
www.cooknbeals.com

Proverbs 16:24

ABF DONATIONS

The following have contributed to ABF during the months of April - May 2024. These donations enable ABF to fund programs and services that benefit members and the American beekeeping industry.

HONEY QUEEN FUND

- Robert Duffy
- Saskatoon
- LACB
- Leslee Alvarez
- Tracy Middlebrooks Jr
- StigBea White
- Barry Thompson
- Shannon Wooten
- Glenda Wooten
- Becky Tubb

LEGISLATIVE FUND

- StigBea White
- Barry Thompson
- Gus Rouse
- Becky Tubb
- Ronnie and Wendy Jourdan
- Virginia Gilliam

FRIEND OF THE BEES

- Tracy Middlebrooks Jr
- StigBea White
- Barry Thompson
- Gus Rouse
- Becky Tubb

HONEY DEFENSE FUND

- Tracy Middlebrooks Jr
- StigBea White
- Barry Thompson
- Becky Tubb

FOUNDATION

- A.M. Stedina
- Wisconsin Honey Producers Assn
- StigBea White
- Barry Thompson
- Becky Tubb

GENERAL FUND

- Virginia Webb
- Patricia Sundberg
- Maria Baker
- Donna Carter
- Tara Bennett
- Rodney L Holloway

RESEARCH FUND

- James Howard
- Joe Daly
- StigBea White
- Barry Thompson
- Edward Menefee
- Becky Tubb
- Virginia Gilliam

SWEET SUCCESS IN THE SILVER STATE

By Debbie Seib

2025 Conference and Tradeshow will be in Reno, NV at the Peppermill Resort Spa & Casino. January 7th, Tuesday night we will once again have a Dinner and Movie and start our education sessions on Wednesday, January 8th.. Our three Keynote Speakers are:

Dr. Marla Spivak from University of Minnesota is a Distinguished McKnight Professor. Her lab focuses on the health of all bees but primarily the honey bee.

Dr. Geoff Williams from Auburn University is directing his efforts towards understanding and improving the health of insect pollinators in Alabama and abroad, with a focus on exotic parasites and anthropogenic land-use.

Dr. Scott McArt an assistant professor of pollinator health in the Department of Entomology at Cornell University, where he helps run the Dyce Lab for honey bee studies and the Cornell Chemical Ecology Core Facility.

We have reserved a block of rooms at the Peppermill Resort Spa for a discounted rate of $129 a night (plus applicable tax, fees, and a $10 resort fee). The hotel is located on 2707 South Virginia St., Reno, NV 89502. Parking is free and there is a complimentary shuttle to and from the Reno-Tahoe International Airport.

American Association of Professional Apiculturists (AAPA) will be joining us again this year for their American Bee Research Conference (ABRC) on Thursday, Friday and Saturday January 9th through January 11th. 2024 showed off 27 posters from students across the U.S.

Kids and Bees program will be back on site and as usual we'll be hosting our annual Honey Show. Our Honey Show will again feature 18 different categories. Watch our website for the Rules and Regulations to submit your entries.

Our offsite event will be at the National Automobile Museum on Thursday, January 9th. There will be a fun area where younger adults can design their dream car.

Registration will begin on July 5th, 2024 with early bird registration rates through October 31, 2024. Pre-registration will close on December 26, 2024 but we do allow walk-ins. Full conference registration will include a Tuesday night "Dinner and a Show" and Wednesday night "Dinner and Ice-cream Social". Go to our website for the schedule, more information, and a link to the registration page. https://abfnet.org/2025-abf-conference/

With over 35,000 square feet of vendor space, we have lots of room in our Expo Hall and have already confirmed 18 vendors. If you are looking to Exhibit or Sponsor, send an email to Regina Robuck at partnershiprelations@abfnet.org

If you have any questions, send an email to Debbie Seib at abfnet.org@gmail.com.

Registration	Early Bird Rates July 5 - October 31, 2024		Regular Rates Nov 1 - Dec 26, 2024		On-Site Rates	
	Member	Non-Member	Member	Non-Member	Member	Non-Member
Individual Registrants Full Conference	$245.00	$305.00	$295.00	$355.00	$345.00	$405.00
Individual Registrants Day Rate	$150.00	$190.00	$175.00	$215.00	$200.00	$240.00
Student and Educator	$60.00					

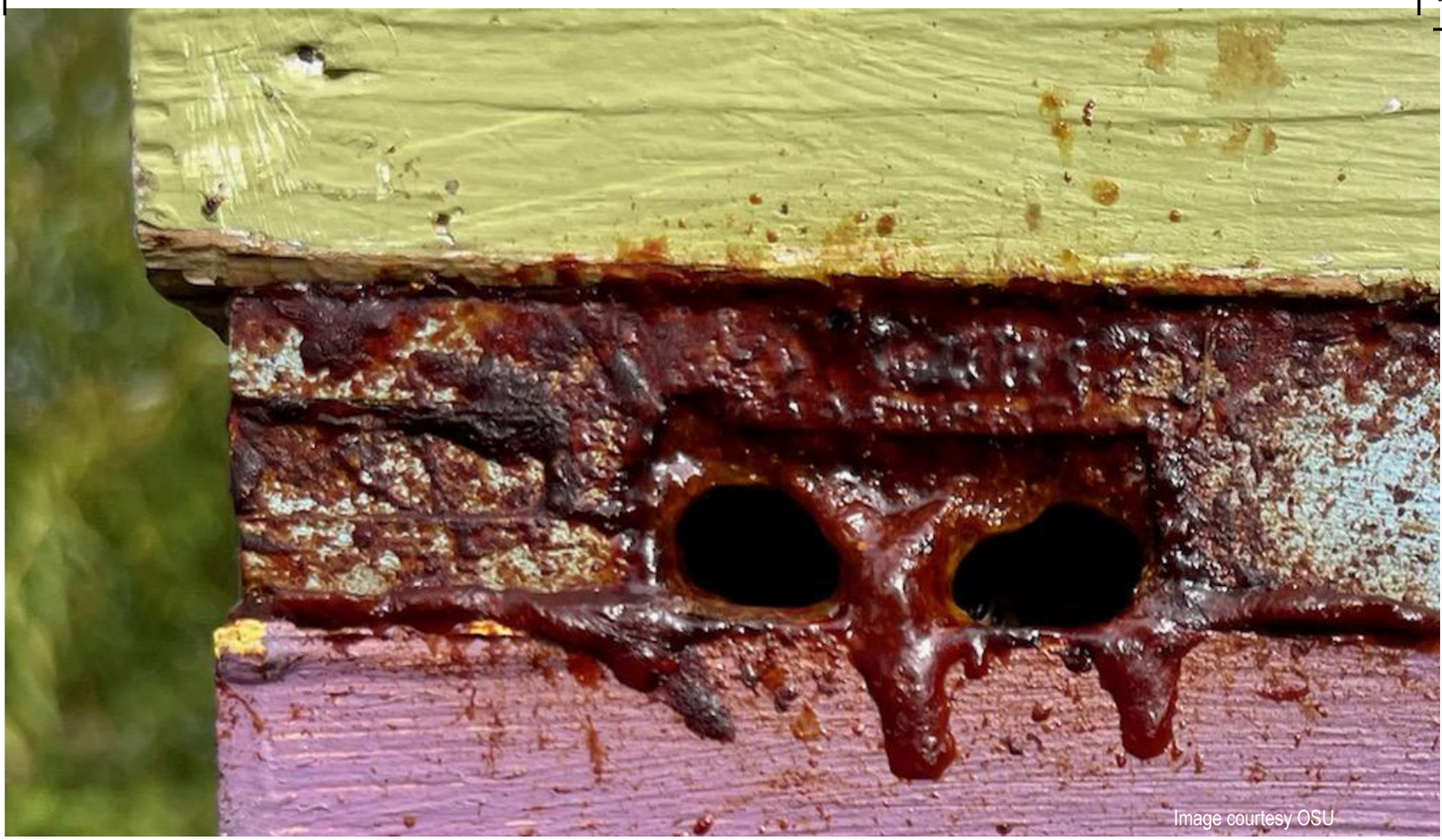


Image courtesy OSU

Propolis Envelope

By Dewey Caron

Honey bees collect and use plant resins to coat their hive. Our name for the resins is propolis and the coating a propolis envelope. Though beekeepers might consider propolis 'in the way,' studies have shown that a propolis envelope leads to both individual and colony-level health benefits.

In the summer, propolis is soft and sticky, like taffy, necessitating a hive tool to separate boxes and remove frames. Under cooler temperatures it separates with a snap, alerting the bees of our presence. Beekeepers over the years have been selecting bees that minimize use of propolis. Keeping our bees in smooth wooden boxes and using finished wooden/plastic frames helps reduce bees use of propolis and reduces the propolis envelope. Managed bees live in hives that are propolis-poor compared to wild, feral colonies in natural cavities.

The biological significance of minimizing the propolis envelope is not well known. Honey bees have many stressors with mites, diseases, pesticide exposure and diminishing forage negatively affecting beekeeping success. These stressors impact both large-scale, migratory beekeeping operations – where colonies providing pollination services participate directly in industrial agriculture – and stationary, small-scale apiaries. Is minimizing propolis use an inadvertent constraint of basic colony natural defense?

As beekeepers, our beekeeping practices should support colony health, not constrain their natural defenses. We recognize bee colonies, in addition to the individual workers, have defenses against potentially harmful organisms. Colony level defense is termed social immunity, i.e. defense of the bee colony itself, functioning alongside individual immunity that the workers possess. The sum of the whole, in addition to the individual bees making up the colony, fights off enemies big and small that seek to exploit the bee colony. A propolis envelope is an example of collective colony level defense.

A recent review article "Thinking inside the box" summarizes studies comparing honey

More NUTRITION, page 12

NUTRITION, from page 11

bee mouthpart microbiomes in propolis-rich and propolis-poor conditions. The study results suggest that propolis promotes the growth of what are believed to be beneficial microbes and it may help reduce the growth of opportunistic microbes that trigger the production of antimicrobial peptides that reduce honey bee immune defenses.

Experimentally roughing wooden boxes did not improve colony survivorship but gene expression of the EFB pathogen was significantly lower and viral loads for multiple viruses tended to decrease as propolis deposition increased. By the end of year one, honey bee populations in migratory rough box colonies were significantly larger than those in control colonies. The use of roughened wooden boxes of migratory bees had decreased honey production the first year but had no effect during year two. In both stationary and migratory operations, propolis deposition was correlated with a seasonal decrease and/or stabilization in the expression of multiple immune and bacterial genes, suggesting that propolis-rich environments contributed to hive homeostasis.

In addition to being a pest deterrent and in reducing microbial loads, the propolis envelope serves other hive purposes. It provides waterproofing, helps prevent fungal decay of the hive walls, it is used to reduce cracks and narrow hive entrances and it helps promote stable hive temperatures and humidity which promotes brood hatching success and colony growth.

It is relatively easy to promote propolis use leading to a more robust propolis envelope by roughing the inner surface of hive boxes. Using frames and bottom and top covers from less smoothly finished woods and construction material also helps. In the experiments, plastic propolis collectors were arranged on the inner surface of the hive boxes but this is not a practical solution.

It is common to see differences among colonies regarding propolis use. Some colonies will severely close hive entrances with propolis in the fall, something you can see at the entrance to a feral nest in a tree cavity. Although bees can collect plant resins from a variety of sources they have favored tree sources. The resin is carried back to the bee hive in pollen baskets, similar to how bees transport pollen back to their hives. Hive bees remove the propolis from the bee that collects it and mix it with beeswax and salivary secretions. In addition to coating, it is used to strengthen brood comb. If there is need for more propolis, the resin is removed at a faster rate and the propolis forager returns to collect more. Less need means lowered collection.

Although propolis gums up beekeeping equipment and slows our hive manipulations, it is an important line of defense for its antimicrobial activity. It is used for human and animal medicine in other parts of the world. As much as we might dislike it as have to pry boxes and frames apart of their propolis envelope, we need recognize that our bees benefit from propolis.

To read more about propolis

Shanahan, Maggie, Michael Simone-Finstrom, Philip Tokarz, Frank Rinkevich, Quentin D. Read and Marla Spivak. 2024. Thinking inside the box: Restoring the propolis envelope facilitates honey bee social immunity. PLoS One. 2024; 19(1): e0291744.

Dalenberg H, Maes P, Mott B, Anderson KE, and M. Spivak. 2020. Propolis envelope promotes beneficial bacteria in the honey bee (Apis mellifera) mouthpart microbiome. Insects 2020;11: 453

Simone-Finstrom M, Borba RS, Wilson M, and M. Spivak. 2017. Propolis counteracts some threats to honey bee health. Insects. 2017;8: 46. doi: 10.3390/insects8020046

QUEEN Committee Report

by: Anna Kettlewell, *American Honey Queen Program Committee Chairperson*

As you'll see from Kaelyn and Lainey's articles this quarter, our two representatives are extremely busy with honey and beekeeping promotional work throughout the nation. Thank you to everyone who has reached out with their promotional requests. We are working to fulfill as many of those requests as possible this year. Most of the summer months are booked and we are working on September through January schedules! Contact me at honeyqueen99@hotmail.com or 414.545.5514 to schedule Kaelyn or Lainey for an event in your area in person for the fall or virtually throughout the year.

While the American Honey Queen Committee is busy with the logistics of summer and fall promotions and travel for our 2024 representatives, we are also working on the candidate pool for the 2025 positions. 2025 will mark the third year of our expanded application process. In both 2023 and 2024, one of our representatives came to the ABF through the expanded application process, coming from states without an established state honey queen program. American Honey Queen Committee members have been in contact with state honey queens throughout the nation in the last quarter, discussing the application process and the opportunities to further promote the industry through the American Honey Queen Program.

Parallel to this, the Committee has opened up the alternate application process for women in states without existing honey queen programs. We are excited to report that we've had several inquiries and preliminary applications through this process. (Visit www.abfnet.org, and visit the American Honey Queen Program page for more details.) We will continue to seek applicants through this platform through early fall, and ultimately receiving final applications for the positions in late fall.

This expanded process is exciting and brings to the organization new opportunities including a more diverse applicant pool and new promotional events and markets. State organizations that currently sponsor a state honey queen understand that there are logistics and costs to sending an applicant to the ABF convention each year, including airfare, lodging, and meals. Most states will budget approximately $1,000 to send their honey queen to the ABF convention annually.

For our candidates coming through our expanded application process, the costs are the same. As our team finds candidates that meet the criteria to participate in the full interview process at the ABF convention, sponsorships will be needed to help fund these candidates' trip to the convention. Ideally, we'd hope that state and local beekeeping organizations from these applicants' home state could help support the candidate's journey to the convention, but sponsorships could come from any interested parties to offset candidate expenses. Should we find a candidate from your state, a member of the American Honey Queen Committee may reach out to your organization to discuss sponsorship opportunities. Additionally, these candidates may assist you in your statewide or local honey promotions as your state's honey queen. Not only a benefit to your promotions, but it will also help them as they prepare for the American Honey Queen interview process.

We thank all of you who continue to support this expansion of the American Honey Queen Program. We are excited to welcome applicants in January from states with established programs and those applying directly through the ABF's portal and ideally being sponsored by your state organization, local clubs, and businesses.

Happy 2024 promoting!

AMERICAN HONEY

Queen Report

by Kaelyn Sumner

Good day, members of ABF!

These last few months have been very busy! I have shared the importance of our industry in six different states: Kentucky, Florida, Illinois, California, Kansas, and Wisconsin.

In early March, I interviewed with Agri-View, an agriculturally-focused newspaper that reaches about 28,000 people in the Midwest. The article published on March 29 highlighted my involvement with bees and how FFA was a key component of my journey with beekeeping. It also covered how, as American Honey Queen, I will promote the consumption of honey across the country.

Queen Kaelyn sharing about the varieties of honey that are produced in the United States with students.

From March 6-10, I traveled to Lexington, Kentucky, for the Bluegrass Beekeeping School. I promoted the event throughout the week with various events. I started the week talking to the Fayette County 4-H Entomology Club, where several members are working toward becoming responsible beekeepers. The following morning, I had a radio interview with Froggy Radio, 101.7 and 104.9, for over three minutes of publicity for the industry. At the Kentucky Castle, a 100+-acre destination hotel, event center, and farm-to-table restaurant facility, I demonstrated a hive check with students from Locust Trace High School. These students were interested in learning more about the beehives that are on the property, as they already manage the gardens and the petting zoo there. They are hoping that expanding the castle hives will expand the food and drink offerings available in the castle restaurant.

I also spoke with 20 Master Gardeners at the Woodford County Public Library to explain how they are directly aiding the honeybees in the area. The Master Gardeners also work to educate the public, and I expanded on the benefits of local pollinators. During the Bluegrass Beekeeping School on March 9, I presented about engaging consumers or potential consumers to sell more of the products of the beehive. I also spoke with many of the 220 attendees about the American Honey Queen Program. Thank you to Ellen Melcher for arranging all my events while I was in Kentucky and to Greg Brock and Lucinda Masterson for hosting me in your house.

From March 13-17, Princess Lainey and I went to Gainesville, Florida, for the Florida Bee College hosted by the University of Florida Honey Bee Research and Extension Lab. Participants included beginner to experienced beekeepers learning about basic beekeeping up to the latest scientific research. We talked with many of the attendees about the American Honey Queen Program and presented on the history of the program. I also attended instructional sessions and facility tours. During the lab tour, the museum director showed us that different varieties of honey look extremely different under an electron microscope. While touring the observational hive lab, I learned how bees perceive red light as dark.

I also learned that hives in close

More, QUEEN, page 16

AMERICAN HONEY

Princess Report

by Lainey Bell

Hello, ABF! This spring has been very busy for Queen Kaelyn and me! I went on my first official promotion to Houston, Texas, for the Houston Rodeo and Livestock Show March 7-12. I worked with the Harris County Beekeepers Association in their exhibit, which featured lots of information about beekeeping, as well as two observation hives. During my three days there, I reached nearly 100,000 people about many aspects of honeybees and beekeeping. I also used this opportunity to promote the benefits of purchasing local honey! Many thanks to Jim and Rachel Orr, who hosted me during my visit!

At the Los Angeles County Fair, Princess Lainey discusses the different varieties of California honey with a fairgoer.

Shortly after, from March 13-17, Queen Kaelyn and I made it down to Gainesville, Florida, for the University of Florida's annual Florida Bee College. This two-day event, hosted by the UF/IFAS Honey Bee Research and Extension Lab, gave us the opportunity to speak with around 325 people from across the globe about the American Honey Queen Program. While there, we also attended some of the many classes offered. Because of my background working in commercial beekeeping, I attended a few marketing and business-focused classes. Queen Kaelyn and I also toured the beekeeping museum that the lab manages, and saw photos of past Honey Queens during the early years of the program. During this time, I worked with a museum curator to record an audio tour for the museum, explaining what our current roles are and how we promote the beekeeping industry. I would like to thank Amy Vu and the staff at the UF/IFAS Honey Bee Research and Extension Lab for setting up this promotion for us!

After returning to Maine, I began to promote in my home state and the area surrounding it throughout March and April. On March 25, I attended a virtual webinar hosted by the Maine State Beekeepers Association to introduce myself, as well as listen to beekeepers speak on different methods they use to solve various problems. Rounding out March, I gave a virtual presentation to an elementary school in Colorado, where I spoke to about 70 students over the Zoom platform. Virtual presentations are a great option throughout the school year, especially for a single school visit.

During the week of April 8, I had an interview with my college's outreach office, that produced a YouTube video and other social media content. Additionally, I spoke to students in a Portland school that week. On April 26, I took a train to Boston, Massachusetts, where I presented to about 50 school kids, as well as a group at the East Boston Branch of the Boston Public Library about honeybees and beekeeping.

Princess Lainey shows families attending the Houston Livestock Show and Rodeo where the queen bee is.

May was by far my busiest month this quarter! I spent the first couple of weeks giving school presentations for a variety of ages around the state of Maine. I spoke

More, PRINCESS, page 17

QUEEN, from page 14

proximity to each other will experience comingling or "drift" of worker bees. Thank you to Natalie Parkell and Amy Vu for inviting us to this event and allowing us to take part in a great learning opportunity.

Throughout April and May, I visited eight schools in my home state of Wisconsin, presenting to nearly 700 students in elementary and high school. At Trinity Lutheran School in Marinette, students were getting ready to plant some flower beds and were interested in what flowers they could add to attract honeybees. Springtime is a great time to have the American Honey Queen or Princess speak to students who are studying gardening or plants so they can make a direct connection to bees and pollination.

Other school presentation highlights included returning to my alma mater, Pulaski High School, and visiting Lena High School. At Pulaski High School, I spoke to students in agricultural classes about how I began beekeeping as my FFA project and the many jobs in the beekeeping industry. I worked with Lena High School Family and Consumer Science students to learn how to use honey in simple recipes. They learned that honey can easily be substituted for sugar in many recipes. These classes made honey coconut lattes from our recipe brochures, and many of the students wanted to make it again! These two schools helped me move closer to my goal of speaking to career and technical education classes – something I would love to do when I visit your state! Rounding out my local visits in Wisconsin, on April 10, I spoke before the Green Valley Town Board, my home town, about ways that the Board could benefit honeybees. I also shared industry information with the Board members along with the audience of 17 residents.

On April 24, I virtually presented to 30 employees at Wi-Tronix, of Bolingbrook, Illinois, during their Earth Week activities. I was invited to present by Michelle O'Malley, the company's office manager and also the 1994 Indiana Honey Queen! During the lunch and learn presentation, I shared about pollination and honeybees with the staff. This is a great promotion that could be done in other businesses during their own lunch and learn activities. Honey consumers can be found in all different promotional venues!

On April 30, I participated in Ag Discovery Day at the Wisconsin State Fair Park. Ag Discovery Day is held to introduce agriculture and farming to third and fourth grade students in the urban Milwaukee area. This event hopes to increase interest in many areas of agriculture, including keeping bees and the benefits bees have to our fruit and vegetable production, even in an urban area. Throughout the day, I spoke about honeybees to 1,100 students and they all made a rolled beeswax candle as part of the hands-on experience learning about diverse areas of Wisconsin agriculture. Thank you to Mary Kettlewell and Jennifer Hinkel, 2021 American Honey Queen, for inviting me to share about our industry.

From May 1-5, in Woodland, California, I shared that honeybees are essential for many crops in California with almost 5,000 elementary students across 11 elementary schools, as a lead-up to the California Honey Festival. This event, attended by almost 25,000 people, works to celebrate bees, the pollination they provide, and the many varieties of honey they produce in California. I presented on stage about honeybees and pollination and how commercial beekeepers impact their local economy through pollination of California almonds and the many fruits and vegetables produced. Thank you to Al Elby and Emilia Zarate for inviting me to these events and coordinating an amazing promotional schedule.

From May 12-17, I traveled to Paola, Kansas, located outside Kansas City, to speak at local schools and community events to bring awareness of honeybees and consuming honey. I visited three high schools, three elementary schools, a library, and three adult day centers. The high schoolers were interested in how honeybees could become a source of income, even in an urban area. Several students were interested in how honeybees could lead to a career as a beekeeper or in the science of studying bees.

The elementary students were very interested in the roles of the different bees in the hive. The most difficult question they asked was, "What happens if a honeybee stings a fish?" The answer I gave was that honeybees don't swim, so I didn't think it would be an issue. The message I shared with the adult day centers was that honey is wholesome and healing. I emphasized with these disabled adults that honeybees are not scary and are not trying to sting them, but that they are doing their jobs. They were amazed at how many honeybees it takes to make a pound of honey and that there are different flavors and colors of honey.

More, QUEEN, page 17

QUEEN, from page 16

I am looking forward to meeting many of you as I travel to your state! In the next few months, I will travel to New Jersey, Iowa, Illinois, Kentucky, Nebraska, and Ohio. Follow Princess Lainey and me on our social media: American Honey Queen Program on Facebook and Instagram, American Honey Queen on YouTube and the Buzzing Across America blog.

To schedule an appearance from me, please contact Anna Kettlewell at 414.545.5514 or honeyqueen99@hotmail.com.

PRINCESS, from page 15

in six different schools, giving 16 presentations to almost 600 students. On May 8, I was also interviewed by my hometown newspaper, the Morning Sentinel. After this interview, the article appeared in four of the most popular newspapers across the State, with publicity for the industry valued at nearly $10,000! As a result of this interview, I had my first television appearance on the ABC 7/FOX 22 News Channel out of Bangor, Maine, on May 14. I highlighted the importance of people working in beekeeping during this segment.

One of my goals this year is to present to at least 25 government officials or bodies, and I took the first step in reaching that goal in my own hometown. I gave my first presentation to the Town Council of Winslow, Maine, where I spoke about how the Town could support local beekeepers and the local honeybee population. After this, I received a proclamation in front of almost 100 of the citizens of Winslow. I'd love to speak with government officials when I visit your state!

I next set out for my first multistate, two week-long trip! After a very long flight, I arrived in southern California to promote at the Los Angeles County Fair from May 15-20. I worked with the Los Angeles County Beekeepers Association in their educational exhibit. This exhibit featured an observation hive, as well as different varieties of honey for sale. I talked with fairgoers about the importance of honeybees, as well as sold them different California honey varieties. I spent many hours working in the exhibit and sales booth, and I also gave daily presentations about honeybees. Many thanks to Mary Ann and Jeff Laun for hosting me for this promotion, as well as the Los Angeles County Beekeepers Association for facilitating my trip.

I then flew to Idaho Falls, Idaho, to visit area schools. I was there for three days, May 21-23 and, during that short time, I gave 12 educational presentations to well over 1,000 elementary students. This region of Idaho is home to many commercial beekeeping operations. The students had some awareness and knowledge about bees, but I still had some incredible questions after the presentations! I would like to thank my aunt, Jana Klein, for hosting me, and making this trip possible.

My final promotion in May was during Memorial Day weekend, May 23-26. I attended the annual BuzzFest, hosted by the staff of BeeWeaver in Navasota, Texas. I spoke to a few hundred people while I was there, teaching them about the American Honey Queen Program as well as my job as the American Honey Princess. People who came to my table also got to learn a bit about the commercial side of beekeeping, and how it differs from a hobbyist's setup. I was excited to tour BeeWeaver's facilities, which was incredibly interesting. I love seeing how different each commercial beekeeping operation is compared to what my background knowledge is! I would like to extend my deepest gratitude to the staff at BeeWeaver, especially Marie Yanchak, who organized my visit.

This summer is going to be packed with promotions for me! My upcoming stops include Connecticut in June, Michigan and Washington in July, and Indiana in August. I hope to see many of you there!

Please follow Queen Kaelyn and me on Instagram @americanhoneyqueenprogram and on Facebook under the name American Honey Queen Program. If you would like to schedule me to come to your event, please contact Anna Kettlewell at honeyqueen99@hotmail.com.

Thank you!

LOOKING FORWARD FOR THE ABF AUXILIARY

By Louann Hausner

Recently, a committee was formed within the ABF Auxiliary to determine the future direction of this group. The committee, which was composed of volunteers from the 2024 meeting, includes Louann Hausner, Rachel Bryson, Brian Nilson, and Chris Delaney. We have had several very productive meetings over the last several months.

The committee has identified three focus areas for this group going forward.

- Marketing the Honey Industry
- Supporting the American Honey Queen Program
- Assisting with the Kids & Bees Program

For a little background, originally this group was called the “Ladies Auxiliary”. Approximately 20 years ago, the name was simplified to the “ABF Auxiliary” to reflect that men and women were attending the annual meeting and supporting the group’s goals. In the past, dues were collected to support their activities and programs, although dues were suspended several years ago. The structure of the Auxiliary meetings has been to host a breakfast or lunch that provided the venue at the ABF convention for the American Honey Queen applicants to present their marketing presentations as a part of their interview process to become the ABF’s national spokesperson and for the American Honey Queen and Princess to report on their promotional work throughout the previous year. As it is written today, the mission of the ABF Auxiliary is “to provide support for the Honey Queen program with emphasis on using honey in the home and community”.

A few years ago, an article was published in the ABF newsletter asking for feedback and volunteers for those interested in taking a closer look at the Auxiliary to determine future direction. The goal was to harness the power of people who are interested in how we can continue to support the ABF and its programs.

The committee is recommending the continuation of a breakfast/lunch at the annual ABF convention for the continued sharing of promotional best practices to support the above noted three focus areas. The committee would like this group to also initiate a marketing workshop on the Saturday morning of the ABF convention to share marketing best practices with ABF members.

The reformatted mission of the ABF Auxiliary will be “to connect those interested in learning, supporting,and sharing best practices for marketing honey and the beekeeping industry through local businesses and organizations.” We will use the breakfast/lunch at the convention to promote marketing; support the American Honey Queen Program through sharing promotional ideas; identify people to support the planning for next year’s “Kids & Bees” program; and recommend a marketing workshop topic and/or presenter for the next year’s convention. This group will continue to be open to all ABF members who are interested in supporting the promotion and marketing of honey and other products of the hive for the benefit of all beekeepers.

For more information or feedback, please feel free to contact Louann Hausner @ intlmarathoner21@gmail.com

STATE DELEGATES

Each state having ABF members may appoint a state delegate to serve as a liaison between ABF and its state association and local clubs. Each state delegate acts as a membership and legislative coordinator — communicating important membership and legislative information between ABF and the state and local clubs.

Let's grow together! Don't miss this opportunity to publicize your state meetings. Let us know if you want your state more involved with the membership and legislative happenings and consider becoming a state sponsor of the ABF.

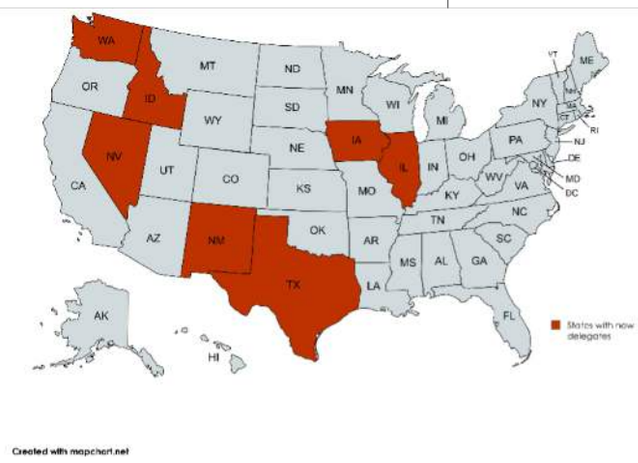
By Debbie Seib

The ABF State Delegates Assembly meets the second Tuesday every other month. We hear from a Guest Speaker or Speakers on timely topics, the latest on American Beekeeping Federation including our Conference and Tradeshow. On our May call we heard from Danielle Downing, Project Apis m, and Natasha Garcia – Andersen and Kim Skyrm from the Apiary Inspectors of America.

We introduce our newest delegates from across the US. During our March and May meetings, we were happy to introduce several delegates that are new to our assembly:

- Jim McMahon – Idaho
- Michael Morrison – Idaho
- Phillip Raines – Illinois
- Lara Lovell – New Mexico
- Debbie Gibson - Nevada
- Tyler Holton – Iowa
- John Talbert – Texas
- Tim Branan - Texas
- Dawn Beck - Washington

How are delegates selected? Each state that has at least one ABF member is allowed a delegate. Based on the number of members, they are allowed up to 3. The states nominate their delegates and send the name(s) to the Assembly Chair.



The formula for the number of delegates per state is base on the number of members and the amount paid for dues.

1 - 14 Members	**1 Delegate**
15 - 74 Members	**2 Delegates**
75+ Members	**3 Delegates**
$60-1,499	**1 Delegate**
$1,500-10,499	**2 Delegates**
$10,500+	**3 Delegates**

Our remaining 2024 meetings are listed below. If you are a state delegate, please add these to your calendar and join on the next call. If we have your cell phone, you should receive a text message one hour before the start of the meeting.

- July 10
- September 11
- November 12

If you would like more information about ABF State Delegates Assembly or about state sponsorships, contact Debbie Seib at seibshoosierhoney@yahoo.com. If you are a State Delegate and would like ABF information to share at your event, send an email including estimated numbers to seibshoosierhoney@yahoo.com. Please give us about 3 weeks notice.

FOUNDATION FOR THE PRESERVATION OF HONEY BEES, INC.

FOUNDATION
4-H ESSAY CONTEST

2024 4-H Essay Contest
Varietal Honeys

The winners of the Foundation 4-H Essay Competition are: Landon Moore from Texas, Annalise Watkins from Florida, and Naomi Renner from Nebraska. You may read their entire essays below.

First Place Winner, Landon Moore

Varietal honey is honey that comes from a single source. This honey has a flavor derived from the source flower and can even have a similar scent. In general, lighter colored honeys have a more subtle taste and dark honeys are more intense.

Varietal honey has been compared to wine, in that honeys produced in different years can be distinguished, even if they come from the same flower and location. This is due to slight temperature and rainfall differences for the flower that in turn cause small changes to the resulting honey's flavor. This phenomenon is called terroir and is responsible for the individual taste of each honey harvest. Varietal honey's unique flavor, based on local flowers, and sometimes rarity, has made this type of honey very valued and frequently quite expensive. In America, more than 300 of varietal honeys are produced.

One example of a unique varietal is blueberry honey. This type is often produced either from honey taken after bees pollinate a field of berries, or from wild blueberries, especially in the Northeast. It is a light-colored honey with a mild fruity and buttery taste. A rarer varietal is Avocado honey. It is produced only in California and Florida. It has a dark amber color and strong rich taste. A more widespread (but still regional) type is cotton honey. It is produced across the South in the many cotton fields. This honey is very pale with a mild and subtle taste.

One of the more famous varietals is orange blossom honey. It is produced in parts of a few states mainly California, Arizona, Texas, and Florida. It is a very pale honey with a strong floral scent and distinct citrus taste. It is frequently made from multiple citrus species, but purely orange honey can be found, often from California.

One final example of a varietal honey is the ubiquitous clover, one of the most popular types of honey. It is grown all over the United States and produced from several species of clover, most commonly Red, (Trifolium pratense) Alsike, (Trifolium hybridum) Crimson, (Trifolium incarnatum) and White (Trifolium repens). These are often blended together, but are sometimes found as distinct types based on the species. All produce a mild and sweet, light-colored honey. The aroma is often compared to grass, plums, and hay. Certain varietal honeys such as Manuka are authenticated before going to market. Manuka honey is produced from the tree Leptospermum scoparium which grows in New Zealand and small parts of Australia. There is some dispute between these two countries over the honey, as New Zealand wishes to trademark the name "Manuka Honey." Despite the controversy, most high quality Manuka honey comes from New Zealand. Its rarity and unusual taste make it highly valued.

Additionally, Manuka honey has been found to have several health benefits. It can help heal burns, soothe wounds and has been found to destroy bacteria, even antibiotic resistant bacteria, making it even more highly sought after. All exported New Zealand Manuka honey must be authenticated in a laboratory approved by a government agency, the Ministry of Primary Industries. During the authentication, a sample of Manuka honey is subjected to a two-part test that looks for five markers of true Manuka honey. In the first part of the test, dissolved honey has the pollen removed via centrifuge and its DNA is compared to the DNA of the tree, Leptospermum scoparium. In the second stage, the sample is tested by a machine called a mass

More, ESSAY, page 21

ESSAY, from page 20

spectrometer in a complicated process called liquid chromatography-tandem mass spectrometry.

After the honey is authenticated, the MGO (Methylglyoxal) level of the honey is usually determined. MGO is a chemical compound that contributes extensively to Manuka honey's antibacterial properties. The MGO rating is a number equivalent to the milligrams of MGO per kilogram of Manuka honey. Manuka honey is also usually given a "UMF" (Unique Manuka Factor) quality rating based on the amount of over two thousand chemical components that exist in real Manuka honey. These tests further show the quality of the Manuka honey and prove its genuineness.

Another rare and valuable varietal is Tupelo honey. It comes from the White Ogeechee Tupelo tree, Nyssa ogeche, which grows only in a small area of Florida and Georgia. As with Manuka, Tupelo honey is also authenticated by pollen analysis. Tupelo honey is light amber with a greenish cast. It has a complex, floral taste compared to many other flavors, such as pears with a cinnamon-like scent. Due to an unusually high fructose content, Tupelo honey is much less prone to granulate than other honeys. Tupelo honey is difficult to produce, (and consequently, often expensive) since it requires exact timing to avoid adulteration with other trees' nectar, as there is a narrow window when the Tupelo is the principal plant in bloom. Tupelo honey is highly unique and therefore greatly loved and promoted by the locals where it is produced, to the extent there is an annual Tupelo Honey festival in Wewahitchka, Florida.

Varietal honeys are some of the most distinct and valuable honeys there are. They have tastes that vary greatly from other types and even from the same type produced in different years. Because they are so distinguished by their origin, they are a source of pride for locals and are frequently protected from adulteration or substitution. Whenever one has the opportunity to sample some of these highly varied and unique honeys, it is always worth it.

Second Place Winner, Annalise Watkins

"Variety is the very spice of life that gives it all its flavor," an adage first penned by William Cowper's poem "The Task" in 1785, encapsulates the emblematic nature of varietal honey (Cowper).

Honey, a natural sweetener produced through the symbiotic relationship between honey bees and flowers, in which bee's collect nectar from flowers and then convert it into honey from within their hive, comes in a myriad of flavors, colors, and textures, reflecting the diverse floral sources from which it is gathered. Varietal honey, also known as monofloral honey, "mono" meaning one and "flora" meaning flowers, is derived predominantly from the nectar of a single plant species in localized areas, resulting in unique and distinct characteristics ("Honey: Benefits, Uses, and Properties").

Honey bees, acting as nature's diligent pollinators, selectively forage nectar from specific floral blooms, imbuing the resultant honey known as varietal honey with distinct flavor profiles, aromas, and medicinal properties. Scientific analyses reveal a rich tapestry of bioactive compounds within varietal honey, including phenolic acids, a type of bioactive compound, enzymes, a protein molecule, and volatile organic compounds, which contribute to its nutritional and therapeutic value ("Honey Varietals"). Ultimately, beekeepers cannot completely control which flowers the bee's forage from, and therefore in order to keep control of the process must take advantage of what times of year the flowers flourish as well as where they originate from.

With honey bees providing pollination to over 180,000 flower species around the world, the diversity of varietal honey is limitless, each bearing distinct characteristics reflective of their floral sources (Ollerton et al.). As stated in the podcast Two Bees in a Podcast, "All About the Money, Honey with Melanie Kirby" the art of "Beekeeping is a global endeavor" and is not restricted to just one area (Ellis). Exotic varietal honeys are sourced from all around the world such as Acacia honey, a sweet almost vanilla tasting honey, which is derived from the blossoms of the Black Locust tree, commonly found in Europe and North America and Eucalyptus honey, a sometimes-tart flavored honey produced from Eucalyptus trees

More, ESSAY, page 22

ESSAY, from page 21

in Australia and South Africa (Kunat-Budzyńska et al.). Specialized varieties in differentiating regions often depend on the soil and climatic conditions; humidity, wind and sunlight which make the flora of each region different. The bees feed on the nectar in the plants near the hives; therefore, the composition of honey reflects the nectar characteristics of the group of plants around a hive hence the difference in taste, smell, appearance and more depending on location (Kunat-Budzyńska et al.).

Honey is a high-value, global food product featuring a high market price strictly related to its origin. Therefore, the demand for premium varietal honeys necessitates authentication mechanisms to safeguard consumer interests. Various honey components, such as chemical characteristics, have been used as discrimination markers among different botanical and or geographical origins. This data can be generated by various advanced analytical techniques, such as high-performance liquid chromatography, a process that separates and identifies specific components in mixtures, which in turn enables comprehensive chemical profiling of varietal honeys (Tsagkaris et al.).

Geographical indications and certification schemes, such as the Unique Manuka Factor Honey Association, also provide legal frameworks for delineating the geographical provenance and authenticity of varietal honeys (Scholz et al.). Without these reliable authentication methods, consumers would be at risk of purchasing adulterated or counterfeit products and the sustainability of beekeeping could be compromised.

With pollination contributing to a large part of global food production, culturally and economically significant varietal honeys encompass a large influence with their multitude of benefits. One such example is Manuka honey, derived from the tea tree and revered for its rich heritage. Originating primarily from New Zealand and Australia, Manuka honey holds a place in the indigenous Māori culture, where it is celebrated for its medicinal virtues and spiritual significance (“Manuka Honey in Maori Culture”).

In recent decades, the global demand for Manuka honey has surged exponentially, driven by its potent antimicrobial activity against antibiotic-resistant pathogens and its efficacy in wound care and gastrointestinal health (Carter et al.). According to market research, the global Manuka honey market was valued at approximately $829 million in 2020 and is projected to reach $1.5 billion by 2027, with a compound annual growth rate of 8.5% during the forecast period (Research). Additionally, certain honey types can provide nutrients, not usually accessible to people such as Acacia honey which is often preferred by people with diabetes because of the presence of low concentrations of sucrose and high concentrations of fructose in it (Puranik et al.).

In the end the countless perks of varietal honey, with its economic stability, medicinal benefits and overall sustainability as a natural and less processed food product prove the potential of variety.

Third Place Winner
Naomi Renner

Did you know there are over 300 unique types of honey in the U.S., and many more throughout the world (National Honey Board)? These types are referred to as varietals!

Varietals continue to be an engaging topic because of the creation process, their uniqueness and authenticity, and their importance to us both culturally and economically. It’s time to discover the fascinating world of varietal honeys.

First, let’s address the process of how varietals are made. The creation of different honey types depends on the plants bees pollinate. These honey types vary in taste, viscosity, texture, and even color. There are two main classifications of honey: monofloral and polyfloral.

Polyfloral (or multifloral) honey is made from the nectar of two or more plant species. Often multifloral honey is distributed as “wildflower honey.” On the other hand, monofloral honey, also referred to as varietal, comes predominantly from just one kind of flower (Uren Food Ingredients). Monofloral honey is relatively difficult to determine. Classification as monofloral depends on the percentage of pollen from that particular plant species the honey contains.

The honey must be analyzed and the pollen grains counted. Usually, the pollen percentage from the source claimed as monofloral must be 45% or greater. However, because flowers vary in the amount of pollen held, it could possibly be as small

More, ESSAY, page 23

ESSAY, from page 22

as 15% and still be classified as single flower honey. The country from which the honey originates is in most cases able to set its own specifications (Honey Traveler).

Let's look at a few major varietals and some of their unique characteristics. Of course, when honey is labeled as "wildflower," it's the term for honey made from a variety of plants. Its attributes depend completely on the time of year, nearby plants, and harvest location of the honey. Some of the more common types of monofloral honey include clover and dandelion, abundant throughout the U.S.

Clover honey is usually a light golden color with a mild flavor. Dandelion has a thicker viscosity and is bright yellow-gold (Best Bees Company). Other kinds like star thistle and avocado blossom honey are lesser known but still important varietals. The star thistle is an invasive plant in some areas, but the honey produced from it is nutritious with a delicious floral taste and almond-like scent (Sleeping Bear Farms). Avocado honey, one of the rarer varietals, can be found in California. Sweet and creamy, it can be easily substituted for molasses, cane syrup, or regular white sugar in almost any recipe (Wildflower Meadows)!

Rare plant species often lead to valuable varietals, and other factors such as medicinal benefits and the amount of difficulty to obtain can contribute to this as well. Some examples of important varietals include Manuka, Yemeni Sidr, Bashir, and Himalayan honeys (Ecocolmena). The value of these brings up the question of how to be certain of buying the true varietal and not a fraud.

Honey can be analyzed to check for pollen grains of the plants from which the honey is claimed to be. It's a relatively complex process to describe, but in short, the honey is diluted in warm, distilled water. Then it's centrifuged and studied under a light microscope so the analysts can identify the main pollen type (National Library of Medicine). Once the honey has been verified, some receive a certification so purchasers will know it's authentic.

In Manuka's case, a strict grading system is used. Manuka, native to Australia and New Zealand, contains three compounds unique to only its species: Leptosperin, DHA, and MGO.

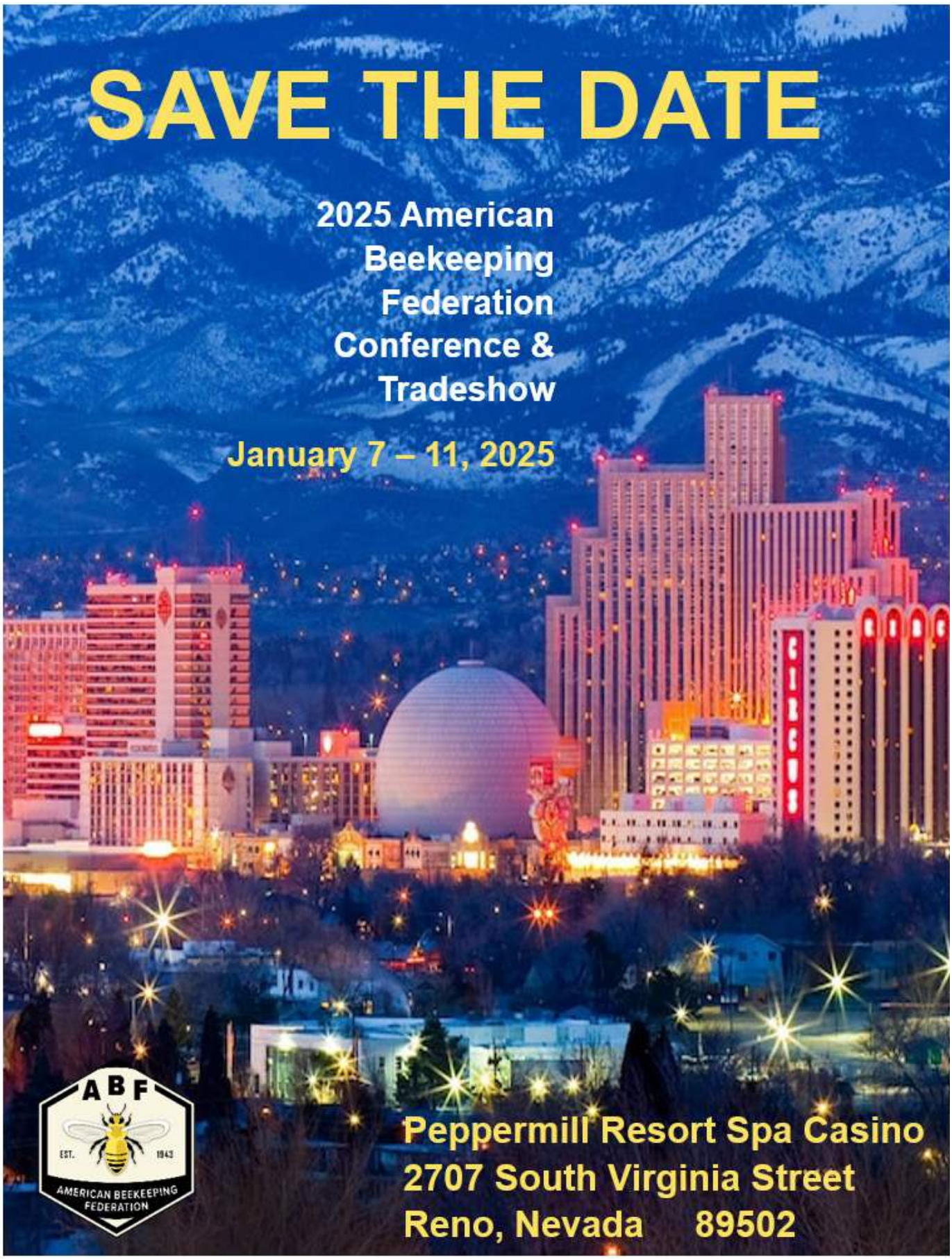
There are several standards used to measure these, but the UMF standard of New Zealand is the toughest. UMF stands for "Unique Manuka Factor" and specifically serves as a measurement of MGO in the honey. MGO is the compound that gives Manuka most of its antibacterial effects, increasing its value. The grading range spans from UMF 5+ to UMF 20+, with a higher number meaning increased antibacterial effectiveness. In Australia, look for honey labeled as AMHA Authentic or AMHA Authorized according to the country's own grading system.

When searching for authentic Manuka honey, also keep in mind that it's more likely to be the real thing if it was made in New Zealand or Australia (Healthline). Not all honey has its own certification like Manuka, so before buying make sure to pay close attention to the wording on the bottle. Honey products that state "infused with," "flavored," or "essence of" are not a true varietal. If there are plant parts floating in the bottle, it's probably a cause for suspicion (Honey Bee Suite).

Lastly, there are many varietals that are culturally or economically important–both in the U.S. and around the world. In parts of Florida and Georgia that include the Apalachicola River Basin, tupelo honey is frequently used during the festival of Rosh Hashanah (Miami New Times). Those who observe this Jewish holiday eat apples with honey. Tupelo, only commercially produced in this specific region, is a popular choice for the festival because it complements the apples' flavor. Across the Atlantic, honey is also used prolifically in Italian cuisine. Acacia honey can be added to a dish without covering up other flavors. Lime honey is used for desserts (Wanted in Rome).

On the economic side, North Dakota is the number one honey-producing state in the U.S. Their honey production was valued at a total of $82 million in 2022 (North Dakota Department of Agriculture). Their main varietals include alfalfa, buckwheat, canola, and clover. Internationally, lavender honey in France is economically important. An estimated 2,200 tons of honey is produced each year from the region of Provence, France (Apiculteurs en Provence). Lavender honey from Provence is famous worldwide.

Everyone should strive to gain an appreciation of varietal honeys. Knowing what makes a varietal, being aware of examples, recognizing authenticity, and demonstrating a strong grasp on the cultural and economic significance of varietals will ultimately benefit one's future in honey production as well as improve one's understanding of the beekeeping and honey process


SAVE THE DATE
2025 American Beekeeping Federation Conference & Tradeshow
January 7 – 11, 2025
CIRCUS
ABF
EST. 1943
AMERICAN BEEKEEPING FEDERATION
Peppermill Resort Spa Casino
2707 South Virginia Street
Reno, Nevada 89502