

WAS Journal



Journal of the Western Apicultural Society of North America

Volume 41 Number 4

November 2018



2018 WAS Up! | Meeting Minutes | 2019 WAS Board | Confirmation Bias

Tools for Managing Varroa | Eliza Jane Donovan | State of WAS Bees | James K Smith

2 *WAS Journal*

WAS Journal

Journal of the Western Apicultural Society of North America

Volume 41 Number 4

November 2018

Contents

3	Annual Rotation of Directors
5	2019 Executive Committee & Regional Directors
7	President's Message <i>Sarah Red-Laird</i>
8	WAS 2018 Conference Photos <i>Treasure Valley Beekeepers Club</i>
9	Past President's Message <i>Steve Sweet</i>
13	Preconference Directors Meeting Minutes
15	General Meeting Minutes
19	2019 Officer and Director Introductions
22	Confirmation Bias . . . Me? <i>Jerry Hayes</i>
25	Tools for Varroa Management <i>Dewey M. Caron</i>
26	Beekeepers' Calendar
27	Eliza Jane Donovan, Part 2 <i>Al Chubak</i>
31	State of WAS Bees
38	James Kermith Smith <i>Fran Bach</i>
39	WAS Presidents
41	Membership Form

Advertisers

4	Acorn Beekeeping Equipment
24	American Bee Journal
20	American Honey Producers Association
26	Apimondia 2019
24	Beaver Plastics
42	Bee Culture
14	Beekeeping Insurance
2	Blue Sky Bee Supply
34	BrandNew Industries Inc
18	Central Life Sciences Apistan®
24	CF Koehnen & Sons Inc
34	Complete Bee
30	Dadant & Sons Inc
12	GloryBee
17	Honey-B-Healthy
17	Honey Bee Genetics
36	Mann Lake Ltd
44	Master Beekeeping Certificate Univ Montana
26	Miller Bee Supply
12	Millerbees Mfg
16	Olivarez Honey Bees
6	Pierco Inc
12	Ross Rounds
24	Sacramento Beekeeping Supplies
10	Shastina Millwork
24	Snohomish Bee Co
17	Strachan Apiaries Inc
4	StickerYou
40	Strong Microbials
24	Tate's Honey Farm
32	Véto-pharma
43	WAS Conference 2019
34	Western Bee Supplies Inc
24	Wifi Hive Scale
28	Wraith, Scarlett & Randolph

2019 Advertising Rates

Four issues annually, typically published in
February, May, August, and November.

Size	Per issue	Per year
Full page (7.5" x 9.5")	\$200	\$800
Half page (7.5" x 4.5")	\$125	\$500
Third page (7.5" x 3")	\$100	\$400
Quarter page (3.5" x 4.5")	\$75	\$300
Business card (3.5" x 2")	\$35	\$140

For additional information,
please contact the journal editor at:

Western Apicultural Society
4207 SE Woodstock Blvd, Ste 517
Portland, Oregon 97206
rosannamattingly@gmail.com
503.772.3486.

Front Cover: Bees over Boise! Counterclockwise from upper right, Jennifer Berry, Randy Oliver, Beekeepers, and Bees under sunny August skies at this year's WAS Conference.

Photos: Cover photos and those on pages 9, 10, and 22 are used with kind permission, courtesy of Treasure Valley Beekeepers Club.

Disclaimer: Articles appearing in the *WAS Journal* reflect the beliefs and experiences of the authors and should not be construed as having specific Western Apicultural Society endorsement. Similarly, inclusion of advertising and links to websites in this journal should not be construed as having specific endorsement of products or services by the Western Apicultural Society or its members.

ANNUAL ROTATION OF DIRECTORS

Following the annual conference this summer, some expressed confusion surrounding the election—not about *for whom* but rather about *for how long*. How can it be that a new director is being told that they are committing to a three-year position and then be told that their time's up in one? or two?

In explanation, for directors, WAS has a means of rotation to avoid having too many directors be newly elected at once.

Experience matters. The terms of those who were elected for only one or two years truly are three years in length, it's just that those particular terms are already into their three years. The positions were vacant or had been vacated for some reason. For reference, as the current years go:

AK, CA, ID, OR, WA, and YUK — elected in 2018
BC, CO, MT, NV, SK, and WY — to be elected in 2019
AB, AZ, HI, NM, and UT — to be elected in 2020



STICKER YOU .COM

CUSTOM HONEY LABELS
Order at any size and shape!

Save 10% with code: **WAS10**

www.stickeryou.com



ACORN™
BEEKEEPING EQUIPMENT
"THE NEW STANDARD OF EXCELLENCE AND QUALITY"

NO BOWING OR WARPING

Acorn One Piece Plastic Frames

- Flatter, Stiffer, Sturdier
- Redesigned Mega Strong Ears Last Forever
- 9-1/8" 6-1/4" Sizes

FLATTER STIFFER STURDIER

Plastic Snap-in Foundations

- Plastic Snap-in Foundations fit well in 9-1/8" and 6-1/4" Wood Frames
- Optional Breakaway Communication Hole

BRAND NEW!

6-1/4" Drone

Drone Combs

- Integrated Pest Management (IPM)
- Varroa mite control
- Queen Breeding
- 9-1/8" 6-1/4" Sizes

Features

- Well Defined Precision Molded Cell Base
- High Quality Beeswax Used
- Rigorously Field Tested
- Excellent Bee Acceptance

Superbly Waxed - Standard and Heavy Waxed Available!

Bees in Action on Acorn Foundation
Photo: Rollin Hannan

Deeper Precision Molded Cells

Nick Lissaman
25 Years Experience
info@acornbee.com
www.acornbee.com
13818 Oaks Ave. Chino, Ca 91710
Call Acorn Bee Today!
877-255-6078

PROUDLY Made in USA

VISA MasterCard

Western Apicultural Society of North America

www.westernapiculturalsociety.org | www.facebook.com/WesternApiculturalSociety

2019 Executive Committee

President	Sarah Red-Laird PO Box 3257 Ashland OR 97520 541.708.1127 sarah@beegirl.org	Secretary	Cyndi Smith 19909 122nd St E Bonney Lake WA 98391 253.222.4906 onthegocgs@comcast.net
Past President	Steve Sweet 1720 Canova Dr Boise ID 83706 208.850.3452 boisebeeman@gmail.com	Treasurer	Sherry Olsen-Frank PO Box 5274 Twin Falls ID 83303 208.735.5353 magicvalleybees@gmail.com
1st Vice President	Phylcia Chandler phylcia@beegirl.org	Member-at-Large	Jerry Bromenshenk 200 Rimrock Way Missoula MT 59803 406.544.9007 beerresearch@aol.com
2nd Vice President	Jaylene Naylor PO Box 411 Stevensville MT 59870 406.529.9174 jaylene.naylor@gmail.com		

Regional Directors

Alaska	TBA	New Mexico	Melanie Kirby (2019–2020) 505.901.2102 ziaqueenbees@hotmail.com
Alberta	TBA		
Arizona	TBA	Oregon	Sarah Red-Laird (2019–2021) (See President)
British Columbia	Nancy Burkholder (2018–2019) Box 249 Pritchard BC V0E 2P0 Canada 250.577.3410 b2wphoto@gmail.com	Saskatchewan	Doreen Bradshaw (2017–2019) 2812 Fleury St Regina SK S4N 2M4 Canada 306.761.0995 dbradshaw@myaccess.ca
California	Archie Mitchell (2019–2021) 1520 N B Court Lompoc CA 93436 805.291.3279 archibald_178@hotmail.com	Utah	Albert Chubak (2018–2020) 5033 S Commerce Dr Murray UT 84107 801.654.9700 albert@ecobeebox.com
Colorado	Ray Story (2019) 303.596.8642 beesgonewildremovals@gmail.com	Washington	TBA
Hawaii	Noelani Waters (2018–2020) 808.345.2894 noe.honeybee@gmail.com	Wyoming	Catherine Wissner (2017–2019) 620 County Rd 146 Carpenter WY 82054 307.649.2430 cwissner@uwyo.edu
Idaho	Steve Sweet (2019–2021) (See Past President)	Yukon	TBA
Montana	Jaylene Naylor (2019) (See 2nd Vice President)	Journal Editor	Rosanna Mattingly 4207 SE Woodstock Blvd Ste 517 Portland OR 97206 503.772.3486 rosannamattingly@gmail.com
Nevada	Del Barber (2019) 541.249.0160 goldentrianglepiary@gmail.com		



Frames - Plastic

- Super Strong and Durable
- Safe - FDA food grade plastic
- Easy to use - No Assembly Required



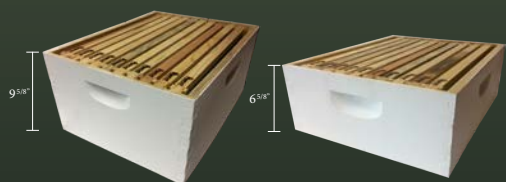
Frames - Wood

- Stronger than Industry Standard
- New 1/2" thick end bars - 3/4" top bars
- Assembled, Glued, and Stapled



Snap-in Foundations

- Impervious to wax moths, rodents, and hive beetles
- Preferred by Professional Beekeepers
- Precision molded, perfect cells
- Easy to use - Snaps into wood frames



Commercial Grade Boxes

- Honey Supers & Hive Bodies
- Added Strength 1 - 5/8" Top Joint
- Pacific Northwest Ponderosa Pine
- Assembled, Primed, & Painted



Pierco®

Genuine Beekeeping Equipment

EST. 1977

Buy Pierco - Buy Quality
Factory Direct Store

New Lower Prices - Buy Now and Save!

FREE SHIPPING * See website for details

Check us out at: www.Pierco.com

FOR ALL YOUR BEEKEEPING NEEDS

HOBBYISTS / SIDELINERS / COMMERCIAL BEEKEEPERS

We Offer
**DOUBLE & TRIPLE
WAX**

SUPERDFM



**PROTEIN
SUPPLEMENTS**



BEEKEEPING KITS



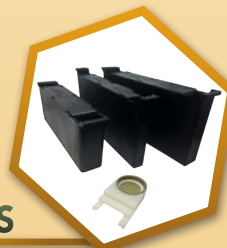
**EXTRACTING
& BOTTLING**



**PROTECTIVE
WEAR**



FEEDERS



Call or Visit us at:

Factory/Store Address: 680 Main St. | Riverside, CA | 92501
Get Connected | [f](#) [t](#) [@](#) (909) 575-2029 Made in the **USA**

President's Message

September 27, 2018

This August I was honored and humbled to take on the roles as the 42nd President of the Western Apicultural Society. I was ushered in by a band of WAS board members who are passionate about the survival of the organization, and I want to see a positive succession plan take place to the next generation of leaders. Past President Steve Sweet's conference in Boise was so well done, and he set up a truly optimistic and encouraging atmosphere for myself and Vice President Jaylene Naylor to step into. As president, it's not only my job to keep the organization afloat, but also to plan the 2019 WAS Conference!! I am hoping to create not just a conference, but an experience that emphasizes what we are—a society.

Our theme is “Hive Mind for the Greater Good,” built on the values of persistence and authenticity and celebrating community, women in leadership, and, of course, bees and their keepers.

This weekend will be a mix of dynamic keynote talks, workshops built on the themes of art, beekeeping, social media and marketing, bee habitat conservation, education, native bees, and global research. I'm still rounding out the list, but so far you can look forward to seeing Katrina Klett, Elevated Honey Co. and Chinese Academy of Science; Hilary Kearny, Girl Nextdoor Honey & Beekeeping Like a Girl Blog; Meghan Milbrath, Michigan State University College of Agriculture and Natural Resources; Anna Geiselman, Bee Amour Jewelry; Robin Jones, Honey Girl Grows; and the native bee team from the Logan, Utah, USDA-ARS-Pollinating Insects Research Unit.

In an effort to create community, we are also going to provide plenty of opportunities for networking:

- We will turn the microphone around to the attendees with a “storytelling hour” in the theme of #beekeeperfail (we all have them, let's take some time to admit it and have a little fun!).

- We'll give attendees the opportunity to sign up for the “Community Waggle Dance Tabletop Show,” where we will provide a bistro table to a selected group to create a “show and tell” display of something they are working on (e.g., a hive design, research, or a tech innovation).

■ Staying with WAS's ability to provide an intimate experience for conference speakers and attendees, we'll have “Roundtable Speed Swarming.” Guests will rotate (in groups) to speaker-hosted tables and spend some time in dialogue with a leader they have been admiring from afar.

- Throughout the conference, we will provide multiple breaks, and a happy hour each evening to encourage beekeepers to meet up and waggle dance using social media, the Bumble Biz networking app, and our special-interest themed “hive towers.” The hives are the place to meet your new best friend, who's also into beginning beekeeping, honey production, co-ops and supply chain management, bee habitat, native bees, bee-themed travel and service opportunities, and so on.

On Sunday, we will have a limited number of spots on an interactive bee habitat tour. We will load up in vans to travel to the Bee Girl organization's “Seeds for Pollinators” research project at The Farm at Southern Oregon University, see our “Regenerative Bee Pasture” research project at the Sampson Creek Preserve, and also participate in native bee research with the USDA Logan Bee Lab team at Mount Ashland.

We also want to give you the opportunity to enjoy the gem that is Southern Oregon. Come join us before the conference officially begins to raft the Rouge River and take in a show at the Oregon Shakespeare Festival on Thursday! Sunday evening, we will officially close up the conference with a trip to a local winery with stellar views and bee-friendly practices.

Save the dates! *Preconference Adventures*: July 11 and *Main Conference*: July 12–14, 2019, Ashland Hills Hotel & Suites in Ashland, Oregon. Registration will open in February of 2019.

Sarah Red-Laird



41st Annual Conference



Registration



Master Beekeeper Panel



Vineyard Banquet



Alcohol Wash



Hive Inspection



Midnight Bee Wrangling



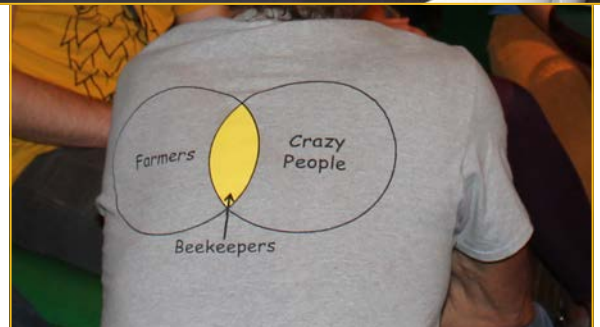
Next Gen



Learning



Bee Buzz



Past President's Message

October 12, 2018



Our Western Apicultural Society 41st anniversary conference was held in Boise, Idaho, between August 3rd and 5th, 2018. Our venue was the brand new and very eclectic Jack's Urban Meeting Place. Locally known as *JUMP*, our conference center was the "interactive creative center and community gathering place in the heart of downtown Boise"—a wonderful six-story facility occupying a city block and commemorating the life and vision of the beloved, late, great, potato tycoon Jack "JR" Simplot.

Thursday, August 2

Our preconference activity started Thursday evening across the street from JUMP, with the kickoff Bee Buzz that was held at the locally acclaimed brew pub, Woodland Empire Ale Craft. We jammed the Woodland with conference attendees and speakers, while quaffing our fair share, thus helping to keep the local economy afloat. This initial casual session set the tone for the entire conference, where our speakers mingled with the attendees and established a very personable and intimate conference experience. Really though, should there be much mystery to this? As our Boise hosts with the Treasure Valley Beekeepers Club so aptly note: "'Bees' and 'Beer'—there's only one letter difference." A good time was had by all!

Friday, August 3

Our first full day of the conference kicked off with the engaging Jennifer Berry's emphatic overview on "Fighting for Our Bees!" (Subtitled "Virus and Varroa—It Ain't Pretty!") With a thoroughly authoritative overview, Jennifer's inimitable wit and charm set the stage for a rousing next couple of days. Her message: "If you want to keep your bees alive, you'd better manage your mites."

You know, Mrs. Wiggins couldn't have said it better.

Although a tough act to follow, Dewey Caron, in his own indubitable and respected style, next delivered a rousing overview of resources that are available through the Honey Bee Health Coalition. An esteemed professorial style, backed up with years of experience, the point was driven home that if we are to succeed in keeping our bees alive, we all need to pay close attention to our bees, their parasites, and the crippling viruses vectored by those nasty vermin.

Two of these presentations proved to be enough for one morning, so we all decamped JUMP for lunch on the town. This turned out to be a lunch that waited for no one, as our next speaker was none other than the eminently qualified and illustrious Randy Oliver, speaking on "Hot Topics of the Moment." Randy indeed raised the heat in the room as he morphed into a whirlwind that led us from climate change with implications for both bees and plants *to* deformed wing virus and its "taking advantage" of both Varroa and us *to* how *Apis cerana* controls Varroa (and *Apis mellifera* does not) *to* use of the alcohol wash and interpretation of results *to* prospects for improving pollen substitute *to* ongoing experimentation with oxalic acid for Varroa control *to* . . .

Following Randy Oliver in an afternoon slot might be considered a tough proposition. Hat's off to Jerry Hayes, now with Vita Bee Health, for his presentation entitled "Confirmation Bias . . . Me?" Jerry's presentation quickly drew everyone's attention with the Bee Informed Partnership's current data concerning Idaho's honey bee losses. In an engaging and affable style, Jerry opened a lot of eyes using data developed right here in our host state of Idaho. "Confirmation Bias" (the tendency to interpret new evidence as confirmation of one's existing beliefs or theories): "It Ain't Pretty" redux. Truly, this was a presentation well done.

Proving we couldn't seem to get enough "Jerry," beekeeping luminary Jerry Bromenshenk next regaled his audience with observations on "Changes in Beekeeping—A Backward Look into the Future." Talk about a beekeeper with passion and energy, this Jerry went on a tear covering unanticipated things he now knows from major changes to small revelations throughout a life-long exposure to honey bees and higher education.

Shastina Bee Girls

877-789-7526

**Factory
Direct
Pricing!**

**Give Your
Bees The
Best!**

**Eco-Friendly
Products**

**For All Of Our
Products, visit
ShastinaBeeGirls.com**



Closing out Friday's presentations, Jennifer returned to the stage, along with local Marc von Huene, for an enlightening overview of "Beekeeping Behind Bars." The uplifting message behind this joint presentation illustrated the positive societal benefits that we all enjoy with our common pursuit.

With a full day at JUMP in the rearview mirror, the evening's events were scheduled for an off-site "Next Gen" session led by today's president, Sarah Red-Laird. "The Future of Beekeeping is Ours: Interactive Happy Hour for Next Generation Beekeepers" was initially scheduled for a one-hour session in the basement of nearby Tom Grainey's Sporting Pub. We all should have seen that one coming—the enthusiasm of young beekeepers encouraged to freely speak their minds in a casual setting amongst their peers easily extended for hours of camaraderie. Thanks to Sarah and the entire crew for bringing these simmering concerns of beekeeping's future leaders to the fore. Our underlying lesson is that Sarah has a message that bears all our attention.

Saturday, August 4

Bright and early Saturday morning, the effervescent Sarah Red-Laird – Melinda Jean Stafford duo captured the undivided attention of WAS with their presentations. Sarah's "Two-Step Plan to Saving Your Bees," with an emphasis on keeping healthy bees and engaging our local communities, is essential to putting high-quality flowers on the landscape. Melinda's "Relevancy" presentation identified potential barriers affecting young people's participation, and identified strategies that associations can use to bring new people to beekeeping.

Mid-morning, we all enjoyed a unique opportunity to watch Jennifer Berry and Randy Oliver work the rooftop hives under the early morning blue sky. Randy donned a cordless mic and talked to the audience behind JUMP's glass walls, while Jennifer attracted a cadre of students and worked individually with those lucky beekeepers.

Saturday afternoon served up a wonderful diversity of interesting topics, beginning with Ron Bitner's presentation on "Bee-Friendly Farming: Ground Cover for Native Bees." Next Jamie Strange knocked one out of the park as he covered the intricacies of "Bumble Bee Biology and Practical Aspects of Bumble Bee Culture." Ramesh Sagili's delivery on "Honey Bee Nutrition:

What We Know and What We Need to Know" covered the importance of pollen and sterol production, and also included some new information on the natural emergency queen replacement process. Closing out the day, Ellen Topitzhofer updated us on recent events with the Bee Informed Partnership's Northwest Tech Transfer Team.

Saturday's activities closed out with the WAS annual banquet out at Bitner Vineyard (yes, our evening host was the same Bitner who spoke to us earlier in the day). The venue, looking out over the Snake River Plain, was spectacular, the locavore dinner was delicious, and the only reason the party ended was due to an on-coming thunderstorm lurking on the near horizon.

Sunday, August 5

The 2018 conference concluded with a panel discussion that delved into a wide array of Master Beekeeper programs with panelists Jennifer Berry (Georgia), Shannon Mueller (California), Dewey Caron (Eastern Apicultural Society), Jerry Bromenshenk (Montana), and Ramesh Sagili (Oregon). We were indeed fortunate to have all these experts help identify the necessary elements for successful programs.

Concluding Thoughts

In a large part, the conference's success was due to the generosity and hard work of the Treasure Valley Beekeepers Club and local participants. Beyond serving up Melinda Jean Stafford and Marc von Huene as speakers, the TVBC also came through with various contingents, such as the "Bee Wranglers & General Roustabouts" that moved our rooftop hives in and out, the "Cheery Local Airport Greeting and Taxi Service," the "Effervescent Front Table Registrars and Courier Service," and the unsung "AV & Window Shades Crew." Add to this participation by the Boise State University Bee Team and Advisors, and the superlative staff at JUMP, all this unselfish participation translated to: "When things needed to get done, things got done!" Our hats are off to this great local crew!

The conclusion of WAS 2018 witnessed the passing of the presidency to Sarah Red-Laird. Sarah now leads the Society for the remainder of 2018, and she will take us on to our next conference in Ashland, Oregon, in July 2019. Make sure to put this one on your calendar.

Steve Sweet



WE BUY HONEY!

All Floral Varieties
All Colors and Grades
Comb Honey

Isolda (Soda Pop) Nunez
Domestic Honey Buyer
Phone: 541-689-0913, ext 171
isolda.nunez@glorybee.com



SEND US A SAMPLE!

120 N. SENECA RD, EUGENE, OR 97402 | GLORYBEE.COM

COOL BLUE

COOLEST
JACKET
FEEL THE
BREEZE
BEE COOLER

DOUBLE LAYER
POLYESTER MESH,
ZIPPER FACE
OPENS, VELCRO
WRIST STRAPS,
DRAW STRING
WAIST AND ZIPPER
POCKET.
FROM \$80.00

OTHER UNIQUE
ITEMS, SWARM
TROOPER, BEETLE
JAILS, BUCKET
TILTER AND MORE.



Available www.beetlejail.com phone 731 695 6960
Dealer inquiries welcome

Harvest The Best...

with SUNDANCE™ POLLEN TRAPS and COMPLETE ROSS ROUND SUPERS.



SUNDANCE POLLEN TRAPS

Imagine the cleanest pollen available with no heavy lifting, chalkbrood mummies or risk of foulbrood scales. There is no substitute for the **Sundance Trap** quality and cleanliness. Leading experts from the USDA and universities as well as commercial beekeepers and hobbyists agree that **Sundance Traps** are the best pollen traps available.

COMPLETE ROSS ROUND SUPER

Produce comb honey with no dripping from cut edges and no liquid honey in the consumer package with **Ross Rounds** equipment. Easily shipped or delivered, stocked on shelves, purchased and taken home without danger of leaking. Enjoy providing locally grown, unprocessed, all-natural honey with a complete **Ross Rounds Super**.

For more information visit www.RossRounds.com.

For dealers near you please email sales@rossrounds.com.



Preconference Directors Meeting Minutes

August 2, 2018 | Boise, Idaho

Present: Steve Sweet, Jerry Bromenshenk, Rosanna Mattingly, Sherry Olsen-Frank, Jaylene Naylor, Archie Mitchell, Sarah Red-Laird, and Cyndi Smith (by remote)

President Steve Sweet called the meeting to order at 4:30 PM. Steve pointed out the minutes need a spelling correction.

Motion: Sherry Olsen-Frank/Jerry Bromenshenk – Accept minutes to reflect corrected spelling. Motion carried.

REPORTS OF OFFICERS

PRESIDENT: As of February, Fran Bach is officially retired. Let the minutes reflect nobody will be able to replace Fran. Rosanna Mattingly is the new Editor/Historian. I have been extremely happy with Rosanna and the work she has done in the past few months on the journal and keeping me on track. I would also like to thank Leslie Newman and Jaylene Naylor, who have worked hard at making the transition of the website a smooth one. Sarah Red-Laird also stepped in to help as well as prepare for her upcoming presidency.

TREASURER: Sherry Olsen-Frank reported income/expenses, details of the UC Davis conference, and year-to-date information.

Discussion: How many and where attendees came from was discussed, also whether we should have a line item included in the conference budget for marketing and advertising, possibly labeling it as educational.

Motion: Sarah Red-Laird/Archie Mitchell – Accept treasurer's report. Motion carried.

EDITOR/HISTORIAN: Rosanna Mattingly reported that the journal is now accessible from the website back to 2011. The older journals are in the process of being scanned. Currently there is not enough room on the website for all of the journals. It is suggested that we look into getting some type of a cloud account.

Sherry Olsen-Frank has past conference photos and CDs. Discussed the need to transition from written to electronic records.

The journal continues to make a profit. Rosanna is applying for a nonprofit mailing permit to reduce costs.

The question regarding privacy was discussed, i.e., is there any policy in place regarding the sharing of

member information? Current policy is that we do not share information. Also discussed the benefits of having a membership directory where members could input the information they choose, which could be placed in a members-only section on the website.

Motion: Jerry Bromenshenk/Sarah Red-Laird – Establish a committee to look into and formulate a membership directory. Motion carried.

A committee was formed consisting of Jaylene Naylor, Rosanna Mattingly, and Sarah Red-Laird to further investigate this idea and how to implement it.

REPORTS OF DIRECTORS

Steve Sweet: There needs to be a certain level of commitment from regional directors as we cannot seem to get them to the meetings. They need to be active members, active in their area as a beekeeper, willing to submit articles to the editor, with possibly a report from their state or local association stating the person is truly active in their association.

Director changes to be brought up to the membership for a vote this year: Jerry Bromenshenk will become the member-at-large, Jaylene Naylor will become the regional director for Montana. Melanie Kirby has asked to be the regional director for New Mexico.

No reports given.

COMMITTEE REPORTS

Audit: No audit done yet. Steve Sweet will put together an audit committee and report back by October 1, 2018.

Awards: None.

Resolutions and Bylaws: Revisions approved for submission to membership, loopholes were revised.

Actions for Bylaws: It was brought up that membership information should be the responsibility and reside with the secretary, who is an officer. Section 8, line 183 bylaws to be changed to read, "The Secretary shall attend and maintain a complete and correct record, including membership and the text of motions. . . ."

GENERAL DISCUSSION

How do we bring in board members who can help? Bringing a program manager on board was discussed



*We write over 88%
of the Beekeepers
in the program
Nationwide.*

BEEKEEPING **INSURANCE SERVICES**

APICULTURE INSURANCE PROGRAM **A Specialized Program for Beekeepers**

Available Nationwide

Offering All Forms of Insurance Including:

- * **USDA Apiculture**
- * **Property**
- * **General Liability**
- * **Automobile**
- * **Life Insurance**
- * **Home & Farm Insurance**

We are Proud Members & Sponsors of:

- * **American Beekeeping Federation**
- * **California State Beekeepers Association**
- * **Michigan Commercial Beekeepers Association**
- * **Montana State Beekeepers Association**
- * **South Dakota Beekeepers Association**
- * **Tennessee State Beekeepers Association**
- * **Wisconsin Honey Producers Association, Inc.**
- * **American Honey Producers Association**
- * **Florida State Beekeepers Association**
- * **Minnesota Honey Producers Association**
- * **North Dakota Beekeepers Association**
- * **Texas Beekeepers Association**
- * **Washington State Beekeepers Association**

Kevin Rader: Buzzus@beekeepingins.com
www.beekeepingins.com
888-537-7088

again. Discussed strategic planning such as putting together a committee regarding how best to make the transition and succession of conferences smoother.

Motion: Sherry Olsen-Frank/Archie Mitchell – Form a committee to look into adding a paid executive director who would organize all the annual conferences and handle the “day-to-day” business of the organization, and to extend the terms of the president and executive committee from a 1-year term to a 3-year term for continuity of the organization. That way the president isn't putting on the conference and then stepping down for the next president/conference organizer. This would obviously necessitate an

increase in dues, which would be part of the discussion. Steve Sweet, Sarah Red-Laird, and Jerry Bromenshenk were appointed to the committee. Motion carried.

WAS membership rates were discussed. The board has the authority to change the rates. It was decided that a coherent plan to justify the raise is needed, such as adding a members-only section to the website.

Motion to adjourn: Jaylene Naylor/Sarah Red-Laird – Carried.

Adjourned 5:30 PM.

Respectfully submitted,
Cyndi Smith

General Meeting Minutes

August 4, 2018 | Boise, Idaho

President Steve Sweet called the meeting to order at 11:13 AM.

Motion: Rebecca Sunderlin/Jerry Bromenshenk – Accept minutes. Motion carried.

REPORTS OF OFFICERS

PRESIDENT: As of February, Fran Bach is officially retired. There will never be another Fran, and I appreciate all that she has done. Rosanna Mattingly is the new Editor/Historian. I have been extremely happy with Rosanna in the work she has done in the past few months on the journal. Welcome to the new board the member from Hawaii, Noelani Waters.

TREASURER: Sherry Olsen-Frank reported income/expenses and details of the UC Davis conference, with information through June 30, 2018; report provided.

Motion: Jimmy Tamarelli /Archie Mitchell – Approval of financials. Motion carried.

EDITOR/HISTORIAN: Rosanna Mattingly – The journal continues to make a profit; report provided. We are applying for a nonprofit permit to get a better price on postage for mailings. The digital versions of the journal since 2011 are online. We are working to get all past issues online.

Discussion: Historically we have passed a hive tool to the next president and would like to make sure this remains a part of our culture – Jerry Bromenshenk. We will continue this tradition going forward.

COMMITTEE REPORTS

Director Nominations: Jaylene Naylor is nominated to take the open position in Montana. Jerry Bromenshenk is nominated to the at-large position. Sarah Red-

Laird is nominated for three more years as Oregon's representative. Del Barber is nominated for Nevada, Ray Story is nominated for Colorado, and Melanie Kirby is nominated for New Mexico.

Discussion: Explained how the nominations and directorships work, what they do and their terms. Concern presented that one of the nominations for a director position does not currently live in the state they would represent. Steve has spoken with the person in question. This person votes there, owns property there, and runs a business there.

Explanation given on how the directors' terms run and become open. There will be clarification in the journal on which seats are coming open. Call for vote.

Motion: Jimmy Tamarelli/Rebecca Sunderlin - Acceptance of slate of directors. Carried with one opposition.

Officer Nominations: President 2019 Sarah Red-Laird, 2nd Vice President Jaylene Naylor, Secretary Cyndi Smith, Treasurer Sherry Olsen-Frank, Member-at-Large Dr. Jerry Bromenshenk.

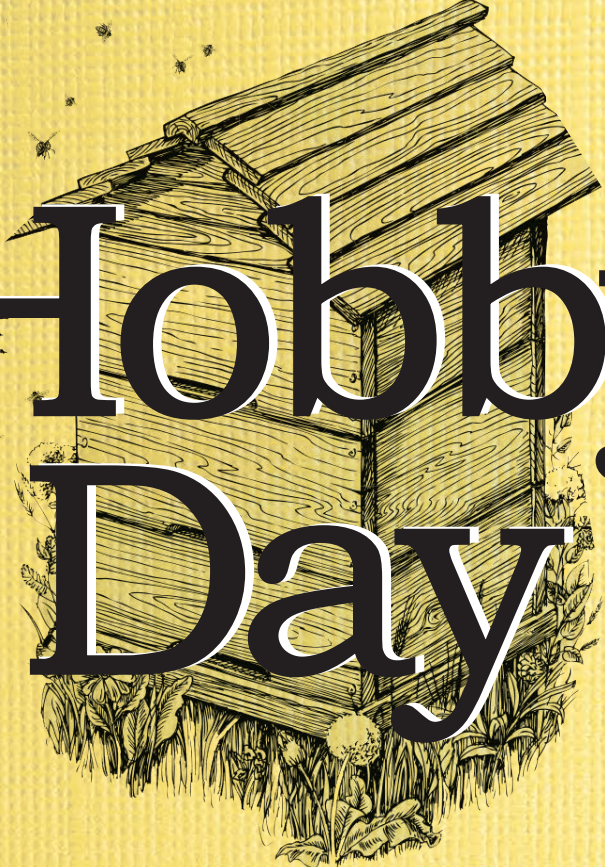
Motion: Sherry Olsen-Frank/Rebecca Sunderlin – Accept slate of officers. Carried.

Sites: Recommendation that we return to Montana following Ashland, Oregon.

Motion: Mark Naylor/Jimmy Tamarelli – Montana to be the 2020 WAS conference location. Carried.

Bylaws: The bylaws, approved last year pending a vote at this meeting, were sent out to membership by email and mail. WAS operated the past year under the revised bylaws.

ELEVENTH ANNUAL HONEYBEE-FEST



Hobby Day

SATURDAY, APRIL 6TH
OLIVAREZ RANCH
ROAD 20, ORLAND CALIFORNIA
ADULTS \$5*
KIDS UNDER 11 FREE

PRE-ORDER
PACKAGE
BEES
\$150

FOR PICK UP AT HOBBY DAY ONLY
LIMITED QUANTITIES AVAILABLE

9:00AM—3:00PM
RAIN OR SHINE
EARLY BEE BREAKFAST
HOMETOWN MUSIC
& FOOD TRUCKS

LIVE BEEKEEPING DEMONSTRATIONS • MEAD MAKING
COOKING DEMONSTRATIONS • LOCAL CRAFT & VENDOR BOOTHS
LOCAL HONEY • KIDS “BUSY BEE” ACTIVITIES • HONEY TASTING • GUEST SPEAKERS

CALIFORNIA
MONTANA
HAWAII



NEXT GENERATION BEEKEEPING

CALIFORNIA
530. 865. 0298
6398 COUNTY ROAD 20
ORLAND, CA



VISIT OHBEES.COM FOR TICKETS & DETAILS

*PROCEEDS BENEFIT LOCAL ORGANIZATIONS: LAWS AND PAWS AND ORLAND TOWN AND COUNTRY HUMANE SOCIETY

Discussion: The board of directors met before the conference and recommends that we make a two-word change/revision under the secretary's duties to include being the "keeper" of the membership official records. This change, Section 8, line 183, reads, "The Secretary shall attend and maintain a complete and correct record, including membership and the text of motions. . . ."

Motion: Rebecca Sunderlin/Ray Story – Accept the bylaws, including revisions to the secretary's duties. Carried.

NEW BUSINESS

Dewey Caron is suggesting that we put \$1,000 to the Honey Bee Health Coalition.

Motion: Sherry Olsen-Frank/Melanie Kirby – Support HBHC with \$1,000 donation. Carried.

2nd Motion: Sarah Red-Laird/Rebecca Sunderlin – If the conference has \$3,000 in profit or more, should a second \$1,000 go to support of HBHC?

TABER'S on the web ...



RUSSIAN QUEENS & PACKAGES

Phone **707-449-0440**
P.O. Box 1672
Vacaville CA 95696
www.honeybeegenetics.com

Discussion: There might be better use of the \$1,000, like scholarships to help students get to the conferences. From Dewey's perspective, the \$1,000 is sufficient.

We are going to have a donation button on the website so that those donations can go to nonpolitical support instead of taking it out of our treasury. In-depth discussion ensued regarding the HBHC. Motion failed.

Motion: Sarah Red-Laird/Calle – If we make \$3,000 or more out of the 2018 conference, that we open a \$1,000 scholarship for college students to attend the WAS 2019 conference.

Discussion: More-specific details regarding how this would work given, i.e., the \$1,000 would not go to just one person, it would go to as many registrations as that \$1,000 would cover. This would just be for next year's conference; the board would take this up next year if it works going forward. Carried.

No further business.

Motion for Adjournment: Sarah Red-Laird/Steve Sweet. Carried.

Adjourned 12:03 PM.

Respectfully submitted,
Cyndi Smith



Helps Your Hives to Thrive!®

HONEY B HEALTHY® PRODUCTS PROVIDE BEES A DIET RICH IN NATURAL INGREDIENTS THAT HELP RESTORE AND MAINTAIN A STRONG IMMUNE SYSTEM WHICH IS VITAL IN TODAY'S STRESSFUL MAN-MADE AND NATURAL ENVIRONMENT. MANY COMMERCIAL BEEKEEPERS ARE ABLE TO MAINTAIN HEALTHY COLONIES YEAR AFTER YEAR USING THESE PRODUCTS.

Honey B Healthy® - a feeding stimulant composed of lemongrass and spearmint oil concentrate. Helps Promote Healthy, Vigorous Hives® when used as a feeding stimulant.

HBH™ Super Plus - a special essential oil emulsion and when used with Honey B Healthy®, Amino-B Booster®, and/or Vitamin B Healthy®, produces a synergistic (amplified) effect. Can also be used alone.

Amino-B Booster® - provides protein (amino acids honey bees need). Should be combined with Original Honey B Healthy® or HBH™ Super Plus to help keep this liquid protein stable.

Vitamin B Healthy® - provides needed nutrients vital for bee health and helps build strong healthy colonies for maximum honey production and pollination.



Made in the USA using Certified Ingredients with a Special Proprietary Process in an FDA-Registered State-of-the-Art Facility.

Beware of Imitations-Quality Control Makes the Difference!

Call: 866-542-0879 www.honeybhealthy.com



New World Carniolan Bees & Queens

We select for hygienic behavior, honey production, mite resistance, and gentleness.

STRACHAN APIARIES INC.

"Honeybees are the backbone of agriculture"

2522 Tierra Buena Road (530) 674-3881
Yuba City, CA Fax: (530) 674-5802
95993-9654

Website: www.strachanbees.com
Email: orders@strachanbees.com





IT'S EASY...



APISTAN® IN YOUR HIVES. VARROA OFF YOUR MIND.

Managing *Varroa* mite infestations with Apistan® is as easy as inserting two strips in a brood box. Apistan® is a simple way to get the longest life out of your *Varroa* control program. Mite resistance can develop in a short period of time and that is why it is key to rotate your control materials with products like Apistan®. Rotating on an annual or semi-annual basis with products that have different modes of action will help manage mite resistance. Starting your rotation program is easy with Apistan®.

For more information, call 1-800-347-8272 or visit www.centralapiary.com.

Always read and follow label directions. Apistan and the Apistan design are trademarks of Wellmark International.
©2017 Wellmark International.



2019 Officer and Director Introductions

New Members and Shuffling Responsibilities

As noted in the minutes of the General Meeting on August 4, 2018, a shuffling of roles has occurred among members of the WAS Executive Board. These include Sarah Red-Laird moving from 2nd vice president to president, thus bumping Steve Sweet from president to past president; Jaylene Naylor then taking Sarah's place as 2nd vice president and also assuming the role of director for Montana; Jerry Bromenshenk, thus moved off the Montana director position, claiming Jaylene's previous role as member-at-large; and Phylicia Chandler assuming the role previously held by Joe Carson as 1st vice president. We welcome Phylicia to the board, we welcome directors for Colorado, Nevada, and New Mexico, and we welcome all continuing officers!

Phylicia Chandler, 1st Vice President

Phylicia grew up in the Midwest and has always loved nature. A fond memory she has about bees is when she was little and was helping her dad, a park ranger, around the



park, they discovered a tree had fallen across the road. They were going to cut the tree up to remove it, but discovered a nest of honey bees living inside. Phylicia's dad called a local beekeeper to come and remove the bees. While the beekeeper was looking at the nest, he picked out a drone and placed it on Phylicia's hand. The beekeeper assured her that she wouldn't get stung. She was intrigued and fascinated with this amazing little insect. Little did she know 20 years later she would be working for Bee Girl!

Phylicia's love of nature led her to pursue bachelor degrees in environmental science and biology at the University of Dubuque. After working as a teacher-naturalist with Delaware Nature Society for four years, Phylicia was inspired to continue her education. In 2015, she graduated from Southern Oregon University, receiving a master's degree in environmental education and teaching.

In 2014, Phylicia had the opportunity to intern with Bee Girl, and this was when she really learned a lot

about honey bees and beekeeping. In 2017, she joined the Bee Girl organization as the program coordinator. Phylicia helps coordinate Bee Girl events, community outreach, volunteers, and educational programs. With her environmental education background, she is specifically focused on Bee Girl's kids education programs. She is excited to share her passion and educate current and future generations about bees and beekeeping!

While she is not working on all things Bee Girl, you will find Phylicia spending time with her husband Tom and fulfilling her new role as Mom to her daughter Olivia. When time allows, Phylicia loves hiking and birding!

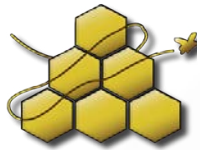
Ray Story, Colorado

I own Bees Gone Wild Removals LLC, a structural honey bee extraction and relocation service. This affords me the opportunity to have observation hives of insects other than our beloved honey bees. In 2018, I had four bumble bee observation hives (three *Bombus huntii*, one *B. morrissonii*) and two aerial yellowjacket hives used for education/outreach purposes. During my recent exploits, I've collected an undiscovered cuckoo bumble bee in Colorado that is now on display at the CSU Entomology Museum.

In the past, I have volunteered with Childrens Hospital of Colorado, president of Friends of Childrens Hospital. I have been very active in the Handicapped Sports Program, where the kids taught me to enjoy the simplest things in life. I started two Geology clubs K-12 when my kids were in school, had 100-plus students attending the monthly meetings. While on a field trip led by the USGS and The Denver Museum of Natural History, I was fortunate to find a very rare rock/mineral that is now housed in equal parts at the Museum, USGS, and my personal collection.



My passion is to get generations much younger than mine interested in pollinators, organic practices, and



**American Honey
Producers Association**

50th Annual Convention & Trade Show

*Join us in 2019 in Phoenix, AZ at the
DoubleTree by Hilton Hotel
Phoenix Tempe!*

January 9-12, 2019

*For more information visit
www.AHPAnet.com*



understanding invasive plants/animals/insect species through education and outreach programs. I look forward to networking with anyone interested in outreach/education.

Del Barber, Nevada



Beekeeping has been a part of my life since I was a boy. In our small western South Dakota town, my grandfather was the go-to guy for catching swarms and solving hon-

ey bee problems. An early memory is when I joined him to help remove honey stores from the walls of an old two-story farmhouse. I still remember putting my ear to the walls inside and listening to the bees working. Amazingly, we scooped more than ten 55-gallon drums of comb and honey from those walls.

As an adult, my interest and fascination with honey bees continued. It infiltrated my high school Biology teaching career where I taught Bee Biology to the Future Farmers of America (FFA). Later, as I approached retirement from education and medicine, I was able to establish an apiary in Oregon and met many fascinating fellow beekeepers who invited me to join them at the Coos County Beekeepers Association. Though it was the nearest local beekeeper organization, it was a 75-mile drive one way to monthly meetings. Through this association, I became involved with the Oregon State Beekeepers Association, where I served as the South Coast Regional Representative. Subsequently, OSBA established a collaboration with Oregon State University to form the Oregon Master Beekeeper Program, where I served as an instructor and mentor for the Apprentice level.

My wife, Myrna, and I solved the long-drive dilemma by organizing a new Oregon association, Oregon South Coast Beekeepers. A short two years later, we migrated to Nevada and established another association, Great Basin Beekeepers of Nevada. I am currently a Life member of both. I am always interested in continuing my beekeeping education. The challenges of beekeeping have grown more complicated as the years have passed. I seldom miss an opportunity to share with other beekeepers through local meetings, area conferences, and formal coursework. As I enter the eighth decade of my life, I continue to

encourage young beekeepers and invited two mentees of the Great Basin Beekeepers of Nevada to join me in the pursuit of the University of Montana Master Beekeeping Certificate. We are nearing completion of Master level of the UM beekeeping program.

Melanie Kirby, New Mexico

Melanie Kirby is a Native New Mexican (Tortugas Pueblo) who began beekeeping by assignment as a US Peace Corps Vol-



unteer over 20 years ago. After her service, she worked for several large-scale queen operations in Hawaii and Florida. In 2005, she teamed up with Superior Honey Farms (Upper Peninsula-Michigan) and launched Zia Queenbees Farm & Field Institute in the southern Rocky Mountains. Zia Queenbees specializes in the heritable, longevity-based selection of honey bee stock chosen by beekeepers for beekeepers, pollination services, consilience (multi-disciplinary) research, exquisite hive products and apitherapeutics, and outreach. Melanie has been the recipient of several research grants from both Western Sustainable Agriculture Research Education for queen breeding and the New Mexico Department of Agriculture for value-added hive products.

As an apicultural consultant, she has served twice for the USAID Farmer to Farmer program and independently for development organizations. She is grateful to have learned and worked with beekeepers and their bees in various Native American tribal communities in the Southwest and Pacific Northwest, and with beekeepers across the US, Central America, the Pacific Islands, South America, the Caribbean, Canada, North Africa, and Europe. Melanie is a freelance writer for *The American Bee Journal* and *Bee Culture* magazines, a blogger for *Mother Earth News*, and has served as the editor of the Kelley Beekeeping online monthly newsletter for the past five years. She is currently working on a graduate degree at the WSU Sheppard Honey Bee Lab (www.bees.wsu.edu). Melanie is committed to supporting the beekeeping industry as a career and livelihood. She served as the New Mexico director from 2007 to 2012 and as the 2013 WAS president. She feels optimistic to return to WAS as the New Mexico director and to support the organization's efforts.

Confirmation Bias . . . Me?

Without Facts You Cannot Have Cooperation

Jerry Hayes, PhD—Vita Bee Health, North America

Back in August, I was honored to speak at the WAS Conference held in Boise. (As an aside, the JUMP Conference Center is the most unique and inviting conference center I have ever been to. Very cool . . . very nice.) I have the opportunity to speak many times a year all over the country and outside the country, and I am generally asked to talk about one of the 4 Ps of honey bee health: Pathogens, Parasites, Poor Nutrition, Pesticides (including varroacides). This is fine because these are the fundamentals that influence just about everything in honey bee health in the 2000s. As beekeepers, we can't get better unless we know what the problem is and how to minimize it.

Yet, Steve Sweet, the patient one, simply asked me what I wanted to talk about. Whoa! Did he really know what he might be getting into, I wondered? I wasn't used to not being given a presentation "assignment." Steve opened the door for me to talk about and explore something that I have been thinking about for a long time as we beekeepers point our collective fingers at those real and imagined reasons for *my bees being sick and dying*. In 2018, we are constantly reminded on the News that we all have "bias" about one thing or another. In both contemporary sociology and psychology, there is a real, recognized, and defined bias called *Confirmation Bias*. This is a tendency to search for, interpret, favor, and *recall* information in a way that confirms one's pre-existing beliefs or hypothesis, which is an error in our reasoning. Stay with me here, don't nod off or reach for the remote just yet.

With the huge growth in backyard hobby beekeeping, there is the reality that any time in any hobby (and you and I have experienced this many times), you as the

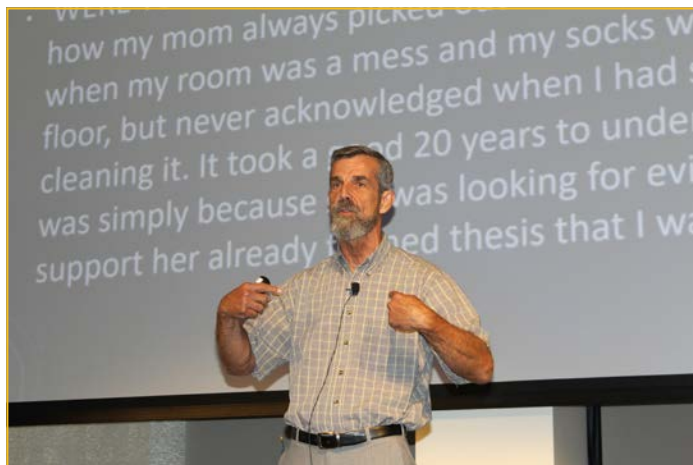
new aficionado simply don't know everything. You can't know everything about everything intuitively. There is a learning phase that, in beekeeping in particular, takes years. I have said it many times before that anyone who says they know everything about beekeeping after two years and has their own blog, and podcast, and website is delusional and arrogant. They lead new beekeepers down the wrong path, bees die, and they blame some outside influence or event. It's never *them*.

Most of the tens of thousands of "new" beekeepers are Boomers, who are now old enough that the kids are grown, they sold the SUV, they read *Mother Earth News* in 1975, and now they want to go back in memory to save the world. Honey bees are the mechanism for this in 2018.

What I want to do is challenge some of our thoughts and perceptions and bias by using the Bee Informed Partnership (BIP) annual survey data to show these submitted "facts" as published by BIP. This is an exercise in challenging potential false reality perceptions of honey bee health and causes. Regarding involvement of confirmation bias, "Due to our species innate *tribal* (new beekeeper) *desire* to be socially accepted (by WAS new beekeepers), we tend to favor or agree with people (new beekeepers) who agree with us (new beekeepers)."

I went to the BIP website and looked at the data for Idaho. Not to pick on Idaho, but it seemed like the place to begin the conversation.

As caveat, surveys are only as good as those contributing to the survey. So, they may not be 100 percent correct, but where else can one start except at the beginning data point?



Jerry explains *confirmation bias*, defined as "the tendency to interpret new evidence as confirmation of one's existing beliefs or theories," at the start of his presentation. This slide is titled "I was a messy kid" and reads: "I know that I was one. It used to frustrate me how my mom always picked out and noticed the instances when my room was a mess and my socks were all over the floor, but never acknowledged when I had spent an hour cleaning it. It took a good 20 years to understand that this was simply because she was looking for evidence to support her already formed thesis that I was a messy kid." He soon brings it all around to *us*.

So, what is killing my bees? What are the possibilities?

The BIP survey data for the US show a 40 percent total annual loss in 2017–2018. Average winter loss in Idaho was reported as 62.9 percent.

Respondents' ideas on the reason for the loss: For 91.7 percent, "I don't know" was the answer.

Were there some negative issues with being close to agriculture? Only 40.1 percent said they were close to production agriculture.

Average winter loss for beekeepers who used some kind of Varroa treatment was 45.1 percent.

Those who used labeled Varroa products lost 35.1 percent.

Those who did not use labeled Varroa control products reported losing 51.2 percent.

Average winter loss per beekeeper who monitored for Varroa was 48.4 percent.

Average winter loss per beekeeper who had less than five years of experience was 64.4 percent.

So, what we know about reported Idaho losses in 2017?

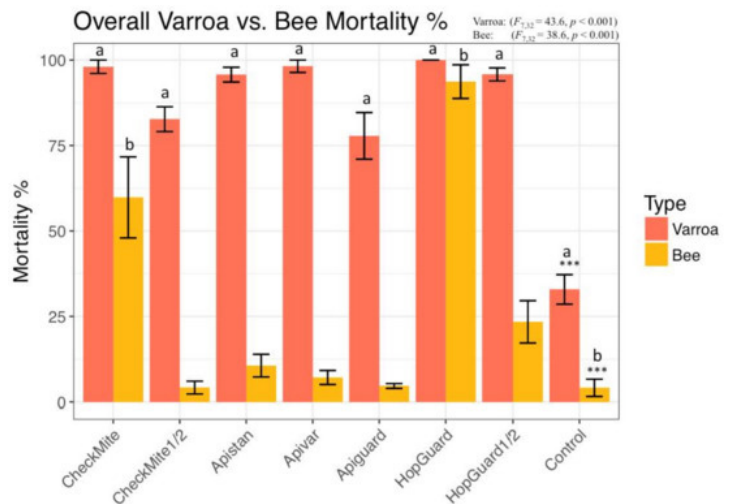
An average 62.6 percent loss is reported by Hobbyists. As reported:

- 91.7 percent said they didn't know why the bees died
- 60 percent are not near production agriculture
- 54.9 percent did not treat for Varroa
- 64.9 percent of those who did treat didn't use selected products
- 51.6 percent did not sample for Varroa before treatment
- 64.4 percent of beekeepers had less than five years of experience

= 62.6 percent Loss

Many beekeepers blame the use of pesticides in agriculture for loss of their bees. And certainly, if some of these products are misapplied according to label direction, they can hurt pollinators. APHIS did a colony chemical residue study in honey bee colonies a few years ago. What they found was that approximately 45 percent of all pesticides found in a beehive were the ones beekeepers had used. The focus on neonicotinoids as causing honey bee losses was not found in regards to residues of neonics or their metabolites, only showing about 2 percent of residues. So, it's not agriculture.

These varroacides used to control Varroa have been vital in keeping the greater beekeeping industry. They



Total mortality for Varroa mites and their caged host bees after 48 h of exposure to 1 dose of CheckMite®, ½ dose of CheckMite®, Apistan®, Apivar®, Apiguard®, 1 dose of HopGuard®, ½ dose of HopGuard®, and no acaricide (control group). Same letters indicate significant differences between a treatment and control at $\alpha = 0.05$. The only significant differences that were detected occurred at $p < 0.001$ (***). Bars denote mean bee and mite mortality (%) $\pm$ 1 standard error (SE).*

saved the industry. But take a look at not only their effect on Varroa control but honey bee mortality as well. This is something we never see or think about. There are Varroa controls that are better than others if you use the metric of negative effects on the colony itself.

The Honey Bee Health Coalition (HBHC; honeybeehealthcoalition.org) is a strong industry collaborative that has many pluses to its activity. The most important in my mind at this time is the *Tools for Varroa Management* guide. No beekeeper really needs any other information than this to know what the Varroa problem is, how to identify and monitor for Varroa, and what products are available with their plus and minuses for use. It's all here in one place. The industry relies on this document, and you need to as well.

We have to realize that honey bees cannot exist any longer in the wild for any length of time before Varroa kills them. Honey bees have to be managed like livestock or pets. They need attention and treatments not different than flea and tick medicines, or rabies vaccines, or wormers we use for Fido or Fluffy. Would you let them die because you didn't care to know? We can do better. And an organization like WAS has the experienced members who can help and guide and direct. By working together, partnering and collaborating is the only positive route.

***Source:** Insects 2018, 9(2), 55; <https://doi.org/10.3390/insects9020055>. Toxicity of Selected Acaricides to Honey Bees (*Apis mellifera*) and Varroa (*Varroa destructor* Anderson and Trueman) and Their Use in Controlling Varroa within Honey Bee Colonies. Aleš Gregorc, Mohamed Alburaki, Blair Sampson, Patricia R. Knight, and John Adamczyk.

SNOHOMISH BEE CO.
HIGH QUALITY BEEKEEPING SUPPLIES

◦ BEES ◦ HIVES ◦ TOOLS ◦ LOCAL HONEY ◦
& MUCH MORE.

360-568-2191
WWW.SNOHOBEECO.COM
BEES@SNOHOBEECO.COM
403 MAPLE AVE. STE. A, SNOHOMISH, WA 98290
@SNOHOBEECO



Beaver Plastics
Langstroth Honeybee
Brood Box



 **Contact us today**  bpgrower.com
Toll Free: 1-888-453-5961 Email: growerinfo@beaverplastics.com

Sacramento BEEKEEPING SUPPLIES

"BEE THEMED" GIFTS
MAKE-IT-YOURSELF SUPPLIES FOR:
CANDLES, SOAPS, CREAMS, LOTIONS

(916) 451-2337
info@sacramentobeekeeping.com
www.sacramentobeekeeping.com

2110 X Street
Sacramento CA 95818
Fax: (916) 451-7008

Fred & Nancy Stewart
Pamela Hill
Courtney Hill

Quality & Service Since 1907

C. F. Koehnen & Sons, Inc.

Queens *Packages*
Italian & Carniolan *F.O.B. all sized orders*

www.koehnen.com / bees@koehnen.com
3131 Highway 45 Glenn, CA 95943 (530) 891-5216

WiFi Hive Scale
Steady Stream of data will help you know almost as much as the Queen knows about her hive
www.wifihivescale.com
For the busy beekeeper

New! Cellular Wi-Fi Hotspot For remote Apiaries



TATE'S HONEY FARM

- Bee Equipment
- Package & Queen Bees
- Beeswax/ Honey Soap
- Honey
- Pollination Services
- Beeswax Candles
- Comb Honey

509-924-6669 taccon105@icehouse.net



8900 E Maringo Dr **TatesHoneyFarm.com** Spokane, WA

Subscribe to keep your Hives Alive!

Monthly Magazine
100+ pages every month

Science & How To
Articles that keep you informed about the latest scientific advancements and hive management techniques

Great Columnists
Including:
Keith Delaplane
Randy Oliver
Rusty Burlew
Wyatt Mangum
Alison McAfee
Scott McArt
Jerry Hayes

Beekeeping Basics
Covering critical topics for beginners every month

And So Much More...

AMERICAN BEE JOURNAL
The Professional's Magazine Since 1939

THE GREAT CHIPPING

4th Winner with the Soudack-Coser

THE STINGING AND THE STINGLESS

www.americanbeejournal.com



AMERICAN BEE JOURNAL *Subscribe Now!*

Stay informed every month for the price of a cup of coffee.

☐ **New Subscription**
Allow six weeks

☐ **Order Back Issues** Current year \$2.50 each plus postage
For other back issues, write for prices

☐ **ABJ Magazine Binder** \$20.00 postpaid in U.S.

☐ **Change of Address**
Include address/label reference or customer number

☐ **Renew Subscription**
Please include customer number

Date _____
Name _____
Address _____
Address _____
City _____ State _____ Zip _____

U.S.

☐ 1 Year	\$28.00
☐ 2 Years	\$53.00
☐ 3 Years	\$75.00

Canada

☐ 1 Year	\$45.00
☐ 2 Years	\$88.00

Foreign

☐ 1 Year	\$52.00
☐ 2 Years	\$99.00

Digital

☐ 1 Year \$16.00

American Bee Journal
51 S. 2nd St., Hamilton, IL 62341
www.americanbeejournal.com

Ph: 217-847-3324
Fax: 217-847-3660
1-888-922-1293



Tools for Varroa Control from the Honey Bee Health Coalition

Dewey M. Caron, PhD—WAS Representative, Honey Bee Health Coalition

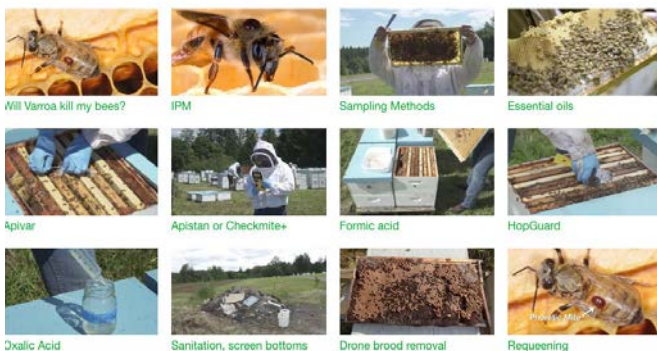
The Honey Bee Health Coalition (HBHC; www.honeybeehealthcoalition.org) is a diverse, collaborative, private-public partnership addressing the multiple factors impacting honey bee health. HBHC currently includes 49 organizations, including WAS, working across the full food value chain of:

- Beekeepers and Honey Producers
- Crop Producers
- Agribusinesses
- Manufacturers and Brands
- Agencies and Universities
- Conservation Groups
- Bee-Focused NGOs

As WAS representative, I contribute to the Hive Management Focus Group and our Public Outreach effort. I was principal author to develop, with extensive collaboration of coalition members, *Tools for Varroa Management*. The guide provides specific information on Varroa mites, mite sampling, and monitoring of mites.

Tools includes a Sampling and Control Spreadsheet, which provides a handy tool for individuals to track their Varroa mite populations, their individual control strategy, and the effectiveness of applied controls. There are also practical, demonstrative 3–5-minute videos on the various controls. They were recorded at Foothills Honey Company in Colton, Oregon. Our HBHC website also includes a PowerPoint available for association use to introduce and demonstrate how to use these resources. *Tools* (now in its 7th revision), the Spreadsheet, and videos are a free download.

The following videos demonstrate techniques for combatting Varroa mites



Tools emphasizes that successful Varroa control solutions are *proactive*. The control approach strategy is to

use Integrated Pest Management (IPM). An IPM approach recommends regular sampling to determine mite levels using either powder sugar roll or alcohol/nonsudsing soap wash of a 300-adult-bee sample taken from a brood comb. This provides an estimate of risk the mite population poses to a colony. If this

number exceeds 2–3 percent of adult bee sample, the injury level (IL) escalates. If injury levels continue to grow, an economic injury level (EIL) may be passed, whereby the costs of applying a control (in money/time) will be justified. Precisely at what level this may occur varies with type of beekeeper, their management, and their beekeeping goals.

Control approaches utilizing nonchemicals are detailed in *Tools* along with how, when, and which chemical control might be appropriate once an EIL is exceeded. The IPM approach is to use cultural or physical/mechanical controls such as drone brood removal, hygienic queen stock, and/or brood break management to suppress mite population increase. When available, biological controls could also be included, but we currently lack effective biocontrol of Varroa.

Once threshold is exceeded in any colony in the apiary, chemical control should be considered. All colonies should be treated. The advantages/disadvantages, use conditions, and other details of the three organic acids and two essential oils are provided in *Tools*. They generally have limitations and are effective within temperature and colony size limitations. The single synthetic miticide Apivar® (amitraz), to which mites have yet to develop resistance, also has advantages and disadvantages and limitations, again as detailed in *Tools*.

Doing nothing is simply not a good option once mite populations expand. Virtually all colonies have or will have Varroa mite. Tools, like the knowledge of the Varroa pest, accurate sampling to determine their numbers, and how and when to apply the various effective controls, are the best way to healthy, sustainable beekeeping.



Beekeepers' Calendar

November 3: **Ohio State Beekeepers Association Fall Conference.** Information: www.ohiostatebeekeepers.org/event/osba-fall-conference-2018.

November 9: **The 3rd Annual Colorado Pollinator Summit.** Information: catalog.botanicgardens.org/DateSelection.aspx?item=3360

November 13–15: **2018 CSBA Annual Convention.** Harrah's Resort Southern California, Funnar, California. Information: www.californiastatebeekeepers.com.

January 8–12: **The 2019 American Beekeeping Federation Conference & Tradeshow.** Sheraton Myrtle Beach Convention Center Hotel in Myrtle Beach, South Carolina.

January 9–12: **American Honey Producers Association 50th Annual Convention & Trade Show.** DoubleTree by Hilton Hotel, Phoenix. Information: www.AHPAnet.com.

January 9–12: **The American Bee Research Conference.** In conjunction with American Honey Producers Association.

February 9: **Washington State Beekeepers Conference.** Eastern Washington University. Information: jenifer@wasba.org.

July 12–14: **The Western Apicultural Society Annual Conference.** Ashland, Oregon.

September 8–12: **46th Apimondia.** Montreal. Registration is now open: www.apimondia2019.com.



Your Beekeeping Experts Since 1976!



- Beginner Kits
- Feeders & Bee Feed
- Frames
- Honey Removal, Processing, & Storage
- Books and Signs
- Protective Wear
- Smokers
- Queen Supplies
- Tools and Hardware and much More!



www.MillerBeeSupply.com • 888-848-5184 • info@millerbeesupply.com

496 Yellow Banks Road, North Wilkesboro, NC 28659

A 19th Century Beekeeping Legend | A 20-Year-Old Irish Immigrant Mother Part 2

Continued from July 2018 issue of the WAS Journal

According to the 1870 census, Eliza Jane Donovan is a 20-year-old married immigrant of Ireland living in Indiana with two daughters and one son under the age of 4. She is listed as “keeping house,” but is educated enough to read, write, and attend to 150 colonies of bees! In 1870 she received verification that a beehive she jointly submitted to the US Patent Office was approved, second woman to do so. At first thought, writing someone like Brigham Young may be intimidating, but clearly not so for her. The “fighting Irish” blood coursing through her veins allowed her to put pen to paper, and off to the US Postal Service her letter went.

In August of 1870 Eliza Jane decided to write the territorial governor of the State of Deseret after reading *The Illustrated Bee Journal*, a local beekeeping journal produced by N. C. Mitchell in Indianapolis, Indiana. In this journal, legends like Quinby, Langstroth, King, and others sparred regarding national beekeeping politics, methods, styles, and so on. Eliza Jane learned enough she felt capable and confident to share her love with others, specifically that ladies teach ladies.

teach the ladies. Placing a male figure in close proximity of adult females may have been seen as a threat to other husbands and as morally inappropriate in refined society. This concept of teaching within a specific gender group was both novel then and still in demand in the 21st century.

This suggestion suggests ladies can teach other ladies better than a male counterpart. Of course, this sounds reasonable, but nevertheless still hits the chords of the male ego.

A recent new term of *mansplaining* was 2010's *New York Times* new word of the year. Lily Rothman of *The Atlantic* defines the word as "explaining without regard to the fact that the explainees know more than the explainer, often done by a man to a woman." According to Wikipedia, "Mansplaining differs from other forms of condescension in that it is rooted in the sexist assumption that a man is likely to be more knowledgeable than a woman." It appears to be quite a rare challenge, this 19th-century young lady Eliza Jane, to suggest this approach to such a notable figure as Brigham Young. Due to probably many local factors, it seems Mr. Young never responded to her request in writing.

There are insights that a woman can offer to another woman in relation to modesty, sales, distribution, and ethics in a male-controlled environment, separation from other “female” duties, juggling the care of infants or children, challenging male counterparts, supporting

a husband or even as a single lady, how and where to seek further education, choosing a hive style that fits the constraints of a lady, how to deal with the appearance to men of a successful woman, and perhaps what threats this all poses to a wife, Sunday labor, utilizing other hired hands such as

1870 US Census from Indianapolis, Indiana showing John Donovan 30 from Ireland with his young family; Jane 20 (Ireland), Kate 4 (Indiana), Andy 2 (Indiana), and Mary 2/12 (infant born in Indiana).

1880 US Census from Indian Creek, Hancock County, Kentucky showing a growing family, with John listed as a C. Laborer (coal laborer), and Jane listed as Keeping Home. 5 children are included in their family; Kate (14), John (12), Mary (10), Maggie (8), Rose (6). Unsure the name change of their only boy from Andy (1870 US Census) later to John.

Apiculture Program Lack of Rainfall Insurance

Now Available in 48 States

We **CUSTOMIZE** a plan of insurance for every customer and every property.

- Decrease premiums
- Increase net indemnities

RISK MANAGEMENT TOOLS EXCLUSIVE COLONYCALC SOFTWARE:



Only WSR agents have access to ColonyCalc. ColonyCalc shows you;

- Historical payments back to 1948
- What coverage intervals give best protection and net return

RAINFALL INDEX LOOK UP TOOL

- Accurate interval estimates two days after an interval ends

"In a world where climate change and severe weather changes are normal, WSR has given my business financial security and growth on high operating cost years. WSR has a professional group of agents, that put your business in the best possible position to succeed."

Brad Pankratz, 2015 President, California State Beekeepers Association

**FOR MORE INFORMATION OR TO OBTAIN
A FREE QUOTE CONTACT US TODAY!**



Cris Armas
carmas@wsrins.com
(530) 300-3566



Casey Awbrey
caseya@wsrins.com
(530) 228-4101



CA Lic #0B48084

women versus men, raising capital, banking, perhaps the challenges of obtaining a business license, and so on.

Eliza Jane may have also heard the news women were given the right to vote in this new territory, opening the gate to other potential rights of the women's suffrage movement.

Bees as Pets

It was a refreshing thought Eliza Jane penned that viewed honey bees as pets, and not simply as livestock. This reference uniquely separates the caring of bees from the traditional honey management as usually seen. As pets, the first thought may be of a relationship can be nurtured with the colony. This intimate relationship between beekeeper and colony is still challenged today. Managing a colony differs if viewed as the relationship is that of a pet, versus livestock, where the end goal is solely for financial gain.

Today there are many benefits of caring for a pet, many of which were not perceived in the mid-19th century—decreasing stress, lowering blood pressure, pain reduction, improved mood, and the numerous other modern scientific rationales. Perhaps Eliza Jane was thinking well beyond her time, but also she may have felt activities beyond child rearing and household duties were needed for her contemporaries. Meaningful activities build self-esteem and purpose.

Gardening, too, is an activity many rural and city women participate in, where bees could aid in both production and beauty of a garden. Beauty of a garden is often overlooked by men, but essential to many women.

Italians Versus Black Bees

Many early references exist to the type of bee used in the United States as a *black bee*. In Utah as early as 1860, there are references to a black bee being the typical bee, but attempts to replace it with the Italian honey bee began in the 1860s and 1870s. The letter by Eliza Jane stated she was trying to change to the Italian bee from the black bee as well. By the late 19th century, magazines are selling the calmer Italian honey bee as the black bee fades out of use.

Dr. Joseph Carson of Alaska claims the darker bees do better in long, cold winter climates. He claims, "I prefer the darkest bees I can get. No whiz-bang college educated bees—just good, hard-working, gentle, dark-as-night bees. The lighter the bee in color, the more they eat, and shutting them down for the winter is tough to do. No, I do not use Russians. If you want a pet, buy a horse.

HARDY RACES.

The most beautiful bees are not the ones that store the most honey. Bees, if bred for color instead of other more desirable traits, will naturally go backward and deteriorate in industry. Hybrids are the best honey gatherers, but generally very wicked to handle; most of the bees in California are hybrids. A cross between the Carniolan and Italian bee makes a good strain for honey gathering. Carniolans, after once being introduced or blended into an apiary, hold their own wonderfully; their markings may be seen in myriads of generations after. The Carniolans are the best all-purpose bee that I know of. In the upper Sierras, they are of especial value. Where heavy, deep snows fall they seem to winter splendidly. In Sierra county a bee-keeping friend states that at one time his hives were covered with twenty-five feet of snow, and when he dug them out, all his Italian and black bees were dead, but the Carniolans were all alive and in a vigorous condition.—S. L. Watkins, in *Farm and Home*.

A young bee keeper, and a good farmer told a *Farm and Home* correspondent recently that without any help he took the past season 2,000 pounds of honey from thirty-five to forty colonies, which he sold for \$200 and the time spent working with the bees was not as much as his neighbor farmer spent loafing at the store.

From the *Salt Lake Herald*, February 10, 1896. University of Utah Newspaper Collection.

I use Carniolans or Caucasians, or as close to the German Black as I can get. They shut down for the winter, lay prolifically in spring, are gentle as can be, and propolize the hive very well for winter.”*

Typically, the darker the bee the more aggressive it is; however, aggression is also based on situation, environment, and seasonal issues affecting the colony.

Mastering Beekeeping, Needs of Income, Honey, and Household Duties

During the Great Awakening of the early 1800s, women began entering into the workforce and were producing income. During and after the American Civil War, where 620,000 men died, there was a greater need for women to work. Yet, it wasn't until the 1860s when the Women's Suffrage Movement saw women able to vote in states such as Wyoming and Utah. Beekeeping according to Eliza Jane was an ideal occupation and business for women.

To be continued . . .

*Carson, Joe. 2017. Wintering honey bees in northern climates. *Western Apicultural Society Journal* November, pages 34–35.

“The bee’s life is like a magic well: the more you draw from it, the more it fills with water”

—Karl von Frisch,
Bees: Their Vision, Chemical Senses and Language



Beekeeping & Honey Bees - Our Business Since 1863



AP23®

Artificial Pollen 23

WINTER PATTIES

Dadant's winter patties are a multifunctional patty, high in carbohydrates and 3% protein to help keep your colonies strong through the winter months.

Contains: sugar, AP23 and Honey-B-Healthy

- Can be used in winter & early spring in place of candy boards
- Readily accepted by the bees
- Convenient for all beekeepers
- Currently available at your nearest Dadant branch location



• 51 S. SECOND STREET, HAMILTON IL 62341 • TOLL FREE (888) 922-1293 •
• 1318 11TH STREET, SIOUX CITY, IA 51102 • TOLL FREE (877) 732-3268 •

dadant.com



State of WAS Bees | Fall 2018

The WAS region is extensive and amazingly diverse. So, too, are the conditions for the bees and the options for those who care for them. Here we find a roundup of conditions this season—and, in some cases, for the year.

BRITISH COLUMBIA—Nancy Burkholder

British Columbia (Canada) typically ends its honey production in mid-August. British Columbia's temperature, rainfall and, in recent years, even the air quality from forest fires vary dramatically from region to region. There are many microclimates within each region. Apiaries and production were affected differently by these climate factors in each area. We look forward to sharing the results from the 2018 production surveys from the Minister of Agriculture in the New Year.

At the time of this writing, the Capital Region Beekeepers Association will be hosting the annual 2018 British Columbia Honey Producers Association (BCHPA) Annual General Meeting, Conference and Trade Show in beautiful and historic Victoria October 28–29. The BCHPA holds two conferences each year to educate and improve the quality of beekeeping throughout the Province.

As of December 1, 2018, The Canadian Food Inspection Agency (CFIA) will enact new regulations which will require a veterinarian prescription for the purchase of any veterinary antibiotics, including oxytetracycline. This is in response to the threat of increased antibiotic resistance involving animal and human diseases.

Beekeeper registration continues to be a legislated requirement in BC to assist the beekeeping communities in the prevention of diseases and mitigate their impact. Changes to the CFIA antibiotic policies may require an up-to-date Beekeeper & Apiary Registration to obtain a veterinarian prescription for antibiotics.

The BC Ministry of Agriculture (BCMA) offers many free services to BC beekeepers, including free beginner beekeeping courses with a strong emphasis on bee health. "The ultimate aim of the BC Apicultural Program is to turn each beekeeper into his/her own bee inspector," says Paul Van Westendorp, Manager BCMA Apicultural Program.

On May 29, the "Day of the Honeybee," the BC Minister of Agriculture, Lana Popham, announced a two-year BC Bee Program of \$100K in support of small-

scale, community-based projects to enhance bee health. This year, seventeen projects were submitted with a total of \$5,000 each.

British Columbia is continuing to show a growing interest in all pollinators, including native bees and honey bees. Many BC classrooms are giving students an in-depth and hands-on approach to pollination. This appreciation of native bees, honey bees, and other pollinators will be vital to the future of the world's diverse habitats. Educators are fostering an appreciation of our agriculture and the environment here in BC and around the world. We can all make a difference!

COLORADO—Ray Story

Colorado has had a very dry year with only 62 percent of moisture to date statewide. Durango was especially dry. Reporting from Durango, Tina Sebestyen said it was a very dry summer that started out well, with amazing fruit bloom, but, without any rain, irrigation water was cut off early. This means that all those who rely on irrigated crops like alfalfa and usually get large honey crops are feeding heavily right now to get colonies up to weight. Interesting, she said, those beekeepers whose bees normally do not make a large honey crop did get one this year. (That is a small minority of beekeepers.)

The rest of the state wasn't as dry as Durango, but we didn't fare much better. The last two winters have been mild, in which we had better-than-normal winter survival of our colonies. What is amiss is our swarm calls, which we normally receive in the spring. We are getting about half the normal volume. Some say the Nextdoor app is getting a lot of the calls. What do you think is happening? We need to market ourselves better. Send me your thoughts.

Hawaii—Noelani Waters

Aloha from the Big Island of Hawaii! This year has been a pretty challenging year for bees and beekeepers on island. In May, the most active volcano in the state of Hawaii, Kilauea, opened up new active fissure sites after a strong earthquake hit the island. This flow affected an established and highly populated area along the southeastern rift zone in the district of Puna. Puna is a prominent farming community, and many beekeepers had apiaries in this area as it is home to plentiful, diverse nectar flows during much of the year. When the lava

Api-Bioxal

NEW



The **OXALIC ACID**
specifically made **FOR HONEY BEES**
with **PHARMACEUTICAL QUALITY**

SACHET
AVAILABLE
IN 3 SIZES:
35g, 175g
AND 350g

FOR SOLUTION,
VAPORIZATION
OR SPRAYING

E.P.A.
APPROVED
FOR HONEY
BEES

HIGH
PHARMACEUTICAL
QUALITY & PURITY
STANDARDS

For more information about Api-Bioxal, email our US Technical Advisor, Phil Craft, at: phil.craft@vetopharma.com
For distributorship opportunities, please contact Frederick Proni via email at: frederick.proni@vetopharma.com,
or by phone, at 214.675.7464.

www.veto-pharma.com



facebook.com/vetopharma

Véto-pharma
Committed to apiculture

ABX-01-US-N01-10/18

started moving and threatening to overtake roads, farms, and homes, beekeepers acted fast to move their apiary sites. Nectar in some areas was also tainted by the strong sulfuric gases that blew down wind. The movement of hives out of this productive area caused a huge loss of honey for the year, but overall saved the hives in most cases. Some hives were not able to be reached in time. The lava flow in Puna lasted nearly four months and only recently stopped in volcanic activity in early August after claiming over 1,000 homes, causing \$800 million in damages, and covering 13.7 square miles of land in a new crust of lava. This flow was a devastating event for Puna and the entire island, but has proven us stronger both individually and as a community.

In mid-August, just as Kilauea paused in activity, the state of Hawaii was hit by Hurricane Lane. The east side of the Big Island again took the brunt of the storm and over a three-day period we got over 52 inches of rainfall. This caused widespread flooding and washed some hives out of low-lying areas. We were very lucky to not have hurricane force winds, or our bees would likely have fared much worse.

Our bees are overall now recovering and enjoying a sunny, mild time of year with nice fall nectar flow. The hives are regaining their strength, and we are so grateful for their tenacity and resilience! We look forward to a (hopefully) mild tropical winter and early nectar flows to help boost our hives.

IDAHO—Steve Sweet

Idaho's beekeepers are represented by at least six organizations across the state. The Idaho Honey Industry Association, representing commercial and hobbyists, has 47 current members. The Beekeepers of Southeast Idaho/Upper Snake River Beekeepers (Idaho Falls) count 988 members on their Facebook page. The Magic Valley Beekeepers meet every other month in the Twin Falls area and tally 360 followers on their Facebook page. Pocatello hosts a loosely organized group of approximately 50 individuals and meets one or two times per year. The group continues to participate in a springtime nuc-making workshop with 75–100 participants at 2J Honey Farms. In Northern Idaho, the majority of the hobbyist/sidelineers continue to participate in the Inland Empire Beekeepers Association. The Idaho Natural Beekeepers count 450 members on their Facebook page, with nearly 100 of those living in the Treasure Valley.

The Treasure Valley Beekeepers Club counts over 250 dues-paying members across Southwest Idaho

and Eastern Oregon, and have 760 followers on their Facebook account. The TVBC continues to support an active web presence with (1) a site at www.idabees.org, offering local monthly recommendations on best management practices, and (2) regular contributions to a Club Facebook page.

Regular monthly meetings and a commitment to beekeeping education are the TVBC's hallmarks. In 2018, Club members taught three "Introduction to Beekeeping" classes through the local school district, plus provided members with eight separate education sessions, outside of scheduled meetings, focusing on hive component construction, queen cell installation, coolly feeding (pollen patties and candy boards), and



Varroa mite management. Sixty-seven members of the TVBC actively participated in the Oregon Master Beekeeper Program at the Apprentice and Journey levels. Throughout the remainder of the season, Club members also established and maintained six beehives at Boise City's Foothills Learning Center, staffed a very active booth at the Western Idaho State Fair, and participated



in the Idaho Botanical Garden's annual "Bug Day," where the emphasis is on introducing local kids to the magic of entomology.

MONTANA—Jaylene Naylor

Hello, beekeeping friends! I've been actively involved in our local Beekeepers of the Bitterroot association since about 2013, where I have held every office possible. After completing the UM Master Beekeeping course with Dr. Jerry Bromenshenk a couple years ago, I've now become engaged with WAS. I spent last year working on

BEEKEEPER'S BEEHIVE BRANDER KIT

Prevent Theft!



Mark your boxes and frames today!

- Heavy duty
- Light but rugged - easy operation
- 1/2" and 1" characters available
- Designed to produce very deep brands
- Uses Standard 20 lb. propane BBQ tank



375 Pine Ave. #22
Santa Barbara, CA 93117
(800) 964-8251 BrandNew.net

it's obvious

nature
loves
natural

nozevitTM Plus

"All natural honeybee food supplement"



The Original Solution

Your partner in helping maintain the intestinal well-being and integrity of your honeybee colonies

- Help maintain healthy colonies
- Promotes productivity of honeybees
- Treating honeybees the natural way

Available at:
eKoBeekeeping.com Dadant & Sons
Pierco Pierco General Beekeeping Equipment
or ask your local beekeeping supply store.



Brought to you by:
Complete Bee
"All Natural - All The Time"
www.completebee.com

Makers of Results Driven Products:



WESTERN BEE SUPPLIES

Specials!

#1 - C/5 CM Hive Bodies with 50 frames and 50 sheets of Plasticell

Special! - \$199.95 and FREE SHIPPING

#2 - C/5 CM 6 5/8 Supers with 50 frames and 50 sheets of Plasticell

Special! - \$179.95 and FREE SHIPPING

#3 - C/5 CM 5 11/16 Supers with 50 frames and 50 sheets of Plasticell

Special! - \$169.95 and FREE SHIPPING

#4 - Plastic Helmet and

**Folding Veil
\$23.00**

**#5 - 10 Sheets of Colored
Honeycomb Sheets.**

**Available in 15 colors!
\$18.90**

#6 - Budget Grade Cedar

**Bottom Boards
\$6.99 ea**



*Call us for Jars and Containers, Bee Nutrition
and Patties, Mite Control and Medications*

CALL TOLL-FREE 1-833-533-1014 P.O. Box 190 Polson, MT 59860

www.westernbee.com Everything for the Beekeeper since 1965.

Our woodenware is proudly manufactured in the USA!



FREE SHIPPING APPLIES TO THOSE ITEMS DENOTED AS QUALIFYING FOR FREE SHIPPING IN YOUR ORDER OF \$100 OR MORE IN THE CONTIGUOUS U.S. ANY OTHER ITEMS WILL INCUR SHIPPING CHARGES. OTHER CONDITIONS MAY APPLY. SEE OUR ONLINE STORE'S HOMEPAGE FOR DETAILS.

our WAS website, and now—as the Montana director and 2nd vice president—I’m really looking forward to helping Sarah make the 2019 WAS conference a fantastic event, and to reconnecting with or meeting you next year in Ashland, Oregon, at WAS 2019. If all goes well, I’m anticipating that we’ll be bringing the conference back to Missoula in 2020, so dust off your fly rods and hiking boots!

In July this year, our Beekeepers of the Bitterroot partnered with the Big Sky Beekeepers of Missoula (with 140 paid members!) and University of Montana’s



School of Extended and Lifelong Learning (www.umt.edu/bee) to bring in Randy Oliver for a two-day Beekeeping Field Camp. Our clubs had never jointly brought in a high-profile speaker, and Randy was a true treasure. We had approximately 120 attendees, and though

we had a few hiccups, the event was very successful overall. We learned so much, and as a result of the discussions around the best way to test for Varroa, we are pushing for people to use Randy’s alcohol wash method. Bitterroot president and excellent citizen scientist, Loren Stormo, has put together a method for mass production of alcohol wash cups based on Randy’s original design. And we’ve created a video with detailed instructions that you can find on our website: www.beekeepersofthebitterroot.org, where you can check out a trailer I made for the video. My sense of humor may not be mainstream, but see for yourself!

Montana is a large state, and there are many hobby/sideline beekeepers. We don’t have a good handle on how many of us there are, so one of my goals for this year is to finish identifying Montana’s beekeeping associations. Fortunately, a great start has been made by Brian Rogers via his Facebook group, Montana Beekeeping Forum.

I reached out to USMC Veteran Chuck Lewis, a beekeeper in Ronan, Montana, about his fabulous project called *Plan Bee*, focused on helping Veterans and raising suicide awareness. The project was born out of Chuck’s amazing walk across the country (see: www.walkingforthefallen.com).

Chuck says, “I’ve patterned my classroom training

after the U of M’s apprentice training, the hands-on work is done at my apiary, and the swarm captures, trap-outs, and cut-outs are done in the field. At the end of the season, we process honey and wax. We bottle the honey and make candles to raise money to put back into the program. When a Vet completes the program, Plan Bee gives them their own hive and colony of bees.” To contact Chuck and learn more about Plan Bee, check out his Facebook group at: <https://bit.ly/2CyJums>.

NEVADA—Del Barber

What are Nevada beekeepers up to? The Great Basin Beekeepers are preparing for winter by treating for mites. While others have been using other common techniques, recent graduates of the University of Montana Beekeeping



Slovenian hive swarm event.

Program, Jackie Sandage, Linda Groves, and Del Barber are employing the Oxalic Acid Vaporizer system to treat their Slovenian hives in the bee house at the Bee Magic Apiary located in Mound House, Nevada.

Nevada approaches a dearth every autumn with limited forage, which makes feeding an important support to hives. Forage is limited primarily to rabbit brush, sage, and some Russian sage. Limited pollen is coming into hives, with not much nectar. Therefore, we encourage feeding so that the hive is not forced to consume their precious winter stores.

As the evening temperatures begin to fall, beekeepers are placing mouse guards on hives to prevent the four-legged creatures from taking up residence. Many of our beekeepers also insulate their hives. Placing an insulating quilt on top of hives serves a dual purpose to insulate and provide

moisture absorption. While our dedicated beekeepers hope to reduce



Students on Ag Day at Riverdale Elementary School.

losses by treating, feeding, and winterizing, we also continue to offer educational experiences to our youth. Members presented educational displays at two local school events. The Silver Stage Fall Festival and Ag Day at Riverview Elementary. We saw 1,500 students and adults (give or take a dozen or so)! Our display emphasized the beehive and components, bee safety, bee-friendly plants, and honey tasting.

NEW MEXICO—Melanie Kirby

The land of enchantment had a very puzzling year to start. Winter snow pack was at 10 percent of normal, which really had beekeepers, farmers, skiers, rafters, and forest service personnel wondering if it was going to be a tinderbox sort of year come the warm season. But despite the poor snow, the lack of a late-spring frost actually yielded one of the best honey production years in a while. A few reports from the field:

Steve Wall, of Buckin' Bee in Santa Fe shared that, "Nectar-wise I'd say this is the best year I've had since 2006. This in spite of and extended summer drought. My best guess is that we benefitted from a lack of late spring freezes which would have killed fruit blossoms, Locust blossoms, etc. Varroa mites have stayed at low numbers up until now. As a result, I've seen almost no incidences of DWV, EFB, or AFB. I do, however, plan to treat my hives that have high mite counts with oxalic

acid in November."

John Gagne of San Juan Apiaries also based in Santa Fe shared, "Currently most colonies are experiencing nectar flows from fall sources; chamisa (rabbit brush), aster and wild sunflower. Weather has continued to be quite dry at most yard locations along the Rio Grande north of Albuquerque. 2017 production colonies and 4 over 4 overwintered nucs fared very well with few losses. Spring conditions were extremely dry for field forage, but warm weather allowed for fast buildup of colonies. Swarm prevention was managed through divides. River flora provided early valuable pollen sources. Main honey flow from late April into May from Oleaster and Tamarisk provided well above average surplus. Typically, June through July offers little surplus in my localities.

"Additionally, 40 nucleus colonies have been established under a Western SARE grant award ending in April 2019. Both control yards (20 colonies each) have built up and are being monitored for mite counts via alcohol washes. Fall washes have yet to be completed. Open mated USDA Russian-Carniolan stock and VSH Queens originating from the Baton Rouge Labs constitute the control groups. Miticides will not be introduced to any of the study nucs. Results of the study will be presented next spring. Some production colonies have been selected for mite level testing; those colonies exhibited very low or no mite counts to date. Visitation by bears continues

WINTER PREP MADE EASY

◆ PRO WINTER PATTIES ◆ FONDANT ◆ MOISTURE BOARDS ◆ WINTER WRAPS ◆ MOUSE GUARDS ◆ AND MORE!



FREE SHIPPING ON MOST ORDERS OVER \$100*

MANN LAKE
WE KNOW BEES
An Employee Owned Company

800-880-7694
www.mannlakeltd.com

*Free shipping applies to most orders over \$100 sent standard ground service within the lower 48 states. Some exclusions apply. See site for details.

to be a problem at isolated yard locations requiring the use of solar powered fencing as a deterrent. Several colony losses have already occurred in 2018.”

And Mark Spitzig, of northern New Mexico shared that for the northern counties, it was also a better honey year due to the lack of a late spring frost, which tends to thin out the spring blossoms along the Rio Grande corridor regularly. Hive losses went from 35 percent the year previous to 12 percent this year. The land of enchantment is known for its landscape diversity and adversity. Daily temperature swings tend to test bees through rigorous and intense environmental conditions.

Southern New Mexico experienced a better honey flow year as well, though the intensity of the drought did keep everyone on their toes. Then the summer monsoon rains arrived and a late-season flush of nectar manifested across the state, bringing much relief to all beekeepers and their bees. The NMSU-Alcalde Sustainable Agriculture Science Center along with San Juan College Chemistry lab has continued to analyze oregano nectar and pollen for potential pollinator benefit.

Mite counts remained lower on average across the state. The New Mexico Beekeepers Association held their summer conference in late July with guest Dr. Jose Villa, recently retired from the Baton Rouge Bee Lab. At the meeting, a group of hobby beekeepers discussed and strategized on how to produce more local bees to avoid imported package issues and increasing winter losses. The New Mexico Bee Certification course is going on its 4th year and includes a level I and II curriculum modeled after Western master beekeeper programs.

New Mexico beekeepers are looking forward to more much-needed moisture. We are remaining hopeful that this coming winter’s snow pack will be better. These snow banks feed into the Rio Grande to provide the needed irrigation waters for the lower valleys of apples, alfalfa, pecans, onion, cotton, and chile crop.

SASKATCHEWAN—Doreen Bradshaw

Beekeeping in 2018 has been a very different year. In March, it was reported that there were strong hives and healthy bees in Saskatchewan. However, a very cold spell in April changed all that with significant hive losses in some areas. Wintering indoors was good with 14 percent loss, but some outdoor wintering had losses as high as 70 percent. Overall the provincial average for winter loss was 28 percent.

Due to winter losses, some beekeepers have split remaining hives to increase hive numbers, but this also

resulted in reduced honey production. There was an increase in rainfall this year over the previous year and many sunny days, so production was looking good in some areas. In other areas, it was drier than normal in late July and August, resulting in lower honey production. In general, this was a short honey season with an early fall.

At the provincial level, the focus again this year was disease control for AFB, mites, and hive beetle. Although this beetle has not yet been located in Saskatchewan, it is important to continue to monitor the situation in order to be proactive. Newsletters, field days, training seminars, and club gatherings have been the methods of communication about disease prevention and control. As of December 1st this year, antibiotics used to control AFB will only be available by prescription from a veterinarian. This change is being implemented for all livestock in North America to reduce the risk of developing antimicrobial resistance in bacteria.

In recent years, the Regina and District Bee Club has increased its membership substantially in part due to an increase in urban beekeepers. To support its new and all current members, the Club provides several services such as: Educational classes, Field Days, Mentorship Program, Quarterly Newsletter, Bulk Shipping Program, Nuc Purchase Program, Club Extractor Rental Program, Drawn Comb Program, and Products for Sale Listing on the website.



In November, the Club will be entering for the 31st year in Canadian Western Agribition’s weeklong show with two booths. It is an ideal opportunity to promote the Industry with product sales and education through the Agriculture Education Showcase focused for school children and visitors to the show. Last year the show attracted around 1,200 foreign visitors from 86 countries participating in and/or as visitors.

Beekeepers are currently preparing bees for the winter months by ensuring good health, mite and disease free, feeding, and winter wrapping. We now look forward to beekeeping in 2019.

James Kermith Smith: A Remembrance

May 20, 1957 - October 18, 2018

Fran Bach—Past Editor, WAS Journal



On Thursday evening, October 18th, Jim Smith passed away quietly at his home in Bonney Lake, Washington, with his family around him. Jim and his wife Cyndi served the Western Apicultural Society as president and 1st vice president, respectively, in 2012, and more recently Jim was the Washington state regional director to WAS, a position he took over from Jim Bach on his death in 2013.

Not long after accepting the nomination to head WAS, Jim was diagnosed with a rare form of spatial Alzheimer's that forced him to leave his 25-year-long position as a design engineer at Boeing in Seattle. Among the many projects he helped design and develop were the F-22, the Osprey, and a satellite prototype now hanging in the Smithsonian Aerospace Museum.

Jim was involved in many organizations, which reflected his interests: World In Motion, which teaches children science and engineering; engineering organizations—SAE and ASME; and beekeeping—Western Apicultural Society, Pierce County Beekeepers Association, and Washington State Beekeepers Association. He also served on St. Martin University's engineering board.

The effects of Jim's illness were not apparent initially, and they pulled off an excellent conference in 2012 with few of us any the wiser. Later, as he struggled with the deterioration of his speech, Jim and Cyndi formed an ever-closer working partnership in which she became his physical voice in public. They discussed everything. To the end, Jim was able to understand and to participate in a limited way in such conversations.

Together they attended all WAS conferences until this summer, when a sudden reversal in Jim's condition made getting to Boise, Idaho, impossible. Even then, they participated via telephone and computer, with Cyndi managing her function as secretary long distance. At that time, Jim and Cyndi made the decision not to stand again as regional director for Washington since it was quite apparent he would not see the end of a new term.

For a number of years, Jim worked with a cousin, a commercial beekeeper moving his bees between Washington and California for almond pollination. He joined the



2011: Jim serves as 2nd vice president.



2012: Seattle, Washington. Jim (left), as president, presents Eric Olson with an Outstanding Service to Beekeeping award.

Pierce County (Washington) Beekeepers Association, took some classes, completed the Journeyman level, and was well into the Master Beekeeper program and his own apiary when he took sick. The hive numbers dwindled after Cousin Bob retired, and dwindled some more as Jim's health declined—finally being given up when he couldn't work them any longer, even with Cyndi's help. During his illness, he spent many hours out there with "his girls" listening to the cheerful hum and watching them go about their business.

When you remember Jim, remember how much he loved his family, remember his kindness, his laughter (though a quiet man, he had a wicked sense of humor!), his patience, his love of all things mechanical and his honey bees. He was a lifetime learner with an extensive, eclectic library that was always a source of knowledge and humor. Whenever you needed a question answered, he would say, "I think I have a book on that."

Left to cherish his memory are his wife Cyndi, daughters Christianne and Brittany, granddaughter Zamora, three sisters, two brothers, and a huge extended family, all whom he loved dearly. He was preceded in death by his mother Beverly and, just a few weeks ago, by his father, Ronald Smith of Spokane.

Add to that list the members of the Western Apicultural Society who have benefited so much from the quiet dedication of this couple to our organization. Thank you both. Your commitment, your friendship, and your memory will be with us always.



2014: Missoula, Montana. Cyndi and Jim share a moment during a break with Betty Farber.



2013: Santa Fe, New Mexico. Cyndi, Jim, and Fran Bach enjoy the conference banquet.



2017: Davis, California. Cyndi and Jim stand with other members of the board as Eric Mussen kneels in the front row.

WAS Presidents

- 1978 **Norman Gary** (California)
- 1979 **Lucien Alexander** (Oregon)
- 1980 **Randy Barker** (British Columbia)
- 1981 **Charles Duncan** (California)
- 1982 **William P Nye** (Utah)
- 1983 **John Edwards** (Washington)
- 1984 **Eric Mussen** (California)
- 1985 **Mike Burgett** (Oregon)
- 1986 **Doug McCutcheon** (British Columbia)
- 1987 **Tom Muncey** (Nevada)
- 1988 **Dan Mayer** (Washington)
- 1989 **Stan Williams** (California)
- 1990 **Mark Shelton** (California)
- 1991 **William P Nye** (Utah)
- 1992 **Mike Burgett** (Oregon)
- 1993 **Mark Winston** (British Columbia)
- 1994 **James Bach** (Washington)
- 1995 **Eric Mussen** (California)
- 1996 **Russell Messing** (Hawaii)
- 1997 **Eric Erickson** (Arizona)
- 1998 **Steve Sheppard** (Idaho)
- 1999 **Leonard Joy** (Nevada)
- 2000 **Fletcher Miller** (Alaska)
- 2001 **Mike Burgett** (Oregon)
- 2002 **Eric Mussen** (California)
- 2003 **Jaquie Bunse** (British Columbia)
- 2004 **Jerry Bromenshenk** (Montana)
- 2005 **Steve Sheppard** (Washington)
- 2006 **Adrian Wenner** (California)
- 2007 **Diana Sammataro** (Arizona)
- 2008 **Mark Pitcher** (British Columbia)
- 2009 **Eric Mussen** (California)
- 2010 **Dewey Caron** (Oregon)
- 2011 **Jenny Bach** (Hawaii)
- 2012 **James K Smith** (Washington)
- 2013 **Melanie Kirby** (New Mexico)
- 2014 **Jerry Bromenshenk** (Montana)
- 2015 **Beth Conrey** (Colorado)
- 2016 **Ethel Villalobos** (Hawaii)
- 2017 **Eric Mussen** (California)
- 2018 **Steve Sweet** (Idaho)
- 2019 **Sarah Red-Laird** (Oregon)

*Almond season is near.
Your bees are about to be exposed
to high levels of herbicides
and fungicides.
Are you prepared?*



SUPERDFM-HONEYBEE



Lucky for you, SuperDFM-HoneyBee
reduces pesticide absorption.



Not sold by Mann Lake. Find our distributors at:

www.strongmicrobials.com/distribution

Or purchase from us directly at:

www.strongmicrobials.com/honeybee

**3 x more CFUs/gram than
our nearest competitors!**

www.strongmicrobials.com

New Renewal

Mailing Address: _____
Street/Box Number

Phone: _____ e-mail: _____

Other area(s) of work/interest?

Western Apicultural Society
4207 SE Woodstock Blvd Ste 517
Portland OR 97206

SUBSCRIBE NOW!

BEEKeeping Magazine – Your First Three Years



Hand Delivered by
Trusted Federal Agents

**RIGHT TO YOUR
MAILBOX!**

**GET FOUR
ISSUES FOR**

ONLY \$20

(That's 30% off the Newsstand Price!)

CALL NOW: 1.800.289.7668, ext. 3220

ORDER ONLINE AT:
www.BEEKeeping3.com

SEND A CHECK TO:
Beekeeping3
623 W. Liberty St.
Medina, OH 44256

Visit: Store.BeeCulture.com/Magazine

The Top 5 Reasons to Attend the

Western Apicultural Society Conference



in Bee-utiful Ashland, Oregon, July 2019

1. Hands-on beekeeping and native bee workshops
2. Keynotes from some of the most interesting and passionate beekeepers and bee researchers from around the world
3. Side trips to our crown jewels: the Oregon Shakespeare Festival, the Rouge River, & wine country
4. Field trips to bee habitat conservation projects
5. Networking opportunities to connect with other beeeple will abound!



Western Apicultural Society of North America Inc
4207 SE Woodstock Blvd Ste 517
Portland OR 97206
www.westernapiculturalsociety.org



'TIS THE SEASON...
Bee creative this year.
Beekeeping courses make great gifts!

UMT.EDU/BEE
UNIVERSITY OF MONTANA