



Photo: Annie Spratt



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**SAVE THE DATE!**

Spring & Summer  
**Albuquerque, Bee City USA**  
Watch for upcoming Pollinator Celebrations.  
June 19-25, 2017  
**National Pollinator Week**  
How are you celebrating in your community?

**THE NEW MEXICO BEEKEEPERS ASSOCIATION**

is dedicated to informing and inspiring persons interested in beekeeping, and educating the general public.

## 2017 Annual Meeting

**Jessie Brown**

Every year, I look forward to the NMBKA Annual Conference and seeing friends from around New Mexico. This year, we chose to focus the conference on the “Business of the Bee,” in hopes of growing and supporting small bee-focused businesses in our state.

Friday started off with a bang, as Leslie Hoffman spoke about the nuts and bolts of turning your beekeeping hobby into a money-maker or expanding your current beekeeping business. Ryan Hiles shared the results from the 2016 National Honeybee Survey, and the NM Department of Agriculture’s concern about spiromesifen, a miticide used to control mites in corn, being detected in some NM hives. At this time, NMDA doesn’t know the source of the miticide. Raymond Espinoza reported on the 2016 NMBKA Best Practices Survey. Thanks so much to Abq Beeks for inspiration to conduct this survey. As a group, the 173 people who participated in the survey experienced a 50.85 % beehive loss from 2015 to 2016. Friday ended with a talk from Ashley Bennet, the new Integrated Pest Management Specialist at NM State University, and we learned in great detail about “Conserving NM Native Bees.”

Susan Marie George began the program on Saturday, reporting on SJM 4, a memorial that is currently in the state legislature. Memorial legislation is a way of urging the governor and relevant state agencies to take action, and this pollinator-friendly memorial was written by students around NM that participate in the Wild Friends Program. Along with many other people who support the memorial, I have been attending the legislative committee sessions to support the kids, and have been truly inspired by them! Whisper to the bees that this Memorial passes. Craig Noorlander gave us a great demo on package bees. We were then joined by Darragh Nagle, who

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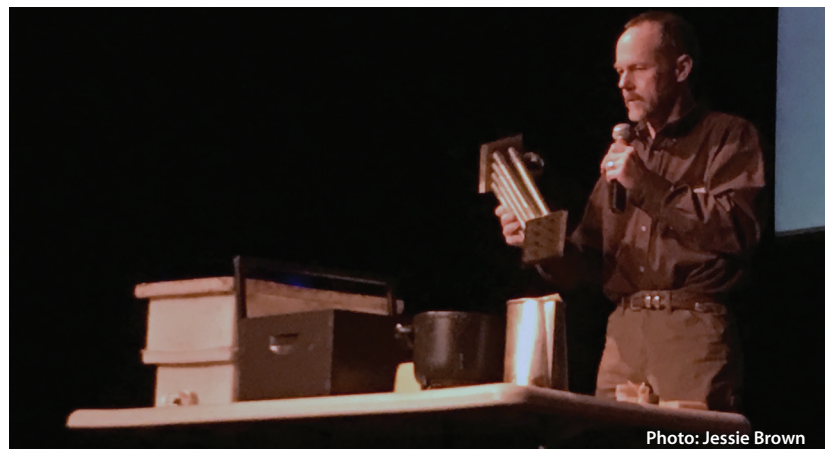


Photo: Jessie Brown

Steve Wall talks wax and candles



## Beekeeping in the Zuni Mountain Expanse

Rhett Renoud

My wife and I have found beekeeping in the Ramah, New Mexico region to be both challenging and rewarding. We have 20+ hives scattered throughout the Zuni Mountain expanse at an elevation of 7,000 ft. and higher. The Continental Divide runs through the Zuni Mountains leaving a very diverse landscape of grasslands, lava fields, plateaus, cliffs, and canyons. The lower elevation areas are Piñon-juniper woodlands while the higher elevation consists of Gambel oak, Douglas fir, and Ponderosa. These unique ecosystems are far removed from any type of land development and commercial farming. This means that the bees depend solely on their natural habitat for food, pollen, and water.

When scouting for potential hive locations, we look at federal land (which requires a special use permit) but mostly we end up getting permission from private owners to place hives on property that borders federal land. No matter whom we deal with, our number one priority is to be legal, respectful, and transparent. This protects our brand and reputation, as well as that of the New Mexico Beekeepers Association, the New Mexico Department of Agriculture, and the greater beekeeping community.

*Rocky Mountain Bee Plant at El Morro Apiary*  
Photo: Rhett Renoud



Photo: Rhett Renoud  
*Langstroth hives on the stand behind El Morro National Monument*

There are two critical elements for determining hive placement. The first is adequate forage within a one-mile radius. Evaluating a forage area usually requires making a few trips to the prospect site, in spring, summer, and fall. It is awfully difficult to estimate how many hives an area can support, so we rarely place more than two to four hives in one apiary. The second critical element is a nearby dependable water source. While there might be a few intermittent streams and seasonal ponds, finding a year-round spring or water source is much more challenging.

The next phase of the decision-making process involves accessibility. Access to our hives is usually by way of gravel and dirt roads. Some of these are maintained, some are not.

Accessibility can depend on weather conditions; hives at higher elevations are typically not accessible for several months each winter due to heavy snow. To further protect the bees, we position the hives at a satisfactory distance from the roadside. Impassible road conditions have sometimes required us to hike a good distance to check the hives. Often there's a tradeoff between really good forage areas and accessibility, but we enjoy beekeeping enough to negotiate tricky conditions when necessary!

Once location and nectar source have been determined, hive selection becomes important. We primarily use



eight-frame Langstroth and Warre hives with an occasional top bar. The flexibility that the Langstroth offers, in addition to frame compatibility, makes it easy to work with. However, the eight-frame Langstroth is still too spacious for small colonies in our microclimate, so we overwinter small colonies in Langstroth double nucs. For the sake of uniformity, Langstroth frames with queen cells are used for queen rearing in modified Langstroth boxes. In addition, the Langstroth can accommodate various sizes of super. We use the extra shallow super with foundationless frames for comb honey production. Extra shallow, shallow, and mediums are used for honey extraction.

The Warre hive has also earned its spot in many of our apiaries for three reasons. First, the bees winter better in a Warre with the least amount of stored food. Second, the Langstroth and Warre are somewhat compatible by using a Lang Nuc-to-Warre transfer box. Third, supering a Warre allows us to target a particular honey flow. Our Warre supers contain approximately thirteen to fifteen pounds of extracted honey that can be filled and capped by the bees in a seven-day timeframe. These lightweight supers are easy to transport by foot over longer hiking distances.

Hive positioning completes the decision-making process. If the hives are in bear territory, we defend by using a solar-powered electric fence. Our Certified Naturally Grown certification recommends that we keep hives 16" inches off the ground. For this reason, we build custom hive stands for all of our hives. Each stand has built-in tiedown points to ensure that the hives can withstand extreme wind gusts. Overheating is not a problem at our elevation—in fact, we paint the hives a darker color to absorb the sun's heat. To encourage early morning bee activity, we face the entrance of the hive in a southern or southeastern direction. We also look for boulders and trees that can provide natural protection from the cold north wind. In a well-ventilated hive, healthy colonies can survive in very cold temperatures. Our winter nighttime low can dip well below 0°F; we've seen -32°F.

Hopefully some of our knowledge and experiences will prove helpful to those who want to keep healthy honey-bee colonies in unique and fragile ecosystems. We are always learning and improving our beekeeping techniques and practices. Please feel free to contact us with questions or comments. We would enjoy hearing from you!

*Rhett Renoud and his wife Sarah run Wild Honey Ranch, specializing in holistic hive management and raw honey production. Find them at [wildhoneyranch.com](http://wildhoneyranch.com)*



## 2017 Annual Meeting

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talked about his adventures in mead making. Judging by the many questions from the audience, there is a huge interest in our community on this subject! Steve Wall (pictured) gave a clear step-by-step lesson in rendering beeswax and making candles. This process is very fussy but well worth the time spent since while pure beeswax can be sold for \$1 an ounce, once it is made into a candle, you can get up to \$45 an ounce. Taylor Horst finished the program, speaking about "Selling Honey in NM Farmers Markets" and the hoops you may need to jump through to sell a great product.

At our NM Beekeepers Association Business Meeting, we elected a new Board Member at Large, Amy Owen. You will find a blurb about her later in this newsletter! We also heard reports on the work done by the NMBKA in 2016, an update on the Certified Beekeepers Program, and were presented with a budget for 2017. Our next Annual Conference will be February 2-3, 2018 and will feature author Tom Seeley.


Thanks so much to all of our meeting sponsors and vendors: Starbucks, Dadant, Brushy Mountain, GloryBee, South Broadway Cultural Center, Beewitching Honey, Hays Honey Farm, Bookworks, Carol Horwitz, Papa Bears Honey and Zia Queen Bees. A big thanks also to our Conference Planning team: Konnie Nelson, Kathy Boardman and Pasty Baughman. 



Photo: Jessie Brown



## Solar Wax Melter: The Key to Cleaning your Wax Cappings

Article and Photos by Steve Wall

When I first started keeping bees in 1996, it was not with the intention of starting a candle business. Soon, however, I found myself with a growing quantity of sticky brown wax cappings. Not knowing what to do with them, I melted them and strained them through a mesh cloth. This was a messy process that wasted a lot of wax and didn't get my wax all that clean.

Fortunately, I had joined a club of experienced beekeepers who set me straight. The key, it turns out, to getting your wax clean is a solar wax melter. I have since built dozens of them for myself and for other wannabee candle-makers.

Solar wax melters are simple affairs, just a box with a glass top, a sloping piece of tin on the inside, and a receptacle for the molten wax, which is placed under the tin. The receptacle is usually a plastic storage container, like Tupperware.

A melter can be purchased from almost any beekeeping supply catalogue (or from me, for that matter, at my website [buckinbee.com](http://buckinbee.com)). A melter can also be home-made by anyone with basic woodworking tools and tin snips. Plans for a melter can be found at [Beesource.com](http://Beesource.com). Whatever you do, make sure the melter is bee-tight. If bees get in, they usually can't find their way out

For convenience, I make mine from a deep hive body.



On a warm day (70 degrees +), the solar wax melter is placed on a flat surface in the sun. Cappings are placed on the tin an inch or two deep. The melter removes cocoons, propolis, dead bees, and any other junk that might contaminate your wax. These impurities stick to the tin while the molten wax and any remaining honey drip into your receptacle. A bit of 1/8" screening at the lower edge of the tin catches any debris that might try to run out with the wax. Once cooled, you have a relatively clean block of wax and some very dark, thick honey.

At this point, the wax looks pretty clean. But, there are still very fine bits of cocoon and propolis that must be taken out before the wax is clean enough to produce a clean-burning candle. So, once the dark honey has been rinsed off the block of wax, I put it in an electric frying pot:



An electric pot allows me to control the temperature. Without a thermostat, the wax can over-heat and catch fire. (Please don't ask me how I know this.)

I set the thermostat to 200 degrees and melt the wax. Once it has all turned liquid, I turn the heat down to 160 degrees and add a cup of water with a teaspoon of oxalic acid in it. It's important to turn the heat down this far so that the water doesn't turn to steam and explode out of the pot. The oxalic acid is optional, but it will produce even cleaner wax than water alone. I'm not sure why this works, I just know it does. Oxalic acid can be purchased at paint stores. It's used to bleach wood.

The cup of added water will make some of the wax turn solid. But in just a few minutes, everything will be liquid again. At this point, the pot can be turned off and allowed to cool, usually overnight. As it does, the wax will shrink away from the sides of the pot, which are coated with a non-stick material like Teflon.




At this point the pot can be turned over and the water, which has sunk to the bottom, will drain out. If it is sufficiently cool, the clean block of wax will also fall out (it may take a little encouragement). Any remaining impurities will be stuck to the bottom of the pot or to the bottom of the block of wax. This can be removed with a hive tool.



Now the wax is ready to be poured into a candle-pouring pot and subsequently poured into your molds.

Good luck and happy beekeeping!

*Steve Wall has been an earth-friendly beekeeper since 1996, in and around Santa Fe, NM. He welcomes questions about how to turn your sticky wax cappings into a clean-burning candle: [stevewall@buckinbee.com](mailto:stevewall@buckinbee.com). To purchase a wax melter or to learn about Steve's beekeeping classes, hives for sale, and/or consultation services, visit his website: [buckinbee.com](http://buckinbee.com).* 

## It's a Community Thing – Part 2

**While NMBKA connects beekeepers all over New Mexico, there are also smaller local beekeeper communities who work together formally or informally. Here is information about more of these groups...**


The [High Plains Beekeepers](#) meet every two weeks in eastern New Mexico to talk beekeeping—and to generally have a blast. The group has only been around for about a year, but already has 45 local members (plus more on Facebook) including ranchers, farmers, doctors, business people, homemakers, and four members under 18. Meetings usually start with a specific topic for discussion, but are definitely less “classroom” and more “fellowship.” During bee season, the group visits members’ home to check out their hives and equipment, and share tips and experiences. For more information, visit the Facebook page or contact group coordinator Paul Hopkins: [ephopkins@plateautel.net](mailto:ephopkins@plateautel.net).

[Northern New Mexico Urban Farmers, Beekeepers, and Friends](#) is a Facebook group for information sharing among people interested in pollinators and gardening. Not all members are beekeepers, but many attended talks on bees and beekeeping last spring, given by group coordinator Dorothy Brown. Some

group members help educate people who call about honey bee swarms, or police and animal control officers who receive “bee” complaints. Dorothy also hopes to work with Los Alamos County to cut down on use of herbicides like Roundup, to preserve bee forage, and to regulate insecticide use.

[Sangre de Cristo Beekeepers](#) covers the Sangre de Cristo bioregion of New Mexico and Colorado: “We are an eclectic group of beekeepers who meet on the last Thursday of most months at 6:30 pm in Santa Fe. We include professional and hobby, experienced and novice, Langstroth and Top-bar beekeepers and welcome all new members regardless of experience level. Our focus is chemical-free and conscientious beekeeping. We discuss topics of interest to the group, taste honey, have occasional presentations and socialize. We provide a resource for beekeepers and community members to meet, educate and learn about sustainable and responsible beekeeping in our homes and farms. Members help with bee removals and swarm collection.

We know there are more groups out there, so we hope to continue sharing information about beek communities in various spots around the state!

*Please get in touch if you are part of a group and would like your information included. Thanks!* 



**Not a member? Join Now!**  
[www.nmbka.org](http://www.nmbka.org)

**Have an idea for an article or feature that you would like to see in the NM Beekeepers Association Newsletter?**

Please get in touch! [editor@nmbeekeepers.org](mailto:editor@nmbeekeepers.org)



## Building a Sweeter Future

### Report from the ABF/AHPA Conference

Jessie Brown



Photo: Rhett Renoud

Honey Council, and drew more than 1500 attendees and hundreds of vendors from around the world.

Since the ABF/AHPA conference ran five days, with all-day talks and simultaneous tracks, including the American Bee Research Conference, it's difficult to condense the experience into one review, but here are some of the most memorable talks and takeaways from the event:

- Mike Coursey reported on "Fraudulent Imports of Adulterated Honey and Transshipped Honey from China." Out of 500-600 million pounds of honey consumed in the US in 2016, only 10% was produced by US beekeepers—90% was imported. Despite increasing demand for honey, the flood of imports created an oversupply and resulted in a dramatic cost decline. Packers could get honey for \$0.77 a pound in 2016 as opposed to \$1.25 in 2015.

- Fran Boyd and Eric Silva provided a "Legislative Update" segment, and talked about the need to educate the new administration on the importance of pollinators while the new Farm Bill is being crafted (the current Farm Bill expires September 30, 2018).

- Dr. Norberto Garcia spoke about "Honey Fraud: A Major Threat to the Future of Beekeeping." New techniques for adulteration, like the adding rice syrup or packaging nectar that isn't developed into honey, make honey adulteration a moving target. These methods can't be detected by current technology, which is 25 years old, but Nuclear Magnetic Resonance (NMR) technology makes it possible to determine the botanical and geographic basis of honey, and represents the future for detecting problems.

- In his talk, "Beyond the Bees: Why Solving the Bee Problem Isn't Going to Work," Dr. Jonathon Lundgren addressed the broader issue of biodiversity in decline. We are in the middle of the Holocene extinction and 15% of Earth's landmass is being treated with pesticides. Without a large-scale change in agricultural practices, we will continue to witness decline. The key is improving our soil.

A small contingent of New Mexico Beekeepers could be found in Galveston, TX at the 2017 North American Beekeeping Conference and Tradeshow on January 10-14, 2017. This conference brought together the American Beekeeping Federation, American Honey Producers Association and the Canadian

- Student researcher Samuel Ramsey presented his paper, "Varroa destructor feed primarily on honey bee fat body not hemolymph." Ramsey has discovered that most of our bee biology books are wrong about what part of the bee varroa is feasting on. Varroa destructor feeds primarily on honeybee fat body, not hemolymph as shared in most bee education. This goes to show that there is always room for more research!

- Peter Berthelsen spoke on "Building a Better Mouse Trap for Honey Bee Health." Pete reminds us that habitat is the big-picture fight, and warns against focusing narrowly on varroa mites, treatments, or hive maintenance issues, because these issues can splinter the strong voice of beekeepers.


- As I've found before, the best education and networking at a conference like this often happens in the hallways between talks, with a chance to talk to top researchers in the field or commercial beekeepers who transport thousands of hives for pollination.

The talks this year often had a "doomsday" feel, and certainly the future is fraught with concerns for bees and beekeepers. However, "Building a Sweeter Future" was an apt title of the conference, since we need to stay optimistic and energetic about making sure that things improve. The knowledge and insights gathered at national beekeeping conferences can be priceless, so I hope to see even more NM Beekeepers at these events in the future. 



## NEW BOARD MEMBER:

### Amy Owen

Our new 2017 Board Member at Large, Amy Owen, is a second-year Certified Beekeepers Program student. She greatly enjoys being involved in the statewide beekeeping community, and is passionate about working to address the policy and environmental challenges beekeepers face. As a social worker, Amy has worked with the Mesilla Valley Community of Hope homeless day drop-in center, and as a Multi-Systemic Therapist with Family Youth Incorporated. She also worked with the Border Servant Corps, an organization that arranges for volunteers to work in social service agencies along the border in Las Cruces, NM and El Paso, TX. Now a stay-at-home mom, Amy's passion for beekeeping and experience in community involvement, social networking, and program management make her a great addition to the 2017 NM Beekeepers Association Board of Directors as a Member at Large. 

## What can we do for you?

To help guide our efforts and get the most out of our limited resources, the NMBKA Board of Directors is conducting a strategic planning process to determine which areas the organization should focus on in the future. Here are some of the initiatives we are currently looking at:

- 1 Either expanding the Certified Beekeeper Program, or finding alternatives to deliver high-quality beekeeper training to other parts of the state.
- 2 Expanding our outreach capabilities. This may include: Other local beekeeping groups, businesses, youth and education outlets, engaging non-beekeepers, etc.
- 3 Exploring how NMBKA can support and promote bee-based businesses in NM, making sure we help both our hobbyist and professional beekeepers.
- 4 Finding and developing future Board members and leaders for the beekeeping community.

Do you support these goals? Are there other areas where you think we should apply our resources and energy, to do more for beekeepers in New Mexico? We are interested in your feedback! Please share your thoughts about how you want to see NMBKA develop in the future: [info@nmbeekeepers.org](mailto:info@nmbeekeepers.org)

This is not a "most votes wins" situation, but a way to ensure our vision and goals for the future are in line with the community we serve.

Thanks,  
Jeremy McKeller, NMBKA Board Member at Large

## NEW MEXICO BEEKEEPERS ASSOCIATION

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## NM Beekeepers Association Invites Grant Applications

The New Mexico Beekeepers Association's Grant Program seeks to assist individuals and organizations whose work can better the beekeeping industry in New Mexico and can help raise public consciousness toward the importance and rewards of beekeeping. For details about what types of projects are funded, and how to apply, please visit our website at [nmbeekeepers.org](http://nmbeekeepers.org)



**NEW MEXICO BEEKEEPERS ASSOCIATION**

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