



Kelley Beekeeping

SERVING THE BEEKEEPER SINCE 1924

ISSUE 70: JUNE 2016



Photo: Melanie Kirby

Artful Aggies

IN THIS ISSUE

From the Queen's Court <i>by Melanie Kirby</i>	2
ABeeCs <i>by Dennis Brown</i>	6
Just the FAQs <i>by Phill Remick</i>	7
XYZs <i>by Liz Walsh</i>	11
Beekeeping 'Round the Globe: Help on Bee Wings in Ukraine	19
Bee Health: Eastern Apicultural Society 2016 Conference	21
Bee Science: 3rd International Pollinator Biology, Health & Policy	22
Bee Science: Job Opportunity, Bee Breeding Apiarist	23
Meet the Beekeeper: Brandon Hopkins, WSU	25
Sweet As Honey: Melon Sorbet Recipe	28
Bee Thinking About: National Pollinator Week, Kids & Bees	29
Upcoming Events	40

From the Queen's Court

by Melanie Kirby

In case you haven't heard yet, June is host to National Pollinator Week! This year, festivities will be celebrated throughout the month of June but the main week of recognition falls on June 20-26, 2016. Earlier this spring, I was invited to an Earth Day event in Questa, New Mexico. Questa is a small mountain village nearing the Colorado border north of Taos. The event was organized by two sisters Claire Coté & Joan Long who grew up in the village. Their parents are renowned wooden toy makers—whom, as it so happens, often trade some of their exquisite toys for jars of honey when we are both selling our wares at holiday events.



The sisters Claire and Joan were so appreciative of me making the hour and a half drive north from my small mountain village of Truchas (which means trout in Spanish) to share the wonders and joys of beekeeping with their community. In fact, way back when, there used to be a fabulous honey farm called Questa Honey located there. When I was attending St. John's College back in the 90s, my roommate and I would venture to Whole Foods on our meager college budget and splurge on a 3 pound pail of Questa Honey's pure sweet clover, naturally creamed honey. I can't tell you how many times it came to our rescue as we stayed up all night working on our semester papers and exams.

This month's cover shot is a painting from the Haagen Daz Pollinator Garden located at the UC Davis Harry B. Laidlaw Bee Lab. The top photo on the right on this page is from the Questa Earth Day Pollinator Celebration. Both depict the artistic and inspiring impressions that pollinators have on all of us.

I'm trying my best to keep up with my bees. Never fails, I wish every season that I had wings to get to and fro and help me to get more work done. Sometimes when I meet folks, they respond by saying, "Oh, you're the queenbee, right?" And I can't help but answer, "Well, actually, I'm just a worker bee...my daughter is the Queenbee!" And



Kelley Beekeeping

SERVING THE BEEKEEPER SINCE 1924

Editor

Melanie Kirby

Editor@KelleyBees.com

Design & Layout

Jon Weaver, Johnny4Eyes.com

Website & Ecommerce

KelleyBees.com

Address

807 W. Main St.

P.O. Box 240

Clarkson, KY 42726

Phone

270-242-2012

800-233-2899

© 2016 Kelley Beekeeping

All rights reserved.

CALL FOR PHOTOS

Want to see your bee-related photo on the cover of this newsletter? Send photos to editor@kelleybees.com

Queen's Court *cont'd*

indeed she is. She is learning to graft this summer, of her own volition. Here's a picture of her scoping her first at home.

I am indeed very proud of her, and also excited at the prospect of her becoming connected to the bees on her own. I have to contain my excitement at times as I know she will hit a point when it isn't as cool to do what your parents do...but perhaps, the bees themselves will nurture her interest and encourage her to continue. I'm sure there are others with children who are dabbling in beekeeping. If so, send us some pics. We'd love to run photos of multi-generational shots of beekeepers and their mentors and/or mentees. It's all about having fun and reverence.



Melanie's daughter grafting

This issue of the newsletter has information on a few different events coming up- in each of the four directions. There's also a profile on Washington State University doctoral candidate-Brandon Hopkins. And an entry all the way from the Ukraine on, "Help on Bee Wings," veteran beekeeping program. Also reader responses to Liz Walsh's May article on Integrated Pest Management for varroa mites. Lots to check out and we hope you enjoy this issue!

May the bees prosper in these challenging times...and may all the diverse pollinators as well. Remember, Kelley Bees has the products and services you need to nurture honeybees, native bees, and YOU, their keepers. May you keep the peace!

**Peace Bee With You,
Melanie Kirby
Editor@kelleybees.com**

Melanie has been keeping bees professionally for 20 years starting as a U.S. Peace Corps Volunteer. She serves as an international consultant on sustainable beekeeping practices and queen breeding. She will be traveling to Morocco later this summer to teach beekeeping workshops and will share her stories and photos in an upcoming issue. She lives and breeds bees in northern New Mexico, where the desert and plains meet the Rocky Mountains. Reach her at Editor@KelleyBees.com



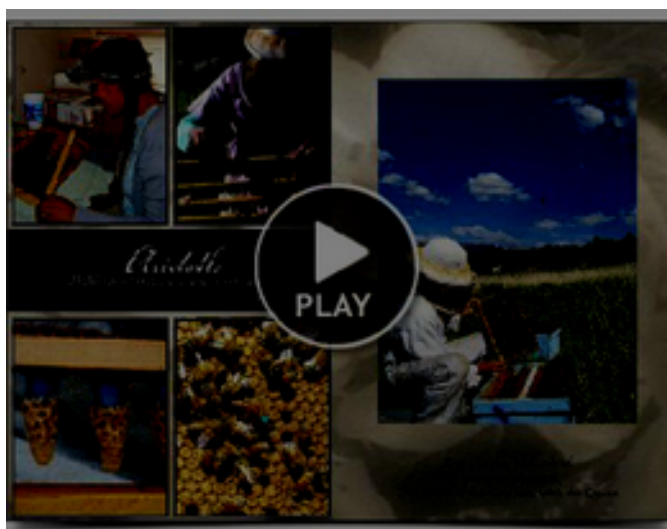
**IN HER MAJESTY'S CHAMBERS-
INTRO TO QUEEN BREEDING & REARING SHORT COURSE
JULY 16-17, 2016- TRUCHAS, NEW MEXICO 87578 USA**

- Want to learn why & how queens are the heart of their hives?
- Interested in learning how to find, select & propagate quality genetics in & out of the apiary?
- Jazzed to mingle with beekeepers from around the nation who are all interested in sharing quality honeybee stock?

Then we have the queen rearing short course for you!

To view course info slideshow, visit:

<http://www.smilebox.com/playBlog/4e4451794d5455314e6a4d3d0d0a&blogview=true>



**IN HER MAJESTY'S CHAMBERS- INTRO TO QUEEN BREEDING & REARING SHORT COURSE
JULY 16-17, 2016 AT ZIA QUEENBEES FARM & FIELD INSTITUTE IN THE MAJESTIC SOUTHERN
ROCKY MOUNTAINS.**

- ZQB's renowned breeding program has inspired beekeepers around the globe.
- Come learn why and how you can help to restore, rejuvenate and revitalize the American beekeeping industry by manifesting quality queen production programs- right in your backyard and beyond!

Instructors Melanie Kirby & Mark Spitzig of ZQB have each been keeping bees professionally for 20 years. They have been breeding bees as a team for over a decade & have established one of the nation's & world's most prestigious longevity-based queen breeding programs. They are committed to sharing & teaching the enlightening intricacies of quality queen rearing for all experience levels of pollinator stewards...to better support local to global food & biodiversity security.

Course takes place at the "kiss of the forests" where Pecos, Santa Fe and Carson National Forests converge in the majestic Sangre de Cristo range of the southern Rocky Mountains of northern New Mexico- USA.

Cost is \$200 and includes instruction, manual, grafting tool, grafting cups, cages and other accessories.

For more information on registration and location- visit:

<http://ziaqueenbees.com/zia/in-her-majestys-chambers-intro-to-queen-breeding-new-mexico/>



Kelley Beekeeping

SERVING THE BEEKEEPER SINCE 1924

Classic Canvas



Bee Natural Canvas Jacket

100 % Natural Cotton Canvas Jacket with hooded veil. Features include : Upper Left chest pocket w/velcro closure, Lower right utility pocket. Premium YKK Brass zippers, Elastic around the wrists, and waist, and thumb strap. Size small to 3X \$57.95 Size 4X-5X \$63.95

Bee Natural Canvas Pants

100 % Natural Cotton Canvas Pants. Features include 2 large pockets with brass zipper closure, 2 hive tool pockets, brass zipper closure at ankles, and elastic waist and ankles. Size small (30-34 waist), medium (34-38 waist) and large (40-44 waist) \$21.95



1-800-233-2899



Kelley Beekeeping

SERVING THE BEEKEEPER SINCE 1924

www.kelleybees.com

If you have a question you would like to share, email it to Editor@KelleyBees.com

A•Bee•Cs

Beginning Beekeeping

by Dennis Brown



Hi Dennis,

How do you judge if a hive is "weak" and needs to be united with another hive that could use a population boost? Some of my hives are loaded with bees on all ten frames of both brood boxes. Others are on just five frames and bees covering one super of honey on top. Just wondering how you go about deciding to let a hive make its own way or combine it with another one.
Kara J.

Hello Kara,

That's a great question. The answer depends on the time of the year. If you had five frames of bees in the early spring months, then the hive is probably in good shape. If you only had five frames of bees going into the fall months, then you should figure out why the hive population is so low. If the reason was because the queen was not good, rather than trying to re-queen the hive, (perhaps because the drone saturation at that time of year was low), then it would be best to unite the hive with another hive that could use the population for the winter months.

The hive configuration that you just described is not good at any time of the year with having only five frames of bees. The bees have too much space to care for with so few bees. If a hive in spring has five frames of bees, they could protect a two brood box configuration if both brood boxes were drawn-out and the queen was a good layer with lots of sealed brood. However, I would not have a honey super on top of that.

If a hive in the summer had the same configuration with only five frames of bees, I would probably re-queen that hive because the current queen is obviously not laying enough to build the hive population up. At the beginning of the fall if I had a hive that only had five frames of bees, I would look at the queens laying pattern and decide if the problem was the queen. If so, I would kill that queen and unite the hive with another hive. If the queen was good, I would break the hive down to a single brood box and feed the bees until they had thirty to forty pounds of food to go through the winter months. Note: this is a strategy that works well in Texas. Provide more food in the colder regions.

"You should never give the bees more space than they can take care of." I hope this helps.

Enjoy your bees!

Dennis Brown

Dennis Brown is the author of "Beekeeping: A Personal Journey" and "Beekeeping: Questions and Answers." Contact Dennis at www.lonestarfarms.net.

Just the FAQs

Questions & Answers

by Phill Remick

Nectar Flow 101

Your honey bees are humming, their flight is incredibly active as the warm air in the apiary fills with their darting air acrobatics. One can almost taste the fragrance of raw nectar. Upon opening a hive, alert beekeepers observe fresh, white wax, appearing on sides and on top of the frames. New foundation is rapidly being drawn out. Yes, yes, yes! The nectar flow is on and the bees appear oblivious as you witness their antics.



So if you want to start collecting all of this honey, what will you use? You have great, interchangeable Langstroth choices: full depth, medium or shallow supers. It's all dependent on your honey gathering aspirations. Note. You'll want to eliminate any feeders or external source of sugar from the immediate vicinity, since they are no longer required. If you cannot remove stored sugar frames from a colony, make a note and mark them so they are not assimilated with real honey during the pending extraction process.

BUILDING A SOLID FOUNDATION

As you inspect the hive, you may notice several frames of foundation near or almost fully and equally drawn out on only one side. What should you do? Gently reverse them and then the younger bees (which are the ones that secrete wax) can focus their comb constructing abilities on the opposite side, permitting frames to be built and uniformly capped.

Although it may seem logical, avoid placing a full super of new foundation on top of your hive because busy bees will often burr comb frames together, wasting their time and yours. Instead, intersperse foundation with drawn comb-so that two new sheets of foundation are never together. No more than three new sheets of foundation per super and none on the outside walls, bees will attach them to the wall. Frame management is a technique many new beekeepers overlook. As mentioned, the manipulation of frames and their rotation affords an even distribution of workable comb surface for the colony.

THE ENDLESS CAVERN OF FRAMES

Providing too many supers will have your honey bees spreading out and filling in a frame here and there; and often, not completely filling in an entire frame. I like to force bees to zero in on one space and not wander in an endless cavern of frames. As usual, there are opposite thoughts on this. There are those who believe you should give the bees much more room than they will ever need - but, my philosophy that 'less is more' may assist the bees by targeting their space and becoming more productive.

SHALL WE EXCLUDE THE QUEEN?

In your pursuit of honey, you do not want the queen laying eggs in comb that you will be extracting. Hence, queen excluders enter the conversation. In some situations I have witnessed, bees were

reluctant to squeeze through the jail-like bars to unload their cargo. Excluders are items one should experience as a new beekeeper, to determine whether they will be a benefit to use. I shy away from these, sensing queen excluders as a road block rather than a motivational device. However, if you decide to use shallow supers and test your hand at producing comb honey, an excluder is the order of the day. You want to ascertain the queen won't be depositing eggs in the midst of all that pristine, capped comb honey. One more thought: if you have some supers with rough comb that you don't want the queen to lay in and have decided to use them only for honey, an excluder would be the ticket.

GOT A TIP FOR YOU

Drill a ½ inch hole just below the hand hold in the front of the shallow super, to allow more direct passage for the bees to the comb honey as well as creating better air circulation. This may also lessen the effect of bees tracking debris as they traverse fresh comb, literally leaving a visible path or 'track' on the surface of the capped product.

The trick to obtaining quality comb honey is to have very strong colonies as well as an intense and sustained honey flow. Why sustained? To not only draw the frames out, but cap them consistently. Use only 100% beeswax; it's referred to as special thin foundation. Using plastic foundation wouldn't work well, especially when trying to cut and/or consume it.

For those who prefer the bees drawing out comb without full sheets of foundation, here's a thought. Try placing small 'starter strips' in wedge style Langstroth top bar frames, lightly coating the exposed edge of starter strip with liquid beeswax. The hot beeswax acts like glue attaching the strip to the frame. The bees will usually draw starter strips out, working the length of the frame. A word of caution: 'starter strips' can become unsecured and unstable and may readily drop when being handled or slowly melt/fall from their support bar, crushing bees and in some cases, your precious queen. Why? No supporting wires, bottom or end bars.

HERE'S THE CURE

Before removing any honey, remember to allow it to cure, don't take any frames that have not been capped or are just beginning to be capped. Give them a bit more time if necessary. The moisture content can be measured using a refractometer (normally around 18.6 %). If the honey is not cured adequately it can ferment.

HARVESTING HONEY

To begin extraction, you must first remove the bees from supers and frames. Many beekeepers use fume boards or acid pads. Note that there are two names, but it is the same tool. The outside cover is painted black for heat absorption. Several pads/boards can be used in unison in larger apiaries. These are sprayed or soaked with a substance that repels bees. The good news: there are non-toxic bee repellents that perform well without negative effects on bees, or on you having to gasp for breath if you are down wind. Once the pads are prepared with the repellent, make sure the weather is hot as the sun's heat activates the repellent formulation.

The process is to remove the top lid. Place the acid pad/fume board right on the rim of the super.

ABCs *continued*

Depending on the heat, you may have to wait 2-5 minutes before the bees start to vacate the hive. They come out like a swarm, but there may still be some bees left on frames.

After a very few minutes, go to the hive(s) you want to pull honey off of, remove the board/pad. Then, tip the super on its end. It is now resting on the lower super. Use your bee brush to dismiss any slackers. Latch onto it and head for the truck and back to the honey house.

A more common removal method is to place an empty super on the ground, with a bottom under it and pull the honey-laden frames out one at a time. Brush the remaining bees off each frame and set them in the empty super on the ground, cover with a standard lid.

Now is the time of year where all your work and all your bees work are going to pay off: you get honey! Just remember to leave adequate stores for the bees; it's going to be a long time between honey flows!

Phill Remick is a former commercial beekeeper and seasonal apiary inspector who teaches beekeeping, offers year round apiary consulting and sells supplies near Edgewood, NM. Contact: Phill@NewBeeRescue.com



JOIN US ON PINTEREST
KelleyBees.com



**YouTube.com/
KelleyBees**

300 Hives or More?



Commercial Beekeepers

We have a SPECIAL just for you.

Call us at 270-242-2019 ext. 213

e-mail aconstant@kelleybees.com

X•Y•Zs

Advanced Beekeeping

by Liz Walsh

Here are a few conversational interchanges from readers in response to last month's XYZ article titled, "Varroa, miticides, and IPM for beginning, intermediate, and advanced beekeepers."

Note from Editor: We are pleased that readers are interacting with our writers and contributors. We encourage these conversations as this exchange of perspectives, experiences and potential solutions can further the momentum to finding, preserving and propagating resilient and productive genetics—from backyards to farms to forests. If you have topics of discussion you'd like to see in the newsletter, you can send them to our writers directly, or to editor@kelleybees.com. We have initialed the reader responses to respect their privacy. Thank you and keep the buzz going, MK



First response from a reader who claims he DOES NOT practice IPM.

In response to your article about IPM strategies in the May 2016 issue of the Kelly Beekeeping news letter, I would like to tell you why I do not practice IPM.

1. First it is time consuming. I live between 15 and 30 miles away from my colonies and have to make a special trip to do any type of management of my bees. This means that extra trips to the bee yard are out for me.

2. It is expensive. I keep bees on a limited budget. All money spent on my bees comes directly from sales of hive products or other bee related services.

I would also like to say that I don't treat my bees at all. This means that I don't do either rolls or powdered sugar rolls. I don't apply any type of acaricide either. This same principle is applied to all forms of pests and diseases in my colonies. I don't feed my bees anything that they didn't make themselves. There is no HFCS, sugar syrup, pollen substitutes or supplement. I have been "treating" my bees this way for over 5 years. In the 14 years that I have been keeping bees I have only treated for mites one season. I have never treated for small hive beetle or any other disease. I don't purchase bees from outside my operation. The last time I did, I bought 25 NUCs from a local commercial beekeeper and all 25 were dead the next spring. Now all my new stock either comes from splits from within my own apiary or cutouts and swarms. The benefits of keeping bees (or any other animal) in this way are many. I will only name a few.

1. It is cheaper. I save my limited budget for things like new hive bodies and frames.

2. I believe it breeds a better bee. If the bees can't take care of pests and diseases themselves and they die, then this is not a bee that I want in my apiary anyway.

3. This approach to pest control takes no time at all and leaves more time for other things like building wooden ware.

I would like to make one final comment. I believe that if all beekeepers would take the zero treatment/supplement approach to beekeeping, then in 20 or 30 years we would be well on our way to solving the world's bee problems. We would take a huge initial hit in the bee population but there are enough people out there doing what I'm doing that I think we could recover rather quickly. It would take a coordinated effort to make this happen and measures would need to be in place to minimize the initial effect, but I think it could be done.

Thank you for your time and your article,
WR
BeeCharmer Apiary

On Mon, May 16, 2016, 12:32 PM Elizabeth Walsh <walshe@tamu.edu> wrote:

Hi WR,
Thanks for the information. I don't necessarily agree with you on all of it, but you do bring up some very good points. I just was lucky enough to attend a presentation from Sasha Mikheyev (of the Okinawa Institute of Science and Technology Graduate University) where he discussed his work on feral honey bee colonies and varroa. It's very fascinating work and it appears that many feral bee populations are indeed undergoing genetic change in response to varroa mites. This is possible in a feral environment in a way that it is not for domestically kept honey bees. Unfortunately, there don't seem to be many places where this can actually happen, as domestically kept colonies breed with the feral populations and then the entire breeding program is down the tubes.

I agree that, whatever approach we choose to take, we need to decide as a community and all do it if we are going to successfully fight varroa. I don't see this happening in the future, as I think that commercial beekeepers, sideliners, and hobbyists are just incapable of choosing a course of action collectively and then implementing it. Do you think that it is possible for everyone to agree to go zero treatment and then do it?

Thanks for your response,
Liz Walsh
Rangel Honey Bee Lab
TAMU Department of Entomology



From: WR Date: Mon, May 16, 2016 at 3:25 PM

I believe you are absolutely right that nobody will agree on the approach that needs to be taken to fight varroa or any other pest or disease. I don't think that everyone will agree to go treatment free. The commercial and sideline guys depend too much on their beekeeping income to put food on their tables. The hobbyist has the luxury of not needing his beekeeping income and can stand a higher loss. Unfortunately the problem is not going to get fixed this way. The beekeepers that we need onboard with a plan like this the most are the least likely to embrace it. I think the only way to make this happen would be through legislation. But, I think it is not the government's job. Though if it were, then it becomes a global problem not localized to just the U.S., so we would be right back where we are now (only it would be countries and governments not being able to decide how to fix the problem, instead of individual beekeepers).

WR
BeeCharmer Apiary

Second Response from J.W.

Hi Liz, we have kicked this topic around in our bee club ad nauseum! And after hearing so much on Varroa control, and fiery debates on methodology, I think the other piece that needs to be added to the discussion is local bee density.

Here in my highly urban, surrounded by berry farms area, we have a foolishly high concentration of honey bees. Pools of good bee forage and bee yard locations are shrinking steadily, making overstocking the norm as many beekeepers fight for slim resources. We also have a significant number of backyard beekeepers of varying skill levels and philosophies. And during the local berry bloom season, hundreds of pollination hives are added to the mix for the 6 weeks of berry bloom.

All this adds up to extreme mite pressure, particularly as the pollination operations are known to often medicate prophylactics for disease and ditto for pests; bringing, as you point out, super-pests and diseases to a field near you. Some state point blank they cannot afford the labor and equipment to run a full IPM strategy in the commercial yards.

We also have at least one survivor bee yard running right in the middle of our local combined flight ranges, and there are treatment free advocates out there, too.

Given our local mite pressure, and the regular infusion of new mites with the mobile pollination hives annually, we find that IPM makes some difference to mite levels, but not enough to allow us to forego at least twice yearly formic acid treatments. Last year many local beekeepers noted a third, mid-fall treatment was called for. And many are now using midwinter oxalic acid vapor treatment as well.

The question often is: why take the time and labor to use IPM strategies (which also drive mite resistance...whatever you do to foil the mites will push the mites to develop a resistance strategy) if in your area you still have to treat regularly with something like formic acid? Especially when, in spite of using IPM, we cannot drop the frequency of treatment. It is not like IPM gets us enough mite suppression to drop one or two of our annual treatments, although in less bee dense areas that may be a realistic goal. At least one of our club members, who lives in a very remote location, remains Varroa free. Once she eradicated her initial load of Varroa, she was never re-infested. For those beekeepers in that enviable situation, Varroa control may not be a result of their practices, but their geographic isolation.

I agree that beekeepers must find mite remedies that are non toxic to bees, and should be highly aware of the remedies that migrate into wax. But for many of us, particularly when sharing flight ranges annually with mobile operations, the focus is going to have to shift to eradicating the mites themselves. I am told that Varroa have not been successfully cultured in the lab, and this has frustrated the need to study the organism and find its weaknesses.

I hope more resources are directed to study Varroa and how to culture it in the lab. I suspect in the end, we must eradicate, not just control Varroa mites.

Kindest Regards,
J.W.

From Liz

Hi J.W., thanks for your response! I enjoyed thinking about some of the things you brought up.

Yes, the genetics of the surrounding area play a really big role in any breeding program and it is so cool that readers are vocal about that. It's something I think a lot of people don't realize, so it's heartening to know that people are thinking about the bee genetics in their area.

As for the time and labor involved in an IPM program--yes, I do think that everyone should still be investing time and energy into non-miticide approaches to cope with varroa infestations, even if they eventually use miticides anyway. This means sampling constantly, regardless of if you still treat twice a year or not. If you don't have baselines of "normal," then you can't compare year to year; and then you can't know if your treatment is actually working or not. As varroa are so good at developing resistance, beekeepers have to constantly be on the lookout for ineffective miticides if we are going to stay on the chemical treadmill. To do that, we need to monitor how useful our miticides are. And we can't do that without extensive sampling (sugar roll, ether roll, boards, etc.). That makes it worth the time and energy to me, ESPECIALLY if people are only using one miticide rather than alternating with two or three different miticides. I really think this is something necessary for as long as we continue to fight varroa.

I also think non-chemical IPM strategies are worth it, even if you still do treat. As you said, beekeepers drive varroa resistance by almost everything we do. I would much rather come up with new ways to non-chemically control varroa than to keep coming up with new miticides, as there is less time, money, miticide drift within colonies, etc. associated with new non-chemical approaches compared to new miticides. Also, if varroa have to develop responses to non-chemical attacks and chemical attacks, then that would appear to be more difficult and time consuming than simply developing a response to a chemical attacks, so our miticides could still last longer. I don't have the data to prove this; it just seems worth consideration to me.

As for eventually not needing to fight varroa...I don't think that anyone will ever find a way to culture varroa in a lab without bees and we certainly can raise varroa with honey bees. As a parasite, it needs the resources provided by its host and always will so long as it's a parasite. I'm not sure if I understand what you mean by culturing varroa in the lab. As for eradication of varroa, I think we have made progress and I am encouraged by all the work that is being done on varroa. Eradication methods are constantly being tried (that's how we keep getting "new" miticides), but non-traditional methods are being tested too. Two non-traditional methods that come to mind are bio-control methods that are being tested in various labs around the world. The Stratiolaelaps mite was originally thought of as a varroa bio-control in Canada and is/has been tested at labs throughout the U.S. and Canada, and there are other potential bio-controls as well. While none seem (to my mind) to have shown much promise so far, it's very encouraging to me that people are coming up with varroa bio-control methods and that there is the interest, money and resources to test these methods. So I'm not giving up hope for varroa eradication yet. Bio-control methods are in addition to molecular methods as well; such as gene knockouts, transgenic bees, transgenic mites, etc., which is very neat stuff that could actually work eventually.

Until we really can get rid of varroa, I think all we can do is just keep doing the best we can to "fight" it--and monitoring, using non-chemical IPM strategies to slow down varroa resistance development to miticides, etc. are really all I can think of doing until we are able to achieve varroa eradication. IPM just seems like the only way to go to me, although it is incredibly frustrating to do all the sampling and time investment and then still need to treat. I just think it is worth it in the long run and I compare myself to beekeepers with large operations (2000+) who still extensively monitor. If they can make time to do that and make it a priority, then I can try to also.

It was a pleasure to talk to you! Best in beekeeping,
Liz Walsh
Rangel Honey Bee Lab
TAMU Department of Entomology



Third Response from S.R.

Nice long article about chemicals of all sorts and how they should or should not be used, IPM, or otherwise; but nothing about survivor stock acquisition, which is often found in the wilds of Nature, selected by Darwinian principles. Our entire Treatment Free FB site is devoted to the discussion of these bee-creatures which thousands of us are raising---but which don't monetarily benefit the bee breeding/package making industry or Big Pharma or the research labs.

Give it a look---breeding for resistance is not the quick way, but the discomfort of the human animal for patient work is his undoing.

S.R. in Manhattan Beach, CA with 30 colonies feral, foundationless, not treated colonies that are easy to work, make good harvests and don't require coddling.

On Fri, May 13, 2016 at 2:56 PM, Elizabeth Walsh <walshe@tamu.edu> wrote:

Hi S.R.

Thanks for the info! Yes, breeding was not the focus of my article, but I definitely should have at least mentioned it. I really feel that breeding for varroa resistance only works in very specific locations. For instance, Mel Kirby has a wonderful location where she is virtually the only beekeeper on her mountain. That means she has total control of her drone population, which is very vital to any breeding program. Sue Cobey does not have control of her breeding area, so she inseminates instead. Do you use insemination techniques? If not, how do you control for other beekeepers bringing drones into your area and mating with your queens?

Best,
Liz Walsh
Rangel Honey Bee Lab
TAMU Department of Entomology

From S.R.

Liz---very few are using package/breeder bees in Los Angeles. The bees are self-selecting for resilience---they either make it or die out. We have a plethora of swarms and cutout opportunities and the bees we are keeping show very little mite infestation---not sterile of mites, just a background stressor they manage. We have AHB genetics, but the demeanor of our bees is lovely, so the old hysteria about AHB does not apply here.

In five years of doing dozens of cutouts and swarm captures, (my history as a beek) I only picked up

a marked queen with some oddly orange bees a month ago (marked blue for '15) Not all the bees in the swarm were orange, and they were smaller than package bees I have observed that other people have in East LA. The bee population here tends to be very small cell (4.6-4.9 brood nest cells) and variable in color---all black, black with grey stripes, yellow with black tipped abdomen, typical yellow with black stripes. Nature for bees seems to thrive on diversity, as is often the rule. Drones have equally inconsistent color patterns within individual hives. I really don't think the off-label use of chemicals is the problem with the commercial bee population. I think propping up weak bee stock, insisting on control, limited queen bee genetic pool size, and a human centric misunderstanding of the ways Nature really works are the problems we don't like to face. Take a look at the opinion given in this Nat Geo piece from last year, with the guy from UK's "Bio-Bees" Phil Chandler---<http://ngm.nationalgeographic.com/2015/05/building-bees/mann-text>

No, I do not do AI (Artificial Insemination). What a goofy world we are in.....

S.R.

From Liz

Thanks for your reply, S.R.!

Your comment about drones caught my eye, as drones drift from colony to colony a lot. Because they are all haploid, they are all essentially male clones of the mother, so all the drones from a single colony will be one color...and all the drifters in that colony will add different colors. If you are getting inconsistent drone color patterns, then that doesn't mean diversity within a colony, although hopefully it does mean diversity in the area.

As for problems with the commercial bee population--that's something that we could discuss for a long time. There are so many. That said, it's so easy to be critical of others. I would agree that inbreeding is a problem with commercially available queens. As for the rest, some days I would agree and some I wouldn't. I suppose that simply depends on your point of view. I think it is a bad thing, overall, to keep allowing colonies with bad genes to propagate (what you refer to when you say "propping up weak bee stock"). That said, if it's a choice between doing that and not making my insurance payments because all my bees died...I'm not sure what I would choose. That's the decision a lot of these commercial beekeepers are making, so it's difficult for me to be critical when I am not facing the challenges that they are.

It was good to talk with you. I hope you have a good bee season this year!

Liz Walsh
Rangel Honey Bee Lab
TAMU Department of Entomology

Liz Walsh is a graduate student at the Rangel Honey Bee Lab, Department of Entomology, Texas A&M University. She can be reached at walshe@tamu.edu

Where are Your Gaps?

www.rockbridgetrees.com

Sourwood	30' Zone 5-9
American Linden	80' Zone 3-8
Little Leaf Linden	80' Zone 3-7
Black Locust	50' Zone 3-8
Seven Sons Tree	25' Zone 5-9
Korean Bee Bee Tree	30" Zone 5-8
Northern Catalpa	90' Zone 4-8
Southern Catalpa	50' Zone 4-8
Tulip Poplar	90' Zone 4-9
Tree Lilac	25' Zone 3-7
Glossy Abelia	06' Zone 5-9
Summersweet	3' to 6' Zone 3-9
Japanese Pagoda Tree	60' Zone 4-8
Golden Rain Tree	30' Zone 5-9
Black Gum	40' to 60' Zone 4-8

Blooms Jul-Aug
Blooms Late June
Blooms Early June
Blooms In May
Blooms in Aug-Sept
Blooms July-Aug
Blooms In Late June
Blooms In Early June
Blooms In May
Blooms In May-June
Blooms In May-Frost
Blooms in July-Aug
Blooms July-Aug
Blooms June-July
Blooms May-June

**Trees to
Fill Your
Nectar
Flow Gaps**

615-841-3664

**Rock
Bridge
Trees**

199 Dry Fork
Creek Road,
Bethpage, TN
37022

www.InsureMyHoney.com

"Independent agent for the USDA's Apiculture Drought Insurance Program"

Last year our customers received on average
over \$20 per hive profit

Help Mel



Our allocation system puts more money
in your pocket, more years, with less risk, compared
to other agents. Give us a call to find out how.

- >No up front cost
- >USDA subsidized
- >Proven payout history

Kevin Gubbels
(402)-360-2626
Kevin@insuremyhoney.com
Norfolk, NE 68701

*"Apiculture Drought
Program Specialist"*



Beekeeping 'Round the Globe

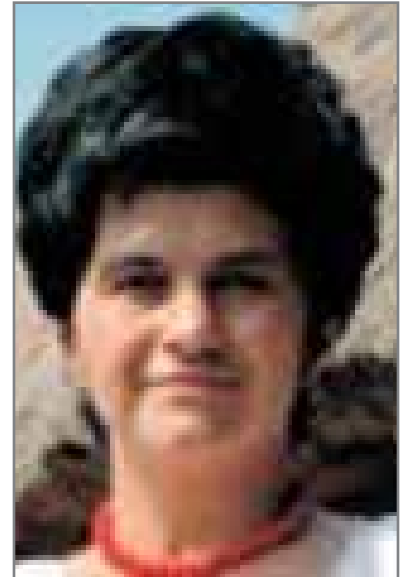
Help on Bee's Wings

by Tetyana Vasylykivska

Dear Colleagues, Friends and Beekeepers,

We would like to inform you about the Program "Help on Bee Wings". The Program has been implemented for psychological and social rehabilitation of the war veterans. The purpose and mission of the Program "Help on Bee Wings" is:

- to give the effective start and professional assistance to the wounded war (Anti-Terroristic Operation) veterans of Ukraine who shall have a chance to live and work independently, in gaining a profession of a beekeeper;
- promote psychological rehabilitation and social adaptation of young people who faced the scourge of war and suffered physically and morally;
- to encourage the war (Anti-Terroristic Operation) veterans of Ukraine to believe in existing opportunities to have normal social life in the community through gaining skills and experience in beekeeping with help of the beekeepers of this nongovernmental organization in certain regions of Ukraine.



The targets or vision of the Program "Help on Bee Wings" is to involve the war veterans into the active beekeeping community of certain regions, those who suffered physically and morally, and also have difficulties in psychological, social and occupational (vocational) rehabilitation, promote professional and business contacts of young trained professionals in their further life.

Beekkeeping *cont'd*

This Program gives a chance to the veterans who are injured physically and morally to gain a profession of the beekeeper and believe in themselves, in their future. Becoming a part of our beekeeping society, the veterans take part together with us in protection of bees and government.

Your support of the Program "Help on bee wings" will help many veterans to hear the buzz of bees, to see the sun and flowers, to have the life and profession, which is able to capture a person, to release sadness, to improve health, to learn new and receive job.

For more information about "Help on bee wings", please visit: veterans-and-bees.com/en

Best regards,

Tetyana Vasylykivska, Chairman of the Board

NGO "Brotherhood of Ukrainian Beekeepers"

Member of the working group of the Ministry of Agrarian Policy of Ukraine for development of beekeeping

President of XXXXIII International Apimondia Congress, Ukraine, 2013

Honorary Member of Apimondia, International Federation of Beekeepers' Associations

www.honeyua.com | www.apimondia2013.com.ua



KelleyBees.com
SHOP ONLINE

LIKE US AT
**Kelley
Beekeeping**



WATCH
**YouTube.com/
KelleyBees**

How to SHARE the Kelley Beekeeping Newsletter on Facebook



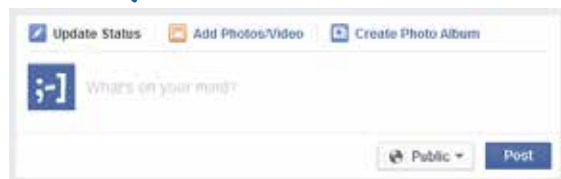
1

Copy the URL from the address field.
Keyboard Shortcut:
Press Control + C to copy.



2

Paste the URL into your status update.
Keyboard Shortcut:
Press Control + V to paste.

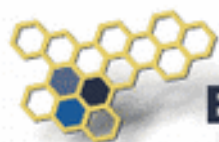


Press Post and share the newsletter
with your beekeeping friends.
Thanks for sharing!

3



Bee Health



EAS
Eastern Apicultural Society

2016 Conference
Richard Stockton University
Galloway, New Jersey
July 27-29, 2016



[Registration is open](http://www.easternapiculture.org/conferences/eas-2016/2016-registration.html)

<http://www.easternapiculture.org/conferences/eas-2016/2016-registration.html>

Located just 10 minutes west of Atlantic City, this year's EAS conference is coming together as one of the best EAS event ever. Presenters include James Frazier and Dennis vanEngelsdorp, Jeff Pettis and Medhat Nasr, Maryann Fraizier, Sarah Red-Laird, David Tarpy and many more.

The week will be filled with educational talks and workshops, scores of national and local vendors, bee olympics, honey show competitions, hands-on bee demonstrations, mead and candle-making, a tour of a large beekeeping operation, and so much more. If you are an experienced beekeeper, apply for the *Master Beekeeper certification exams*. Or, come to enjoy and share the comradery, knowledge, and tall tales from more than 600 fellow beekeepers.

Plenty of free parking near registration. And the campus is absolutely flat, without any pesky ravines to climb over to get to lunch. Although there will be plenty of dorm rooms available on campus, hotels and campsites book fast for the summer. So check out these sites in the area now if you plan to stay off campus. Registration will open for the event in April?

(Stockton University is a 45 minute drive from the Philadelphia Ben Franklin Bridge, just off the AC expressway.)

Join us for our annual conference where you can hang around with some of the most experienced beekeeping minds to be found anywhere. Not just the presenters but some of the most interesting attendees from an unbelievably diverse representation of the industry.

To view a presentaion of EAS NJ 2016, visit: <http://www.easternapiculture.org/addons/2016/EAS-NJpresentation.pdf>

Bee Science

International Conference on Pollinator Biology, Health and Policy



The Penn State Center for Pollinator Research is hosting the third International Conference on Pollinator Biology, Health and Policy on July 18-20, 2016 with an optional evening welcome reception Sunday, July 17, 2016.

Pollinators are essential for the health of agriculture and natural ecosystems, but there have been dramatic declines in key pollinator populations worldwide. A major theme of this year's conference will be translating the results of recent research advances in the biology and health of pollinators into solutions that can be applied to conserve and expand pollinator populations. Symposium speakers from North and South America, Europe, Africa, and Australia will cover a range of topics in pollinator research, from genomics to ecology, and their application to land use and management, breeding of managed bees, and monitoring of pollinator populations. Recent global initiatives in policy, education, and extension will also be highlighted.

This conference will bring together individuals from universities, government agencies, agrochemical companies, non-profit organizations, and several stakeholder groups to engage in a dialog about the research, management, conservation and policy approaches needed to tackle these issues. When this conference was held in 2013, it attracted over 230 participants from 15 countries.

For more information about the conference, please contact the conference organizers, Christina Grozinger (Penn State), Shelby Fleischer (Penn State), Neal Williams (UC Davis) and Rufus Isaacs (Michigan State University). For conference logistic and registration questions, contact Kim Swistock (kar3@psu.edu)

The conference is supported by Penn State's Center for Pollinator Research, Department of Entomology, College of Agricultural Sciences (<http://ento.psu.edu/pollinators>) and the Huck Institutes of the Life Sciences.

Bee Science

Job Opportunity, June 2016

Bee Breeding Apiarist

A honey bee breeding project focused on Varroa resistance in commercially desirable bees has started in Hilo, Hawaii. This location makes use of the favorable climate conditions for selection and breeding yearround.

Hawaii Island Honey Company (David Thomas), the USDA in Baton Rouge (Bob Danka) and the Arista Bee Research Foundation (BartJan Fernhout) are working together in creating new lines of Varroa-resistant honey bees. The project is supported by Project Apis mellifera (PAm, Danielle Downey) for the acquisition of project funding and staffing.

In this project, honey bee lines are screened, selected and tested for high levels of Varroa resistance, using bee breeding techniques, instrumental insemination and Varroa-resistance selection methodologies. In addition, colonies are tested for their ability to perform in the pollination and honey producing part of the US honey bee industry.

Anticipating funding approvals, we are currently looking for two motivated apiarists to staff the project. Job level will be based on education and experience of the candidate.

Position, candidate background

Full-Time position, located in the Hilo area, Hawaii. Continuation of employment is dependent upon program/operational needs, satisfactory work performance, availability of funds, and compliance with applicable Federal/State laws. Candidates are experienced beekeepers familiar with methods of queen rearing, honey bee health inspections, colony assessment techniques and, ideally, instrumental insemination. The candidate would be highly motivated, have a good understanding of honey bee biology and management, bee breeding, and Varroa mites. The candidate has understanding of the needs of the US honey bee industry.

The candidate has excellent communication skills while executing project tasks with a variety of coworkers, beekeepers and scientists. While being able to work in a team, the candidate can also function with limited supervision. Education level of the candidate is, as a minimum, a Bachelor's Degree from an accredited college or university in Entomology, Zoology, Ecology, Biology or related field in the Natural Sciences. Candidate has experience with detailed data collection, both in field and lab conditions. The candidate has the ability to organize, analyze and present complex information and pays attention to details.

For the execution of the field work, the candidate must be in good physical condition, has to be able and willing to work in remote locations under adverse conditions for prolonged periods and must be capable of lifting and carrying fifty pounds of equipment unassisted. Must not be allergic to insect venom. Candidate possesses a valid driver's license throughout the duration of employment. Candidate has to be willing to travel to US mainland locations for extended field trials (up to 3 weeks).

Duties

Bee Science *cont'd*

- Maintain and evaluate, as part of the team, more than 500 colonies using a variety of selection criteria: Varroa reproduction, Varroa levels, brood pattern, temperament, honey production, colony growth.
- Coordinate and execute queen rearing activities, including stock selection, nuc maintenance, grafting, drone production, semen collection, instrumental insemination, strategic single-drone and multi-drone crossings, and isolated mating yard use.
- Collect and maintain scientific data (Varroa infestation levels, Varroa brood counting, field logs, assessment metrics), analyze and report to local and remote group partners.
- Familiarity and skill to review scientific and industry literature. Write or co-author progress and budget reports, in consultation with the breeding team.
- Plan, schedule and execute work in close cooperation with team members and project partners (commercial beekeepers, for example)
- Travel to a variety of sites (foreseeably Louisiana, California) for colony evaluations and project meetings.

Financial Compensation

Compensation commensurate with qualifications, experience and level of education.

Inquiries

Danielle Downey, (808) 936-5483, Danielle@projectapism.org

Application Requirements

Please submit the following documents online to be considered for the position: 1)Cover Letter, 2)Resume, 3)Salary History, 4)Supervisory References, 5)Copy of Degree(s)/Transcript(s)/Certificate(s). Recruitment open until filled.



Meet the Beekeeper

Brandon Hopkins, WSU

Name: Brandon Hopkins

Occupation: Associate Researcher (Lab Manager)

Location- institution: Washington State University

How did you get your start in beekeeping and what inspired you to seek to study them?

As a masters student at Eastern Washington University I worked on cryopreservation techniques and development of artificial reproductive technology. Dr. Steve Sheppard and Sue Cobey were able to provide us with a tube of bee semen and we have some good success in cryopreserving the sample. This initiated my interest and I started working in beekeeping as an hourly employee at the Sheppard Lab the summer before beginning my PhD course work. Since that first summer I have been hooked on bees.

What is some past research or programs that you worked with?

I worked with frogs and mice as a masters student. Since starting in beekeeping I have been involved in many different research programs. Cryopreservation of semen has been a major focus, but I have also worked on improving above-freezing temperature storage of semen and sperm physiology. On the applied level, I have worked on varroa mite treatments using HopGaurd and oxalic acid and treatment of packages. I have been involved in breeding and production of queens and commercial indoor wintering of colonies.

What are you currently working on?

I am working on a few different projects:

Honey Bee Breeding and Genetics:

- importation and cryopreservation of honey bee semen from Old World sources
- collaboration with commercial queen producers to disseminate stock
- producing breeder queens for people to purchase and introduce into their own breeding programs
- assessment for impacts on the genetic diversity of US commercial population
- collaboration working with the USDA National Animal Germplasm Project to begin including honey bee germplasm from valuable US breeding programs



Meet the Beekeeper *cont'd*

Specialty Crop Block Grant:

- comparing subspecies lines (now available here in the US because of the importation project) with commercial strains of honey bees for foraging behavior in field conditions
- separate lines are compared in almond, cherry, pear, and apple orchards for pollination during inclement weather

Fungi Perfecti (antiviral and varroa mite):

- testing Fungi Perfecti fungal extracts for antiviral properties to be used as a feeding supplement that has the potential to reduce viral burden in honey bee colonies
- working on selecting and testing strains of *Metarhizium* to be used as a biocontrol agent against Varroa mites in honey bee colonies

Indoor wintering commercial honey bee colonies:

- researching effects of indoor wintering thousands of honey bee colonies as an alternative to the harsh environment many colonies face in the "standard" California holding yards during the winter months
- experimenting with CO2 levels during indoor storage and the effects on varroa mite mortality and bee nutritional status after storage. In these experiments we are also working on an economic comparative evaluation.

Where do you see the next few years of research or beekeeping management leading?

The next few years look very exciting for the beekeeping industry. There are a few promising research projects that show some real promise for varroa and virus control. I might be "tooting our own horn", but the work we are involved with in cooperation with Fungi Perfecti shows some serious potential in our initial experiments. The two separate projects we are working on (antiviral and varroa control), when combined together, could result in significant improvement for colony health and sustainability.

In the world of beekeeping management there is a lot of promising work on "smart hive" technology, and while much of it might not be applicable for commercial operations yet, this avenue will begin to make an impact in the years ahead.

What message about bee health and management would you like to share with readers?

I know it isn't profound, but...Manage your mite levels. Sample colonies so you know the mite loads, if you allow the mite burden to get too high treatment can't always fix things. In some cases the viral loads will have risen too high for a late mite treatment to be effective in solving the problem. You might get rid of the mites but the colony is too "sick" to recover. Take advantage of broodless periods to get effective mite control. Find a management strategy that works for you; there are a lot of them out there.

Where can we find information about your research/organization?

We have lots of exciting things happening at WSU and we are working on improving our online presence at: <http://entomology.wsu.edu/apis/>

Meet the Beekeeper *cont'd*

Anything on or off topic that you find interesting about yourself/organization to share with readers?

We have recently started a campaign to raise money for a proper honey bee research facility here at Washington State university and any and all help in helping us attain this goal is appreciated.

How can readers contact you and get more info on your organization?

Feel free to contact me at bhopkins@wsu.edu



Sweet As Honey

Melon-Fresh Herb Sorbet

by Beatrix Royale

Rich in vitamins and low in calories, this incredible sorbet delivers amazing flavor without the guilt. With so many fantastic combinations of herbs and melon possible, this is a recipe you will want to see more.

Recipe from Better Homes and Gardens

SERVINGS 8

PREP TIME 20 mins

Ingredients

4 cups seedless melon chunks (watermelon, cantaloupe, or honeydew)

2 lemons or 3 limes, juiced (6 tablespoons)

4 5 inch sprigs leafy herbs (basil, mint, thyme, sage, tarragon, or your favorite herb) or 2 teaspoons crushed lavender flowers

1 cup sugar

2/3 cup water

1 tablespoon honey

1/8 teaspoon salt

Directions

1. In a food processor or blender, combine melon with half the citrus juice; cover and process or blend until smooth. Transfer to a bowl and set aside.

2. In a small saucepan combine fresh herbs, sugar, water, remaining citrus juice, honey, and salt. Bring to boiling over medium heat. Reduce heat; simmer 5 minutes, stirring occasionally. Strain herb mixture into melon puree. Place bowl over container of ice water; stir for several minutes or until mixture has chilled to about 40 degrees F. Cover; refrigerate 2 to 4 hours.

3. Transfer chilled mixture to 1- to 2-quart ice cream freezer; freeze according to manufacturer's instructions. Store, covered, in freezer. Makes 8 servings.

Nutrition information

Per Serving: cal. (kcal) 134, Fat, total (g) 0, chol. (mg) 0, sat. fat (g) 0, carb. (g) 36, Monounsaturated fat (g) 0, Polyunsaturated fat (g) 0, Trans fatty acid (g) 0, fiber (g) 2, sugar (g) 33, pro. (g) 1, vit. A (IU) 485.9, vit. C (mg) 26.57, Thiamin (mg) 0.04, Riboflavin (mg) 0.04, Niacin (mg) 0.2, Pyridoxine (Vit. B6) (mg) 0.06, Folate (µg) 4.03, Cobalamin (Vit. B12) (µg) 0, sodium (mg) 39, Potassium (mg) 128, calcium (mg) 20.19, iron (mg) 0.36, Percent Daily Values are based on a 2,000 calorie diet



Bee Thinking About

National Pollinator Week: June 20-26, 2016

The Pollinator Partnership is proud to announce that June 20-26, 2016 has been designated National Pollinator Week by the U.S. Department of Agriculture and the U.S. Department of the Interior.

National Pollinator Week is a time to celebrate pollinators and spread the word about what you can do to protect them. Nine years ago the U.S. Senate's unanimous approval and designation of a week in June as "National Pollinator Week" marked a necessary step toward addressing the urgent issue of declining pollinator populations. Pollinator Week has now grown into an international celebration of the valuable ecosystem services provided by bees, birds, butterflies, bats and beetles.



**FREE POLLINATOR FRIENDLY
PLANTING GUIDES**

Invite pollinators to your neighborhood by planting a pollinator friendly habitat in your garden, farm, school, park or just about anywhere!



To download your regional guide, visit: <http://pollinator.org/guides.htm>
Inside each guide you'll find 24 pages of native planting information.
All in full PDF Format.

Where can I Buy Native Plants?

Visit Plant Native's site to find a nursery near you using your zipcode.
www.plantnative.org



Bee Thinking About BeeSmart® Pollinator Gardener

"The Bee Smart Pollinator Gardener app has been the easiest and most useful tool that I have used this year in helping to plan an array of public pollinator gardens around my region."

Sarah Red-Laird, Bee Girl

Plant a garden that butterflies, hummingbirds, and bees will love as much as you!

The Bee Smart® Pollinator Gardener is your comprehensive guide to selecting plants for pollinators specific to your area. Never get caught wondering what plants to buy again! It is available on both Android and iOS (iPhone, iPad, iPod) platforms.

With the Bee Smart® Pollinator Gardener's easy user interface, browse through a database of nearly 1,000 native plants. Filter your plants by what pollinators you want to attract, light and soil requirements, bloom color, and plant type. This is an excellent plant reference to attract bees, butterflies, hummingbirds, beetles, bats, and other pollinators to the garden, farm, school and every landscape.

Features include:

- Nearly 1,000 pollinator friendly plants native to the United States.
- Customizable plant lists based on your preferences including pollinator type, flower color, soil type, sunlight and plant type.
- Regionally specific plant lists based on the geographical and ecological attributes of your location (your ecoregion) just by entering your zip code!
- A wide variety of perennials, annuals, trees, shrubs, and vines to browse.
- An easy to use search option for querying on common or botanical plant names.
- Colorful plant images.
- Once you've created your customized plant list by starring your favorites, simply bring it to a nursery or garden center – never forget what to buy or plant again!



BeeSmart is a registered trademark of Bee Smart Designs, manufacturers of Ultimate Beekeeping Equipment, and is used with permission.

Bee Thinking About Kids and Bees

Kids and Bees -

www.facebook.com/kidsandbees

Kids and Bees, an American Beekeeping Federation program designed to introduce children to bees and beekeeping in a positive, educational, and engaging way, and is coming to the Eastern Apicultural Society conference in New Jersey this July!



Why is the work of the Kids and Bees program important? Our bees provide one out of every three bites of food that we eat. No bees, no food, no us. It will be up to the next generation to not only understand their importance, but to take action in their conservation, and maybe even step into a pair of beekeeping boots to carry on the tradition. The Kids and Bees program teaches kids why our bees are essential to everyday life and how they can be honey bee heroes.

Kids and Bees is partnering with EAS to offer a one day "Beekeeping Academy" for students going into grades 4-6, a one hour "Fly-In" program for elementary aged kids, as well as a "train the trainer" opportunity for you!

2016 EAS Beekeeping Academy

The Beekeeping Academy is a one day camp for up to twelve kids going into grades four through six. Students will spend their day in a fun and educational immersion into the world of the bee. During the morning hours, we will take an in-depth look into bee anatomy, biology, and sociology, and their vital role in our food system. The afternoon will be spent up close and personal with honey bee hives and native bee observations. Throughout the day students will learn about present challenges bees face, and how they can be part of the solution in the bee's survival.

Exact drop off and pick up location will be send to students the week before the academy.

The camp will run on Thursday, July 28th from 9:00am to 3:00pm at Stockton University in New Jersey. Students can register at www.easbeeacademy2016.eventbrite.com. The 2016 Bee Academy is a collaboration between the Eastern Apicultural Society, the Foundation for the Preservation of Bees, Stockton University, and Bee Girl.

Register here: <https://easbeeacademy2016.eventbrite.com>

Kids and Bees

2016 EAS "Fly-In" Program

We will bring our "Kids and Bees" interactive exhibit to the Eastern Apicultural Society Conference on July 27th. Kids and their families are invited to campus for a brief and entertaining honey bee lesson, followed by hands-on exhibits. The exhibit session will consist of activities including: beeswax foundation candle rolling, honey, pollen and propolis tasting, a microscope station with bee body parts and pollen, a bee/human nutrition station where kids learn about the importance of planting for honey bees and also their connection to our food, a bee finger puppet making station, an observational beehive, and a display with hive parts, educational frames, and beekeeping equipment.

The Kids and Bees EAS Fly In Program is limited to 30 kids, and is best suited for grades K - 5th.

The program will begin at 2pm, and closes at 3pm.

Register here: <http://eas2016flyin.eventbrite.com/>

EAS "Train the Trainer" Kids and Bees Workshop

Join Sarah Red-Laird for this dual purpose program, where EAS* invites local kids to join us for an hour long program and EAS attendees will have a chance to both volunteer for the program, and also get ideas and an outline to take home and develop, or build on, their own Kids and Bees program. The first 30 minutes will be a "train the trainer" briefing, then we'll invite the kids' group in for an hour where attendees will observe and participate in the program. The last 20 minutes will be a debrief and Q&A session, and you will leave with an education pack full of ideas and resources. Please pre-register here for this course, so the instructor can send additional details prior to the session.

*Note: you must be registered for EAS 2016 to take this course:

Register for EAS here:
<http://easternapiculture.org/conferences/eas-2016.html>

Register for the "train the trainer" workshop here:
<https://easkidsandbeesworkshop.eventbrite.com>

Contact Kids and Bees Program Director, Sarah Red-Laird, with any questions at 541-708-1127 or sarah@beegirl.org



HONEYBEES

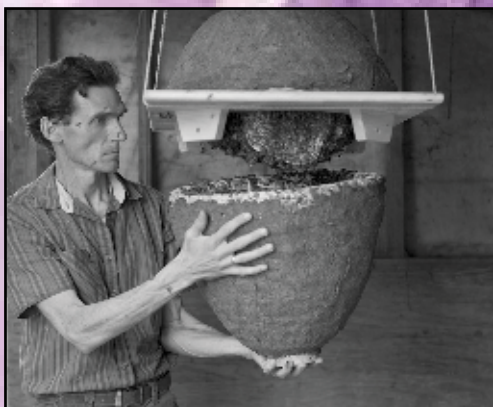
a Biodynamic Apiculture Workshop

August 6 & 7, 2016

Join us at Dancing Sophia Honeybee Sanctuary in Cleveland, NM for a journey into the deeper nature of *Apis Mellifera* in this two day exploration of the biodynamics of apiculture. We will step into the world of honeybees and enter their multidimensional landscape that constitutes an unusual and unique matrix of life and reveals the deep inter-dependencies and wholeness of the entire biosphere. **Michael Thiele** will present multiple dimensions of the nature of honeybees and a new paradigm of living with bees. We will venture into “hive-mind”; explore the inter-relationships within and outside the hive; and look at the ethical, ecological and spiritual dimensions of our relationship with honeybees.

*How can the Earth be
healed through
healing the life
of bees?*

FOR MORE INFORMATION and Registration Go To:
www.dancingsophiabees.com or call: (575) 387-5907



Michael Joshin Thiele is leading an innovative approach within the biodynamic apiculture movement and teaches in the United States and abroad. He is Founder and President of Gaia Bees (www.gaiabees.com) and is researching wild honeybees and new dimensions of apiculture in a socio-cultural, agricultural and spiritual context. In the last decade, Michael has been involved with the creation of honeybee sanctuaries and refuges as a means of protection and education. His work is documented in various national and international magazines, books and film documentaries (“Queen of the Sun”).

2 Events before the GATHERING

Apiary Class, Wed. **Sept 7**, will be taught by Lady Spirit Moon

Apitherapy Class, Thurs. & Fri., **Sept 8 & 9**, will be taught by Lady Spirit Moon. Class is limited to 20 students due to the many practicums and a full afternoon one-on-one Bee Venom Therapy.

GATHERING - September 10 & 11, 2016

Come join us for a beekeeping experience in Spring Creek, NC – a place that will:

“Provide a sacred space for sharing, learning, expressing, teaching, guiding, experiencing, healing, and understanding the components of body, mind, and spirit for the sake of and for honeybees, humans, and Mother Earth.”

Meet internationally renowned speakers on every aspect of beekeeping. Learn no-treatment beekeeping practices, how to communicate with honeybees, keep them in optimum health, grow plants for the well-being of honeybees and humans, and how to use those plants in herbal formulas. Dance bee dances, listen to storytelling, and drumming. Also enjoy, for a nominal fee, Honey Facial Massages and Reiki Sessions. Tour Lady’s apiary and honey house that includes her healing room, mini-lab, and honey workshop.

Children participating in classes taught by Sally Adams, certified to teach children in NC and SC school for science credits. They will learn about honeybee anatomy, roll and decorate beeswax candles, and more.

Go to www.BEEhealing.buzz for more information and registration

MAKE IT A FAMILY WEEKEND IN THE MOUNTAINS.



Presenter/Lecturers/Performers



Advisor/Main Speaker: Dr. Don Huber, Emeritus Professor, Purdue University, Plant Pathology

Advisor/Presenter: Andrew Goodheart Brown, International Consultant for small scale sustainable agriculture projects; Permaculture Practitioner and Teacher (nationally and internationally)





Advisor/Presenter: Corwin Bell - holistic focus on "behavioral immune system" through attentive observation, intercommunication through right timing and sustainable methods.

Presenter: BEE Healing Guild Founder: Lady Spirit Moon – Certified Apitherapist



Advisor/Presenter: Les Crowder – Topbar Hives. Author Top-Bar Beekeeping: Organic Practices for Honeybee Health.

Advisor/Presenter: Laura Bee Ferguson – Founder/Director of College of the Melissae



Advisor/Presenter: Benjamin Pixie – beekeeping, mead maker, a conjurer of spirits, herbalist, a tanner, leather worker, & warrior poet

Advisor/Presenter: Jacqueline Freeman – Author of *Song of Increase: Listening to Beekeeping and a the Wisdom of Honeybees for Kinder and a Better World.*



Advisor/Presenter: Sally Adams, Master Beekeeper, owner of MamaBeehive™ Instructs Children's Programs

Artist Matt Willey is the founder of *The Good of the Hive* Initiative - and has committed to hand-paint 50,000 honeybees in murals around the world to raise awareness about their current struggles.



Advisor/Debra Roberts – Beekeeper, international honeybee educator, speaker, mentor, advocate, artist, and writer.

Bee Dancer: Tarleton Brooks



Storyteller/Musician: Doug Elliott

Musician/singer: Sister 'Je' Spiritvoice



Gathering Extras



Master Reiki – Joyce Rawlings-Davies (Nominal fee)

Mona Hoban – Massage Therapist:



Honey Facial Massage (Nominal fee)



Greta Lee Camp – Yoga Instructor/Therapist (Free)

Randy Bell – Director of Spring Creek Spirituality (Free)





Bee Culture

The Magazine Of American Beekeeping

Get Ready For Bee Culture's Next Event **A CASE FOR HONEY**

Our case of honey is filling nicely this winter. Speakers committed so far include Dan Conlon, Warm Colors Apiaries, Massachusetts; Bob Binnie, Blue Ridge Honey Company, Georgia; Dave Shenefield, Clover Blossom Honey, Indiana; Steve Conlon, ThistleDew Honey, West Virginia; Roger Stark, Howalt-McDowell Insurance, South Dakota; Joann Dunlevey RS, Food Safety Specialist, Ohio Dept. of Ag; and a Representative of The FDA. Other speakers are firming up travel plans and will be announced as they become known.

This well rounded group has all aspects of this topic well covered. U.S. Producers, Packers, Producer/Packers, Insurance and Risk Brokers, Marketing, and all the new Food Safety rules and regulations from both Federal and State level perspectives

Unfortunately, missing from this discussion will be the National Honey Board, the marketing arm of the honey industry, and those large packers and importers who have chosen to have their annual meeting on the same weekend. The coincidence has not gone unnoticed. The focus of this event will remain on promoting and informing ambitious US Honey Producers and Packers of U.S. Honey.

New this year will be a Friday Night Social held in Bee Culture's Conference Center, the location of the Two day Conference on Saturday and Sunday. It's a low-key, meet and greet with the speakers and attendees from 5pm to 7pm on Friday where you can pick up your folders with speaker profiles, conference agenda, and lots of information on Medina's dining and shopping opportunities. Supper afterwards is on your own but you'll have plenty of places to choose from, and lots of people to join with.

Tuition is \$150.00 per person which includes the Friday night social and classes and an exceptional lunch on Saturday and Sunday. On line Registration opens April 1, 2016.

Friday Night Social, October 21, and classes and lunch Saturday and Sunday October 22 & 23, *Bee Culture's* Conference Center, 640 W. Liberty St., Medina, Ohio. Register early.

Mark Your Calendars Now!

October 22 and 23, 2016 at
Bee Culture's Conference Center
640 West Liberty Street
Medina, Ohio

Watch BeeCulture.com and these pages for program and registration information

DON'T MISS OUT!

**Kelley Beekeeping is
looking for resale partners!**

Ask yourself these questions:

*Is your local beekeeping community
strong and active?*

Do you teach beekeeping classes?

*Would you like to run a business that
aligns with your passion?*

**If you answered YES,
we may have
an opportunity for you!**



Contact Us Today

Email: aconstant@kelleybees.com

Or Call: 800-233-2899 ex. 213

Bon Aqua Springs

Full Line of Equipment

- 8 & 10 Frame Hives and Nuc's
- Protective Gear
- Honey Extracting Equipment
- Hive Tools
- Natural Treatments
- Education and more...



931-670-6862

basprings.com

BASTIN HONEY BEE FARM

Indiana

- *HIVE KITS
- *HIVE COMPONENTS
- *PACKAGES AND NUCS
- *QUEENS

- *PERSONAL PROTECTION
- *BEEKEEPING TOOLS

- *PROCESSING EQUIPMENT
- *BOTTLING NEEDS



www.bastinhoneybeefarm.com
5002 W. 450 S., Knightstown, IN 46148
Bastin Honey Bee Farm
ph: 765-987-8385

Bee Well Honey Farm
205 Hampton Ave
Pickens, SC 29671
864-898-5122
www.beewellhoneyfarm.com



N1829 Municipal Dr.
Greenville, WI 54942
920.779.3019
www.honeybeeware.com



Graham's Bee Works Inc.
Beekeepers Helping Beekeepers

Package Bees, Nuc's, Queens

Full line of beekeeping supplies and classes
121 West Washington Street Morgantown Indiana 46160

Visit our web store at www.grahamsbeeworks.com

If you have any questions please feel free to call us at 812-597-2000 or email us at store@grahamsbeeworks.com
Celebrating 25 years of serving beekeepers

Full line of
Beekeeping
Supplies,
Woodenware,
Protective
Clothing and
Honey
Containers.



Shipping Nationwide
Call or See Website

930 N Freedom Street, Ravenna, Ohio 44266
877-529-9233
www.blueskybeesupply.com



LIKE US AT
**Kelley
Beekeeping**



**YouTube.com/
KelleyBees**

MONTGOMERY FARMERS
CO-OP

Clarksville's Beekeeping Headquarters!

We have the know-how to get you started!

Beekeeping Supplies

- Complete Hives
- Frames
- Supers
- Wax Foundation
- Feeding Supplies
- Extraction Tools
- Protective Clothing
- Packaging Supplies

WE STOCK BOTH 8 & 10 FRAME

1801 WILMA RUDOLPH BLVD.
 CLARKSVILLE TN, 37040
 (931) 648-0837

Southwestern Ohio Hive Parts

Southwestern Ohio Hive Part
 3900 E. St. Rt. 73
 Waynesville, OH 45068

Manufacturers & Retailers of Beekeeping Supplies

937-435-5112

Closed Saturdays

- Starter Kits
- Frames
- Hive Bodies
- Smokers
- Tools

Seib's Hoosier Honey

Providing a full line of beekeeping services, supplies and products, conveniently located in the heartland of bee country.

Nucs
Beginning Beekeeping Kits
 Kelly dealer with a full range of beekeeping equipment

Pollination
 Special and unique gifts for all events
Honey and Hive Products

Contact us today with your beekeeping needs.

7784 N. Sanctuary Lane
 Mooresville, IN 46158
 (317) 432-5342
 seibshoosierhoney@yahoo.com
 www.seibshoosierhoney.com

WOLF CREEK BEES

PACKAGE BEES AND QUEENS
SHIPPING AVAILABLE

930 HWY 438, CENTERVILLE TN
 931-729-9229
 WOLFCREEKBEEES.COM

VISIT US ON FACEBOOK

Hidden Happiness Bee Farm
Home of the Original Wind Look

FULL LINE OF BEE SUPPLIES

336-957-0275
 www.hhbeefarms.com

KelleyBees Dealer - Eastern Missouri Region

isabee's

BEEKEEPING SUPPLIES & LOCAL BEES
CLASSES & EQUIPMENT RENTAL
ON-SITE CONSULTING & MANAGEMENT

location & store hours at isabees.com 314-894-8737

 **@KelleyBees**

 **JOIN US ON PINTEREST**
KelleyBees.com



UPCOMING EVENTS

June 2016

Washington: Instrumental Insemination Courses with Sue Cobey at WSU

May-July 2016

For more info, visit <https://honeybeeinsemination.com/>

Email: suecobey@mac.com

Virginia: Sustainable Biodynamic Beekeeper Training

June 2-4, 2016

Spikenard Farm Honeybee Sanctuary
401 Hideaway Lane, Floyd, VA

Kansas: 125 year celebration of NEKBA featuring Dr. Jamie Ellis

June 4, 2016

Info: <http://www.nekba.org/>

Kentucky: Kelley Beekeeping Field Day

June 4, 2016

807 W. Main Street, Clarkson, KY 42726
Info: www.kelleybees.com/

Missouri: Queen Rearing Class with Cory Stevens

June 4, 2016

Columbia, Missouri
Info: www.boonebees.org

Connecticut: 125 year anniversary featuring Dr. Larry Connor & Dr. Diana Sammataro

June 11, 2016

Connecticut Agricultural Experiment Station
123 Huntington St
New Haven, CT
Info: www.ctbees.com

IA: Iowa Honey Producers Summer Field Day

June 11, 2016

Goodell Community Center
315 Broadway, Goodell, Iowa
& Pat & Peggy Ennis' Apiary
2105 110th St. Goodell, Iowa
Contact: Mary Wiltgen tmwiltgen@gmail.com
Tel: 563-920-9628

MD: Intro to Simple, Smart Beekeeping

June 11, 2016

Hosted by Kirsten & Michael
Traynor of Flickerwood Apiary
Info: www.mdbee.com

Indiana: Purdue Field Day with Gary Reuter

June 18, 2016

Purdue Bee Lab, West Lafayette, IN
Info: <http://indianabeekeeper.com>

MA: Western Mass Bee Field Day

June 18, 2016

Info: www.massbee.org

New Mexico: Zia Queenbees Farm & Field Institute Monthly Short Courses

June 18, 2016

Info: <http://ziaqueenbees.com/zia/wp-content/uploads/2016/04/INTRO-TO-APICULTURE-taos-slip-2016-1.pdf>

USA: National Pollinator Week!!!

June 20-26, 2016

Nebraska: Cooperative Extension Introductory Beekeeping Courses with Judy Wu-Smart, Marion Ellis, Erin Ingram, Natalia Bjorklund, and Warren Nelson
June 25, 2016
University of Nebraska

103 Entomology Hall, Lincoln, NE

Contact: Jeri Cunningham,
jcunningham1@unl.edu
<http://entomology.unl.edu/2016beeworkshops.pdf>

July 2016

NC Beekeepers Summer Meeting

July 7, 8, & 9, 2016

Hickory Metro Convention Center
1960 13th Avenue, Hickory, NC
Info: www.ncbeekeepers.org

New Mexico: In Her Majesty's Chambers: Intro to Queen Breeding & Rearing Short Course with Mark Spitzig & Melanie Kirby
July 16-17, 2016

Zia Queenbees Farm & Field Institute
Truchas, New Mexico 87578
Info: www.ziaqueenbees.com/zia

Pennsylvania: 2016 International Conference on Pollinator Biology, Health and Policy
July 18-20, 2016

Penn State Campus, University Park, PA
Info: <http://ento.psu.edu/pollinators/events/2016-international-conference-on-pollinator-biology-health-and-policy>

New Jersey: Eastern Apicultural Society of North America Conference

July 27-29, 2016

Richard Stockton University, Galloway, NJ
Info: www.easternapiculture.org

Washington: Instrumental Insemination Courses with Sue Cobey at WSU

May-July 2016

For more info, <https://honeybeeinsemination.com/>
Email: suecobey@mac.com

We'd love to share news of your upcoming events. Please send the event name, date, website and/or contact information by the 10th of each month for inclusion in the following month's issue. Editor@KelleyBees.com