News 'n Views...

The January meeting of the PA Pollinator Protection Plan was canceled due to the winter snowstorm that buried the southeast portion of the state. It was rescheduled and held, February 25th at the Pennsylvania Department of Agriculture building. The purpose of the meeting was to begin developing a statewide, voluntary pollinator protection plan. The plan is intended improve and promote pollinator health, while responding to the President's directive that all federal agencies develop Managed Pollinator Protection Plans (MP3s). The plan is to mitigate risks to honey bees and other native pollinators. The directive encourages all states to work with growers, beekeepers and others to develop state plans to protect pollinators. The Apiary Advisory Board has been included in the meeting, along with a number of stakeholders from agencies and industries involved that may impact pollinators. In all, eleven of the participants are beekeepers and members of PSBA. That’s about 30% of the group. Penn State is represented by Maryann Frazier and Harland Patch. Eric Lonsdorf, a researcher collaborating with Penn State, from Franklin and Marshall College also attended.

Initially, the meeting was a conversation and exchange of ideas. We looked at a couple completed plans from other states. The idea of cloning another state was somewhat rejected. Although the overall goal is the same, Pennsylvania differs in landscape, population centers, crops, industry and many other ways. Upon leaving the four hour meeting, it was decided that some Best Management Plans (BMP) be created from the perspective of different stakeholders. For the beekeepers, it will be to identify practices and management that optimizes keeping our honey bees healthy, such as feeding as needed, mite control and hive placement. It was also felt that effective communication with potential pesticide applicators is needed.

Other BMP will address minimizing stressors, expanding quality habitat and public outreach. The MP3 is not intended to be a platform for regulation. This report does not have room for all the points of discussion and is quite preliminary.

Two surveys were conducted ahead of the meeting. One survey was directed to beekeepers that have been registered at least 5 years. The other to non-beekeepers registered with PA Plants division. Participants included private, commercial and public pesticide applicators and related businesses and organizations. The response level was 54% from 1,128 beekeepers and 15.16% response from 4,097 non-beekeepers. That’s a telling statistic by itself. My take is that beekeepers are much more aware and interested in pollinator health. It seems difficult to cut between sound science and social media. Which is perhaps why a need for research and education seemed to rank high in both surveys.

The Apiary Advisory Board will meet at the PA Department of Agriculture in mid March. One order on the agenda is to follow up with the beekeeper’s Best Management Practices as related to the Pollinator Protection Plan. This is a great team of beekeepers and researchers that represent a wide variety of Pennsylvania.

Additionally, the board will try to make progress with food safety regulations that stifle the ability for beekeepers to establish honey houses and sell honey. Bear in mind that food safety regulations may be further regulated by the Food Safety Modernization Act. This is a federal regulation passed in 2010, with rules being written by FDA after years of review. It has yet to be fully implemented. So, no matter how convincing the board may be to the state, some federal regulations may supersede. That won’t stop us from continuing to advocate for membership.

The Center for Pollinator Research at Penn State University will be hosting the third International Conference on Pollinator Biology, Health and Policy from July 18-20, 2016. The conference will be held at Penn State’s campus in University Park, PA.

The conference plans to feature three world-renowned (Continued on Page 3)
Romancing the Honey Bee

A Report on the Presentation by Clare Densely at the PSBA Conference last November

Brother Adam, a Benedictine monk at Buckfast Abbey, died in 1996, some ten years before Clare began working in the Buckfast apiaries, yet his celebrity continues. In order to understand this complex man Clare outlined the history of what was originally a Cistercian Abbey founded in 1018, was dissolved in the 1539 by Thomas Cromwell, until, in 1882, a group of Benedictine monks from France, Germany and one from Scotland moved into the remains of the buildings and began to rebuild both the Abbey and the community.

It was common for boys from poorer or religious families to become alumnates, then novitiates and eventually fully ordained monks, and who could meanwhile provide the necessary labor. It was under this scheme that Karl Kehrle, later to become Br. Adam, arrived at Buckfast from Germany in 1910, aged 11, to become an alumnate. Adam chose to stay at the Abbey for his lifetime as a lay monk and was never ordained.

In 1915, in the middle of the First World War, Adam, who was not considered strong enough to work on the rebuilding of the Abbey was assigned to help Br. Columban look after 45 hives in two home apiaries.

A critical event in Adam’s future thinking was the Isle of Wight disease. First noticed in 1904, it had spread to the mainland by 1908 where it destroyed most of the indigenous colonies in England. The Abbey lost 29 of its 45 colonies. A Ministry of Agriculture Commission cast a wide net of blame - nosema, weather, poisonous plants, chemical sprays - even the use of the movable frame hive! By 1919 the newly discovered tracheal mite, Acarapis woodii, was thought to be the cause although current explanations involve a combination of factors including chronic paralysis virus, poor weather limiting foraging, and overstocking of bees in relation to available forage.

Br. Adam maintained to the end of his life that the cause of this traumatic disease was tracheal mites, a belief that was to determine and direct his life long ambition to breed a high quality, mite-resistant strain of queens.

The 16 surviving colonies of Italian and Carniolan queens, which had been mated with local British black drones, were split using 30 Ligurian queens bought directly from Italy, which built up well and provided an excellent honey crop. Soon there were 100 hives at the Abbey, and in the same year that the war ended, Br. Adam assumed full responsibility for the apiaries. The nucs of Italian bees cross-bred with British black bees were the first and original Buckfast bee.

Clare stressed that Br. Adam believed bees to be his vocation that he had been chosen by God for this work. He endeavored to serve God and his community through his work with the bees.

(Continued on Page 5)
Romancing the Honey Bee (Continued from Page 3)

As Br. Adam focused increasingly on improving the quality of his queens, he was inspired not only by Mendel’s work on genetic inheritance but also by the theoretical writings of Professor Ludvig Armbruster, who applied the new science of genetics to the breeding of farm animals. He also took an idea from the Swiss and in 1925 established an isolated meeting site at Sherberton, which was on Dartmoor and within the large Abbey property.

What started out as a response to a distressing problem became an all-consuming passion. Between 1948 and 1987 Br. Adam travelled the world, covering more than 100 000 miles, assessing and gathering pure breeding stock to improve and add to his basic “Buckfast bee.” What he wanted, Clare said, was “a good commercial bee which had good manners, a low swarming instinct, resistance to disease and which brought in a decent crop of honey in variable conditions,” and she went on to ask, “Is there such a thing as the perfect bee? Can we breed it or is it already there?”

Adam believed consistently he could improve on nature, and Clare concedes that the Buckfast bee is a good choice for commercial bee keepers, but for her apiary the Buckfast queens are “too eggy” - she prefers a more modest self sufficient bee, and went to some length to explain why the Buckfast bee is no longer bred at the Abbey. In Clare’s experience, Buckfast bees that well meaning visitors bring to the Abbey are no better than her “Devon mongrels” with their diversity of character and variation in behavior and performance. Some of the last Buckfast bees that were bred in the 1980’s were susceptible to AFB and showed a tendency towards aggression. Clare argues that using an isolation site to restrict the drones the queen can mate with is detrimental to the long term fitness and success of the colony and she cited Keith Delaplane to the effect that “The honey bee super organism has invested hugely in genetic out-crossing, not narrow genetic specialization … When I compare this evolutionary strategy with a paradigm of narrow, trait based selection programs I can’t help but wonder if biology has something to teach us.” Clare also cited the work of Heather Matilla (who was one of our PSBA guests in Nov. 2014) to the effect that colonies headed by well mated queens produce more pheromones, are better looked after by their off spring, that communication is better in the hive and even their gut bacteria is better. Finally, Clare stressed that complex attainments of bees such as hygienic behavior are often viewed by us as a single heritable trait rather than the complex result of single bees synchronizing a multitude of relatively simple tasks.

The aim at Buckfast is to get people to engage with, and to see the world through the eyes of, not just the individual bees but the collective intelligence of a superorganism. The fact that bees create something we want has given us a long history with them, and as Mark Winston has written, “None of our other domesticated animals retain the wild characteristics found in honey bees, nor do they survive well outside of the domesticated state.” The beekeeper is regarded by some as a kind of animal whisperer or as a brave soul, or as Clare described it, “mysterious and magical, practical and skillful, knowledgeable and full of wisdom and inherited folklore. We are gentle, brave, fearless, protectors of the environment and saviors of the planet.” It is bees’ ability to sting, to defend what is theirs, that emphasizes our need to respect them, to handle them with care. Thus the theme at Buckfast is ‘gentle beekeeping’

Clare outlined how, during the relatively short time span of our existence on earth, we have valued the honey bee and developed both an economic and a spiritual relationship with her. We attribute to the bees qualities such as immortality, rebirth, industry, a soul, chastity, messengers of the gods, secret wisdom from another world, thrift, diligence, courage, prudence, posterity, harmonized living, royalty and purity.

Honey is an amazing, delicious, food made by bees for themselves as an energy rich, storable food, with a long shelf life, perfectly packaged and easily accessible. The craftsmanship of the comb in which it is stored is impeccable, the use of wax is efficient, thrifty and stunningly beautiful, and the communication and shared labor of the bees, which collaborate to make all of this, is unique.

But honey is more than a source of sweetness. It is seen by some cultures as a heavenly and therefore sacred food with healing properties, which can impart knowledge and eloquence, not to mention act as an aphrodisiac, in contrast to the chaste and sexless perception of the bees themselves.

It is made by insects from flowers that are not even ours, with a communication system that involves pheromones, dancing, buzzing, piping, shaking, food sharing, shoving and stroking, all of which is shared, circulated, processed and acted upon.

Simple actions combine to create complicated and impressive outcomes. For Clare, the authentic poetry of the hive is the superorganism with its secret language that can be glimpsed and yet not fully understood and which is based on true life rather than fanciful stories, romantic notions or pretty words.

Br Adam had a completely different agenda to Clare’s. He was into control and improvement; she prefers watching and working with what is whatever present, and yet, said Clare, “I reckon we would have had plenty to talk about though because we both love bees. But there is a strong message emanating from the hive for me as a beekeeper and a lover of bees and that is that right from the start of our relationship with them we have been altering her character and her attributes have been refined to make her easier to live with and more useful and productive for us. Its time for us to consider more seriously and with more commitment how

(Continued on Page 7)
Romancing the Honey Bee (Continued from Page 5) to make it easier for bees to live with us instead of stressing them beyond their endurance to comply with our needs and demands.”

We may not be able to achieve this all of the time - but more extensive plantings, less use of chemicals, greater diversity of food and habitat and gene pools and nesting would certainly be a good start.

Jeremy Barnes

Backyard Beekeeping

Six introductory classes for those with an interest in honey bees but with no prior knowledge. Participants will be provided with the information and skills needed to establish and maintain their own backyard hives. Meeting in an apiary in Seven Valleys, the classes will combine the theoretical (structure of a hive, honey bee biology, colony dynamics, nectar and pollen sources, common diseases and treatments, etc.) with the practical (inspecting and evaluating the growth of the bees and diagnosing the health of a colony).

The class will meet from 5:30 to 7:30pm on Wednesday April 6, 13, 20 and 27, and May 18 and 25. Handouts and suggested reading materials will be provided.

Cost: $75. Pre-registration is required as class size is limited.

For further information contact Jeremy Barnes at honeybeewhisperer@gmail.com or call 717 428 1144.

Nature Notes

Red Maple Flowers. Photo by Elizabeth via Creative Commons

When maple flowers explode into bloom with a halo of stamens around the open buds, winter is over for Pennsylvania bees. Maple nectar and pollen provide fresh sugar and protein to colonies that are industriously raising bee larvae. These larvae will have become foraging adult honeybees in time for the locust bloom in May.

Robins are gleaning fruit from trees and bushes and from the ground beneath. The birds seem to leave certain trees and bushes until something tells them the fruit is ready. Then the flocks gather to strip the fruit. Songbirds do not react to food taste the way we do. People mix cayenne pepper in with bird food to discourage squirrels, which can taste their food. The hot pepper doesn’t bother song birds. Birds have short digestive systems compared to our twenty-five foot intestines. Their guts have to work rapidly to extract nutrients. Perhaps the birds can tell by texture when fruit is ready for them.

Ducks quacking in the late winter woods? Wood frogs move from woods to shallow water where they quack and breed. The shallow water of these vernal (spring) pools is less likely to harbor fish that would eat the wood frog eggs.

Many of us prefer native plants and trees in our yards and gardens. Native plants feed the insects that are near the broad base of the web of life, keeping us surrounded with birds and butterflies. In spite of our nativist tendencies in the garden, we also like daffodils, which came originally from Spain and Portugal.

Chickadees start building nests by arranging moss on the floors of bluebird houses. Water striders appear from nowhere to skate on the surface of ponds and slow-moving streams.

Eastern Comma Photo: D. Gordon E. Robertson via Creative Commons

A warm March day will bring out comma and question mark butterflies, fifty-cent coin size butterflies with scalloped wing edges and earthy brown and orange markings. Hidden on the underside of the hind wing is a tiny white arc (the comma butterfly) or an arc with a dot (the question mark butterfly). Commas seem to be more common in Pennsylvania. Both species winter over as adults and fly on warm, late winter days.

Also wintering over are mourning cloak butterflies, which dance through the woods on warm March and April days. Mourning cloaks have dark brown wings edged with a narrow gold or cream band.

Jupiter rises in the east after dark. Orion is standing up now at center stage in the south. To the right of Orion is bright orange Aldebaran (“al-dab’-a-ran”), the bloodshot eye of Taurus the Bull. To the right of the “vee” of Taurus is the Pleiades (“plee’-a-dees”) star cluster. Sharp eyes may see a miniature Big Dipper of seven stars in the Pleiades. A telescope shows the Pleiades to be a cluster of about a thousand young stars. The Pleiades star cluster is only about 100 million years old. The Sun and the Earth are about 4.5 billion years old. To the left of Orion is Sirius the brightest of our nighttime stars.

Tim Sterrett

Honey Queen Brochures

The 2016 PSBA Honey Queen Brochures are now available! Cost is $10.00 per hundred (plus shipping). Please purchase the brochures to help you increase your honey sales and support the honey queen program. To order, contact Stewart Mathias, 514 Early’s Mill Road, Hummelstown, PA 17036, phone 717-533-2231.
In order to reflect the interests of all facets of Pennsylvania beekeeping, articles submitted for publication may on occasion express ideas contrary to the philosophy of the P.S.B.A. or a majority of its members.

Application for New and Renewal Membership
Pennsylvania State Beekeepers' Association

☐ $1.00 Junior Membership (under 17) annual dues
☐ $20.00 annual dues ☐ $25.00 family dues ☐ $200.00 Lifetime Membership

I understand the dues entitle me to the Newsletter and all other benefits of membership.

Name ________________________________________________________________

Address ______________________________________________________________

City ___________________________ State _____ Zip _______ Telephone ________

Email ___________________________ County ____________________________

☐ New ☐ Renew

Make checks payable to: PA State Beekeepers Association
Send to: Yvonne Crimbring, 2565 Southside Road, Canton, PA 17724
Upcoming Dates

To Remember
Deadline for the April issue of The Pennsylvania Beekeeper is March 28th.

Lehigh Valley Beekeepers
Wednesday, March 9, 7:00 p.m., at the LCCC, Schnecksville. 2nd & 3rd year beekeepers. Presenter: Brett Dyer. Visit LVBA website or contact Brett Dyer at 484-553-2967 for more information.

Monroe County Beekeepers
Wednesday, March 9, 7:00 p.m. at the Monroe County Conservation District, Stroudsburg. Visit the website: www.monroecountybeekkeepers.org for more information.

Lackawanna Backyard Beekeepers
Thursday, March 10, 6:30 p.m. at the Keystone College, Harris Hall, room 104, LaPlume. For additional information, contact Jared Jaffe at jared.jaffe@keystone.edu

Susquehanna Beekeepers of NEPA
Friday, March 11, 7:00 p.m. at the Claverack Bldg., Montrose. Topic: Spring prep and installation of new bees packages. Contact Jim Perkins at 570-967-2634 or visit www.susquehannabeekeeping.com for updates.

Northwest PA Beekeepers
Saturday, March 12, 1:00 p.m. at Our Lady of the Lake Church social hall, Edinboro. For more information, contact Deb Chilcott at 814-398-8520 or visit the website www.nwpabeekeeperscom

North Central PA Beekeepers
Wednesday, March 16, 6:00 p.m. at the Penn State Extension Bldg., Coudersport. Contact Joan Bradley at 814-697-7586 or email northcentralpabeekeepersassoc@gmail.com for more information.

Montgomery County Beekeepers
Thursday, March 24, 7:00 p.m. at the 4-H Center, Skippack. Topic: Evolutionary Biology. Contact Dan Boylan, dpboylan83@gmail.com or visit the website: www.montcobeekeepers.org for more information.

York County Beekeepers
Thursday, March 24, 7:00 p.m. at the York County School of Technology, York. Ben McKeen, a West Virginia beekeeper from Honey River Meadery will be the guest speaker. Visit the website www.ycbk.org for more details or contact Jeremy Barnes at honeybeewishperer@gmail.com

Burgh Bees
Tuesday, March 29, 7:00 p.m. at the Penn State Center, Pittsburgh. Discussion Topic: Package and nuc installation and what to expect the first four weeks. Spring management of overwintered hives. Visit the website: www.BurghBees.com for additional information.

Wayne County Beekeepers
Monday, April 4, 7:30 p.m. at The Park Street Complex, Honesdale. For more information, contact the Agricultural Extension Office at 570-253-5970 – EXT 4110.

Backyard Beekeeping Classes
Wednesdays, April 6, 13, 20 and 27, May 18 and 25 from 5:30 p.m. to 7:30 p.m., Seven Valleys, PA. Introductory classes for those with an interest in honey bees but with no prior knowledge. Pre-registration is required as class size is limited. For further information, see article on Page 7 or contact Jeremy Barnes at honeybeewishperer@gmail.com

North East PA Beekeepers
Wednesday, April 6, 7:30 p.m. at 32 Comm St., Honesdale. Contact Charles Kinbar at 570-497-6402, email: purepahoney@gmail.com for more information.

Susquehanna Beekeepers of NEPA
Friday, April 8, 7:00 p.m. at the Claverack Bldg., Montrose. Contact Jim Perkins at 570-967-2634 or visit www.susquehannabeekeeping.com for updates.

Lehigh Valley Beekeepers
Wednesday, April 13, 7:00 p.m., at the LCCC, Schnecksville. Rearing Queens presented by Brett Dyer. Visit LVBA website or contact Brett Dyer at 484-553-2967 for more information.

Monroe County Beekeepers
Wednesday, April 13, 7:00 p.m. at the Monroe County Conservation District, Stroudsburg. Visit the website: www.monroecountybeekkeepers.org for more information.

Lackawanna Backyard Beekeepers
Thursday, April 14, 6:30 p.m. at the Keystone College, Harris Hall, room 104, LaPlume. For additional information, contact Jared Jaffe at jared.jaffe@keystone.edu

York County Beekeepers
Tuesday, April 19, 7:00 p.m. at the York County School of Technology, York. Tri-County Meeting. Dr. Heather Matilla from Wellesly College will give two presentations: How Well-Mated Queens Will Improve the Productivity of Foraging Workers, and The Effect of Early Nutritional Stress on Bees as Adults. Visit the website www.ycbk.org for more details or contact Jeremy Barnes at honeybeewishperer@gmail.com

Northwest PA Beekeepers
Saturday, April 23, 1:00 p.m. at Our Lady of the Lake Church social hall, Edinboro. For more information, contact Deb Chilcott at 814-398-8520 or visit the website www.nwpabeekeepers.com

Beaver Valley Area Beekeepers
Monday, April 25, 7:00 p.m. at the Beaver County Conservation District Wetlands, Speaker: TBA. Contact Pattie Zyroll at 412-848-3506, email patty.zyroll@elkem.com or visit the website beavervalleybees.com

Montgomery County Beekeepers
Thursday, April 28, 7:00 p.m. at the 4-H Center, Skippack. Topic: Methods to Increase Honey Production. Contact Dan Boylan, dpboylan83@gmail.com or visit the website: www.montcobeekeepers.org for more information.

Beginner Bee Out-Yard Demonstration
Saturday, May 7, 12:30 p.m. at the Railroad Supervisor’s Club, Baden. This is a hands-on workshop for Prospective or Beginning Beekeepers. Contact Pattie Zyroll at 412-848-
RE: Colony Depopulation

Gentlemen,

Your article in the February edition of the PSBA newsletter was most interesting. I am a small time amateur beekeeper and have had similar depopulation problems in the late fall and early winter. When checking the hives in November and December, there has been a complete absence of bees with only a stray few dead bees in or around the hive. At least I know well ahead of time that a new colony will need ordered for next spring. Usually, I treat my couple of hives for mites in the late summer or early fall and it doesn’t seem to matter as far as the colony depletion in November or December is concerned. One hive will look fine and the hive next to it will have no bees remaining in the hive when checked in late November. Could it possibly be that the bees are out searching for pollen in the cooler weather and die while away from the hive, or that the fall spreading of the dairy waste (liquid cow manure), spread after the corn has been harvested, has some sort of toxic effect on the bees. I am surrounded by cornfields and the vapors from the manure are not only foul smelling to me but even irritating. If you can find a cause for this pattern of late fall colony depopulation it would be great. However, if the cause is related to the manure, there is little that I’ll be able to do about it. I can try to keep them inside the hive for a few days during and after the manure has been spread.

I will look for future information regarding this November/ December colony depopulation in future newsletters.

Bill Kirsch, Roaring Spring

(Continued on Page 13)
Jeremy's Corner (Continued from Page 11)

often unproven and unregulated.

Those who lament the loss of local farmland to residential development, or the closure of a commercial bee yard, don’t realize that their buying habits contribute to the decline of the country life that they profess to admire.

Perhaps our argument would be more effective if we challenged our customers to spend a year maintaining a colony of bees, harvest the honey, factor in their expenses, add a modest profit margin, and then sell the honey.

I did this exercise for myself. I won’t bore you with the math, but the expense side of the balance sheet is based on maintenance costs for 2015 (no packages or nucs purchased, no new hardware, no new queens bought last year,) 5 hours of management per hive per year, which is conventional wisdom but a conservative estimate, and minimum wage for labor costs.

Because of the shortened nectar flow in this area last spring (4 weeks instead of 6) we did not have a good honey year. Even so, I harvested 200 lbs. of honey for sale, which using the above calculation (and again, I stress minimum wage) works out at a little under $12 per pound. With a 20% markup so that I can continue operating next year, each one-pound honey jar would cost $14.50. That’s Economics 101. And if I include ancillary expenses like the cost of the jars and lids, transportation, conferences at which I can improve my knowledge and skills, that figure is closer to $16.00

So $8 for a one-pound jar of honey works out, conservatively, at 50% of my production costs.

I have two things in my favor. First, I am not in it for the money; keeping bees brings rewards for which there is no monetary value. And secondly, I can keep the Chairlady of the Family Finance Committee happy by making up the deficit through offering classes, selling the occasional nuc, filling a few small pollination contracts, and writing the occasional article for commercial journals (as compared to association publications like this one.)

And yet I have to ask, why is it that the public expects beekeepers, and many others involved in the agricultural community, to have to supplement their income because the market will not support a fair price for their products? The answer for me is education - educating the public that good food, as with everything else, has a price attached, and with the concomitant improvement in public health, that increased outlay is still relatively inexpensive.

Education, by good and consistent communication, is the only way we can bring others along on the journey, so that they walk beside, and not behind, us.

Jeremy Barnes

Previous copies of Jeremy’s Corner cane found at honeybeewhisperer.simplesite.com