President’s Message

October 2017

Well, we are nearing the end of the beekeepers’ calendar year. Hopefully you and your bees were very productive and you harvested a bumper crop. That brings us to the upcoming Mass Bee Fall Meeting on November 11th... have you considered entering the honey and wax show? This is a great opportunity to show off your skills. We will also have our cooking competition which was a great success last year; please bring along a sweet treat made with honey.

Mass Bee has been working hard planning our fall meeting in conjunction with the help and great support of the Hampden County Beekeepers. They have secured the venue of Westfield State University and planned your lunch, Speakers dinner Friday night as well as accommodations close by right off of route 90. More details follow in this newsletter.

We are very excited about having a meeting in the western part of our great state of Massachusetts. Hopefully our members in the west as well as our neighbors in adjoining states will be able to attend given the shortened drive to the meeting. As always, the vendors will be in attendance allowing you to pick up your orders without paying shipping. Please share widely and let everyone know about this great educational opportunity to learn from the experts, participate in great discussion and meet with other beekeepers.

See you at the meeting!

Pete

Peter Delaney
There’s a lot of talk these days about the “big 3” of honey bee health – Pests/Diseases, Environmental poisons, and Nutrition. In this article, we’ll talk about natural nutrition – nutrition derived from plants, as opposed to prepared feeds and pollen substitutes.

Bees and flowers have a special relationship. Bees need plants for food – pollen for protein to support development of brood into adults; nectar, to convert to honey, for energy and winter heat generation. And many flowers need bees to transfer pollen so the plant can reproduce.

The science of pollination could be a whole article in itself, but basically, plants produce nectar in their nectaries to draw bees, hummingbirds, and butterflies in to get the nectar for food. While the bee is in the flower getting nectar, pollen rubs off of the anther, and sticks to the bee’s body. As the bee moves around on the flower, or from flower to flower, the pollen is transferred to the stigma and a seed can be made. As the bee works the flower, she packs the pollen into pollen baskets (corbicula) on her legs, to bring back to the colony.

What do bees want to eat?

“Man does not live on bread alone”, and similarly, bees should not be expected to live on food from only one source. Bees need a diverse selection of food sources, all through the year. There are “wild” food sources
available, like trees and wildflowers, but as these sources disappear with ever-expanding roadways and housing developments, we need to plant to provide our own food sources for bees. (pic 2)

What makes a good bee plant?

Nectar is somewhat complex, but it is basically made up of sugars and water. Sucrose, glucose and fructose may exist in different proportions in different nectars. Honeybees prefer nectar made up of the 3 sugars in equal proportions. Plants in the legume family have this nectar makeup – black locust, alfalfa, white clover, and yellow clover being the most desirable to bees.

During their processing of the nectar, honeybees add an enzyme, invertase, to convert the sucrose to glucose and fructose before depositing it into the comb. The more glucose in the honey, the greater the chance of crystallization occurring. So when someone tells you that their honey “went bad” just tell them that it simply has high glucose content.

Bees prefer an open corolla (the whorl of petals around the center of a flower) with the nectaries and reproductive parts fully exposed. (pic 3, RIGHT)

The raspberry has multiple anthers and stigma all out in the open, so a bee looking for nectar comes into contact with all of them at once, producing many seeds and beautiful fruit. (pic 4, 5 NEXT PAGE)

Flower color is important in attractiveness to bees. Bees see differently than we do and are drawn to bright colors and high contrast – bright blues,
purples, yellows and whites. Some red and lighter colored flowers incorporate guides to help lead pollinators to the right place.

So, you see, the bees prefer plants that offer good nutrition and ease of access to the food.

What makes a bad bee plant?

It’s physically impossible for some species to get pollen and nectar from certain flowers. For example, honeybees are known to love all types of clover, but red clover has a deep corolla and certain bees, especially Carniolans, have a proboscis that’s too short to reach the nectar, so they avoid it. Some bees “steal” nectar from deep flowers by breaking in through the side, thus bypassing pollination. Honeybees will take advantage of the opening to do the same. (pic 6, NEXT PAGE)

Double flowers are very showy and formal, but are of little value to bees. In some cases the extra set of petals replaces the reproductive parts so the plant is sterile, and in others the nectaries are completely hidden. Some rhododendrons and azaleas, and the red chestnut, are known to have substances in their nectar that are toxic to honeybees, so bees tend to avoid them.

How can we help our bees find diverse, healthy food?

We can plant. We can leave areas of our yards more natural to provide habitat. Grow patches of flowers, 10 sq. ft. or more, so that groups of bees can work on an area as they like to do. Bees basically relearn how to get
nectar and pollen from each plant they visit, so a large patch of a preferred flower will let them work that patch over and over. If you’re going to plant spring bulbs, plant them by the hundreds. A diverse selection of flowers growing over the entire growing season is the goal. Typically the months of July and August are light on flowers in New England. That is an area we are always working on. As beekeepers, we have a vested interest in a long period of nectar flow. We like a good honey crop for our own use and we also want the bees to have good stores of honey to get them through the winter. As gardeners, we want to have a large force of foraging bees to pollinate our crops. So we watch what the bees seem to like and we plant more of them.

Remember that honeybees and other pollinators are preferential to plants that provide the most nutrition, so when certain species are in bloom, they may ignore others, but then may move to those later. Again, diversity, through the seasons, is the key.

What should we plant?

Flowering herbs. Herbs are a prime source of beneficial, healing pollen and nectar. Researchers have found that sick bees will go to these plants when they feel that they need some healing. Many herbs can be grown as ground covers. Some examples of herbs for bees are: thyme, oregano, basil, motherwort, lavender, marjoram, sage, lemon balm and calendula. Calendula is especially important late in the year, as it can bloom into December if the weather allows.

Fruits: raspberries, blackberries, apples, pears, peaches, currants, gooseberries, blueberries and cherries are all good sources for bees. An added benefit is the fruit production you realize when you have a foraging force pollinating them.
Trees are slow to establish, but are very important, since they provide a large foraging area on a small patch of land. Locust, linden, maple, redbud, hawthorn, bee-bee tree (Evodia), and Seven-sons flower are good examples. Many of these trees are important in the spring nectar flow.

We grow a lot of flowers, and the following are based on our observations in our gardens. We tried to come up with a “top five” for each season, but found that there are more worthy of mention. (SEE BELOW)

If you’d like a more comprehensive list, you can email Ed at lunariafarm@outlook.com and we’ll send you one.

Happy planting!

Ed and Marian Szymanski

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**Our Top Bee Flowers**

**Spring:**
Crocus, Dandelion, Grape Hyacinth, Lunaria, Camassia, Milkweed.

**Summer:**
Buckwheat, Clover, Catmint, Poppy (Breadseed), Echinacea, Mountain Mint, Clethra (Sweet pepperbush)

**Fall:**
Sedum, Goldenrod, Aster, Red Bamboo, Wingstem, Sunflower, Dahlia (single)

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(pic 8, ABOVE) We recently discovered Camassia, and it’s a spring favorite!

(pic 9, RIGHT) Five bees on one breadseed poppy
(pic 10) Mountain mint is a huge summer favorite

(picture)

(pic 11) We've added a lot of Sedum, and it's the bees' new fall favorite (and ours)

(picture)

(pic 12, ABOVE) We planted Wingstem after seeing bees on them at Dan Conlon’s place

(picture)

(pic 13, RIGHT)
Dahlias are popular this year →

(picture)
New pollinator garden mostly started from seed this year

Honeybee on Hawthorn tree

It’s hard for bees to see red and pastel colors, so a good bee plant like this poppy incorporates contrasting “landing guides” to guide them

All pictures courtesy Ed Szymanski
Summer 2017 Legislative Update

By Cliff Youse, Plymouth County Beekeepers Association

Earlier this year Representative Carolyn Dykema’s bill, H.2113, An Act to Protect Massachusetts Pollinators, was co-sponsored by an unprecedented 135 legislators. Subsequently, in a further demonstration of support, Senator Jamie Eldridge filed an identical companion bill, S.2164, An Act protecting Massachusetts pollinators, on June 16.

Since then, the list of supporters of this legislation has expanded to include:

- BJ's Wholesale Club
- Conservation Law Foundation
- Environment Massachusetts
- Follow the Honey
- Friends of the Earth
- Green Century Capital Management
- Loring, Wolcott and Coolidge Investment
- Massachusetts Audubon
- Massachusetts Beekeepers Association
- Massachusetts League of Environmental Voters
- Metacomet Land Trust
- New England Wildflower Society
- Northeast Organic Farmers Association, Massachusetts
- Northwest Atlantic Marine Alliance
- Old Friends Farm
- Round the Bend Farm
- Sierra Club Massachusetts
- The Trustees of Reservations
- Toxics Action Center
- Trillium Asset Management
- Western Massachusetts Pollinators Network
- Westport Fisherman's Association
- Westport River Watershed Alliance

In the private sector, over 135 retailers including Walmart, True Value, Home Depot, Lowe's, Costco and Whole Foods have pledged to eliminate neonicotinoids. Also, Ortho, a subsidiary of Scotts Miracle-Gro, is phasing out neonicotinoids as an ingredient in its outdoor garden products.

H.2113 and S.2164 seek to limit the use of the neonicotinoid class of systemic pesticides to licensed pesticide applicators only. They also contain disclosure components that give consumers the information they need to opt out of purchasing seeds, plant material or pesticide application services where neonicotinoids are used. The states of Maryland and
Connecticut have already passed similar legislation and other states are also considering it. It is common sense legislation whose time has arrived.

There are also three other pollinator related bills that establish commissions to advise the legislature on potential legislation to promote pollinator habitat or forage. In each case, although the bills are pro-pollinator, the makeup of the commissions include only a small percentage of beekeepers.

The bills are:

- **S.451, An Act to protect pollinator habitat.** – Senator Jason M. Lewis
- **H.457, An Act to promote pollinator forage.** – Representative Keiko Orrall
- **H.2926, An Act to protect pollinator habitat.** – Representative Mary Keefe

S.451 and H.2926 are also companion bills that are essentially identical. They are supported by and were initiated at the request of the Audubon Society. Representative Keefe is a beekeeper and a member of the Worcester County Beekeepers Association. Senator Lewis and Representative Keefe filed their bills simultaneously, demonstrating joint Senate and House support for a pollinator habitat bill.

On August 31 Representative Dylan Fernandes, a **Joint Committee on Environment, Natural Resources and Agriculture** (ENRA) member, filed bill **H.3927, An Act empowering towns to protect their environment and residents from harmful pesticides**. This legislation would remove state preemption over local, municipal ordinances regarding the sale, use and disposal of pesticides when the local ordinances are stricter than state law, as is the case in the state of Maine. Cities and towns would then be able to ban the sale, use and disposal of pesticides within their jurisdictions as the city of South Portland, Maine has done with neonicotinoids. Although H.3927 has been assigned to ENRA it has not yet been assigned a hearing date and because the bill was filed late, the window for cosponsoring it was limited to seven days and has already passed.

H.2113, S.2164 and all the pollinator bills have been assigned to **ENRA**. Hearings on H.2113, S.2164, S.451, H.457 and H.2926 were held on October 3, 2017 at the Statehouse. There was a large crowd of beekeepers, concerned scientists, horticulturists and environmental activists in attendance with standing room only, throughout most of the hearing. Representative Carolyn Dykema testified on behalf of her bill, H.2113 as did many beekeepers including Ed Szymanski from the Norfolk club, Shira Wolberg and Tony Piscano from the Northern Berkshire club, Ernie Huber and Mark Hanson from the Middlesex club and Mary Duane, Dave Lewcon, Dick Callahan and Glen Card from the Worcester club. Glen drove 8 hours from western New York to testify. By all accounts, the testimony in favor of H.2113 was well received by the committee and we are hopeful that will translate into a recommendation to pass the bill when the committee reviews the testimony in executive session.

If you would like to call, email or meet with your legislators in person to urge them to support any of these bills you can find them at [https://malegislature.gov/Search/FindMyLegislator](https://malegislature.gov/Search/FindMyLegislator).

Cliff Youse

Plymouth County Beekeepers Association
Mass Bee Fall Meeting Details

Saturday, November 11, 2017  
8 AM – 4 PM
Westfield State University, Scanlon Hall, Westfield MA 01085

Come join us for an outstanding educational event hosted by Hampden County Beekeepers Association and sponsored by the WSU Environmental Science Department*.

SPEAKERS

Meghan Milbrath  Coordinator, Michigan Pollinator Initiative, Michigan State UniversityDept of Entomology
Meghan’s topics:
Varroa Biology and Management
Sustainable Northern Beekeeping using Late Season Nucs Overwintering
http://msutoday.msu.edu/360/2015/meghan-milbrath-honeybees-and-pollinators/
http://www.canr.msu.edu/people/meghan_milbrath

Rachael Bonoan  PhD candidate at Tufts University, President Boston Area Beekeepers
Rachael’s topics:
Why do Bees Like Dirty Water?
Honey Bee Nutrition
https://www.rachaelebonoan.com/

All attendees must be current Mass Bee members or *WSU Environmental Science students. Can join online or pay for membership at the door ($15 for individual, $20 for family and $25 for organization.) Payments by credit card are accepted on our web site via Mass Bee’s online membership form →  https://www.massbee.org/membership/.

Lunch MUST be reserved at least 1 week before the meeting (deadline is November 4th.)

Details and schedule will be available soon on our web site  https://www.massbee.org.

Updates & notices will be posted on the Mass Bee Facebook page
https://www.facebook.com/MassachusettsBeekeepers/  and shared in our Facebook group
https://www.facebook.com/groups/1478288992482523/

Don’t forget to enter the honey show! Rules will be posted on the web site.
Mass Bee Fall Meeting Lunch Option  $15 per person

Must be reserved one week in advance. Registration / Reservation info will be forthcoming on our website https://www.massbee.org

Lunch includes Sandwich (or salad*), Hand Fruit, All Natural Chips, Water, and Bakeshop Cookie. Served in a Compostable Paper Tote Bag.

SANDWICH SELECTIONS

Turkey Lettuce, Tomato, Artichoke Pesto Aioli, Swiss
Ham Lettuce, Tomato, Honey Mustard, Swiss
Roast Beef Lettuce, Tomato, Cheddar, Horseradish Cream
Tuna Salad Spinach, Swiss, Tomato

Veggie (V) Avocado, Red Pepper Hummus, Cucumber, Carrot, Tomato, Alfalfa Sprouts, Provolone
Caprese (V) Fresh Mozzarella, Tomato, Lettuce, Pesto Club
Turkey, Bacon, Lettuce, Tomato and Cheddar

*OPTIONAL SALAD instead of sandwich (choose from Caesar or Garden Salad with Chicken)

ACCOMODATIONS

Holiday Inn Express & Suites Westfield

Address: 39 Southampton Rd, Westfield, MA 01085
Phone: (413) 564-6900

Westfield State Rate is $99 plus tax include a king or 2 queen beds. Suites are $109 and include a fridge, microwave. (Mention MASS BEE event at WSU)

VENDORS CONFIRMED

BEE TREE ACRES (Local Westfield Supplier)  https://www.beetreeacres.com/
BETTERBEE  https://www.betterbee.com/
MANN LAKE (Pending)  https://www.mannlakeltd.com
SLOVENIAN BEEKEEPING TOURS & HIVES  http://www.slovenianbeekeeping.com

Please contact Andrew Preissner if you are interested in vending at  apreissner@amptechconsulting.com
Mass Bee Field Day Pictures
June 17th 2017 at the State Apiary Umass Amherst
photos courtesy Renae Barton
Mass Bee is now accepting online applications! This makes it easy to join & keep dues and information up to date using a credit card. The form can be accessed here: https://www.massbee.org/membership/

To have your notice included in the next Mass Bee newsletter, please contact the editor at: correspondingsecretary@massbee.org

Massachusetts Beekeepers Association Officers

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Web Site: www.massbee.org
Facebook: https://www.facebook.com/MassachusettsBeekeepers

Massachusetts Beekeepers Association Online Application:
https://www.massbee.org/membership/
Massachusetts Beekeepers Association Membership Application

Application Date: ____________________________

Check #: ______  Amount: ______________________

Membership Year: ____________________________

New: _____________ Renewal: _________________

All Memberships run from January 1st through December 31st in a given year.

NAME(S): __________________________________________________________________________________

ORGANIZATION: ____________________________________________________________________________

ANNUAL MEMBERSHIP TYPE:  
Individual $ 15.00 ____________  
Family $ 20.00 ____________  
Organization $25.00 ____________

ADDRESS: __________________________________________________________________________________

__________________________________________________________________________________________

EMAIL #1: ____________________________________________

EMAIL #2: ____________________________________________

PHONE: ______________________________________________

County Beekeeping Association: ____________________________

Completed applications along with payment made out to the “MBA” should be mailed to:

MBA Memberships  
PO BOX 234, Halifax, MA  02338

Applications may also be emailed to treasurer@massbee.org

Or fill out the form online on our web site at https://www.massbee.org/membership/

Annual membership dues are subject to change; please check our web site for current information.