



# Buzz Words



[www.barnstablebeekeepers.org](http://www.barnstablebeekeepers.org)

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Barnstable County Beekeepers Association

April 2016

## *APRIL MEETING*

The next meeting of the club is Tuesday, April 12th, at 7:30 p.m. at the West Barnstable Community Building, Route 149, West Barnstable. Our April meeting will feature Rachel Bonoan, Tufts University Researcher from the Stark laboratory. She will be speaking on:

### **Why do honey bees like dirty water? An update**

Beekeepers have observed that honey bees forage from dirty water sources over clean ones. While the mechanism by which honey bees find dirty water sources is likely scent, the *reason* they look for these dirty water sources in the first place has yet to be examined. Since micronutrients are essential for many physiological functions (e.g. muscle movement and immunity), and are only found in nectar and pollen in trace amounts, I hypothesize that to obtain a well-rounded diet, honey bees selectively forage in soil and water for minerals that the colony may lack. In my talk last year, I discussed my results on the seasonality of mineral preferences in honey bees. This year, I will present data from my third and final field season, and update you on the seasonality of mineral preferences. I will also present data on how such mineral preferences might link to hive health (specifically adult population and the amount of capped brood).

Nibbles and sweets would be so very welcome!!

## *CALL TO ANNUAL MEETING*

Annually at our April meeting, election of officers and board members takes place. On April 12<sup>th</sup>, 2016, just prior to our featured speaker, we will elect these positions and nominations may be taken from the floor by the president.

Proposed officers are:

**PRESIDENT:** Kalliope Egloff

**VICE PRESIDENT:** OPEN – PLEASE HELP\*\*

**SECRETARY:** Claire Desilets

**TREASURER:** Lynn Heslinga

**BOARD OF DIRECTORS:** John Beach, Marte Ayers, Peter Cooper, Paul Lefebvre, Julie Lipkin, Rebecca Matarazzi, Joe McClure, Andy Morris, Brian O'Donnell, Melissa Sanderson, Lisa Sheehy, Mark Simonitsch, and Miguel Zamora.

**NEW BOARD OF DIRECTOR VOLUNTEERS:** TO BE VOTED IN: Mary Ann Mann, Maria Packett Cashdollar and Melissa Caughey.

### ***FROM THE BOARD***

For the first time ever, last fall I used oxalic acid to treat a hive showing a high varroa count. And I am delighted to report that that hive (alone among my three hives) survived the winter and is looking good and strong.

That's why I'm celebrating a report from the state's new chief apiary inspector that oxalic acid has just been approved for use as a miticide in beehives in Massachusetts.

Its common form is as wood bleach, purchased in a hardware store. ... Wait ... what?

Well, consider that oxalic acid is also a component of wood sorrel (the oxalis plant), spinach, rhubarb and cruciferous veggies, like cauliflower, Brussels sprouts and cabbages. (Oh, yeah, it's also in kidney stones – but don't eat those.)

Which is to say, it's being regarded as an organic treatment.

So ... OK, yes, I used it before it was technically approved (my bad). The only way I knew what I was doing was by following the steps outlined by biologist and 50-year beekeeper Randy Oliver on his amazing site Scientific Beekeeping. (If you haven't familiarized yourself with that site, do.) Since then, Oliver has updated his instructions and has even created an 84-slide PowerPoint presentation on oxalic acid application, available [here](#). (As a promising aside, Oliver reports there is new evidence oxalic acid may also be effective against nosema.)

I regard varroa as the greatest challenge to Cape Cod beekeeping. With its new stamp of legitimacy in Massachusetts, oxalic acid offers a valuable arrow in our quiver. I'm sure we'll be hearing more about it. Thank goodness. -----Julie Lipkin

### ***GREAT NEWS!!!***

Please note that the MA Pesticide Board Subcommittee did meet March 16<sup>th</sup> and registered the following two bee hive Varroa mite control products for sale and distribution in the Commonwealth. The Oxalic Acid product was of special interest to beekeepers in Massachusetts as it is a new product being used and distributed throughout many states and provides effective mite control when used in accord with labeling directions.

- New Active Ingredient (NAI)
- o Oxalic acid Dihydrate, formulated in the following product:

§ Oxalic Acid Dihydrate, EPA Reg. No. 91266-1-91832

- New Active Ingredient (NAI)
- o Potassium Salts of Hop Beta Acids, formulated in the following product:
  - § Hopguard II, EPA Reg. No. 83623-2

Both of these products may now be sold and distributed in Massachusetts. Please share this widely so that all can be aware that these products are now available for use in MA!!

Kim Skyrn, PhD, Chief Apiary Inspector of Massachusetts

### ***BEE FACTS AND NUMBERS***

This is part of an article gleamed from the Feb 2016 Bee Culture Magazine. Even I, after 20 years of beekeeping, found this interesting and I learned a couple new figures. The writer, Katherine Kiefer, is referring to Dutchess County in New York and Litchfield County in Connecticut so the comparison is fairly relative to our lateral position.

"A colony, from January 1 through December 31 needs 44-48 pounds of pollen (depending on quality, weather, etc.) and 150 pounds of honey (including that needed to make wax) to thrive - make the necessary brood and to collect all that they need to survive the year. Honey harvested for human consumption is above this base number of pounds for colony health, so for this example we are pulling a 55 pound average. Total requirement per colony per year is 205 pounds of honey. The general ratio of nectar to honey is 32 mg of nectar yields 17 mg of honey (Canadian Honey Council "How to Make a Pound of Honey"). This is dependent on weather and the nectar source. Bee math - one ounce has 28,350 mg in it. To make 205 pounds (76,586,435.763 mg) of honey, the bees need to collect 92,988,000 mg of nectar. Each worker bee, weighing about 80 mg herself, can carry about 70 mg of nectar in the honey sac. So, per colony, about 1.5 million bee honey sac loads of nectar are needed annually. About 100 flowers nectar yields 17 mg of honey, so 2.6 million flowers yield one pound of honey. So, to make 205 pounds of honey, workers must make 533 million flower visits. This quantity is not in your neighbor's "Bringing Nature Home" flower planting. (Also Hive and the Honeybee, Dadant, 7th printing of 1992 edition, Honey Bee Nutrition, Ch.6)

A bee can fly about 2.5 miles from her hive, which is a circle five miles in diameter = 23.75 square miles X 64 = 15,200 acres. Average commercial beeyard has 60 colonies. For this fly zone there MUST be more wildness than say, corn, or pavement, or flower gardens, or hay fields or forest."

Hum mm, food for thought.

-----Marte Ayers

## ***APRIL MANAGEMENT TIPS***

Ah, spring is here! Although we breezed through this winter, the month of April is so very welcome with so much new life erupting. And I am so itching to get into the hives to see that first generation of brood. Here are my plans when the weather warms in the next few weeks:

- remove tar paper, insulation, shims and sticky board.
- scrape top deep frames of sugar and paper and burr comb.
- brood pattern will be noted next, checking notes to see the age of the queen.
- sugar shake will be done for beginning varroa mite level.
- before rotating deep brood boxes, the bottom deep will be moved off and bottom board scraped of all debris.

If damp, it will be replaced and screen brushed with wire paint brush to open all holes of debris.

- top deep will go onto clean bottom board making sure the cluster is not getting split between the 2 deeps.
- the drone comb will be marked and added to the 2 position on the right for easy removal when drone cells are capped.
- depending on the age of the foundation, at least 4 frames will be replaced with new foundation rearranging honey frames to outer edges.
- lastly, the feeder will be filled with sugar syrup and ¼ pollen patty added if needed.

-----Claire Desilets

## ***OH, VARROA!***

Check this site out for assessing varroa mite counts. Soon the club will have uniform how-to's for members.

Free 4 x 4" 8 mesh screen will be available to encourage all beekeepers to make and use a sugar shake jar.

<https://www.perfectbee.com/blog/obtaining-and-assessing-varroa-mite-count/>

## ***WHY HONEY BEE IS TWO WORDS***

*Regardless of dictionaries, we have in entomology a rule for insect common names that can be followed. It says: If the insect is what the name implies, write the two words separately; otherwise run them together. Thus we have such names as house fly, blow fly, and robber fly contrasted with dragonfly, caddicefly, and butterfly, because the latter are not flies, just as an aphision is not a lion and a silverfish is not a fish. The honey bee is an insect and is preeminently a bee; "honeybee" is equivalent to "Johnsmith." --From **Anatomy of the Honey Bee** by Robert E. Snodgrass.*

-----Thanks to Mike Doyle

## ***TRIVIA***

- Did you know oxalic acid is a natural chemical found in honey and some vegetables? In fact, a pound of carrots contains about 2.25 grams of Oxalic Acid which is the correct dose to treat a single hive by vaporization killing most varroa mites.
- WATER – now is not too early to provide water for your overwintered bees. Bees were seen collecting water in earnest on March 12<sup>th</sup> this year. According to Wyatt Mangum, PhD (ABJ, March 2016) “nurse bees feed young larva food containing a high moisture content (70 to 80% water)”. The stored honey is 17 to 18% so this needs to be diluted for feeding unless high moisture nectar is coming in.

## ***SORRY I LIED!***

Sixty-six degree day on the upper Cape and bees were flying home with bountiful baskets of pollen on 3/23/16. So, could not resist taking a peek at the brood pattern. My scale hive has 5 -6 seams of bees, plenty of stores and currently weighs 108.5 lbs. It lost 3.5 lbs in 6 days. Syrup feeding will begin on Easter Sunday but there is still plenty of sugar brick left on top. This is the nice frame of brood I found. The queen is a Melissa swarm cell that produced a nice healthy Cape Cod Queen! -----Claire



## ***UPDATE: BEEKEEPERS BALL 2016***

Our next meeting is on 4/13 at 7pm, if anyone wants to stop in.  
We will be meeting at the Cultural Center of Cape Cod.



## ***RECIPE OF THE MONTH***

### ***FRUIT SALAD WITH HONEY VANILLA YOGURT***

#### **Ingredients:**

- 2 cups plain yogurt
- 2 tablespoons good honey
- 1/2 teaspoon pure vanilla extract
- Seeds scraped from 1/2 vanilla bean, optional
- 1/2 orange, juiced
- 1 banana, sliced
- 1/2 pint fresh blueberries
- 1/2 pint fresh raspberries
- 1 pint fresh strawberries, hulled and cut in half
- 1 bunch seedless green grapes, halved

Combine the yogurt, honey, vanilla extract, and vanilla bean seeds in a bowl and set aside. Combine the orange juice and banana slices in a separate bowl. Add the berries and grapes and gently mix the fruit mixture together. Spoon the fruit into serving bowls and top with the yogurt.

Recipe by Ina Garten, Food Network. Read more [here](#).

## ***SOMETHING FUN***

John Chapman born in Massachusetts and later known as Johnny Appleseed, in his travels through Pennsylvania and Ohio helped the nation by planting appleseeds in this region of our young nation's frontier with "malice aforethought." The Latin, generic name, for apple is *Malus domestica*. Or we could say *Malus aforethought!* ----- Pete Cooper

### ***The Continuing Beekeeping Adventures of Paul 'n Patty*** ***CHAPTER 2***

By Andy Morris

It was about noon when Paul came into the house. He had been out in one of their gardens, weeding some perennials and pruning the three fruit trees they had started from seedlings about five years earlier. He had poured himself a glass of ice water and was drinking it with his eyes closed, awaiting a brain freeze. It was curious what he saw when he opened his eyes...a very distorted Patty grinning at him through the bottom of the glass. Placing the glass down on the drain board of the sink, Paul asked, "Don't make me guess. Just tell me what you are grinning about."

"I just now got off the phone with the secretary of the bee club," Patty volunteered. "And I am happy to report that we are in luck. I signed us up for...(insert drum roll)...Bee School, which happens to start tonight."

"But," Paul started, "tonight is the final show of "Most Talented", and I wanted to find out who wins."

"I'm sure it will be a headline story in the morning news cast," said Patty. "You won't be missing anything important. School starts at 7 o'clock. We'll need to leave here by 6:30."

Panic set in quickly. Paul hated being uninformed, so he sat down at his Mac and called up the search engine he used the most. The only problem now was he didn't know what to search for. He tried to think of all that knew about honeybees, and determined that he didn't know very much. On a whim, he typed in Honeybees, and to his surprise, millions of hits appeared on his screen. It seemed like this was going to take all afternoon...at least.

Patty came in just at that time. "Whatcha doin'?" she asked.

"I thought I'd find out some stuff about bees before we go to school so I don't look stupid," said Paul. "I hate not knowing something. The only problem is there is too much information. I can't learn it all before this school starts."

“Well, we know there is a queen bee,” said Patty. “Why not start with a search for queen bees?” Paul typed in ‘Queen Bee’ and got nearly as many hits as before.

“Sure seems like there is a lot of information and research being done on honeybees and queen bees,” said Paul. “I think I’ll just look at the recent stuff, since we are really interested in what is going on with the bees today.”

Bee School was being held at the community center next to the public library. There were about fifteen cars in the parking lot when they drove in. Several people were walking up the steps toward the large double doors. Paul, in a slight panic, and Patty, thrilled about the prospect of attending bee school, walked hand in hand toward those same doors.

Inside, there was a registration table. A genial elderly lady and a gray-bearded, wrinkled gentleman sat the table. The lady smiled and said, “Welcome. We are taking new students for our annual bee school. If you are interested, please sign your names on this

list, pick up a registration form and an information packet, and go on into the room. You can sit anywhere...it isn’t church, so feel free to sit up near the front. You’ll better be able to hear.”

Paul and Patty entered the large room. Paul turned left toward the back of the room and Patty turned right, headed for the front. Their hands separated. Paul stopped, his head dropping. He turned toward the front of the room and shuffled after Patty. They sat on the metal folding chairs and looked around at all the stuff.

Boxes were stacked on boxes. In the front of the room, things that looked somewhat like picture frames were on the table. There were metal tools and things. It all looked somewhat mysterious and intimidating.

In one corner of the room was gathered a cluster of people who obviously knew each other. One could catch snippets of their conversations. Phrases like, “Hurt like Hell...” and “Got ‘bout sixty pounds” and “Gah damn mice, proly gotta git a cat now” were floating about the room.

Soon a bespectacled lady, about fifty years of age, walked in front of the table and quietly asked for everyone’s attention.

“I believe you are all here to learn something about the art of keeping bees. Let me introduce myself, and some of these other disreputable folks up here with me. I am Eileen, the secretary of the Bee Club. This is my husband, Ben...Ben Dover. As you can guess, I didn’t marry him for his last name. He will be teaching tonight’s lesson with me.

“The young lady at the desk where you signed in is Sandy. And the gentleman next to her is her husband of forty years, Rocky Beach. Both are proof that keeping honeybees keeps one young.

“Now, what we will be teaching will seem overwhelming. There is a lot to know about keeping bees. However, most of what you will learn will be over a period of time and by trial and error. Each of you will be assigned a mentor. This person will guide you through problems you will

encounter. We recommend that you work closely with your mentor and not look for advise from others, at least to begin with. You see it is common knowledge that if you were to ask ten beekeepers the same question, you will get eleven different answers.

“You will be working with animals, even though they may be tiny insects, and because of that, nothing is written in stone. No two hives will be the same. Look upon your hives as children. If you are a parent you know that none of your children will turn out the same. Some of your hives will be a gentle as spring lambs, and others may be quite aggressive. You will learn why these differences happen and how to adjust things to make them somewhat easier. Remember, we do not have all the answers. The school is arranged so that in eight lessons a variety of topics will dealt with in depth. There will be different instructors for each lesson and a question and answer period in case you get confused.”

Sandy walked through the students, about fifteen in all, handing out yellow binders. Rocky counted out papers and asked that they be handed down each row so everyone got one.

**To be continued....**

### ***FINAL THOUGHT***

"Were we to kill a hen for her egg, the cow for her milk, or the sheep for the fleece it bears, everyone would instantly see how much we should act contrary to our own interests; and yet this is practiced every year, in our inhuman and impolitic slaughter of the bees." - Thomas Wildman, in "A Treatise on the Management of Bees" (1768), arguing against the then-common practice of beekeeping with skeps. ----- Julie Lipkin

### ***CLUB RESOURCES*** **(accurate as of 4/16)**

The following officers and directors are a great resource to answer questions and requests for assistance. (All area codes 508 unless another one is indicated.)

|                |                 |              |  |
|----------------|-----------------|--------------|--|
| President      | John Beach      | 362-2054     | <a href="mailto:john.a.beach@comcast.net">john.a.beach@comcast.net</a> |
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| Secretary      | Claire Desilets | 888-2304     | <a href="mailto:beekeeper@gmail.com">beekeeper@gmail.com</a>           |
| Treasurer      | Lynn Heslinga   | 774-994-0648 | <a href="mailto:lynneheslinga@gmail.com">lynneheslinga@gmail.com</a>   |

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