



Newsletter

Vol. 4, 1st Quarter Spring Issue 2012

Honey & Wound Therapy & Bees in Ancient Egypt

Volume 4, 1st Quarter

Spring 2012 Issue

The RIBA winter monthly meetings' talks were fascinating and very well received, with audience size estimated at 80-100 bee enthusiasts. The January meeting featured an informative and entertaining presentation by Dr. Allen Dennison on the curative powers of honey.

Dr. Dennison, RIBA member, is Medical director of the Evergreen House Health Rehabilitation Center in East Providence. The National Honey Board and scientific articles and reviews, such as the Mayo Clinic Health Letter, De-

Healing with Honey

scottes, pioneered the modern use of medicinal honey, in Limoges, France using local raw thyme honey. Dr. Dennison has successfully introduced the use of Medihoney, the FDA-approved preparation from New Zealand at Rhode Island Hospital and Roger Williams Medical Center by working with the hospital pharmacies, and nursing staffs and medical staffs.

Natural honey applied to a minor wound that has been thoroughly cleaned, provides a biofilm which through a startling list of

mechanisms results in quicker skin healing and less scarring. Honey has been used for many years to treat coughs, bronchitis, and researchers point out that it is an effective remedy for children's coughs and reduces the severity and frequency of night time coughing. (cont'd on p. 4

Dr. Allen Dennison



Bees and Beekeeping in Ancient Egypt

Richard Lobban, Professor Emeritus of Anthropology at RIC and husband of RIBA Secretary Carolyn Fluehr-Lobban spoke at the February monthly meeting in an engaging and informative presentation with a large in crowd in attendance including president of Rhode Island College Dr. Nancy Carriuolo and her husband Dr. Ralf Carriuolo. Adding to the general public fascination with ancient Egypt was the topic best loved by RIBA members, bees and beekeeping. For nearly 5,000 years of

Egyptian history, dating from at least from 3100 BC, beekeeping was a part of Egyptian life with many depictions of their techniques on the murals and bas reliefs they left as a record.

Mural depicting honey extraction, conical hives



Bees have never truly been domesticated and the ancient Egyptians managed colonies using the same acquired knowledge that keepers of bees have used for centuries, including the importance of the queen, the value of a convenient nearby source of nutrients and water, the extraction of honey and wax and the many uses to which each can be put, as well as knowledge of the life cycle of the honey bee.

Egyptians appreciated the importance of pollination as well, and colonies of bees were transported by Nile river barges from south to north as the spring and summer flowers and crops developed from earlier blooms and honey flows in the south to the later ones in the north. (cont'd on p. 8)

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Send you name, address and phone number and \$15 annual membership dues to:

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Make the check payable to, "RIBA".

Include your email address if you prefer to receive information electronically, or by post at your home address

[Www.ribeekeeper.org](http://www.ribeekeeper.org)

BEE SCHOOLS Fill Again in 2012

Bee School at Davies Technical High School, instructor Betty Mencucci began February 29, 2012 extending for five weeks to March 28, 2012, enrollment of 81.

URI Center for Biotechnology & Life Sciences, instructor Jeff McGuire, began February 1, 2012 until Feb. 29, 2012, enrollment 56.

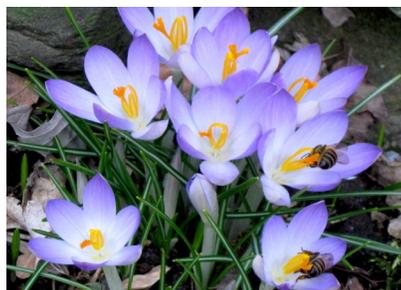
A third Bee School opened at the Archie Cole Junior High School in East Greenwich, taught by Everett Zurlinden, enrollment 30

EARLY SPRING PHOTOS

Send your photos for the next issue to cfluehr@ric.edu



Bee on dandelion, Sanne Kure Jensen



Bee on crocus, Sanne Kure-Jensen

**UPDATE YOUR RIBA MEMBERSHIP
APRIL IS THE TIME TO RENEW**

REMINDER TO PAY YOUR ANNUAL DUES by APRIL 1, 2012 AND RENEW YOUR RIBA MEMBERSHIP! SEND YOUR \$15 RENEWAL TO RIBA SECRETARY ANTHONY DIGIULIO AT THE ADDRESS IN THE UPPER LEFT CORNER OF THIS PAGE

YOU WILL NOT BE ABLE TO VOTE FOR NEW RIBA LEADERS AT THE APRIL DINNER UNLESS YOUR MEMBERSHIP IS CURRENT.

PRESIDENT'S MESSAGE

Welcome to all the new beekeepers from our schools this year. We had such an amazing turn out that we added a third school. Our numbers reflect the nationwide resurgence in beekeeping that is going on. The number of beehives kept in this country has been slowly on the rise the last couple of years. Although it may seem like everyone is keeping bees these days there are still only about half the number of hives there were at the peak. One of the goals of our association is to help all beekeepers be successful in raising bees. We teach the basics to new beekeepers giving them a solid foundation to start as well as continuing education for those that are more experienced. We look to seasoned beekeepers to mentor the newbees sharing their years of experience and reassuring them along the way.

We have just had one of the mildest winters on record and many are asking how it will affect the bees. Will they be built up sooner and want to swarm? Will there be enough nectar and pollen to sustain them? As with everything, that depends on the weather: don't leave anything to chance, be a beekeeper not a bee - haver. This means constant tending and inspecting along the way. We have both Yahoo and Face Book groups. Everyone is encouraged to use these groups for sharing information and asking questions. I am looking forward to seeing everyone at the April dinner.

Jeff McGuire, RIBA President
(jeffmcguire1@cox.net)



You are now a beekeeper - Would you like to be a mentor?

By Ed Lafferty

You ask, "What can I do, I am not an expert?"

If you have successfully over-wintered a colony, you have done something right and you are now a beekeeper. You do not have to be an expert. With a little time to share, you can make a big difference in a new beekeeper's first year.

RIBA discusses a mentoring program every year. We currently have a list of about ten members on our website who are available for mentoring. We need far more than that to accommodate the increase of new beekeepers that join us every year.

This spring I am asking you to step up and be the beekeeper you looked to for guidance in your first year. Just an hour or two here-or-there, or just to be available by phone, to help setting up a new hive or passing on your feeding methods would be a great assistance to some one new to beekeeping.

If you have over-wintered a colony, your experience should already include:

- Setting up a hive (or two)
- Assembling frames
- Installing packages and queens
- Feeding the bees
- Adding a second deep when needed
- Hive inspections
- Organic mite treatments
- Use of smoker and hive tools

To be a volunteer mentor, you can choose the geographical areas that are most convenient for you to visit. You don't have to be able to recognize foul-brood or know how to make a split, and I can't always find the queen either.

The bee schools sponsored by RIBA do a remarkable job, but it's the volunteers that can make the difference between success and fail-

ure. When there is no one there to help, people can get discourage and sometimes give up. It is time for us to share the knowledge we have obtained to others that need guidance.

My wife Celeste and I are encouraging new beekeepers, as well as any others, to come with us as we go inspect our hives. We have twenty-four hives in different locations and do something with them every week. I prefer phone contact at (401) 261-9641. Call anytime and if I don't answer, just leave a message. Our e-mail is fruithillapiaries@verizon.net.

Evolution in our organization is what makes us stronger and better. To RIBA's credit we hosted the EAS conference last summer and that was no small feat. We don't have to stop there, as the smallest state beekeepers association in the U.S., we are working diligently, building an association that we can all be proud of. With more mentors, we can bring our bee survival rate to an enviable level.

Do what you can, to give whatever you can, to help others and you will reap not only the rewards of helping them, but you will continue to improve your beekeeping as well.

Yours in Beekeeping,

Ed Lafferty



Ed helping me out last spring after I broke my arm

ANNUAL SPRING DINNER APRIL 21, 2012

The April monthly meeting will be held at Twelve Acres restaurant on April 21st

Speaker: Dr. Heather Mattila, Wellesley College .

May 2012, (TBA due to conflict with Mother's Day)

June 10, 2012 (date firm)

Check RIBA website for more details as the dates approach. Directions at RIBA website:

www.ribeekeeper.org

All of the spring meetings are held on the 2nd Sunday of the month at the Rocky Hill Grange at 2:00 unless announced otherwise.

Check the website for meeting notices: www.ribeekeeper.org

Directions to Rocky Hill Grange, 1340 S. County Trail (Rt. 2), East Greenwich: I-95 North or South, Exit 8/RI 25/ Quaker Ln. (8 from south, 8A from north. Merge on to Rt 2 south, go thru light at division St, Grange is on left after shopping center



Honey & wound therapy cont'd

It improves sleep quality for children and their parents. Presently research has clearly shown the value of honey as an antioxidant. Honey contains a variety of flavonoids and phenolic acids which act as antioxidants. Additionally darker colored honey seems to have higher antioxidant content than lighter honeys. In regard to honey's nutritional profile, it is composed primarily of fructose, glucose and water. It also contains in small amounts a wide array of vitamins and minerals including niacin, riboflavin, pantothenic acid, calcium, copper, iron, magnesium, manganese, phosphorous, potassium, and zinc. Clostridium botulinum is found in honey which is why it is not recommended for children under the one year of age, but it is fine after a child enters its 2nd year of age. The infant's lack of stomach acid can allow proliferation of C. Botulinum whose toxin can cause respiratory paralysis and death.

Dr. Dennison began by saying that it has been fun working on honey therapy and confirming that honey is highly efficacious in wound treatment. He cited a 90 year old who presented with stasis dermatitis and minor ulceration of the legs where excellent results were achieved by direct application of an easily made salve of aquaphor and raw honey mixed in equal parts. An alginate dressing with honey inserted deeply into a more serious wound also has had beneficial results, along with honey dressings applied to burns, nerve injuries, vascular occlusion, crush trauma, infections, and on all stings including honey bee stings. Skin redness, pain, heat and swelling are the classic signs of signs of inflammation, and often infection. Dr. Dennison and a Brown University medical student treated a deep boil filled with pus with 5 cc of Manuka honey packed with gauze tape ; within 14 days the wound was resolved.

A well healing wound border will advance to cover an open lesion at 0.9 mm per day and honey achieves this rate by feeding the healing elements like fibroblasts with sugar, protecting the wound

from drying and infection. There is also a natural chemical interaction involving an bee enzyme called glucose oxidase found in honey. As the high osmotic pressure sucks dilute tissue fluids into the honey the enzyme catalyzes micro-amounts of a hydrogen peroxide, which is at the same time toxic to bacteria and a signal to cellular elements to speed up healing.

The chemistry of honey provides good thermal insulation and therefore immediate comfort to the patient. With a composition of 90% sugar (fructose and glucose) honey draws fluid from the wound. Honey has twice the osmotic strength than table sugar. The less water the better for healing so it is better to extract honey on low humidity days and crystals in honey signals high medical value. The Ph of honey is 3-4.0 and chronic wounds have high a ph, so honey acts to lower the ph resulting. Studies suggest that wound nurses can use pH probes to monitor pH to determine when to add more honey but cleaning and debriding is not needed or desirable. Under the Honey film the body "does its own thing." but without forming scabs, the picking of which which humans find irresistible.. Medihoney is a Manuka honey product irradiated to satisfy FDA safety requirements which Dr. Dennison believes is unnecessary and possibly inappropriate for most wounds. Patients tolerate honey well as compared with irritating chemicals like iodine and bacitracin and Neosporin and silvadene . Scab formation results from exposure of the skin to dry air and honey keeps humans from picking scabs and re-infecting their wounds. The alternatives are expensive and less well tolerated. A common hospital treatment , the KCI vacuum, debrides a wound by sucking out pus, but it is costly at an average of \$1200 for the three weeks needed for healing. Compare that to \$10.00 a pound for local raw honey!

Even more tantalizing is the possibility that honey therapy may be useful in fighting new strains of antibiotic resistant bacteria.

MRSA staph resistant bacteria was found in 108 patients in a randomized control study, and honey eradicated MRSA bacteria in 70% of patients. One of our previous RIBA speakers, Dr. Marla Spivak, also noted that propolis has been shown to have anti-viral properties against the HIV-AIDS virus (see RIBA Newsletter, December 2009 issue). Nectar source is likely only one factor in the antibiotic activity of honey. Dennison lauded the work of Dr. Peter Molan of the University of Waikato, New Zealand, who has furthered the development of Manuka honey and pioneered its research. Dr Molan's research group discovered the Unique Manuka Factor (UMF) in honey derived from the nectar of the tea tree plant with methyl glyoxal as the key ingredient, but we still don't know why it is effective against the bacteria. He mixes a honey gauze dressing with a seaweed derived compound call alginate. The cost of \$30 per pound of Manuka honey still dwarfs the present alternatives in affordability. Agar dilutions assays of various australian honeys have been compared with Manuka honey for antibacterial activity and suprizingly all showed varying activity against all strains of staphylococcus, even the feared superbug Methacillin resistant Staphylococcus aureus.. Dr. Dennison is working on getting some laboratory and clinical trials underway in RI, with hospital trials at Rhode Island Hospital and Roger Williams comparing local honey with the gold standard, Medihoney. Hospitals must adhere to FDA approved treatments until the local alternatives are proven but you may do as you please at home! However, the cost savings will drive the comparison.

Cont'd on next page

International uses: The medical use of honey by humans has been known for thousands of years. Table sugar has similar properties and was used successfully by Rhode Island Hospital trauma surgeon Dr Keith Monchik in Haiti after its massive earthquake for open wounds. Honey is used in Iran because of the US trade embargo. In many cases where honey was substituted it was shown to be highly efficacious, often in 5-7 days even on serious skin infections. A 2007 study in Malawi proved honey to be more effective than sugar.

In the mean time support for the local research is a way that RIBA members can contribute to the improvement of public health through honey treatments. RIBA members can contribute by collaborating with medical researchers; consider contributing a pound of honey for research, There will undoubtedly be multi-year projects developed, especially research involving honey and the resistant superbugs.

Treatment: The wound should be cleaned, better not to use soap but debride with gentle action and salt water. Deep lacerations should be closed with sutures up to 6 hours after trauma, left open after that time or when grossly contaminated. The limb or affected part should be raised on pillows and pain treated with Tylenol. Burns are cooled with water and covered with honey. Oral antibiotics should be avoided unless wound is obviously infected; look for signs of infection, such as pus or a fever. Topical antibiotics should also not be used and honey should be substituted. Topical antiseptics kill bacteria but retard healing. They can sensitize tissue and produce redness and can lead a physician to use oral antibiotics. The overuse of antibiotics leads to bacterial resis-



Republican palace in Port-au-Prince after the 2010 earthquake (cfl photo)

Honey is equivalent to the antibiotic mupirocin in lowering staph counts for example in hemodialysis patients needle insertion site colonization. Moreover, honey eliminates the odor of the wound which causes much shame in patients who must live with chronic wounds.

Making your own salve: For first aid kits, use raw honey directly on any wound or dressing. The compound is convenient, avoids dribbling, and can be used on a dressing for 1-2 days. Take 14 ounces of Aquafor (Hydrophor is cheaper than Aquafor but lanolin is not good for allergic patients) (**correct?**) and heat to 105 degrees in a microwave. Transfer to a mixing bowl and add equal amount of honey and mix with hand mixer for 3 minutes. Decant into jars with name and date (reprinted from RIBA Newsletter Fall 2011). Note: 1 oz hydrophor (Aquaphor, Biersdorf, USA or generic equivalent) and 1 oz raw honey can produce a medical grade honey, adding a 15% fruit pectin powder makes a gel.

The Q and A: The presentation will be put up on the web for further reference by RIBA members. In response to a question about propolis sprays and tinctures, it was related that a natural product store in Rhode Island The Farmacy (farmacyherbs.com) is currently making tincture of propolis. In response to a follow-up question, "When does this expire?" Dr. Den-

nison replied "2000 years and counting." More answers: 1) A 1:6 propolis compound is good for eczema but not the honey salve. 2) Is a creamed honey ok? Not really. The necessary heating and stirring to make creamed honey kills the beneficial bacteria. 3) An audience member noted that cancer sores on a dog were treated with honey and this healed them, but bees followed the dog around. 4) propolis exposed to any oil will dissolve so this is an easy way to make a propolis tincture 5) Since you cannot suture an infected wound, honey is a real plus in treating infected wounds 6) Further applications discussed; surgical wounds and radiation skin redness and soreness are excellent opportunities for honey therapy 7) the use of honey therapy for diabetics is excellent contrary to what you might imagine. Two podiatrists at Roger Williams Medical Center, Dr. Micheal Reuter and his father Dr. Richard Reuter are going to town with this treatment. Depending on the patient and quality of blood supply, some wounds close and some don't. But decreasing the pain of the dressing change and frequency of dressing changes to every 4 days and elimination of odors helps to decrease the curse of an open wound.

(Allen and Jane Dennison can be reached at: jamdmd@aol.com.)

Medical Grade Manuka Honey



Late winter Early Spring Honey Report

James Praski
James.Praski@ams.usda.gov

Jim would like to hear from you with your observations and any information regarding your hives.

In New England overall, the months of December and January exhibited cold, seasonal temperatures replacing the earlier abnormally warm weather. This weather pattern offered little rain or snowfall with only measureable snowfall in high level terrain. Moisture levels were about average and seasonally adequate. Low stores coupled with the usual cold, harsh weather of winter in the future, will surely mean a high mortality rate for over wintered populations. Keepers report that as much as 70% of colonies are light in stores with just enough to fill the brood chambers. However, New England has been good and favorable going into the winter for beekeepers. Beekeepers administered supplemental feedings much heavier than normal due to the early December mild temperatures. Over wintering procedures entails installing mouse guards, entrance reducers and insulation boards between inner and outer covers and/or boards under the bottom screens to ensure proper ventilation. The Styrofoam covered hives have shown to provide better insulation but have not been able to stand up well in commercial operations. Reportedly Styrofoam has shown to be better suited for use in mating nucs in queen rearing and in the early stages of nucleus buildup. In New England, beekeepers reported hat clusters are smaller than desired. As needed, colonies were fed on an occasional warm day, sugar water syrup 2:1, otherwise with sugar candy and fondant with homosile boards strategically placed in order to add to the stored food that was left after surplus honey was drawn off. In New England, the average consumption is 60 lbs of honey throughout the winter.

The weather pattern was less cold than average. However, the inevitable falling temperatures do not hurt the bees as long as the hives have good ventilation. In New England, hives normally lose 5 to

10% of their population due to winter related issues. Cold weather will not adversely affect bees as much as condensation will. Colonies should be ventilated to abate this problem. Keepers reported that bees exhibited the usually late winter pattern of clustering just under the inner cover. Some keepers registered early colony losses presumably due to low cluster size, low stores and erratic weather temperature swings. The most important thing in a healthy hive is nutrition. Hives weaken under the stress of protein deficiency. Limited pollen and nectar means less brood and poor nutrition. Reportedly, this year's honey stores on brood frames are very small although in many cases large quantities of pollen are found. This could mean an increase in viral infections in queens coupled with a stronger disease laden varroa mite population that could carry over to next season with another season of queen problems especially with underperforming queens. This will likely contribute to creating a greater winter loss as many colonies are light and their winter bees were not developed under the best of conditions.

Harvesting and extracting honey was completed by early winter. Some yields were half what they usually are. Keepers are giving estimates at 30 to 35 lbs per colony on average which is well under the norm of 60lbs per colony. Honey sales reportedly were excellent during the holiday season. Keepers crafted many products from the fruits of their hives to sell for the holiday season primarily as stocking stuffers such as decorative honey decanters, candles, creams, lip balms and many edible holiday treats. The holiday season brings on an increase demand for local honey especially at local farmers markets and all retail/wholesale outlets that are selling evergreen holiday decorations such as Christmas trees. Honey sales are predicted to remain very good and continue to grow with supplies of new crop honey being available.

The months of January and February 2012 exhibited a pattern of erratic weather with a series of warm days with temperatures in the 50's set against an opposite pattern of cold days with temperatures in the 20's. January is usually beset with Nor'easter storms and the common deep freeze of bitter cold temperatures, strong

winds and sporadic periods of heavy snow and rainfall. But this January and February have been just the opposite of this norm.

New England has had very little rain or snow which has resulted in a low moisture level at this point in time for the entire region. The mild winter certainly means less stress on honeybee colonies. The big concern is that the bees have been very active and this uses more of their honey reserve with flights being common with so many days with warm temperatures. Keepers report that many of their hives were light on stores going into the winter, so starvation is a very real threat. The milder temperatures have allowed frequent cleansing flights and ventilation which should reduce disease and improve overwintering. New England keepers need to keep an eye on winter stores because they may need to feed when brood production starts. There is a serious need to stay on top of food reserves as we move into March and April, where hive honey consumption increases with the start of brood rearing and the need for the bees to maintain higher incubation temperatures in the hive. It has already been pointed out to me that some beekeepers have seen eggs being laid by the queens earlier than usual in 2012. In light of our weather and noted flight activity, keepers should not be surprised to find some hives lose bees because brood production will start early and an extended cold period may result in the loss of a number of hives due to starvation issues. In New England, keepers advise checking the brood areas and replace empty frames with capped honey ones but never physically disturb the cluster. Many keepers are reluctant to open up the hives and chance chilling the bees as most keepers leave enough food as well as bee candy in regard to hives showing light stores. The current mindset is, feed while you can. In this inspection process, check the hives for weight of the stores. Light weight store conditions require adding granulated sugar (fondant) on the inner cover and watch to see if the bees are utilizing it. Otherwise, feeding 2:1 sugar water (5 lbs. per hive) with the necessary accessibility above the hive is standard procedure. Keepers report a high feeding success rate allow the bees' access to the holes in the jar cover. **(cont'd on p. 8)**

Welcome Honeybees and Native Pollinators

Sanne Kure-Jensen

Do you want to become a beekeeper in New England? Do you crave a bountiful garden harvest next and fall? One of the most important criteria is that bees and pollinators have access to diverse foods for the longest possible season. While honeybees can fly up to three miles in search of food, they save energy with close food sources and produce more honey and pollen stores for their winter survival and for beekeepers to harvest.

Plant your gardens and yard with beneficial plants for a long season. You can start with Crocus and Aconites for February and March and finish the season with Goldenrod and Asters. Plant annuals to tide the bees over through July (the hottest part of summer) during the lull between perennial blooms. Honeybees often resort to their reserves (diminishing what beekeepers will be able to harvest).

Most people think honeybees love big, showy flowers or mixed gardens of annuals, perennials and/or vegetable blossoms. There are a large variety of trees, shrubs, perennials, annuals and even lawn plants that benefit honeybees. There are many trees, shrubs, perennials, annuals, foods and even lawn plants that benefit honeybees. Tulip Trees (*Liriodendron tulipifera*) and Black Locusts (*Robinia pseudoacacia*) are great food sources for honeybees.

Most Maples including Red Maples (*Acer rubrum*) are wonderful for honeybees but they bloom very early in spring often making the temperatures too low for the honeybees to be flying; Willows and Pussy Willows (*Salix discolor*) are another favorite when the temperatures aren't too low. Later in spring the American Holly (*Ilex opaca*) blooms will be covered with happy honeybees. Other nectar sources include Apple and crabapples (*Malus*), Sumac (*Rhus glabra*) and Linden or Basswood trees (*Tilia americana*).

Shrubs like Blueberries (*Vaccinium corymbosum*) and Chokeberries (*Aronia melanocarpa*, *Aronia arbutifolia* or *Photinia pyrifolia*) bloom in late spring and offer delicious fruit as well as nectar for the honeybees. Azaleas (*Rhododendron*) grace many yards in New England and provide food for honeybees and bumblebees. Wild and cultivated brambles (*Rubus*) like Raspberries and Blackberries are also favorites. Home gardeners and farmers love the idea of keeping honeybees to increase pollination and hence their fruit and vegetable harvests. Honeybees' favorite food crops include Pumpkins (*Cucurbita pepo*), Melons (*Cucumis melo*), Cucumber (*Cucumis*), Soybeans (*Glycine soja*) and Buckwheat (*Fagopyrum esculentum*).

Wild areas and carefully tended gardens offer great food sources. My 'wild' meadow includes native Milkweeds (*Asclepias*), Asters (*Asteraceae*), Goldenrod (*Solidago*) and Joe-Pye Weed (*Eutrochium*) as well as some cultivated perennials like Cone Flowers (*Echinacea*) and Globe Thistle (*Echinops*). Native bumblebees and other pollinators

share the meadow's bounty with my honeybees, often on the same blossoms.

Herb garden favorites include Thyme (*Thymus*), Basil (*Koellia*), Oregano (*Origanum vulgare*), Lavender (*Lavandula angustifolia*), Catnip (*Nepeta mussinii*), Russian Sage (*Perovskia atriplicifolia*). Don't plant too many Chives, Garlic Chives (*Allium*) or Mints (*Mintha*) since honeybees love these flowers and their honey may develop a strong flavor. Native plants and common weeds provide great forage: Thistles (*Centaurea*), Wild Carrots (*Daucus carota*), Birds Foot Trefoil (*Lotus corniculatus*), Chickweed (*Stellaria media*), Deadnettle (*Lamium*) and Vetch (*Vicia*).

Don't forget about lawns. If you practice organic lawn care and can encourage your neighbors to do the same, you may offer your honeybees their all-time favorite: Dandelions (*Taraxicum officinale*). This is the single greatest nectar source for a variety of pollinators including honeybees, bumblebees and butterflies in late spring and early summer. You can also overplant your lawn with Dutch white clover (*Melilotus alba* or *Trifolium repens*) as I have. If you let some of your property taller or have meadow area, be sure to include Red Clover (*Trifolium pratense*) for honeybees and native bumblebees.

Email: sannek-j@cox.net



Some plants bloom for a relatively short time separately from other plants allowing beekeepers to gather honey from a single plant. This is done by putting out empty frames and removing the capped honey frames when that bloom period is over. The bloom cycles of Black Locust, Basswood, Raspberry, Blackberry, Fireweed, Russian Sage, Lavender, Basil and Goldenrod lend themselves to monofloral honey collection. Tulip-tree and American Holly monofloral honey is often gathered in southeastern New England. Monofloral honey can also be gathered in or near large plantings of Oilseed Rape (Canola), Buckwheat, Alfalfa as well as White or Yellow Clover. To view a comprehensive list of honeybee-friendly plants for New England including their bloom period, consult http://en.wikipedia.org/wiki/Northm_nectar_sources_for_honey_bees.



Honey bee on spring
Azalea flower (Sanne
Kure Jensen) Above

Bees on almond blossoms



Early Spring Honey Report

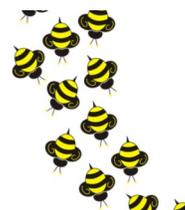
(cont'd from page 6)

Keepers began feeding in late February with pollen patties, fondant, protein patties, sugar candy, sugar water syrup, high fructose corn syrup and frame feeders in order to stimulate brood production and add new worker populations for the young. The increase in daylight hours will signal the queen to begin laying eggs; hence a food source is necessary and timely needed. Hive positioning in New England is best suited by pointing south to shelter from Northern winds. Additionally, tilting hives to assist drainage is accomplished by tilting the back end of the hive up and the front end down in order to assist drainage of the bottom board. Additionally, this is the time to plan for the upcoming year. In this regard, last year's (2011) packages were reportedly very weak from several sources, such that one major supplier has cancelled their 30 year agreement with the provider as their packages were shown to be very unproductive. Overall in January, colonies were reported to be in moderate to fairly good condition whereby the colonies that have experienced good health were the ones that received regular and aggressive applications of mite treatments such as apiguard and formic acid.

In order to provide an accurate picture of the health of the nation's honeybees, USDA/APHIS initiated the USDA Honeybee Pests and Diseases Survey Project in 2011. The project is a comprehensive study aimed at documenting which bee diseases, parasites and pests are present or absent in the United States. The primary goal of this survey is aimed at verifying the absence of the Asian honeybee; *Apis ceranae* and *Apis dorsata*, slow paralysis virus (SPV) and the highly destructive parasitic mite named *Tropilaelaps*. The natural host of *Tropilaelaps* is the enormous Asian honeybee, - *Aphis dorsata* with evidence that other Asian honeybee species as well as the Western honeybee may be also infested by this pervasive mite. The *Tropilaelaps* mite is reddish brown in color, and is about 1mm long and .6mm wide, and can move quickly/freely on comb and brood. This mite reproduces rapidly as an adult and can lay eggs on mature bee larvae within 48 hours after

capping and eggs hatch within 12 hours and immediately begin to feed on the developing bee. Adult mites enter with larvae and reproduce within the sealed brood. Bees affected by this mite exhibit stunted growth, deformed wings, a shortened life span, and can lead to adult bees absconding from the hive. Researchers predict that if both varroa and *Tropilaelaps* were present in a colony, the population of *Tropilaelaps* would increase far more rapidly than varroa. Data from the national survey will be used in the USDA's CCD Action Plan. The information on practices and problems throughout the country will be entered in a data base. The project will help identify management practices that keep colonies alive rather than looking for factors that increase the risk of mortality. Once there is sufficient data from all the areas in the United States, beekeepers will be able to log in with their location and learn about the problems in their area and how other beekeepers are dealing with those problems. USDA and the Bee Informed Research Group will provide an extensive database of information from nationwide apiary surveys combined with historical and regional data, that will provide specific information about a variety of diseases and pests of honeybees; (Additional Source used: December 2011 issue *Growing Magazine*, *Pollination Nation* issue).

Honey sales have remained very good and continue to grow with supplies of new crop honey being available. Colonies overall are reported to be in fairly good condition as spring approaches with mite problems under control and bee dead out losses to be within expected levels. Prices quoted for retail 11b bottled units were \$7.00 to \$10.00, mostly \$9.00, and occasionally higher inclusive of all varieties; for food service operations prices were strong with 5 gallon units selling at \$175.00 to \$215.00, mostly \$200.00, occasionally higher for all raw and natural honey depending on variety and quality. Current wholesale prices quoted exclusively for white, cleaned beeswax are steady and for 11b block units at \$5.50 to \$5.75, mostly \$5.50, and for 50lb block units at \$4.50 to \$5.00, mostly \$4.75. Price quotes taken for bulk orders above 50lbs are \$2.20 to \$3.50 mostly \$3.50 for white/light, cleaned beeswax. Retail white and cleaned beeswax prices reported are \$16.00 to \$20.00 per pound.



Bees in Ancient Egypt (from p.1)

Carolyn Fluehr-Lobban

Nesu-bity, the ancient Egyptian word for bee symbolized the two regions of lower (northern) and Upper Egypt (southern), and the bee was a common icon of the unification of the Nile valley under the pharaohs for 3,000 years. Beekeeping is documented from the earliest dynasties of the old Kingdom, c. 3100 BC. Honey was used for many practical purposes- in cooking, sealing jars, binding and maritime caulking as well as Egyptian in medicine and religion. The ceramic cylindrical hives known throughout the ancient Middle East were used, stacked in rows along high walls that contained dozens or hundreds of hives. Human access was from the interior, while the bees' entrance/exit was on the wall exterior.



Cylindrical hives in contemporary Egypt

Bees and honey were associated with maternity, sexuality, fertility and love in Ancient Egypt. They were the icons associated with goddesses such as Astarte and Artemis, and provided a model behavior of loyalty and hard work. There was no cane sugar so honey, humanity's original sweetener, was used for baking and making wine. The religious temples often kept bees using honey for ointments and medicine, such as is documented at Kom Ombo where the importance of honey is underscored by illustrations that the priests enjoyed honey and sacred animals were fed honey. Bees appear frequently in Aesop's Fables (Aesop was likely an 'Aethiopian' (Egyptian Nubian) slave whose stories with human and animal characters were preserved in Greek oral traditions and come down to us as delightful stories with names such as The Bees and Wasps and the Hornet, The Bees, The Drones and the Wasps, The Shepherd and the Honeybees, and The Thief and the Beekeeper.

Bees and honey are a part of the great faiths of Judaism, Christianity and Islam that originated in the region. Israel (Canaan) is referred to as "land of milk and honey" and it is possible Jews learned the art of beekeeping from the Egyptians while in captivity and brought this knowledge to other parts of the ancient world after their Exodus from Egypt. Judaic scholars debated whether feral honey was kosher, or could be consumed by the faithful as it came from a wild and not a domestic source. Bees and honey have both sacred and secular value in Islam as a gift from God and for the known curative powers of honey.



Richard Lobban at the Cairo Museum (l) "nasubity" symbol (r)

Honey is mentioned in Jewish holy texts and in the Christian Bible: in Genesis 43: 11, "Honey is a gift"; 1 Samuel 14:24-27 "Feral Honey is a sign and contributor to good health"; Proverbs 24:13 "Honey is sweet and good"; Deuteronomy 1:44 where swarms of bees represent danger and in Deuteronomy 32:13, where humans are admonished to "try to gather honey from a rock." The Qur'an, the holy book of Muslims believed to be God's word, one chapter is called "The Bee" (Verses 68-69) where God spoke to the bees "Build homes in the mountains, the trees and in what men construct for you. Then eat from all of the fruits and follow your Lord's smoothed paths. From their bellies comes out a syrup of different hues, wherein there is healing for mankind." Honey is also described as a "gift" to believers in paradise (Chapter 47:15).

Bees were used in military campaigns as a weapon in siege warfare and honey was used in treating war wounds (noted in medical papyri); wax was applied in hafting weapons' blades to handles and in binding arrow heads to shafts.

Beeswax figurines of deities were common, and in the late Greco-Roman period encaustic (combining beeswax with paints) portrait paintings of the deceased on caskets was common. These paintings appear fresh when excavated although they may be over a thousand years old. The lost wax process, using beeswax was central to the Bronze Age in Egypt and elsewhere. It was clear from Richard's presentation showed that beekeeping in ancient Egypt laid an important foundation for the global knowledge and pleasure of beekeeping.



Example of encaustic painting using beeswax mixed with paints

Two-sided Bee/deer coin, Egypt, 3rd century B.C.



SPRING MANAGEMENT TIPS**Everett Zurlinden**

Spring is finally here! Feed 2:1 syrup from March 1 to about mid-April along with protein supplement (pollen patties).- Stop feeding when there are about 4-deep frames of honey or syrup per active brood chamber or you will cause swarming!- Use 1:1 for packages on foundation or to stimulate a queen to begin laying. Stop feeding when the foundation is completely drawn and there are about 4-frames of honey or syrup per active brood chamber.- Clean bottom boards on any day where temperatures are in the 60's. Resist the urge to reverse brood chambers in March and early April as the nights are still cold.- Do reverse when the nighttime temperatures are steadily in the 50's. Continue to reverse anytime the queen and brood have filled out the uppermost brood chamber.- Remove entrance reducers and mouse guards only when the evening temperatures are in the 50's and above, and when the colony is big enough to defend itself.

I normally super on May 10, but will super early this year on May 1.- Watch for queen cells every 5-6 days, beginning May 1, and cut them to prevent swarming. You can't procrastinate this cycle so get out there every 5-6 days rain or shine! Don't let it go 7-days or more!!- Keep screened bottom boards closed up until June-ish when the daytime temps are really hot.- Always check for the presence of brood by inspecting the brood chamber. Don't be fooled by bees bringing in pollen. This doesn't mean that there is an active queen or brood as they hoard this food just like they hoard nectar.

Protein shortages sneak up on you. We are often fooled into thinking

that there is enough pollen because we see the bees bringing it in. Inspect the brood chambers to see how much is stored. A healthy colony needs 2-3 frames of pollen at all times. Feed supplement when there is less than that.- You can paint the hive while the bees are flying as they will avoid the wet paint. Use latex and any color that pleases you. Some keepers enjoy multiple colors or hand painting designs or murals. - Put out your swarm lures on Mothers' Day!



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**ANNUAL RIBA
SPRING DINNER**

The annual spring dinner will take place on Saturday April 21st at the Twelve Acres Banquet facility, 445 Douglas Pike, Smithfield, RI. Starting at 5:00PM until 8:00PM. Tickets are \$20, paid in advance to Anthony Digiulio or paid at the door. The guest speaker will be Dr. Heather Mattila of Wellesly College in Massachusetts, Assistant Professor in the Department of Biological Sciences where she initiated and supervises research with the 40+ colonies the college manages. She will discuss her research studying the effects of multiple mating of honey bee queens and the productivity of the colonies they produce.

In addition to the lecture and dinner, a raffle will be held coordinated by Celeste Nadworny. Please contact Celeste at fruithillapiaries@verizon.net and consider a donation of items that can be raffled off for the benefit of our association.

DIRECTIONS: From 295 north or south, exit 8A, Rt. 7, North Providence

From 146 north or south, exit for Lincoln Greyhound Park to Twin River rd., bear right onto Rt. 7.

Or call Twelve Acres at: 231-7799



OP-ED by Everett Zurlinden

Everett@beehavin.com

I attended and presented at the March meeting and was disappointed by the contentious remarks made by our past president as I know so many of you were. I was also a president for two years and had the pleasure of being at your service a couple of years-ago. From that experience, I learned that in any group of diverse thinkers there is much to be learned from all of the opinions that are offered. I encourage participation and welcome these sometimes polar viewpoints. I also learned that it is wrong to make organizational decisions based on the minority. I believe that our present-board is doing a fine job and is faithful to the majority.

I especially appreciate the learning environment that Jeff, our president, has created at the meetings. Jason, our program director, has done an awesome job of filling the program and Carolyn's quarterly newsletter is both informative and entertaining. Tony, our treasurer, silently, faithfully and thoroughly keeps the books in top order. This is in sharp contrast to the previous style of meetings and bureaucratic administration that so many of you didn't care for. The fact that seems to elude our previous president is that he wasn't reelected. He has the distinction of being our only one-time, one-year office holder. Jeff, Ed, Carolyn and Tony stood up at last year's annual election and offered an alternative. They volunteered time from their busy schedules to make changes and run the organization. The majority spoke and they were elected. This should be the take-away message for the previous administration. Let it go and enjoy the meetings!



HONEY RECIPE



HONEY CITRUS SALAD

Swing into spring with this refreshing salad from the National Honey Board:

3 6" corn tortillas; 4 oranges; 4 grapefruits; 1/3 cup honey; 1/4 c. raspberry vinegar; 2 tbsps vinegar; 2 tbsps oil; 1/4 tsp salt; 1 ripe avocado.

Preheat oven to 255 degrees. Slice tortillas into thin strips & bake on a cookie sheet for 15 minutes. Section & seed citrus fruits, set aside. In small bowl whisk together liquid ingredients and pour over fruit. Top with avocado slices and tortilla strips. Impress your guests with this treat using your honey!

The RIBA Quarterly Newsletter wants to improve education for beekeepers & public understanding of the importance of honey bees; send your ideas & suggestions to the editor: cfluehr@ric.edu



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Editor's Note

cfluehr@ric.edu

Sorry for the slight delay in your receipt of the spring newsletter due to family travel. Send me your ideas for the newsletter.



RI Beekeepers' Association

We're on the Web!

www.ribeekeeper.org

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Headline