NEW JERSEY BEEKEEPERS ASSOCIATON NEWS

VOL 22 ISSUE 4 **June/July 08**

Presidents Message:

I hope your bees are having a better spring, if you can call it that, than mine are. This cold and wet weather seems to have delayed everything the flower blooms and the bees shave been kept inside so much that they haven't been able to forage that much. I am hopping that the weather will break and there will be a good flow that is a little later than normal.

On a more positive note there seems to have been a lot of swarms this year so I hope that you have been able to ketch some of them. Another point that I would like to mention is the large number of requests for speakers at libraries. The reason for this is that they are having a reading entitled "ketch the reading bug" so this is the reason for the bee program requests.

Well I hope that you will all have a good year and hope to see you at the state meeting on June 7th.

Best of luck Pete

Rutgers hires new Entomologist

DR. Rachael Winfree from Princeton University was selected from the many applicants to work with Dr. Hamilton in the Entomologist Dept.of Rutgers. Due to a previous commitment she will probably start in the fall. Her vast research of bee pollination in both New Jersey and Pennsylvania should be both helpful to pollination and the beekeepers. (***SEE PAGE 6 FOR MORE ON DR. WINFREE)***

Swarm Notice

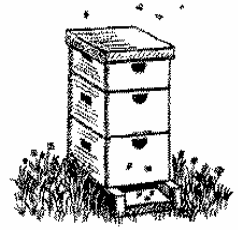
Due to the large number of swarms this year the NJBA is looking for more beekeepers to collect them. So if you think you are up to it to get some free bees contact Janet Katz to put your name on the web site.

NJBA annual Picnic / Auction August 23, 2008

HARVEY'S HONEY

912 ROUTE 40
MONROEVILLE, NJ 08343

MANUFACTURER
EASTERN PINE WOODENWARE



NEW DEALER
MANN LAKE BEE SUPPLIES

DISTRIBUTOR
GAMBER HONEY CONTAINERS

PRODUCER
NEW JERSEY AND FLORIDA HONEY AND BEESWAX

856 358-1010 **FAX 856 358-1166**
US HIGHWAY 40 MILE POST 15
SALEM COUNTY NJ

S&F
Honey Farm

Call or visit us online at
www.sfhoneyfarminc.com
to request our free catalog

Visa/Mastercard/American Express

5 Frame Nucs/ 3 Lb. Packages

Quality Beekeeping supplies
Glassware
Honey Stix Distributors
Crop Pollination

We buy beeswax/propolis

MITE-AWAY II Dealer

57 Amwell Road
Flemington, NJ 08822
Phone/Fax
(908) 782-7525

Important Bee Dates

N.J.B.A: Picnic/ Auction
August 23, 2008
Place: Bob Hughes'

E.A.S: Murray State University
August 4 to 8, 2008
Place Murray, Kentucky
See E.A.S. web site for additional information (2008 programs, and for hotels/ camps)

Directions to Bob Hughes' 706 Groveville/ Allentown Rd., Yardville, N.J. 08620
Phone; 609– 585– 4359
"E" mail; Bobsbuzzybees@aol.com

From the north; Take U.S. 130 S. to Yardville, turn slight right onto 156 s, turn left onto Yardville -Allentown Rd./ CR 524 , go .9 mile turn right onto Groveville / Allentown Rd to 706 on right.

From the south; Take U.S. 130 N. to Yardville, take ramp to Trenton / Allentown, turn left onto Yardville - Allentown Rd./ C R 524 , go .9 miles turn right onto Groveville / Allentown Rd. to 706 on right.

N.J.B.A Annual Picnic / Auction

Time for a fun time. Starting at 8:30 to 9:30 Coffee and Donuts. Then on to the auction. A place to get a good buy on some good bee equipment , maybe an extractor , an uncapping knife or some boxes and frames. After the auction then to the picnic for some good food and lots of bee talk. Bring your bathing suit and some chairs.
Price; $ 20.00 for RSVP ($24 if you don't) so call Bob early so that their will be plenty of food.

Please bring any useable bee equip. that you don't want . 20% of the sale price will go to NJBA.

Hope to see you there because it is always a

Carniolan Queens and Nucs

New Jersey Bred—Selected for Hygienic behavior and Mite resistance;

Naturally winter-hardy, gentle

Nucs available Spring through Summer

RESERVE EARLY for Fall Requeening to Reduce Spring Swarming

Karoly (Charlie) Toth— Beekeeper since 1953

(732) 873-2989 member of C.J.B.A.

38 Van Cleef Road - Somerset, NJ 08873

E&M Gold

"New Jersey Bred"

Russian and Carniolan: Queens and Nucs

We breed our own Queens

We let our bees develop naturally without the use of chemicals

Mary & Ed Kosenski

emgold.beekeepers@verizon.net

www.emgoldbeekeepers.com

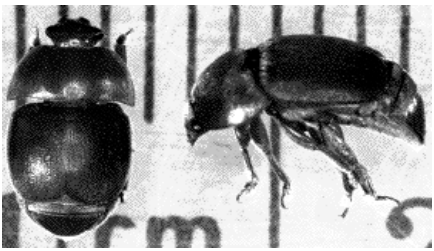
732-542- 6528

Uses of Beeswax From Laurence Cutts at the Florida State Fair:

*Used to make foundation in beehives
*Makes smokeless candles
*Makes homemade soap
*Makes homemade lip balm
*Makes a good skin cream when mixed with olive oil
*Rub it on your iron for smoother ironing
*Rub it on screws and nails for smoother driving
*Lubricate ammunition
*Rub it on thread to make for easier needle threading, sewing and to prevent tangles
*Lubricate doors, windows, drawers and zippers
*Wax your mustache or eyebrows
*Wax bow strings
*Wax leather straps
*Wax fly lines and use in fly tying
*Makes a good furniture polish when mixed with linseed oil
*Waterproof leather boots
*Rub it on pie pans, cake pans and cookie sheets to prevent sticking
*Use to lubricate water skis, snow skis, sleds and toboggans
*Makes a good wood preserver when mixed with mineral oil or turpentine
*Helps camouflage odor on traps
*Removes pinfeathers from poultry and other fowl
*Wax braces on teeth
*Lubricate band saw blades when cutting aluminum
*Used in dentistry
*Used in blacksmithing
*Used in polishing gemstones
*Used in batiking
*Used in cartoon animation
*Used in the making of Ukrainian Easter Eggs

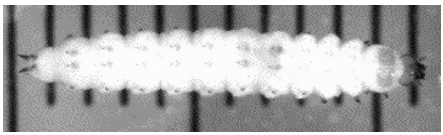
Current update on Small Hive Beetle

Currently, small hive beetles have only been found in several apiaries in southern New Jersey, and it is not yet known whether these beetle populations are truly established or are simply an impermanent result of interstate migratory beekeeping operations. Chemical control for small hive beetles is



targeted at the adult stage of the pest, and treatments for beetles can occur at any time this pest is detected in beehives. The placement of CheckMite+® strips underneath plastic corrugated cardboard is the only in-hive treatment approved for small hive beetles in active bee colonies.

Soil drenching with GardStar® 40% EC (permethrin) is also used to kill small hive beetle larvae as they burrow into the ground to pupate. Beekeepers can adequately reduce



Adult Small Hive Beetle, *Aethina tumida*

Larva of the small hive beetle, *Aethina tumida*.. Note the spines on the dorsal side of the abdomen. (The scale lines are in millimeters.)

Rachael Winfree | I study how human land use affects pollinators, and how pollination can be maintained in human-dominated ecosystems. I am interested in questions such as, Which habitats and plant species support pollinators in human-used landscapes?, and What factors influence the pollination services provided to native plants and crops? This area of research has substantial conservation applications because pollinators provide an important ecosystem service, crop pollination, which in turn provides incentives for their conservation. In one current research project, conducted in collaboration with Claire Kremen and Neal Williams, I am investigating how the pollination services provided by wild bees vary with the extent of agricultural and suburban development in the surrounding landscape. We are also testing several hypotheses about how ecosystem functions in general might respond to species loss – for example, whether the per capita contribution of the remaining pollinator species might increase, thereby mitigating the overall loss of function. In a second project, I am studying wild bees' use of different habitat types in New Jersey and Pennsylvania, and identifying plant species that are heavily used by pollinators. The results of this study will be used to develop pollinator-friendly planting guidelines for landowners throughout the state of New Jersey. In a third project, I am investigating changes in wild bee communities across land use gradients in southern New Jersey, and the role of floral specialization in determining how bee species respond to forest fragmentation.

Education and Training
B.A. Dartmouth College
Ph.D. Dept. of Ecology and Evolutionary Biology, Princeton University
Postdoc, Princeton Council on Science and Technology, Princeton University
Postdoc, Dept. Environmental Science, Policy and Management, University of California, Berkeley

***Publications**

Winfree, R., N. M. Williams, H. Gaines, J. Ascher, and C. **Kremen. In press 2008.**

***Wild pollinators provide majority of crop visitation across land use gradients in New Jersey and Pennsylvania. Journal of Applied Ecology**

***Winfree, R**., N. M. Williams, J. Dushoff, and C. Kremen. **2007. Wild bees provide insurance against ongoing honey bee losses. Ecology Letters 10: 1105-1113**

***Greenleaf, S.S., N.M. Williams, R. Winfree and C. Kremen. 2007. Bee foraging ranges and their relationship to body size. Oecologia 153: 589-596**

***Winfree, R**., T. Griswold and C. Kremen. 2007. Effect of **human disturbance on bee communities in a forested ecosystem. Conservation Biology 21: 213-223**

***Kremen, C., N. Williams, M. A. Aizen, B. Gemmill-Herren, G. LeBuhn, R. Minckley, L. Packer, S. G. Potts, T. Roulston, I. Steffan-Dewenter, D. Vazquez, R. Winfree**, L. Adams, E. E. Crone, S. S. Greenleaf, T. H. **Keitt, A. Klein, J. Regetz, T. Ricketts. 2007. Pollination and other ecosystem services produced by mobile organisms: a conceptual framework for the effects of land use change. Ecology Letters 10: 299-314**

***Winfree, R**., S.K. Robinson, D. Bengali and J. Dushoff. 2006. **A Monte Carlo model for estimating the reproduction of a generalist brood parasite across multiple host species. Evolutionary Ecology Research 8: 213-236**

***Dobson, A., D. Lodge, J. Alder, G. Cumming, J. Keymer, J. McGlade, H. Mooney, J. A. Rusak, O. Sala, V. Wolters, D. Wall, R. Winfree**, and M. **Xenopoulos. 2006. Habitat loss, trophic collapse and the decline of ecosystem services. Ecology 87: 1915-1924**

***Winfree, R.**, J. Dushoff, E. Crone, C. Schultz, R. Budny, N. **Williams and C. Kremen. 2005. Testing simple indices of habitat proximity. The American Naturalist 165: 707-717**

***Chace, J., C. Farmer, R. Winfree**, D. Curson, W. Jensen, C. **Goguen, and S.K. Robinson. 2005. Cowbird ecology: a review of factors affecting the distribution and abundance of cowbirds across spatial scales. Ornithological Monographs 57: 45-70**

***Winfree, R**. 2004. High offspring survival in an invaded **habitat for the brown-headed cowbird. Animal Conservation 7: 445-453**

Continued on page 9

Characteristics of Races of Honeybees

Italian Bees

- Probably the most common race of honeybees in this area.
- Colonies are usually large and winter well.
- Very good honey producers.
- Usually gentle and non-aggressive.
- Swarming instinct is not especially strong.
- Minimum propolis.
- Keep a clean hive and are quick to get rid of the wax moth.
- Queens lay all through the summer, so a large amount of stores are used for brood rearing.
- Italian bees have a strong tendency to rob.

Yellow coloring with bands on the abdomen.

Caucasian Bees

- Very gentle bees.
- Do not swarm excessively.
- Brood buildup is later in the spring.
- A good honey producer, not exceptional.
- Caucasians produce and use a good deal of propolis.

Brown in color.

Carniolan Bees

- A very gentle race of bees.
- Probably the best wintering bees.
- Little use of propolis.
- Builds up very rapidly in the spring.
- Summer brood rearing depends on pollen and nectar flow.
- Usually not inclined to rob.
- These bees tend to swarm more. Probably due to rapid spring build up.

Not as productive as Italians.

Buckfast Bees

- Developed by brother Adam at Buckfast Abbey, Devon, England.
- Very rapid spring build up.
- Very gentle bees.
- Low tendency to swarm.
- Low consumption of winter stores.
- Well adapted to areas with damp cold winters.
- Excellent honey producers.

Inclined to rob.

ROOT PUBLICATIONS

ASSOCIATION MEMBER SUBSCRIPTION
Bee Culture Magazine

Please Print Clearly

Association _____ Secretary's Name _____
Subscriber's Name _____ Address _____
Address _____ City _____
City _____ State, Zip _____
State, Zip _____ Comments _____
Phone # _____

For Office Use Only
Acct. # _____

☐ NEW ☐ RENEWAL ☐ 1 Yr. - $21.00 ☐ 2 Yr. - $38.00

Canada – add $15.00 per year
All other foreign add $20/year

Return white copy to: Bee Culture, Subscription Dept., P.O. Box 706, Medina, OH 44258
Please discard any other forms. Use only this form. Prices subject to change without notice.

Dadant & Sons

136 Rt. 17 C (East)
Waverly, NY 14892-0267

· Quality
· Service
· Value

Your one-stop shopping center for beekeeping supplies.

Ph. (607) 565-2860 · Fax (607) 565-3710

Toll Free Order Number 1-877-532-3268

- Woodenware—Hives
- Extracting Equipment
- Protective Clothing
- Bee Medications
- Hand Tools
- Beeswax Foundation
- Books & American Bee Journal
- Smokers
- Mite Treatments
- Honey Containers
- Honey Handling Products
- Plastic Frames & Foundation

BEEKEEPER

Bees give us sting therapy,
orange juice, apple pie
and even honey.

• School Lectures •
• Swarm Removal •
• Free Advice •
• Sting Therapy •
Call for details

Tom Fuscaldo
429 Preakness Ave
Paterson, NJ
(973) 942-5066

the BEE HOTEL

For Apitherapy

Unique Construction

stores hundreds of bees for months, securely, keeping them lively for Honey Bee Therapy. Saves frequent trips to your friendly beekeeper.

Send for FREE literature or order for $42 plus $8 shipping
Dick Johnson (Essex Branch NJB)

850 Mill Street
Windham, NY 12496
(518) 734-4629

Continued from page 6

***Dobson, A.P., S. Kutz, M. Pascual and R. Winfree**. 2003. **Pathogens and parasites in a changing climate. Pages 33-38 in L. Hannah and T. Lovejoy, eds, Climate Change and Biodiversity: Synergistic Impacts. Advances in Applied Biodiversity Science 4. Washington, DC: Center for Applied Biodiversity Science, Conservation International**

***Winfree, R**. 2000. Reply to "Brood parasitism: ducks can be **cuckoos, too." Trends in Ecology and Evolution 15: 26**

***Winfree, R**. 1999. Cuckoos, cowbirds, and the persistence of **brood parasitism. Trends in Ecology and Evolution 14: 338-343**

*** Active Grants**

National Science Foundation collaborative proposal BIO/DEB #0554790 / 0516205, "Community disassembly and ecosystem function: pollination services across agro-natural landscapes," Co-PI with C. Kremen and N. M. Williams

Promoting sustainable crop pollination by wild bees through farmer outreach and education. With N. M. Williams, Bryn Mawr College. Northeast SARE (Sustainable Agriculture Research & Education)

RANTS, FELLOWSHIPS AND AWARDS

2007 ▪ Promoting sustainable crop pollination by wild bees through farmer outreach and education. With N.M.Williams PI, Bryn Mawr College. Northeast SARE (Sustainable Agriculture Research & Education) $9330

2005 ▪ National Science Foundation collaborative proposal BIO/DEB #0554790 / 0516205, "Community disassembly and ecosystem function: pollination services across agro-natural landscapes," $427,810, Co-PI with C. Kremen and N.M. Williams

▪ National Fish and Wildlife Foundation, "Assessing and Restoring Native Crop Pollinators on Agricultural Lands in New Jersey," $50,128 (with C. Kremen and N.M. Williams; I am not a PI, but I co-wrote and co-administered the grant)

2002 ▪ American Museum of Natural History, Theodore Roosevelt Memorial Fund

2001 ▪ Postdoctoral Fellowship, Princeton Council on Science and Technology

2000 ▪ Princeton Alumni Association Travel Grant 1999

▪ Princeton Alumni Association Travel Grant

▪ Eastern Bird Banding Association Research Grant

1998 ▪ Sigma Delta Epsilon Notchev Fellowship Award

▪ American Museum of Natural History, Chapman Memorial Fund

Letter from the Editor

First I would like to welcome all the new beekeepers from the beginner beekeeping courses. There were over 200 students in the two beginner beekeeping classes held at the Eco. Center. If you are a new beekeeper and need help there are a lot of seasoned beekeeper out there to help you . If you need help contact the NJBA and they will find someone in your area to help. Just remember there are no dumb questions but a missed opportunity not to ask that question to get an answer. Also at your local club and state meetings you can learn a lot. I wish all you new beekeepers a lot of luck with your bees.

I finally put away my winter clothes, but it seems that I can't get rid of that rain coat. I haven't wore a rain coat that much since I can remember. It looks like the April showers are here in May a month late. It seems like my poor bees are working part time. I hope we can get some sun shine so my bees can get out there to take advantage of all that pollen and nectar in the fields. My hives are just exploding with bees ready to work. I have some capped honey but they are behind last year. I am even hoping to get some extra honey from the nucs I got in the spring.

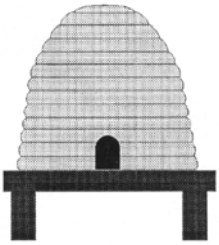
On the Dept. Of Agriculture front it looks like it will be spared the budget ax. But the fight isn't over yet, so don't put those pens and paper away. It is time to revisit your contacts with the State Legislators. The State intends to cut Dept of Agriculture by a total of 18% and over 200 layoffs. Most of the other Depts cuts are 6% but the Ag. Dept is three times as much. Thanks to the outstanding and effective campaign since February to prevent the elimination of the NJDA. So it is time for the advocates of Agriculture to reach a more equitable budget for the Dept.

Your editor Angelo Trapani

Always looking for news for the newsletter.

School or Group Presentation

Live Bees
Honey Taste



Sting Therapy

Tom Fuscaldo

(973) 942-5066

Nucs!
Honey Containers:
Glass, Plastic, Gamber

Nucs available early April
All nucs are 5 frames
with new laying queens!
quantities may be limited
Call early for best pricing
Order early to ensure availability

Stiles Apiaries
Grant Stiles
(member Essex Branch)
(732) 661-0700

When it's not bee**keeping** but bee **removal**…...consider calling

The Beeman

Your customers like to talk about bees and honey, nectar and flowers, but when it comes to ladders and second story soffits, sheetrock, crawl space, dirty old insulation, attic knee-walls and the like, you can easily spend a **lot** of time at bee removal with **no** time to either talk about or even sell bee products.

Let me do the work
I charge reasonable rates, and if you make the referral I will give you the swarm if at all possible.

Robert "Beeman" Simonofsky
(member of the North West Branch of NJBA)

(908)-730-0830
Cell Phone: (908) 797-0562

CATCH THE BUZZ

Know The First Signs Of CCD

One of the CCD Researchers gave this brief overview of what you should expect to see if any of your colonies are coming down with Colony Collapse Disorder symptoms. Watch for these signs. If your colony has other issues you will see different symptoms. Don't ignore them, but know that you are dealing with other problems rather than CCD.

CCD colonies are not necessarily completely dead - remember, you'll usually see a queen and a small cluster of young bees. Typically, in a given bee yard you'll see a few strong colonies and some moderate colonies - both of which visually look to be ok. Then you'll see failing CCD colonies - a queen, mostly young bees on the comb with her, and an excess of brood (at the time of year when queens are laying - often only 2-4 frames with some bees). You'll also see some collapsed colonies (with only a queen and a small retinue of very young bees that will barely cover 1/2 of one frame), and a few empty boxes.

Over a period of a few weeks you'll usually see more failing and collapsed colonies in a yard. You'll sometimes see CCD taking out every colony in a beeyard but more often it takes out 50-80% of the colonies within a beeyard or holding yard. In large holding yards, CCD starts at one end and rolls through to the other end like a wave.

This past fall/winter/spring, there's been a higher percentage of empty boxes found in CCD apiaries (even the queen is gone). Remember also that Nosema cerane and CCD are NOT the same. Cases that look like the classic Nosema ceranae kills reported by the Spanish had dead bees with lots of Nosema in them.

This message brought to you by Bee Culture, the magazine of American Beekeeping

Nosema Disease (*Nosema apis*)

• **Biology:** Nosema is a disease of adult honey bees caused by the single-celled microsporidian, *Nosema apis*. Nosema spores are inadvertently eaten and germinate in the adult bee midgut. The active phase of the organism multiplies rapidly, produces new spores, which ruptures the infected digestive cells. Spores accumulate in the fecal matter and are excreted. Under winter confinement, spore-laden excreta from infected bees may contaminate food reserves and combs, leading to additional transmission and infection. The spread of Nosema between colonies occurs from the use of contaminated equipment, robbing of infected hives, through infected package bees, infected queens, and her attendant workers.

• Nosema disease is widespread in the United States. It generally occurs in the spring during cool wet weather or at other times of the year when similar conditions prevail.
• Nosema infection causes extreme dysentery in advanced infections. Individual bees may exhibit the inability to fly. Heavy infections can result in slow bee population growth in the spring and/or an excessive number of dead or dying bees at the hive entrance.

• No outward symptoms are particularly indicative of infection, although dysentery inside and on the outside of the hive is often a sign of infection. However, these signs may also be caused by other abnormal conditions or ailments. Latent infections may also occur without being noticed. Diagnosis is made by the removal and microscopic examination of the midgut. Healthy midguts appear tan-colored and convoluted, whereas infected midguts are white and appear bloated due to the presence of Nosema spores.

• **Potential for Economic Loss:** Moderate to Severe. Substantial infections can cause extensive losses of adult bees and possibly lead to queen supersedure. Nosema disease is a particular concern for its effects on spring colony development following a long confining winter.
• **Control Practices:** Treatment with Fumidil-B® (fumagillin) during infection or proactively in the previous fall. Fumidil-B® is mixed with sugar syrup and fed to the bees.

"LOCAL HONEY FOR SALE" ***Signs***

14"x 18" - Bright Yellow, No Rust
Aluminum with Black Lettering
Printed Double Sided
Rounded Corners with 2 Pre-Punched Holes
Suitable for hanging from post or
attaching to the side of a building.
$20.00 each + $5.00 for shipping.

Call Jim at (609) 758-3215

Increase your honey sales today with this "Can't Miss" sign

A Middle Entrance For Beehives

Article From Dave Stewart

This material is based upon work supported by the Cooperative State Research, Education, and Extension Service, U.S. Department of Agriculture, under Award No. FNE08-646

All of us, as beekeepers, have a desire to improve the lot of our winged insects, and seek to provide them with the most healthy environment in which to thrive. Sometimes we come across stories of bees doing well in unconventional circumstances, and we pause to consider how our labors seem less advantageous to our bees. For example, in South Jersey there is a colony living in a steel tank, in the shade of a building, apparently healthy, issuing swarms yearly for about 10 years, with no intervention. There, on the side of the tank, is a 2 inch piping hole with bees coming and going. Also, James Tew, in 'An Unclear Case of Colony Survival', Bee Culture, Dec. 2005, pg. 41, writes of an old hive, abandoned for 16 years, partially rotted, and alive with bees! The bottom board had rotted out and collapsed, closing the bottom entrance, but bees were coming and going from other improvised entrances. Upon considering these, and other tidbits of bee lore, including the bee's evident desire to use provided upper winter entrances, I made a deduction that our common bottom entrance is a detriment to the colony.

We, my son Tim and I, decided to make a middle entrance last summer, and have had it in use for about a year. It was a ¾ inch tall wooden rim that extended out the front of the hive to support a landing board. This was placed between the brood chamber and the honey supers. The bottom entrance was closed. We well knew that adding a gap in the middle of the hive violated the bee space, and that the bees would fill in with burr comb, but it was a simple prototype to verify our

thoughts. As the hive seemed to do quite well, we felt we should expand our idea with a thorough test. We applied for a SARE farmer research grant to set up 20 hives, 10 with conventional entrances, and 10 with our new middle entrances. We plan to start with July splits, after the honey flow, and follow them for a year.

There are several effects that a middle entrance could have. First, the traffic through the brood nest will be diminished, as foragers can go directly to the honey supers. This may reduce congestion and swarming impulses. Second, foragers would have less distance to travel through the hive, and may be more productive. Some beekeepers recommend staggering supers to increase yields, providing additional entrances for foragers and improved ventilation. Third, there will be little traffic on the bottom board. Anything that falls down would be left there. This could have an impact on varroa mite population. Some claim that up to 40% of the varroa mites fall off of honeybees in the hive. These can catch another bee and return to the brood nest. The use of a screened bottom board allows the mites to fall out the bottom, past the bees, and lowers the mite population. By moving the entrance to the middle of the hive there will be very few bees for the mites to catch. We expect that we will have a similar mite control effect as the screened bottom, but without potential drawbacks in cold weather.

To verify the validity of these postulates, we plan to monitor hive weight and 24-hr varroa fall rates on a bi-weekly basis through the whole year. For the varroa fall rate we will use a varroa trap with drawer and sticky board under each hive. Half of the hives will have a thin cover placed over the trap to provide conditions similar to a solid bottom, while the other half will be open to the air, providing ventilation like a screen bottom.

Besides noting any advantages or disadvantages due to the middle entrance we will be able to assess the validity of leaving open screen bottoms on through the winter in southern NJ, and the benefits of improved ventilation during summer.

While thinking about how the bees might respond to this change in hive arrangement I asked Joe Waggle, from Derry, PA, (naturebee@yahoo.com), a regular contributor to FerralBeeProject.com, how bees in the tree hollows arrange their nest. He responded with pictures of a colony where "comb has been started at the 'side of the log' proximate to the entrance. This facilitates expansion of the nest by what I call for a lack of a better term 'up-building' of comb for honey reserves, and 'down-building' for broodnest expansion." He notes that bees vary their approach depending on the configuration of the hollow, but seem to always leave the bottom of the cavity alone.

We have also developed an improved middle entrance design, which incorporates slats to fill the void between the two boxes. Our thanks to Steve Leeds, an able woodworker and bee enthusiast in SJBA, for his handywork and design contributions. The photo shows the middle entrance placed on a deep hive body.

We look forward to a busy time carefully weighing hives and counting mites, and will regularly give updates on our findings.

Thanks, and take care of the little bees,
Dave Stewart

Any opinions, findings, conclusions, or recommendations expressed in this article are those of the author, and do not necessarily reflect the view of the U.S. Department of Agriculture.

The History of Honey

Honey bees (as well as many other insects) are one of science's greatest mysteries because they have remained unchanged for twenty million years, while the world changed around them. Bees and flowers evolved in the age of dinosaurs. By 20 million B.C., mammals replaced dinosaurs and honey bees had evolved. After the Ice Age, man hunted bees with torches and stole their honey. The smoke from these torches calmed the bees so that people could take the honey.

As the years passed, man learned to work with bees. Many agree that the first evidence of beekeeping (as opposed to foraging honey from wild bee colonies) appears in the paintings of ancient Egypt, dating from around 2500 B.C. Ancient Egyptians are believed to have kept bees in mud and clay hives. Thousands of years later, the ancient Greeks studied new ways of raising honey bees. By 50 B.C. the Romans were using melted, dyed beeswax to paint pictures. In the Middle Ages, beekeepers wearing wicker veils kept bees in straw skeps, which were put in stone shelters called bee boles. Pilgrims brought the first honey bees to North America in the 1600s. By the 1850s, honey bees were found all the way across the continent in California. Pioneers used boxes to trap honey bees and then released them so that the bees could be followed back to the hive. In 1852, a teacher and part-time beekeeper invented the movable-frame beehive and the honey business boomed.

The Color of Honey, A Taste Sensation

The color and flavor of honeys differ depending of the nectar source visited by the honey bees. There are more than 300 unique types of honey available in the United States. Honey is produced in every state, but depending on the floral source location, certain types of honey are only produced in a few regions.

1. Clover honey is America's most common honey and is grown in fields and yards across the country.
2. Apple blossom honey is harvested by beekeepers after their bees have pollinated apple orchards. Apples are grown in many states, but Washington is probably the most famous apple producing state.
3. Orange blossom honey is valued for its fragrance and is harvested in Florida and California.
4. Alfalfa is a pasture crop fed to horses and cows. Alfalfa honey is found in many states including Colorado, Idaho and Nevada.
5. Avocado honey is produced in California and Florida. Color California, where most avocados are grown, light green.
6. Buckwheat honey is one of the darkest and most robust honeys. Buckwheat is sometimes grown in Virginia.
7. Sourwood honey typically has a light color, but sometimes when it is harvested in North Carolina it has a bluish-purple tint.
8. Goldenrod honey may be used to sweeten many products like graham crackers. Goldenrods can be found in the woods, meadows and hills of Georgia.
9. Basswood honey, with its mint flavor, is usually collected by beekeepers in June. Basswood can be found in Michigan. Color
10. Fireweed honey is an unique honey from Alaska.

A honey bee can fly for up to six miles, and as fast as 15 miles per hour, hence it would have to fly around 90,000 miles - three times around the globe - to make one pound of honey.

The average honey bee will actually make only one twelfth of a teaspoon of honey in its lifetime.

It takes about 556 workers to gather 1 pound of honey from about 2 million flowers.

Jean's Honey, Inc.

NJ - NY - PA - Honey in 60 lb. Pails
Cut Comb Honey
NJ Nucs Available in Spring

George Schaefer

(908) 782-7912

www.jeanshoneyinc.com

Some ready reference tidbits

It is common practice to mark the queen with a small spot of paint on her back (thorax). A color code exists within the beekeeping industry to indicate the year the queen was introduced.

Model car paint may be used to mark the queen. The identifying mark should be small, so that it does not cover any other part of the queen. A 1/16" stick, lightly dipped in paint, is a good applicator. Generally, queens are marked before being introduced, but they can; however, be marked at any time. Paint should be given ample time to dry before the queen is released into the colony. In fact, queens may be purchased already marked by the queen producer.

Some beekeepers also identify queens by clipping the tip of the tip of one forewing. If queens are replaced every two years, the beekeeper clips the left wing(s) on queens introduced in odd years, and the right on queens introduced in even years. The clipping practice may also supplement the paint spot technique as a back-up should the queen lose her paint mark. If clipped correctly, the queen will not be able to fly. However, if clipped too closely, the queen may appear damaged and be superseded.

Mind Your Own "Beeswax Products

Producers of Quality Beeswax Candles & Beeswax Hand Creams & Lotions

Enhance your selling power at fairs, shows and festivals with our line of quality beeswax products

Wholesale & Retail Pricing Available

Visit us at

www.myobeeswaxproducts.com

or send for our catalogue sheet

PO BOX 1
CROSSWICKS NJ 08515-0001
(609)758-3215

npuvel@comcast.net

10% discount on retail sale

for all NJBA members

This ezine is also available online at http://home.ezezine.com/1636/1636-2008.05.04.12.19.archive.html

CATCH THE BUZZ

American Foulbood-- 1 step closer to finding a cure

Scientists in Germany have discovered a new mechanism of infection for the most fatal bee disease. American Foulbrood (AFB) is the only infectious disease which can kill entire colonies of bees.
Every year, this notifiable disease is causing considerable economic loss to beekeepers all over the world. The only control measure is to destroy the infected hive.

The mechanism of infection (pathogenic mechanism) was originally thought to be through the growth of a bacterium called Paenibacillus larvae in the organ cavity of honey bee larvae. The accepted view was that the bacteria germinate preferentially at either end of the gut of honey bee larvae then make holes in the gut wall and enter the larval organ cavity, the presumed primary place of bacterial proliferation.

In a paper published in Environmental Microbiology, Professor Elke Genersch and colleagues in Berlin explain that they have discovered that these bacteria cause infection in a completely different way. They colonize the larval midgut, do most of their multiplying in the mid-gut - living from the food ingested by the larvae - until eventually the honey bee larvae gut contains nothing but these disease-causing (pathogenic) bacteria. It isn't until then that the bacteria 'burst' out of the gut into the organ cavity thereby killing the larvae. These findings are a major breakthrough in honeybee pathology.

"Now that we fully understand the way in which this disease works, we can start to look at ways of preventing the spread of infection" said Professor Genersch.

Honeybees are important pollinators of crops, fruit and wild flowers. Therefore, they are indispensable for a sustainable and profitable agriculture but also for the maintenance of the non-agricultural ecosystem. Honeybees are attacked by numerous pathogens including viruses, bacteria, fungi and parasites. For most, if not all of these diseases, the molecular pathogenesis is poorly understood hampering the development of new ideas about how to prevent and combat honeybee diseases.
Professor Genersch added: "Molecular understanding of pathogen-host interactions is vital for the development of effective measures against infectious diseases. Therefore, in the long run, our findings will help to save large numbers of bees all over the world."

This message brought to you by *Bee Culture*, The Magazine Of American Beekeeping www.BeeCulture.com
Subscribe to the Apis Newsletter http://apis.shorturl.com
Save Your Bees & Save Your Cash! with www.SaveYourBees.com

Honey Bee Facts

The common honeybee is found worldwide and consists of a number of races or subspecies. There are four subspecies of the common honeybee occurring in Europe, three oriental subspecies and 12 African subspecies. These races vary in their nature. Italian bees are generally gentle creatures, whereas German bees are agressive. However, it should be noted that even the normally gentle Italian bee, when provoked, will try to sting you. The weather often affects the temper of bees, and on windy, cloudy days, when they are unable to search for nectar, pollen, etc, they are somewhat angry or frustrated, and they may "take it out" on some innocent passerby

One honeybee with a nasty disposition is the hybrid Brazilian honeybee. This hybrid resulted when African bees brought to Brazil in 1956 escaped and bred with native bees.

Honey Recipes

Fruit Salad with Honey Dressing

1/3 cup Honey
¼ cup orange juice
¼ cup canola oil
½ teaspoon fresh lemon juice, plus the juice 1 lemon
1 ½ teaspoons poppy seeds
¼ teaspoon salt
¼ teaspoon prepared mustard
1 apple, cored and diced
1 banana, sliced
1 avocado, peeled and sliced
1 (11-ounce) can mandarin oranges, drained
¼ cup raisins
¼ cup chopped walnuts or pecans

For the dressing, combine the honey, orange juice, oil,
½ teaspoon lemon juice, poppy seeds, salt, and mustard
In a jar with a tight lid: cover and shake well. Toss the
Apples, banana, and avocado with juice from 1 lemon to
Prevent the fruit from turning brown. Combine the fruit,
raisins, and nuts in a glass bowl. Add the dressing and stir
gently. Serve on red leaf lettuce.

Sweet and Sour Dessert Sauce

¼ cup light honey (alfalfa or any wildflower honey will do nicely)
1 cup sour cream

Place Honey in a heavy stainless steel bowl and place over low heat
For just a few seconds to "loosen" it up a bit.
Remove from the heat
And whisk in the sour cream. Serve over anything, from pound cake
To fruit. It's darned near universal.

Note: These amounts can be adjusted to your personal taste.

Food Facts:

Does honey spoil?
Honey will keep indefinitely if stored in a sealed container. It is best kept at room temperature. Refrigeration promotes granulation.

Does honey change with age?
Honey darkens with age and becomes a bit stronger in flavor. It will not spoil.

About that warning;

Why shouldn't I feed honey to a child under 1 year old?

Warning: Do not feed honey to infants under one year of age.
Infant Botulism is a rare but serious disease affecting the nervous system of infants. Honey and other raw agricultural products may contain bacterial spores from Clostridium botulinum that could cause infant Botulism. These bacterial spores are widely distributed in nature. They can be found in soil, dust. The air or raw agriculture products. C. botulinum spores have been detected in corn syrup, honey, fresh and processed meats, fruits, and vegetables. Scientists don't know why, but this disease has never been reported in an infant older then 11 months of age. The rate of disease is about 0.02 per 100,000 or 70 to 100 cases annually in the United States since first recognized in 1976. **Most infants that develop Infant Botulism have not been exposed to honey.**
FAQ's from Sue Bee Honey

WHO'S WHO in NJBA

President –Pete Leighton, 732-928-4259, p.leighton@att.net
1st Vice President –William Coniglio, 732-247-1424, wrabbit1@ix.netcom.com
2nd Vice President –Landi Simone, 973-263-0674, beelady@optonline.com
3rd Vice President –Karoly Toth 732-873-2989
Secretary—Treasurer -Curtis Crowell, 609-651-4585, curtis.crowll@att.net
Recording Secretary -Open
EAS Director -Dave Peregmom, 856-981-9483, cell 856-981-9483 preferred, dave sawmill@msn.com
Ag. Week Delegate -Grant Stiles, 732-661-0700,
MAAREC Representative -Joe Lelinho, 973-228-4806, Klutch.cargo@verizon.net
Research Committee—Jake Matthenius, 908-454-7316
Speakers Bureau & Flim Librarian -Pat Ricci, 609-758-8729, Mrpatr@comcast.net
Honey Queen Program - Jim Schuler, tim.schuler@comcast.net
Honey Queen –Emily Schuler, timschuler@comcast.net
Budget Committee -Ray Markley, 609-261-1638, rambeeman@aol.com
Honeybee Advisory Committee -Bob Hughes, 609-585-4359, BobsBuzzyBee@aol.com
Publicity –Seth Belson, 856-285-0074, snakesrb@comcast.net
Web-Master -Janet Katz, **janet@rapseik.org**
NJBA Newsletter Editor- Angelo Trapani, 609-259-7457, atrap69530@aol.com

NEW JERSEY STATE APIARY INSPECTOR: -Tim Schuler, 856-697-0483, Tim.Schuler@ag.state.nj.us

Branch Presidents:

Central Jersey—Len Klinker, 732-922-3279, lklinker@verizon.net
Essex County- Landi Simone, 973-263-0674, beelady@optonline.net
Jersey Cape -Karl Novsak, 609-523-1765 (telephone preferred), knovsak@virizon.net
Morris County –Mark Muller, 732-357-5895, markmuller@optonline.com
Northeast Jersey -Tom Fuscaldo, 973-942-5066, tomfuscaldo@aol.com
Northwest Jersey -John Peterson, 908-638-8224, j.phoneyfarm@yahoo.com
South Jersey -Seth Belson, 856-285-0074, snakesrb@comcast.net
Sussex County -Linda Osborne, foxhill4@embarqmail.com

Branch Club Dates:

Central Jersey	July 23-27 Monmouth county Fair Aug. 8 Meeting/Rutgers
Essex County	
Jersey Cape	Third Thursday, 7:00 PM Cape May County Extension
Morris County	June 21 MCBA Summer picnic July 25, 26, 27 Participation in Morris County Fair Sept. 13 Fall hive inspection Oct. 17 Lecture program at Chester Library Dec. 7 Holiday party at the Lamplighter Inn
North East	Third Friday, 678 S. Maple Ave. Glen Rock
North West	July 27-Aug. 2 Warren County Fair Aug. 22-28, Hunterdon County Fair

Do you know new beekeepers? Sign them up today with this form!

NEW JERSEY BEEKEEPERS ASSOCIATION
Membership Form

Note: Memberships start in January and expire in December

☐ New ☐ Renewal

Name _____

Address _____

City _____ ST. _____ Zip _____

Phone _____ E-mail _____

Send Newsletter by Email Only (pdf file) ☐

Publish Contact information in local newsletter (some branches publish a member directory in their newsletter once a year) - if you don't want to be listed check here: ☐

Make checks payable to the local branch and
mail you dues to **your** Branch Secretary/Treasurer listed below

☐ **Junior, $ 8** ☐ **Individual, $15** ☐ **Family, $20**

Central Jersey - Curtis Crowell - 152 Broad St, Hightstown, NJ 08520
Essex County – Joseph Lelinho – 15 Hill St, N. Caldwell, NJ 07006
Jersey Cape - Bill Eisele - 280 Old Tuckahoe Rd, Petersburg, NJ 08270
Morris County - Janet Katz - 460 Route 24, Chester, NJ 07930
North East - Karl Schoenknecht - 683 Summit Ave, Franklin Lakes, NJ 07417
North West Jersey - Karin Weinberg - 337 Tunnel Rd, Asbury, NJ 08802-1120
South Jersey - Patty Schuler - PO Box 228, Richland, NJ 08350
Sussex County - John Vnenchak - 29 Dogwood TR, Kinnelon, NJ 07405

NJBA NEWS Annual Ad rates

Ad size	Location of ad	Price
Full page	1st 25% of newsletter	$150
1/2 page	1st 25% of newsletter	$100
1/4 page	1st 25% of newsletter	$75
1/8 page	1st 25% of newsletter	$50
Full page	rest of newsletter	$100
1/2 page	rest of newsletter	$75
1/4 page	rest of newsletter	$50

New Jersey Beekeeper Association
Angelo Trapani
Olde Noah Hunt Rd.
Clarksburg,N.J. 08510

JERSEY FRESH

FROM THE GARDEN STATE

NON-PROFIT
ORGANIZATION
U.S. POSTAGE
PAID
RINGOES, NJ
PERMIT # 65

Check you mailing label to see if your email is "working"!