A Bee or Not a Bee—That is the Question
by Tony Jadczak, State Apiarist

In the coming weeks the Department of Agriculture, Extension Offices, pest control companies and beekeepers (that’s you) will receive calls from the public, family, friends and neighbors about “bees” living in or seen around buildings, garbage cans, barbecues, farms and gardens. During late summer and fall, the majority of these inquiries will pertain to wasps, in contrast to the honeybee swarm calls that are most common during late spring and early summer. To many, bees and wasps look alike, given that people primarily notice the yellow and black abdominal bands common to stinging insects. Frequently people refer to all of these insects as “bees,” especially the yellow jackets and hornets. Following is a review of the biology and control options for the most common culprits that you can share with those who seek your advice.

In general, social insects are more prone to sting in order to defend the colony when disturbed. Honey bees, yellow jackets, hornets, paper wasps and sawflies belong to the order Hymenoptera. There are more than 113,000 known species in this order and more than 17,000 are found in North America. Many hymenopterans do not sting humans, however, members of the Sphecidae (digger wasps), Vespidae (paper wasps, yellow jackets, hornets), and Apidae (honey bees, bumble bees) families do. There are parasitic wasp species that can look menacing, however, their sting-like appendage is actually an ovipositor that is used to lay eggs into insects, caterpillars or the eggs of host insects. Perhaps you have noticed tomato hornworms or Japanese beetles with tiny rice-like protrusions on their bodies. These are the pupal cases of parasitic wasps.

The basic difference between bees and wasps concerns their diets. Bees are vegetarians and gather pollen as a source of protein to nourish the larvae and nurse bees. It is for this reason that bees have bodies covered with short hairs—the body hair aids in pollen collection. Bees also have appendages to carry the pollen with, such as rows of hairs on the legs and/or abdomen, or even pollen baskets as is the case with honey bees and bumble bees. Bees gather nectar from flowers as a source of carbohydrates that is consumed by both the immature and adult...continued on pg 6

Editor’s note: Bruce Marlin has created a beautiful, extensive online photographic reference of bees, wasps and ants of North America [www.cirrusimage.com/hymenoptera.htm], as well as the same for butterflies & moths, fungi & mushrooms, flies, ticks & mites.
Changes to the MSBA Bylaws

The MSBA Officers and Board of Directors are proposing amendments to the association bylaws. The bylaws require a 30-day written notice specifying the time, place, agenda, and the proposed changes before being amended by a simple majority vote of those attending an annual meeting. This will serve as notice to the members of MSBA that a vote will be taken on the proposed changes on Saturday, October 16, 2010, at Hannaford Hall in the Abromson Center of the University of Southern Maine in Portland, Maine, during the business meeting to be held at 11:30 AM. Copies of the bylaws with proposed changes will be available at the annual meeting and can also be reviewed on the website (www.mainebeekeepers.org).

The proposed changes (in italics) are presented at right.

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Article III Membership

Add Section 2: MSBA’s policy is to fully comply with all applicable laws regarding discrimination. MSBA prohibits any legally impermissible, arbitrary or unreasonable discriminatory practices in granting membership. Renumber remaining sections.

Section 3, correct number of membership classes to: six classes.

Honorary Life Membership, revise to: may be given to any individual who has kept bees in the State of Maine (with an Apiary License from the Maine Department of Agriculture), or elsewhere, for a minimum of 35 years and is now a resident of the State of Maine.

Article IV Officers

Section 4, delete sentence: The Treasurer shall be bonded.

Article V Board of Directors

Section 1, add item to list: e. Membership Director. Renumber remainder of list.

Article VI Committees

Section 1, change to: At the annual meeting, or within two months thereafter, the President may nominate for Board approval the following standing committees….

Section 3, revise: The Executive Committee is to act for the Board between Board meetings at the Board’s direction. The Executive Committee is to be given instructions by the Board on its responsibilities and may be authorized by the Board to act with full authority of the Board.

Section 4, revise: All committees shall file yearly written reports with the Board of Directors 30 days before the annual meeting.

Article VII Rules and Regulations

Section 5 moves to Article VI Committees where it becomes Section 2 and revise: The President shall appoint a nominating committee not less than 60 days before the annual meeting.

Section 9 moves to Article VI Committees where it becomes Section 4. Renumber remaining sections of Article VI and VII to accommodate these changes.

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Annual Meeting Elections

The MSBA Bylaws require an annual meeting “not later than 13 months after the previous meeting” and state that the term for officers is for one year “or for the period between annual meetings.” In order to change from a spring to a fall annual meeting, the meeting to be held on October 16, 2010 will be our next annual meeting [registration form on page 8].

Although we just had elections in March of this year, we will need to hold elections (again) in October. A Nominating Committee was appointed at the May Board of Directors meeting which included all of the Board members present. The committee voted to present a slate consisting of those officers elected at the March Annual Meeting. As always, nominations from the floor will also be accepted.

The committee made the following nominations:

President: Erin MacGregor-Forbes
Vice President: Larry Peiffer
Secretary: W. Adam Stearns
Treasurer: Charles Merrill
Past President: Roy Cronkhite
At-Large Board Members: Nick Kelley and Richard Broadbent
### MSBA Board

<table>
<thead>
<tr>
<th>Executive Committee</th>
<th>Upcoming Board Meetings: Aug 19 &amp; Sep 16 (7 – 9 pm)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Carol Cottrill, EAS Director, Master Beekeeper, 364-0917 <a href="mailto:cotttrill136@roadrunner.com">cotttrill136@roadrunner.com</a></td>
</tr>
<tr>
<td>Vice President</td>
<td>Tony Jadczak, State of Maine Bee Inspector 287-3891 or 287-7562</td>
</tr>
<tr>
<td>Secretary</td>
<td>Hank Nicolaus, Maine Agriculture Committee 563-2555 <a href="mailto:handnicolaus@gmail.com">handnicolaus@gmail.com</a></td>
</tr>
<tr>
<td>Treasurer</td>
<td>Lincoln Sennett, National Honey Board 437-2251, <a href="mailto:swans@uninet.net">swans@uninet.net</a></td>
</tr>
<tr>
<td>Past President</td>
<td>Lester Bourque, 557-0750 <a href="mailto:poothme@adphil.net">poothme@adphil.net</a></td>
</tr>
<tr>
<td></td>
<td>Andrew Dewey, 244-9434 <a href="mailto:andrew@beeherywoods.com">andrew@beeherywoods.com</a></td>
</tr>
<tr>
<td></td>
<td>David Israel, 725-3139 <a href="mailto:disrael@bowdoin.edu">disrael@bowdoin.edu</a></td>
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<tr>
<td></td>
<td>Nick Kelley, 364-4121 <a href="mailto:bakelley39@yahoo.com">bakelley39@yahoo.com</a></td>
</tr>
<tr>
<td></td>
<td>Richard Broadbent, 658-7442 <a href="mailto:broadbentcr@yahoo.com">broadbentcr@yahoo.com</a></td>
</tr>
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<td></td>
<td>Noli Santos, 458-8569 <a href="mailto:nsantos@informe.org">nsantos@informe.org</a></td>
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<tr>
<td></td>
<td>Jean Vose, 563-7564 <a href="mailto:godslve@tidewater.net">godslve@tidewater.net</a></td>
</tr>
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</table>

*Open to all MSBA members; generally held the 3rd Thursday of each month, at the Maine Farm Bureau, 4 Gabriel Drive, Augusta.

### MSBA Chapters

<table>
<thead>
<tr>
<th>Borderline Beekeepers</th>
<th>Penquis Beekeepers Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed Wilkey, 925-3203, <a href="mailto:edwardwilkey@ymail.com">edwardwilkey@ymail.com</a></td>
<td>Tish Dutson, 997-3546, <a href="mailto:tishdutson@yahoo.com">tishdutson@yahoo.com</a></td>
</tr>
<tr>
<td>Ed Lewis, <a href="mailto:mittenhed@msn.com">mittenhed@msn.com</a></td>
<td>Sagadahoc County Beekeepers</td>
</tr>
<tr>
<td>Barb &amp; Jim Reed, 244-3684, or <a href="mailto:virginiaruth_2000@yahoo.com">virginiaruth_2000@yahoo.com</a></td>
<td>Bob Budden, 725-8527 or Sonia Woodrum, 375-8839, <a href="mailto:woodrum1102@roadrunner.com">woodrum1102@roadrunner.com</a></td>
</tr>
<tr>
<td>Kennebec County Beekeepers</td>
<td>Tri-County Beekeepers</td>
</tr>
<tr>
<td>Roy Cronkite, 897-4043, <a href="mailto:roycopronk@roadrunner.com">roycopronk@roadrunner.com</a></td>
<td>Jon Cullen, <a href="mailto:johnandkaren@pivov.net">johnandkaren@pivov.net</a> or Adin Tooker, <a href="mailto:antooker@gmail.com">antooker@gmail.com</a></td>
</tr>
<tr>
<td>Knox-Lincoln County Beekeepers</td>
<td>Western Maine Beekeepers Association</td>
</tr>
<tr>
<td>John Webster, President, 633-6202 (774-7960), <a href="mailto:swtophone@gmail.com">swtophone@gmail.com</a> or Cheryl Rody, 785-3055, <a href="mailto:final-lee@roadrunner.com">final-lee@roadrunner.com</a></td>
<td>Carol Cottrill, 364-0917, <a href="mailto:wmba@roadrunner.com">wmba@roadrunner.com</a> or Nick Kelley, 364-4121, <a href="mailto:bakelley39@yahoo.com">bakelley39@yahoo.com</a></td>
</tr>
<tr>
<td></td>
<td>York County Beekeepers Association</td>
</tr>
<tr>
<td></td>
<td>Ray Salmon, President, 699-8616, <a href="mailto:risalmony@yahoo.com">risalmony@yahoo.com</a> or Larry Peiffer, 642-1089, <a href="mailto:lpeiffer@sad6.k12.me.us">lpeiffer@sad6.k12.me.us</a></td>
</tr>
</tbody>
</table>

### Call for Content & Advertisers!

The Bee Line requests and welcomes member contributions! Please contact the Editor with your comments, photos, calendar events and articles for consideration for inclusion.

**ALL CONTENT IS DUE 15 DAYS PRIOR TO THE PUBLISHING DATE. Issues are published bimonthly:**
- Feb 15, Apr 1, Jun 1, Aug 1, Oct 1, Dec 1

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- 111 Alba Street | Portland, ME 04103
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SARE Grant Colony Update, 07/24/10
by Erin MacGregor-Forbes, EAS Master Beekeeper

The SARE Farmer Grant project is in full swing and we are working hard to record the colonies’ progress and keep up with the needs of the bees.

The Hollis SARE yard experienced a soft pesticide hit in June—all of the colonies brought pesticides of unknown origin back into their hives, killing brood and bees at the colonies. Tony Jadczak came down to inspect and make recommendations for getting the colonies back in line while continuing to conform with the project parameters. We expect that the colonies will continue in the project and that we will be able to successfully bring them to winter, but because of the pesticide exposure, they are substantially behind the progress of the Westbrook yard.

The Westbrook SARE yard is running along full tilt. Three of the colonies are working on their third medium super, three have two supers on now, and six are building in their first super. One hive swarmed and failed to requeen, so they were disqualified (and requeued in a separate yard).

The Cumberland County Cooperative Extension beginner bee school includes a “field day” as part of the curriculum. In 2010 there were two beginner bee school groups, one taught by Tony Jadczak and Mark Plaisted and one taught by myself and Geoff MacLean. So for the field day we invited both classes to the Westbrook SARE yard to spend a little hands-on time looking at colonies and discussing the differences between them. Due to weather and rescheduling, we actually ended up with two field days on the weekend of July 10–11, which was nice as it broke the visitors up into smaller groups and allowed better hands-on inspections. We filled-out the hive inspection note sheets for each colony we inspected and had extra sheets on hand for anyone wanted to start using them in their own colony inspections.

The brood pattern in #46 is solid and the queen is laying heavily. The problem appears to be with the adult bees. On any given day there are literally hundreds of crawling bees in front of the hive. These are adult bees with fully-formed wings. They can sting, but cannot fly—even if you pick them up and brush them off, they simply fall to the ground. Tony Jadczak came down and inspected the SARE yard in June and we took samples of bees in the brood nest and a separate sample of the crawling bees (30 bees in each). Surprisingly both samples came back negative for both Tracheal mites and Nosema. This leads us to assume that the problem with this hive is viral, but we do not know that for certain. I will take an additional sample set of bees with me to the Eastern Apicultural Society annual conference (August 1–7) in the hopes that we can look at them in the Microscopy workshops.

The rest of the colonies are generally healthy—we’ve seen a wide range of bee maladies in the Westbrook yard, including European Foulbrood (which we successfully treated with a quick round of Terramycin antibiotic), Sacbrood Virus and Deformed Wing Virus. The varroa mite loads in the Westbrook yard have been comparatively low this year so far, but with the strong brood buildup, they will most likely increase rapidly, so we plan to treat in early September with Api Life Var (the organic essential oil based mite treatment) if necessary. Despite the low mite loads thus far, the viral loads have been significant.

Thinking two months ahead, as we should all be doing, I anticipate the colonies going into fall with plenty of honey stores in this yard. If anything, the Westbrook yard is “plugging out” heavily this summer, bringing in nectar so fast the bees are storing it in the brood nest instead of drawing out and filling supers. I expect all of the colonies except the #46 will go to winter with our optimal configuration of two deep, plus a medium of honey as their winter stores. Any additional honey past that first medium will be harvested in early September, just prior to treating the hives. Our intention with leaving the additional medium of honey on each colony is to ensure that our colonies will not face starvation in winter, thus eliminating the need for candy or sugar feeding.

For wintering, we have homasote insulation boards which we will install between the inner and outer covers to control moisture in the colonies for winter, and we are not planning to wrap, as we have painted the hives a dark color to improve solar gain. When we treat for mites in September, the Screened Bottom Board inserts will all need to be installed in order to close the hives up, keeping the vapors from the essential oils in the colonies. Even after treatment, we
will keep the SBB inserts in for winter to reduce draft in the colonies and to allow us to monitor the hives in winter by checking the debris on the SBB inserts.

So for now we are monitoring mite loads, keeping an eye on our rapidly filling supers, and keeping good records on the colonies’ progress through the season. We’ve had lots of fantastic weather and the bees are happy and easy to be around. We’re looking forward to the honey harvest, and feeling confident about winter for these colonies.

NOTE: Both homasote insulation boards and Api Life Var will be for sale through the Cumberland County Beekeepers Association (or through your local beekeeping supplier)—place an order for what you need via the CCBA Google group or at the September meeting and pick up at the October meeting.

A whiff of honey is a pleasing introduction to the nicely balanced rosemary and lemon taste of this lightly carbonated, lightly honey-sweetened, subtle, yet flavorful soda I just tried. Christopher Kinkade’s new soda is currently available at Morning Glory in Brunswick, and Rosemont Bakeries in Portland and Yarmouth.

-A Review-

Green Bee’s New Lemon Squeeze Soda

A whiff of honey is a pleasing introduction to the nicely balanced rosemary and lemon taste of this lightly carbonated, lightly honey-sweetened, subtle, yet flavorful soda I just tried. Christopher Kinkade’s new soda is currently available at Morning Glory in Brunswick, and Rosemont Bakeries in Portland and Yarmouth.

-RECIPE-

Bee’s Knees Cocktail contributed by Peter Richardson

A wonderfully refreshing cocktail, Bee’s Knees was made popular during prohibition, as the honey was thought to disguise the smell of the gin. We have served it using our honey, with rave reviews! Here’s the recipe:

*2 oz gin (Substituting rum transforms this drink into a “Canchánchara.”)*

*3/4 oz honey syrup (Make by combining equal parts honey and boiling water—this keeps the honey from forming a ball in the bottom of your glass. Stir until completely mixed, bottle, and refrigerate until ready to use. For a real treat, add lavender blossoms to your honey syrup and then strain them out.)*

*1/2 oz fresh lemon juice*

*Ice cubes*

Combine all ingredients in a shaker. Shake vigorously and strain into a chilled glass or serve over ice. Garnish with a lemon twist or lavender blossom. Too strong? Pour into a large glass and add soda water.

Disclaimer: May impair bee-handling skills; do not work hives after consuming!

-Agriculture Day at the Legislature-

The Cronkhites represented the MSBA on Agriculture Day at the Legislature, one of the favorite days of the representatives and employees at the Capital. Displays covering all aspects of agriculture were located in the Hall of Flags.

Visitors at both events were particularly interested in the observation hive, the hive woodenware, and also enjoyed looking for and finding the queen.

-Roy Cronkhite-

-Kennebec Celebration-

In June Augusta organizers held a festival, the Kennebec Celebration, in the Fort Western park honoring the Kennebec River for its history and influence on area people. The Cronkhites reached out to the public via the MSBA booth.
bees. In contrast, wasps are hairless and tend to have restricted waists between the thorax and abdomen. They are primarily carnivores that hunt a variety of insects, caterpillars and spiders for protein that is fed to the larvae. Adult wasps do consume nectar for nourishment and some species will forage for pollen, too. Except for the honey bee, all of the bee and wasp species have an annual life cycle with a single queen either starting a colony in spring or provisioning her nest with a pollen/nectar or meat/nectar mix for her larvae to consume. Honey bees and wasps are beneficial and it is for this reason that they convert nectar into honey and horde an excess for the winter and periods of dearth. All of the bees and wasps, except for the honey bee, have a smooth sting and are capable of stinging more than once. Fortunately, the vast majority of these insects aren’t prone to sting except for the social species in defense of the colony.

The most common questions in the coming weeks will concern yellow jacket and hornet nests, followed by questions regarding bumble bees and other wasp species. There are likely to be a few “honey bees in my house” calls and a few fall swarm calls. The focus of this review will concern wasps and bumble bees.

When called about a “bee’s nest” at this time of year, first determine what kind of insect the person is concerned about and whether or not there has been a stinging incident. Remember, all of the possible suspects are beneficial insects and have an annual life cycle. For example, if the caller describes a gray paper-like nest that resembles a football, it is most likely of a bald-faced hornet or aerial-nesting yellow jacket. If no one has been stung nor is highly allergic, and the nest is high in a tree or other “safe place” (such as the side of a building and unlikely to be disturbed or in contact with people or animals), it is best to do nothing. The rationale for this advice is that the nest has been there all summer, the wasps are beneficial, and the colony will die in late fall anyway. Assure the caller that wasps won’t move into the nest the following spring and that the nest can be safely removed from the building in late October or November.

If people have been stung or the hornet nest is in an area that is dangerous, offer the following options: Call a licensed pest control company; or if the person is inclined, recommend that they purchase a wasp/hornet killer that delivers a 10”-15” spray. Advise them to read the pesticide label and spray the nest’s entrance (located toward the bottom of the structure) during the evening when all of the wasps have returned from foraging. It is important that the nest or supporting structure (tree branch, building) isn’t bumped or

<table>
<thead>
<tr>
<th>FAMILY</th>
<th>ORDER: HYMENOPTERA</th>
<th>NEST</th>
<th>ID</th>
<th>MOOD</th>
<th>FOOD</th>
<th>CYCLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vespidae</td>
<td>Vespidae</td>
<td>social; large aerial paper nests (usually in trees, rarely in buildings)</td>
<td>black and white, shiny, larger than honey bee, smooth sting</td>
<td>aggressive, capable of multiple stings, easily provoked (use extreme caution)</td>
<td>adults: carbohydrates (fruit pulp, flower nectar, tree sap, honeydew); larvae: proteins (insects and arthropods such as flies, caterpillars and beetle larvae which are chewed-up and fed to the larvae by the adult workers)</td>
<td>annual: only queen overwinters and starts nesting in the spring; large population by late summer</td>
</tr>
<tr>
<td>Vespinae</td>
<td>Vespinae</td>
<td>social; ground nests (lawnmowers beware!) and small aerial nests (trees, eaves, chimneys)</td>
<td>bright yellow and shiny black, smaller than honey bee, smooth sting</td>
<td>aggressive, capable of multiple stings, very easily disturbed (use extreme caution)</td>
<td>usually non-aggressive, but defensive of nest, capable of multiple stings, to be respected</td>
<td>annual: only queen overwinters and starts nesting in the spring; population of 20-30 by late summer</td>
</tr>
<tr>
<td>Dolichovespula</td>
<td>Vespula</td>
<td>semi-social; open-comb paper nests on a stalk, suspended from eaves or porch ceilings</td>
<td>thin-waisted, elongated; shiny-black to reddish-brown, 1”-1½”, long legs, smooth sting</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Vespula</td>
<td>Dolichovespula</td>
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</table>
disturbed, because the wasps will exit the entrance and cover the exterior of the paper nest in a defensive posture. One more vibration or bump and the wasps will defend their nest.

If you are asked to do a “favor,” you may do so provided it is not for a fee (unless you are a licensed Commercial Pesticide Applicator with the necessary credentials).

When asked about ground-nesting yellow jackets, you should offer similar advice according to the situation. The ground-nesting species tend to be more defensive due to vibrations from machinery or movement. These yellow jackets also construct a paper nest beneath the soil, rock wall, etc., and extermination (if necessary) is slightly different. If the nest’s hole is readily accessible, advise the individual of the following options: Prior to taking action, dig a clump of sod from an area away from the nest. Then, mix a 5-gallon bucket of soapy water (1 pint dish detergent : 1 gallon water) and pour it into the hole during the evening and cover the hole with the sod. If the individual prefers a chemical approach, they can purchase a foam-forming wasp/hornet killer and apply it according to label instructions. Another approach could be a dust formulation of either a pyrethroid (permethrin) or a carbamate insecticide such as Sevin, labeled for wasp/hornet control, and used according to the label. Some of these formulations have an applicator tube, but precautions should always be taken to avoid user contact with the pesticide and especially the agitated wasps! The dust formulations do not act as fast as soapy water or the liquid-foam insecticide formulations. A clump of sod also helps for these strategies. Ground-nesting bumble bees can be exterminated in a similar fashion, though bumble bees tend to be quite docile unless disturbed.

At times homeowners encounter yellow jackets and bumble bees that nest within the wall voids or other enclosed areas of houses. Unless the wasps or bumble bees are entering the living space, no action is the best advice since the colony dies in the fall. If the insects are entering the home, advise the person to plug the point of access into the room. If abatement is needed and the individual chooses the do-it-yourself method, recommend an aerosol formulation of a pyrethroid insecticide (not the jet stream formulation) or dust formulation of one of the aforementioned insecticides applied at the colony entrance after all of the insects have returned from foraging. Be sure to stress the need for the pesticide to be properly labeled for control of wasps/bumble bees and the need to read the entire label and take the necessary precautions.

Late summer and fall is the season when beekeepers can expect wasp and hornet calls. The best advice you can give is, “do nothing” since these insects have an annual life cycle and wasps do not re-inhabit nests the following year. In dangerous situations, however, action is appropriate and it is best for individuals to hire professional licensed pest-control companies. For those individuals who are so inclined, advise them to use the least toxic and appropriate formulation of a registered insecticide. Advise people to read the pesticide label in order to protect themselves and others. Remind the do-it-yourself folks to protect themselves from stings and to remember that other than the honey bee, all of the stinging insects can sting more than once. And never pour gasoline into a nest!

When in doubt, do nothing. 

<table>
<thead>
<tr>
<th>BUMBLE BEE</th>
<th>HONEY BEE</th>
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<tbody>
<tr>
<td><strong>Family:</strong> Apidae</td>
<td><strong>Family:</strong> Apidae</td>
</tr>
<tr>
<td><strong>Subfamily:</strong> Apinae</td>
<td><strong>Subfamily:</strong> Apinae</td>
</tr>
<tr>
<td><strong>Genus:</strong> Bombus</td>
<td><strong>Genus:</strong> Apis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>social; small wax-comb nests (often underground)</th>
<th>social; large wax-comb nests (feral colonies usually inside trees, sometimes in buildings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>black and yellow, very fuzzy, larger than honey bee, smooth sting</td>
<td>black and yellow banding, fuzzy, barbed sting</td>
</tr>
<tr>
<td>usually non-aggressive, but defensive of nest, capable of multiple stings</td>
<td>usually non-aggressive, but defensive of nest, only capable of singular sting</td>
</tr>
<tr>
<td>adults: carbohydrates (flower nectar); larvae: proteins (pollen)</td>
<td>perennial: colony overwinters; large population by late summer</td>
</tr>
<tr>
<td>annual: only queen overwinters and starts nesting in the spring; population of around 50 by late summer</td>
<td>perennial: colony overwinters; large population by late summer</td>
</tr>
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MAINE STATE BEEKEEPERS ASSOCIATION ANNUAL MEETING

October 16, 2010
Hannaford Hall in the Abromson Center of the University of Southern Maine in Portland, Maine

HOSTED BY YORK COUNTY BEEKEEPERS ASSOCIATION

We are honored to have three great speakers this fall:

Dr. Medhat Nasr, Provincial Apiculturist, Alberta
& Juliana Rangel, Postdoctoral Associate, North Carolina State
& Tony Jadczak, State Apiarist, Maine

Meet Other Maine Beekeepers and Learn More About Beekeeping!

TENTATIVE PROGRAM SCHEDULE

8:00 – 9:00 Registration and Coffee
9:00 – 9:15 Welcome from MSBA President, Erin MacGregor-Forbes
9:15 – 10:15 Speaker
10:15 – 10:30 Break
10:30 – 11:30 Speaker
11:30 – 12:15 MSBA Business
12:15 – 1:00 Lunch
1:00 – 2:15 Speaker
2:15 – 2:30 Break
2:30 – 3:30 Speaker
3:30 – 4:30 Raffle and Door Prizes

Raffles & Tickets

There will be raffles to benefit the Association. You are invited to bring an item for the raffle table (not necessarily bee-related) and will want to purchase tickets for your favorite items. Everyone who pre-registers receives one free raffle ticket at the registration table.

Directions

From north of Portland, south of Gardiner: I-95 S to I-295 S via exit 52
From south of Portland: I-95 N to I-295 N via exit 44
From I-295: exit 6B (Forest Avenue, North) in Portland. Off the exit, immediately prepare for a left turn at the first stoplight onto Bedford Street. After the skywalk, turn left onto Surrenden Street and into the USM Parking Garage—on Saturdays, gates for the garage remain open for free parking; no tickets will be dispensed.

www.usm.maine.edu/conferences/abromson/directions.html

Dr. Medhat Nasr, Provincial Apiculturist with the province of Alberta, Canada, has extensive experience in apiculture both as a researcher and as a provincial apiculturist. Medhat will speak on hive health, Varroa control, Nosema research, and will be available to answer questions put forth from the group.

Juliana Rangel is a Postdoctoral Associate at North Carolina State University, and the program coordinator for a new queen-rearing initiative in the state. A past EAS Student Award winner, Juliana’s expertise is in the behavior and ecology of honey bees, particularly their collective decision-making processes during swarming.

Tony Jadczak, State Apiarist, Maine Department of Agriculture, will present a report of what he has been seeing across our state in 2010.

Please register with the form below or online via PayPal at www.mainebeekeepers.org by October 4.

2010 MSBA Membership is required to attend the Annual Meeting; please submit membership dues with meeting registration if necessary.

NAME(S) (PLEASE PRINT)
S T R E E T  C I T Y / T O W N  S T A T E  Z I P
P H O N E  C E L L  E M A I L

Registration for 2010 MSBA Annual Meeting

Registration _______ @ $30.00 each Total: $ _______

2010 MSBA Membership is required to attend the Annual Meeting; please submit membership dues as per below if necessary.

2010 MSBA Dues:
□ new □ renewing
Single Membership _______ @ $15.00 each Total: $ _______
Family Membership _______ @ $22.50 each Total: $ _______

Grand Total Enclosed: $ _______

MSBA Annual Meeting
C/o Peggy Pride
19 Lizotte Road
Lebanon, Maine 04027

Registration Deadline: October 4, 2010
Chapter(s) you are a member of: __________________________
Adventures of the Bumbling Beekeeper

by Ed Auden

JULY 2, 2010

Swarm!

By the time I prepare everything and get ready to retrieve it from the alders, the swarm returns to the parent hive. I put together a swarm trap and place it near alders.

JULY 3, 2010

Swarm again—in opposite direction of first day, avoiding swarm trap.

Takes me three attempts to catch it.

First attempt: I try cutting it out of the forsythia. It moves to the field.

Second attempt: I put a cardboard nuc filled with foundation next to it. Bees go in until I up-right the nuc. They then fly back into the forsythia.

Get mean the third time: I cut through to them and shake the bees into a garbage can, spraying them down with sugar water.

Keep garbage can in basement with burlap over top until temperature cools-off while I get the hive ready for the bees.

Pour, shake, bang and brush bees into hive. Top with bucket feeder and close up.

JULY 4, 2010

8:30AM | All looks well. Bees are coming and going.

10:30AM | Hive is empty. Bees nowhere in sight.

2:00PM | I am watering my garden when I see the dog snooping around the forsythia. Odd, I say to myself.

Go over, and there is my swarm—compact and very peaceful in the middle of the bush.

Quickly I get the bee suit on. Smoke parent colony; steal a frame of honey.

Put honey frame in first medium for swarm colony, fill rest of medium box with frames of foundation. Place empty box on top.

Get a bucket and tarp, go over to forsythia.

Cut my way through to branches the swarm is on. Holly is going to have a fit when she notices how I have butchered her forsythia.

As I am cutting branches with swarm, bees are falling off.

Quickly get bucket underneath and am able to shake half of bees into bucket. Cut some more branches to get a few more.

Spray sugar water on bees to keep them from climbing out.

Bring bucket over to hive and pour bees into hive. Give them some nudges.

Rest bucket up against entrance so remainder can climb in.

Go back for more bees, but they’ve dispersed.

Back to hive: start dropping frames with foundation into top box very slowly and easily so as not to crush bees.

In a thick mass of bees on the side, I spot the queen. This is the one Larry Peiffer had marked. I can tell because the mark I made on the queen from the other colony had been sloppy. This confirms the swarm is from the same colony as day one.

Try to smoke-down group of bees with their queen with a puff and then brush lightly while putting in rest of frames. Not much success.

Push frame over from side instead of dropping one down on top of her.

Get everything in and buttoned up, including bucket feeder.

3:20PM | Bees look like they are settling down and staying in the hive.

3:45PM | Swarm is back in forsythia bush.

I now get some sound advice from Erin Forbes: Bring the whole hive over to the bush and place it on tarp; place two empty supers on the bottom board; spray swarm with sugar water to immobilize them; remove swarm and shake it into empty supers; Place frames in top super only; here is a key technique—steal a frame of brood from the parent colony and add it. As Erin put it, “Bees love babies and will not want to leave.” Another key: Before starting out again, drink some mead.

I follow her instructions, once again cutting into the bush to get to the swarm. I get most of it into the boxes. The rest follow through the front entrance.

In the evening, I plug up the holes and with a friend carry the hive back to the apiary.

It may have been the mead. It may have been the frame of brood. The bees have not swarmed again.

Holly was upset about the bush. Unlucky for me, while picking tools off the ground after securing the swarm, I placed my hand down on a bee and received a sting. Holly, more concerned about my swollen hand, forgot about the forsythia!
In his book *Honey, the Gourmet Medicine*, Joe Traynor opens the door to the very real possibility that products from the hive, Honey in particular, have healing powers, and in many cases work far more effectively than the chemicals or medicines widely accepted as standard treatment for many human ailments. Traynor does not provide his own research with regard to the medicinal value of Honey, but rather compiles anecdotes, lore and scientific research conducted by others in a way that convinces the reader not to ignore Honey as a staple for any medicine cabinet, burn unit or hospital emergency room.

Joe Traynor’s background is in Plant Science. He earned his B.S. degree in Horticulture, and an M.S. in Soil Science from UC Davis. In the book he postulates that since the medicinal properties of many plants are well known and those specific plants are highly regarded for their medicinal properties, it should not be surprising that nectar from these same plants, and probably others, also hold high medicinal value. Traynor suggests that monoculture of specific plants for their nectar’s medicinal value (and therefore the honey from that nectar) cannot be far away, once the medicinal properties are widely recognized by our society.

This book is broken into three sections: 1) Honey as Medicine; 2) Honey for Athletes (sports drinks in particular); and 3) The Joy of Honey, where honey as a food is discussed. The first section is what makes this book unique from others. Scientific research conducted by Peter Molan from New Zealand is the primary source of validating studies that prove the medicinal values of Honey for Traynor’s book. Molan has conducted so many studies in this regard that the author calls the research “Molan’s Mountain” (mountain of data).

Human ailments discussed in the book where Honey has been proven by at least one study to be an effective medicine include skin wounds, burns, stomach ulcers, bowel problems, liver problems, SIDS (yes, potentially—irradiated and fed to infants to alleviate SIDS), eye maladies, skin maladies, and particularly interesting, as a remedy for antibiotic resistance.

In one example, Traynor discusses the benefits of Honey as a medicine in treating cancer after cancerous tumors have been removed. He cites a 2000 lab study where 60 mice were inoculated with cancerous tumors. After surgery to remove the cancer, the mice were divided into two groups of 30 mice each; one a control group and one a test group. After surgery to remove the expanded cancer tumors, the control group’s surgical wounds were treated with standard medicines and protocol accepted for this purpose. The test group of mice had their surgical wounds treated with Honey. In the control group, 30 of the 30 mice had recurrence of cancerous tumors. In the test group where mice were treated with Honey, only 8 of the 30 mice had recurrence of tumors. While it is one simple study on mice, the results are still impressive to me. Traynor provides many examples of a similar nature in the book for a multitude of human ailments.

One of the other interesting discussions in the book regards the chemistry associated with Honey’s extremely effective role in preventing infection, and reducing the healing time for burns and skin wounds. Traynor surmises that hydrogen peroxide is key to this, with its bacteria-killing capability, but notes that it is not hydrogen peroxide content in Honey that makes it effective. Instead it is the chemical reaction that takes place locally on the burn or wound when Honey is applied. The “slow release” of hydrogen peroxide from the honey due to this chemical reaction at the injury site appears to be just enough to prevent infection, while not enough to cause...
the flesh “burning” that has been associated with other types of hydrogen peroxide applications. How did the bees know they got the healing formula right? To quote the author, “Could man devise a more perfect, slow-release antimicrobial product for treating wounds? If a billion-dollar biomedical company gave their research and development scientists unlimited time and resources, it is doubtful they could equal what nature has already provided in honey.” One of the contentions of the author is that since Honey is readily available and cheap compared to modern medicines, it will never be embraced as true medicine by mainstream healthcare providers in our society. Honey as a cure to human ailments is just too good to be true for many in the healthcare system.

While the author covers a wide variety of ailments and the healing properties of Honey for each of them, Traynor does not go into the level of detail associated with the work of a thesis, and therefore the book does not stand as the “smoking gun” proof that Honey is the wonder drug of the future for many human ailments. Traynor does, however, provide an extensive listing of work done by others in the field that meet the rigid constraints of thesis development, and therefore provides solid backup material for all of the healing aspects of Honey that are described in the book.

This book was an excellent read, and the data presented was convincing enough that I now have honey in my kitchen cabinets and in my bathroom medicine cabinet.

Lots of New Western Maine Beekeepers Association Members!

by Carol Cottrill

The WMBA has a whole bunch of new members—several thousand actually—as they have welcomed two hives of bees to the club. A package of Italian bees arrived on April 22nd and was installed in the first hive on April 23rd. Our bee school students had a chance to see a live demonstration on the day before they were to pick up their own packages. Nick Kelley and Carol Cottrill got the girls settled in their new home and had a chance to answer questions on the procedure. This was the first time many of the students had been in a bee yard, so there were lots of questions on the location of the hives, the electric fence, the hive stands and what type of feeders to use. Although these subjects were covered in class, there is more impact in seeing them in actual practice!

On May 15th the second hive was set up from a Carniolan nuc. After demonstrating the nuc installation, we checked on our package bees’ progress. Our industrious Italian queen had a beautiful brood pattern going and our students were excited to see some emerging brood as we passed a frame around. Both hives are now enjoying the hills of western Maine, with several acres of pasture in their front yard and lots of wild brambles on the hillside for forage.

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“Since Aristotle’s time, scientists have studied bees closely. The life of the honey bee colony is full of wonders and is attached to all other branches of science, so to study bees is to study nature.”

Great dissertations and philosophical views have been written about the worldwide European Honeybee die-off and about where all the bees may have gone. Having spent many hours reviewing papers by Clarence Collison, Dewey Caron, Steve Sheppard, Keith Delaplane, Jim Tew, Jennifer Berry, Ross Conrad, Roger Hoopingarner and others has provided me insight to US conditions. All the above are respected and very knowledgeable scientists in the field of apiculture. I am a retired aquatic scientist and do not profess expertise in the science of apiculture, but have kept and managed honeybees for 46 years in Maine. This has provided me with a great amount of knowledge through experience. Seeing many changes in the management of honey bees and following the science of the species in the United States during this period of time has also provided great knowledge. In my profession of studying cold-blooded aquatic organisms, I have also seen many changes brought about by numerous environmental factors such as acid rain and habitat change.

The honeybee disappearance phenomenon has been hypothesized by countless individuals and a few are being tested. Some people believe cell phones and GMOs are a cause. While some of us do not know, the bee scientists believe that Nosema, nutrition, pesticides, mites, viruses, bacteria, Kashmir disease or a combination of these factors are the cause. Finally, someone has mentioned migratory stress as creating possible synergistic effects to be questioned. Hallelujah from me!

Which of the above factors are important, the most potent, causative or insidious is puzzling. As a sideline I have not experienced any problems except for Varroa mites, which we all have to deal with, and I do not move my bees. The nation’s bee die-off has provoked debates that are sometimes furious and to no avail, and even ridiculous. Our USDA is providing millions of dollars in various ways to help, but I seriously question where all of this money goes. Inbreeding does affect genetic diversity and is perhaps part of the equation. We do have to consider the crops that are pollinated by the honey bee which is one-third (about 90 crops) of our diet and worth $15 billion in total annual economic value.

So what have we done to our bees? As mentioned earlier, my background and professional work is in aquatic science. I have seen fish raised under hatchery or farmed conditions, and decisions many years ago generated questions; were we asking too much of the species, and what could we do with culturing them to be larger, more active and longer-living? We found that stress was indeed the culprit, and many diseases (bacterial and viral) were being found due to stress. Crowding, transportation and stocking became stress factors that caused the outbreak of many Salmonid diseases. We reduced the crowding, distance-to-transport and stocking policies which all resulted in benefits to the fish; it was a reality check to reduce stress.

The same thinking can be said for honeybees as they are being stressed to the limit. We are expecting too much and think they can “keep on trucking” and not falter or change. While I think, “we have met the enemy and he is us,” Pogo, 1960, this in reality applies to us humans with all of our environmental problems. We must continue to better understand what CCD is.

Some of the more recent publications by Morgan Peck, Francis Ratnicks and Norman Carreck raise the possibility of genetic diversity as part of the problem and Steve Sheppard shares that view. Our honey bees are “sickly enslaved and mechanized.” They simply are being pushed to the limits, and stress again could be the factor.

Past practices have been to assume bee decline is due to a number of interacting factors, synthetic and organic. Colonies were showing symptoms called CCD with rapid loss of adult bees and low ratios of adults to brood, with viruses, bacteria and parasites. Therefore it becomes difficult to isolate a single causative effect and it complicates the researchers’ objective. I think that synergistic effects exist, and migratory stress simply complicates the researchers’ plan to establish a meaningful null hypothesis to be tested. This is Keith Delaplane’s view and I concur.

We need more clarity to solve the puzzle, and I believe that is taking place through Keith Delaplane’s coordinated effort with about 15 major honeybee scientists throughout the US. So far the Australian Continent has escaped the CCD problem. Why? They do not have Varroa mites and all the hitchhikers that come along with it. Our problem: in trying to control Varroa, we have created resistance to effective chemicals. And the mites continuing to become more resistant is a natural survival process. So controlling presents a challenge, and meanwhile, CCD is continuing through many agents in combination. I call it the synergistic effect. My conclusion is, given the significance of the honey bee to humankind, understanding the CCD phenomenon requires further research on honeybee health. So is there anything new? You be the judge.
**CLUB ACTIVITIES**

**Cumberland Beekeepers**

*Open Hive*

Saturday, August 21, noon
(rain date: August 22, 28 or 29)
Keith Kettlehut, 189 Auburn Pownal Road, Durham

Erin will inspect the hives and review what to look for and do in the fall. If they’ve arrived, fall mite treatments will be available.

Bring: veil, lawn chair and pot-luck offering

**Kennebec Beekeepers**

*Open Hive*

Saturday, August 21, 10 AM – 2 PM
Francis & Ginger Scott, 685-3605
188 P Ridge Road, Readfield

All are invited; you need not be a club member to attend.

Bring: veil, lawn chair, food for yourself or to share, drinks (water available), utensils

**Western Maine Beekeepers**

*Meeting*

Wednesday, September 8, 6:30 – 9 PM
Region 9 School cafeteria, Mexico

Tony Jadczak will give a slideshow and presentation on preparing for winter.

**York Beekeepers**

*Open Hive*

Saturday, September 11
(rain date: Sunday, September 12 or 18)
Peggy Pride, 119 Lizotte Road, Lebanon

Wintering Your Hives

Bring: veil, lawn chair and pot-luck offering

**BUZZINGS**

Submit all announcements and news at least 15 days prior to publication date (see page 3).

**Casting Notice**

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michael_raptis@yahoo.com or 917-981-1972

**Old-fashioned Bee Lining**

An article about old-fashioned bee lining was recently published by Northern Woodlands magazine; it can be read online and can also be found in the Summer 2010 issue of the magazine. [www.northernwoodlands.org/articles/article/bee-lining-the-oldtimers-way-to-find-wild-beehives]

**Book Release**


Michael O’Malley, PhD
Executive Editor, Business, Economics, and Law, Yale University Press
michael.omalley@yale.edu or 203-432-0904

**CCBA Scilla Bulb Fundraiser**

The Cumberland Beekeepers will be selling Scilla bulbs again this year, and will take orders at the September meeting. They’ll be priced very economically, and will grace your spring yard with beautiful blue flowers which will provide your honeybees with blue pollen!

**Eastern Apicultural Society Conference**

**Maine Participants, 2010**

Rick & Mercy Cooper, Carol Cottrill, Roy Cronkhite, Jr., Christy Hemenway, Chris Hendricks, David Israel, Erin MacGregor-Forbes, Lawrence Peiffer, Hugh Rowley

**Maine Prize Winners, 2010**

David Israel
1st Prize: Dark Extracted Honey

Overland Apiaries (Erin & Scott Forbes)
1st Prize: Art (sterling silver bee necklace)
2nd Prize: Frame of Honey
3rd Prize: Light Amber Extracted Honey

**Future EAS Conference Locations**

2011: Rhode Island
2012: Burlington, Vermont
Beekeeping Calendar: August Through October

Excerpt from State Apiarist Tony Jadczak’s “A Year in the Apiary: Central Maine”
www.mainebeekeepers.org/maine-state-bee-inspector/index.html

**August:** Harvest honey the 1st week of August if not done in July. Super hives during goldenrod bloom if needed. If summer honey was not harvested, top super for goldenrod/fall honey flow. Unite weak hives and position brood and honey stores in anticipation of winter.

**September:** Harvest fall honey crop and remove supers around September 10–20. Extract ripe honey. Partially filled supers should be fed back to the bees above the inner cover. Reduce entrances, apply brood medications and apply mite treatments after the supers are removed from hives. Feed heavy (2:1) medicated (Fumagillin) syrup or frames of honey to hives low on honey stores. Prevent hives from robbing.

**October:** Finish feeding medicated syrup and the 3rd Terramycin dust application by mid-October. Remove mite treatments in accordance with the label toward the end of the month.

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Membership Type

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- [ ] 5-Year Individual
- [ ] 5-Year Family
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- [ ] Extra Gift Contribution

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This is a [ ] new / [ ] renewing membership (check one).

How did you find out about the MSBA?