

The Arundel



Anne Arundel Beekeepers Association Newsletter

Issue No. 17

February, 2010

The President Speaks

By Loyd Luna

My verbiage will be short; I need space for Peter Quinton's wise counsel on wintering bees. Unfortunately for all of us, Peter has resigned as Vice President. So has Donna McCoy as Secretary. Thanks to both of them for a job "Well Done!" We will have an election of all officers at our first meeting on February 16th.

Preparing And Feeding Hives For The Winter

By Peter Quinton

Wintering over for the bees is a critical time in the colonies life. A critical element in the hive's survival is having enough energy producing stores so that the bees can keep warm and produce enough heat to foster brood rearing.

Here are some items that you should have accomplished prior to the winter. It is, obviously, a little late for this but they are worth mentioning (there is always next year!). Do not have your hives caught short in stores with the onset of fall. They should have 40-60lbs of honey to over winter. If you have not left enough honey from the honey flow, plan to feed them heavily early in the fall (note: some bee keepers suggest starting

feeding in the late summer). In September/October, I rotate the two deeps for wintering over. The bottom deep, rotated to the top position, is usually very light in weight and the expectation is that they will store all that you feed them in the top deep. You take advantage of the bee's natural movement up during the winter where the cluster will end up in the top deep. I feed my bees from September to early November; until they stop taking the sugar water, or the temperature drops below 40F. I use table sugar syrup, two parts sugar to one part water; the heavier sugar syrup helps the bees remove the water quicker and easier to manufacture honey.

You can also wrap your hives with tar paper, cardboard but NOT plastic; must be something breathable to allow moisture out of the hive. I do not normally wrap my hives. It is OK if the hives are covered in snow as it acts as a good insulator but ensure the entrance remains clear. If the air temperature warms up, they will take cleansing flights; remember bees do not defecate in the hive. Going into the winter, your double deep should weigh approximately 170 lbs or feel as dead weight if you lift it. But, gross weight is not everything heading into winter. Your hives should be disease and pest free; have a good productive queen supported by abundant worker population; pollen stores should be stored in frames ready for spring use

(not too much we can do about that...either they have it or not); reduce entrance size and provide for ventilation (prop up the inner cover slightly) to prevent moisture from collecting inside the hive and wetting the cluster.

Now that you have made all of the proper preparations, what is the wintering process for a hive? The workers rid the hive of drones in early fall. They store as much honey as they can with our assistance in feeding. With no brood in the fall and the queen no longer laying eggs starting in November, the cluster becomes well formed when the temperature reaches around 57F. They form a hollow, ball-shaped (soccer ball size) cluster over combs but just under the stored honey. They cannot form a continuous cluster over combs filled with honey. The bees in the center generate heat by vibrating their wing muscles and the bees on the outside of the cluster act as insulators for the cluster. The outside bees gradually trade places with the bees in the center. Bees are normally fatter in the fall so they have better stored energy reserves. They will engorge themselves with honey that could last them days to weeks depending on temperature. It takes very little honey in order to survive and stay warm. The cluster's honey consumption is at its lowest level during the depths of the winter; demands on food stores are very light as there is no brood to raise or keep warm. During warm periods in the winter with temperatures above 45F, (in our area we normally have days like that even in February) the bees can fly to void fecal matter and to move to honey resources within the hive.

There are many methods to feed your bees and they are: top jar/top pail; division board; Boardman entrance feeders; hive top feeders; gallon zip lock

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bags; comb feeding etc. Every beekeeper has his favorite method of feeding bees but they all have the same outcome.

February to March becomes a critical time for a bee hive. Most hive losses occur either very late in the winter or early in the spring. It is a critical period because the queen starts to lay eggs and the brood temperature needs to be maintained at 94F-96F. Feeding and caring for the brood requires a lot of honey: a geometric increase in honey consumption compared to early in winter. A simple test is to lift your hive to get a feel for honey stores remaining. The best solution for feeding at this time is to utilize frames of honey you might have saved from the honey flow. Insert the frames next to the cluster but be sure not to break up or disturb the cluster. During this period, your hives will not be able to utilize sugar syrup no matter how you provide it! It is usually too cold and the bees cannot move to a feeder. They cannot successfully process syrup into usable and storable honey. It is too chilly and damp which precludes evaporation of water in the syrup to produce the honey. Even if they could periodically break cluster to get the syrup, it would stimulate more brood rearing and this increases demand for more honey and pollen at precisely the wrong time. The solution for feeding is FONDANT (dry sugar candy). It does not require evaporation to process. Will not initiate or stimulate further increases in brood rearing as it does not imitate, nor is it seen by the bees, as a nectar flow. Place the FONDANT on the top bars directly over the cluster (the bees should be in top brood box by this time). The moisture the bees generate by respiration inside the hive is utilized in the liquefying process of the dry sugar candy. The recommended FONDANT

recipe is included below. In late March, I will add artificial pollen (obtained from most bee supply houses) to the hives to stimulate increased brood rearing. Once they start to collect natural pollen, stop introducing artificial pollen; the bees will ignore it.

Some final thoughts on the wintering process; be proactive in the fall to insure your hives have the necessary stores to winter over. Ensure your hives have proper ventilation to remove moisture. Be vigilant in February and March and be prepared to feed FONDANT to hives with low honey reserves. Reverse deep hive bodies prior to the start of the honey flow (March/April), remove entrance reducers and install supers. Stand back and be ready to harvest your honey!

FONDANT RECIPE * FOR FEEDING HONEY BEES

There seem to be as many recipes for making fondant as there are cooks, or beekeepers. After trying many of them, and failing more often than not, I've settled on one that works for me. Some recipes call for corn syrup, cream of tartar, and other ingredients, all of which are objectionable to purists or political correctors. Vinegar, which is volatilized in the heating process, is a replacement which purportedly chemically aids the process. Here is my preferred recipe:

Bring one quart of water to a boil in a large pot. Turn off the heat and add five pounds of granulated sugar and ¼ teaspoon vinegar for each pound of sugar (1 ¼ teaspoons), stirring constantly. When it is completely dissolved, bring the water back to a boil and keep stirring until boiling

commences. Boil without stirring for three minutes, covered. Insert a candy thermometer and boil uncovered until 250F is reached. Then place the pot in a sink of cold water. Use a small electric hand mixer to stir the molten candy, measuring the temperature as it cools. ** At about 190F pour the mixture into rimmed metal cookie sheets which are lined with wax paper. Don't use glass containers since it is more difficult to remove. The flexibility of metal makes it easier. Allow it to cool undisturbed; when it is firm to the touch you can score it with a knife to permit easy handling and storage. Place it between sheets of wax paper in a zip-loc bag and fondant will keep almost indefinitely in the freezer.

* Recipe courtesy of Loyd Luna, President, AABA

** I have found it better to utilize a standard mixer as it blends the sugar candy better. It takes a little longer to cool because it is not in an ice bath but I get better results. **Peter Quinton**

2010 AABA SCHEDULE

By Bart Smith, AABA Program Chairman

We meet on the third Tuesday of every other month, starting in February, at Arlington Echo Outdoor Education Center in Millersville. The schedule and speakers follow:

TUESDAY, FEBRUARY 16, 2010, 7:00 – 9:00 P.M. "Sublethal Effects of Pesticides on Honey Bee Health and Behavior" – **Josephine Johnson.**

Jody will discuss her 2009 research results about what pesticides are doing to bees. You may be surprised! Jody is a doctoral candidate at the University of Maryland Baltimore

in the department of Toxicology. She is studying the sublethal effects of several pesticides on honey bees at the USDA Bee Research Lab in Beltsville under the mentorship of Dr. Jeff Pettis. Two imidacloprid studies, one with Dr. Galen Dively at the University of Maryland College Park on field based hives and one with Animal Plant Health Inspection Services (APHIS) in New York City and Worcester, MA on imidacloprid expression in red maple flowers and leaves, are central to her research. Other smaller studies have included work investigating the effects of fluvalinate (Apistan), chlorothalonil, and coumaphos (CheckMite+) on honey bee health.

We will have a business meeting following the presentation. Refreshments, too.

TUESDAY, APRIL 20, 2010, 6:30 - 8:30 P.M.: "Open Hive Demo"

Help examine the honey bee colonies at Arlington Echo. You will be able to see the progress of overwintered colonies and new colonies that were established from packages during the Short Course.

"Panel of Experts"

Get answers from the experts about how to manage your bees or deal with any other issue regarding beekeeping. Club members have been asking for more time to ask questions at meetings. This is your chance to get answers!

TUESDAY, JUNE 15, 2010, 6:30 - 8:30 P.M.: "Open Hive Demo"

Examine the honey bee colonies at Arlington Echo and observe the results of the May honey flow. Also, see the continued progress of new colonies that were established from packages
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during the Short Course.

"Summer Management of Bee Colonies" – Jerry Fischer

Jerry will discuss what you need to be doing with your colonies during the summer months. Jerry has been the state apiary inspector since 2002 and has inspected bees for many years prior to that for the Maryland Department of Agriculture. Over the years, Jerry has kept upward of 200 colonies for honey production and pollination rental. Jerry annually teaches the beekeeping short course each year for the Central Maryland Beekeeper's Association in Baltimore.

TUESDAY, AUGUST 17, 2010, 7:00 – 9:00 P.M.: "Making Soap Using Products of the Hive" – Gale Farquhar

Gale Farquhar is a hobby beekeeper who will discuss the process of soap making using natural materials including products of the hive. He is an experienced soap maker that markets the soap he produces at several local stores in the area where he lives. Don't miss what will be an interesting and informative evening.

"Panel of Experts" (time permitting)

Experienced beekeepers will answer your questions regarding any aspect of beekeeping, time permitting.

2010 SHORT COURSE

By Loyd Luna

This will be our fourteenth year to offer a Short Course--*Beekeeping, A Hobby of A Hobby*. Last year 41 people completed the course. The fees for this year's course remain the same -- \$25 for

individuals, \$30 for family, and \$5 for students. Here is the schedule:

Session 1 (March 9) - Introduction – Loyd Luna; Honey Bee Biology - Rick Derrick.

Session 2 (March 16) - Spring and Summer Management – Loyd Luna.

Session 3 (March 23) - Fall and Winter Management - Steve McDaniel.

Session 4 (April 6) - Maintaining Healthy Bees - Bart Smith; Nectar Sources - Bart Smith.

Session 5 (April 17) - Honey Extracting – Bridgett Kennedy; Products of the Hive - Bart Smith; Equipment Assembly - Free State Bees; Hive Management/Manipulation - Bart Smith; Installing Packaged Bees – Bart Smith and Loyd Luna.

An application form is at page 7. Sessions 1 - 4 are 7-9 P.M.; Session 5 is 9 A.M. - 1 P.M. The course coordinator is Loyd Luna (410) 757-5797; wlluna@verizon.net.

TREASURERS **REPORT FOR 2009** By Doris Luna, Treasurer, AABA

We had \$1,519.03 in the bank on 1/1/09. Income from 76 of our 158 member dues (\$3.00 per annum) was \$228, profit from the Short Course was \$201, extractor rental was \$98 for a total of \$527. Added to the beginning balance equals \$2,046.03.

We spent money for speaker's

fees, refreshments, postage and printing, door prizes, engraving, web site registration, and office supplies. Total expenses: \$1,378.86. The bank balance at the end of the year was \$1,709.80, which includes some deposits for the 2010 Short Course.

ELECTION YEAR!

While I doubt that you will hear of much campaigning by these candidates, at our February meeting you will be asked to cast your ballot for or against the following nice folks who have agreed to stand for office:

President – Loyd Luna

Vice President – Ned Wall

Treasurer – Doris Luna

Secretary – Lindsay Barranco

Chairlady, Publicity – Amy Jameson

Chairman, Programs – Bart Smith

Chairlady, Competition – Amy Jameson

Chairman, Awards – Dwight Fielder

Chairlady, Refreshments – Carolyn Grant

Librarian – Carl Guerci, Jr.

The floor will be open for nominations, and we hope for dozens.





SWEET POSSIBILITIES

The following two recipes, both containing honey, were provided by Bart and Rosemary Smith.

Lynn's Bread

(Lynn's husband was the pastor of the Morristown SDA Church which Bart attended as he grew up. Lynn made terrific bread. Bet you can't eat just one slice!)

3 packages yeast	1 ½ cups oatmeal flakes
1 ½ cups oil	1 cup wheat germ
6 cups water	1 cup soy flour
3 tablespoons salt	8 cups whole wheat bread
¾ cup honey	8 cups white flour
¾ cup bran	

Mix yeast, oil, water, salt, and honey. Stir in honey, bran, oatmeal, wheat germ and soy flour. Add whole wheat flour and enough white flour until a firm bread dough is formed. Knead for 5 - 10 minutes. Place shaped loaves into oiled pans and let rise until doubled. Bake at 375 degrees for 30-45 minutes. Makes 6 loaves.

Energy Bars

(Our daughter Melissa found an energy bar recipe and we slightly altered it to make it gluten free. Tasty and healthy!)

1 cup oatmeal or quinoa flakes	½ cup raisins
½ cup unsalted sunflower seeds	½ cup pitted dates
½ cup flax seeds or pumpkin seeds	½ cup vanilla protein whey powder
¼ cup oat flour	½ teaspoon cinnamon
½ cup dried apricots	1/3 cup honey or maple syrup
½ cup raw almonds	2 eggs
½ cup coconut flakes (optional)	

Preheat oven to 350 degrees. Coat a 9 x 13 pan with cooking spray. Place all ingredients except honey/maple syrup and eggs in food processor. Add syrup and eggs and pulse until mixture is well combined. (If you want the nuts and dried fruit in larger pieces, zap each briefly and pour into a bowl. Mix everything else in food processor and then stir in the nuts and fruit.)

BEEKEEPING - A HONEY OF A HOBBY

FOR: Anyone interested in bees.

SPONSORED BY: Anne Arundel Beekeepers Association
Arlington Echo Outdoor Education Center
Maryland Department of Agriculture

PLACE:
Arlington Echo Outdoor Education Center
975 Indian Landing Road
Millersville, MD 21108

DATES:
March 9, 2010 - 7:00 to 9:00 PM
March 16, 2010 - 7:00 to 9:00 PM
March 23, 2010 - 7:00 to 9:00 PM
April 6, 2010 - 7:00 to 9:00 PM
April 17, 2010 - 9:00 AM to 1:00 PM

FEES: \$25.00 SINGLE \$30.00 FAMILY \$5.00 STUDENT

OPTIONAL TEXT - BEEKEEPING FOR DUMMIES - \$20.00

ADDITIONAL INFORMATION: Loyd Luna - (410) 757-5797, wlluna@verizon.net
DEADLINE FOR APPLICATIONS: February 28, 2010

PLEASE NOTE THAT THIS IS A **FIVE SESSION COURSE**; YOU SHOULD
PLAN TO ATTEND ALL FIVE SESSIONS.

COMPLETE AND RETURN THE APPLICATION BELOW.

Name: _____
Address: _____
City: _____ State _____ ZIP _____
Telephone: Home () _____ Work () _____
E-Mail _____

I want: Text _____ book(s) @ \$20.00 each - Total _____

Course Fee: Individual @ \$25.00 each _____
Family @ \$30.00 each _____ Total number & **names** of attendees
Student @ \$5.00 each _____
Grand Total Paid: \$ _____

Make checks payable to AABA and return the application and check to: Doris Luna,
Treasurer - AABA, 754 Carlisle Drive, Arnold, MD 21012 by February 28, 2010.

