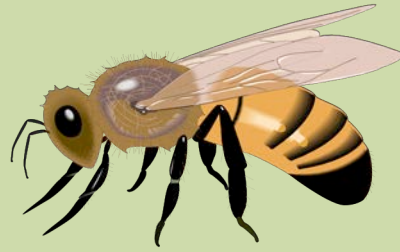


The Arundel



Anne Arundel Beekeepers Association Newsletter

Issue No. 22

January, 2015

The President Speaks

By Lindsay Barranco

Hello and Happy New Year! I am happy to serve as the new President of the Anne Arundel Beekeepers Association, but first let me begin by thanking Loyd and Doris Luna for their many years of service to the members of the AABA. Loyd Luna served as President for 10 years and Doris served as Treasurer for nearly 25 years! Many of our association's members were mentored by Loyd over the years. On page 2 of this newsletter you will find Loyd and Doris' contact information and a message to all members of the AABA. Please feel free to keep in touch with Loyd and Doris and we wish them all the best and hope they are settled into and enjoying their new home in Alabama.

In case you don't know me, I have served as the AABA Secretary for the past 4 years and have been keeping bees for 8 years. For the past year and a half, I have also been working part-time and seasonally for the Maryland Department of Agriculture as the apiary inspector for St. Mary's, Charles, Calvert and Anne Arundel County, while enrolled part-time in a Sustainable Agriculture program at the University of Maryland, College Park. I hope to get to know as many of the beekeepers in the AABA as possible and I look forward to helping our members in whatever way I

can. If you would like to participate in some capacity in the AABA or have an idea, please feel free to send me an email at lbarranco@comcast.net or give me a call at 410-570-1132.

It is an interesting and challenging time to be keeping honeybees. With all the challenges honeybees face, it can also be a bit discouraging to be a beekeeper in this day and age. It is said that 50% of new beekeepers give up keeping bees after the first couple of years. I thought I might write about a few ways that help us, as beekeepers, to persist in the face of discouragement and to continue to find ways to focus on the joys of beekeeping. Here are a few thoughts on this topic:

- **Find a mentor or be a mentor.** Nothing can help a beekeeper keep going by having a beekeeping mentor who also "keeps at" beekeeping year after year. Aside from all the practical assistance, a mentor can show a new beekeeper that it is possible to keep at it even in the face of annual colony losses and discouragement. I have had the benefit of having a mentor – Dwight Fielder, a long-time member of the AABA and a great friend. Dwight has given me helpful feedback over the years and has taught me a tremendous amount, but he has also helped me keep going from year to year and to overcome my

feelings of discouragement when things don't go so well. This is an invaluable aspect of beekeeping.

- **Talking with members of the public about honeybees.** This is another way to tap into the joy and wonder of honeybees. There are thousands of interesting facts about honeybees. When you talk with families, children and adults at the county fair or a community educational event about honeybees, you can see that members of the public are generally awestruck by some of the fascinating things honeybees do – to see this reminds us that honeybees are some of the most awe-inspiring insects on the planet.

- **Reading.** Yes, it is true - when reading about honeybees you will come across many articles on pesticides, diseases, colony collapse disorder, all topics that a beekeeper should certainly keep up on, but they can also add to the discouragement factor. On the flip side there are many books dedicated to the wonder of beekeeping – books on nectar, honey, planting pollination gardens, honeybee biology, making wax products – topics that are uplifting and keep us interested and engaged in beekeeping. Speaking of reading, our association is fortunate to have a terrific library of beekeeping books that can be checked out by our members. Check out the titles on our website at aabees.org under “Library” or check out the “e-library” materials. If you would like to borrow a book, please

contact our librarian, Carl Guerci at carl.guerci@verizon.net and he can arrange for the loan. Carl recently reminded me of a quote out of “The Beekeeper’s Handbook” which is “*a functional knowledge of bee biology and an understanding of the activities performed by the members of the colony will assist you in becoming a better manager of your bees*”.

Quite true! So, consider adding a new dimension to your beekeeping activities, by being involved in a mentoring partnership, talking with groups and reading to keep things fresh and exciting!

How to contact Loyd and Doris Luna:

The home address is 3307 Cotton Crossing SW, Huntsville, AL 35802. Our phone number is 256-715-7563 and the e-mail is wlluna@verizon.net. I've joined the Madison County Beekeepers Association and attended their meetings. I've volunteered to be a mentor and am currently looking for a location to keep a couple of colonies. Spring arrives very early here in Sweet Home Alabama with Red Maple and Willow the first sources of pollen. Many thanks and good luck. Best regards to all my beekeeping friends who I miss.
Loyd

THE MD PESTICIDE NETWORK Recent news

The AABA is a coalition member of the Maryland Pesticide Network, a large group of concerned organizations that include waterkeepers, beekeeping associations, health care organizations, researchers and numerous environmental groups. On October 4, 2014, the Maryland Pesticide Network

members convened at the 8th Annual Meeting located at the Pearlstone Conference and Retreat Center. Attendees heard presentations on the effects pesticides are having on human health, health of fish and wildlife in the Chesapeake Bay and a presentation called the “Plight of the Honeybees”, by Dennis vanEnglesdorp, entomology professor at the University of Maryland. The Beekeeping organizations are particularly concerned about the use of neonicotinoids (insecticides) on crop seeds and ornamental plant seeds. Numerous studies have shown that sub-lethal exposure to neonicotinoids adversely influences the ability of honeybees to navigate and forage for food. Members of the MPN are meeting in smaller working groups to address upcoming legislation that can be proposed to the Maryland General Assembly. They intend to introduce a bill this session that would limit the use of neonicotinoid products by homeowners for non-essential use. There is much we can do as beekeepers. We can help by educating ourselves about neonicotinoids and other pesticides that impact honeybee health, and we can learn about safer alternatives. We can then help educate others. We can address concerns about having neonic-coated seeds on ornamental plants to our local nursery owners. All of us, from time to time, purchase plants from nurseries and nursery owners should hear from their beekeeping customers about plants that adversely impact honeybees and other pollinators. I would encourage all AABA members to read up on this topic and to think about ways we can help in these efforts. Please take a look at MPN Online:

Maryland Pesticide Network
website: www.mdpestnet.org
Facebook:
<http://www.facebook.com/MarylandPest>

icideNetwork

YouTube:

<http://youtube.com/PesticidesSmart>

If there are any beekeepers making presentations to other groups (gardening groups, etc.) I have a power point presentation that was sent to me by a fellow beekeeper about neonicotinoids and will gladly send it to you.

-Lindsay Barranco-

Here is some interesting reading from our members:

THREE “BAD IDEAS” WHEN IT COMES TO BEEKEEPING

By Jim Larson

Since I have been a beekeeper, all of four years now, I have discovered some really bad ideas about how to manage my hives. Some of the ideas come from just being green and not having much experience and some of the ideas come from not making the effort to search out a mentor to help me fill in my knowledge gaps. I’ve found that if I continue to hold on to these bad ideas, I greatly increase the probability that I will lose bees.

Bad idea #1: Ignore Varroa.

There are a lot of different opinions about how to deal with the population of varroa mites in in your honeybee colonies. The opinions range from holding to a high organic ideal with no chemical treatments, to using powdered sugar to dislodge the mites, all the way to using multiple chemical compounds to control varroa. How individual beekeepers deal with varroa mites varies, but I’ve found that knowing your varroa levels during the different times of the year is very important. If you know your varroa levels, then you know whether your treatment plan of choice is working.

There are a number of methods to check for varroa, but the best method I have seen that doesn't kill the bees seems to be the sugar shake detailed in the flyers listed below from the University of Minnesota.

Below is a link to the University of Minnesota Bee Lab flyers:
http://www.beelab.umn.edu/prod/groups/cfans/@pub/@cfans/@bees/documents/asset/cfans_asset_317466.pdf
http://www.beelab.umn.edu/prod/groups/cfans/@pub/@cfans/@bees/documents/asset/cfans_asset_381124.pdf

Bad idea #2: Don't go into your hives to check on your bees.

There is a lot going on in a beehive all the time. If I'm new to beekeeping, there is no way I can get a feel for how a colony is doing without spending time inside of that colony. One of my biggest frustrations when I got my first hive was feeling clueless about what I was looking at when I inspected my hive. I've found that having a mental checklist of what you are looking for before you take a hive apart really helps. Having a mentor to help you out is a huge help. He or she can help you focus on what is important to be looking at each time you go into your beehives (queen, eggs, larva, pupa, tight brood pattern, pollen, honey) and what proportions of each are important to have within the hive. You want to focus on how does the hive sound? How does it smell? Is there evidence of disease? Are there pests or parasites (small hive beetle, wax moth, varroa)?

I find that keeping a log of what is going on in each hive (queen, eggs, larva, pupa, honey, pollen, number of supers) makes it possible to keep track of trends and helps me manage the colony in being prepared for the next visit.

As I spend time in my hive observing my bees, I can learn to head off problems, and discover what questions to ask. Books, articles on the internet, mentors and time in the hive all help me to manage my bees.

Bad idea #3: Don't feed the bees.

Spending time in my hives allows me to know if the bees have sufficient honey stores to make it through the winter. If I have to feed, I should also be looking at what pollen stores are available.

After the spring nectar flow, I have to estimate if the bees have enough stores for me to harvest and still have enough to make it through the winter. If the fall nectar flow is light, I might have to feed. A speaker at one of the Maryland State Beekeepers Association's meetings in November of 2014 (Kim Flottum) emphasized that if you are feeding sugar syrup (carbohydrate source) you should make sure that the bees have enough pollen (the protein source) too. I had been told that in Maryland there are always abundant pollen sources around. But when looking in one of my hives (see bad idea #2) I realized that they had no stored pollen. I started feeding pollen supplements and was pleased to see a colony from a very late package make it through the winter. I don't know if they would have made it without the pollen supplement, but I have since seen a lot of information on the importance of bee nutrition in the of beekeeping literature. So far, in learning how to keep bees, I have done a lot of bad things to my bees. None of us are perfect and we learn as we go. My goal this year is to keep an eye seasonally on the varroa levels, keep better records on what is going on in my hives, keep a finer eye on their nutritional requirements and look for more opportunities to learn by watching others.

2015 AABA SCHEDULE

**By Bart Smith, AABA Program
Chairman**

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

AABA Meeting Schedule for 2015

Wednesday February 18, 2015, 7-9p.m.:

“THE EFFECTS OF PESTICIDES ON HONEYBEE METABOLIC PHYSIOLOGY” – Dr. Steven C. Cook

Dr. Cook is a research entomologist at the Bee Research Laboratory in Beltsville, Maryland. He conducts research on metabolic and nutritional physiology of honeybees, including how environmental stressors (e.g., exposure to pesticide residues, overwintering) affects metabolic processes, and may cause oxidative damage to honey bee tissues. His nutritional studies aim to develop a means with which to make the negative effects of environmental stressors more tolerable which will improve the health of the bees. You will be fascinated by the method he uses to measure the respiration of individual bees!

Dr. Cook joined the USDA in 2011, and joined the Beltsville Bee Lab in January 2013, after transferring from the now defunct USDA Honeybee Research Lab in Weslaco, Texas.

Tuesday April 21, 2015, 6:30-8:30p.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. Please bring protective gear!

Tim McMahon – Maryland State Beekeepers Association - Eastern Apiculture Society representative. A brief presentation on EAS and the EAS Master Beekeeper Certification Process.

“Panel of Experts”

The second half of the evening will be devoted to beekeeping questions. Get answers from the experts about how to manage your bees and other issues regarding beekeeping.

Wednesday June 17, 2015, 6:30-8:30p.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 during the Short Course.

“Preparing Entries for Honey Shows for Fun and Profit” – David Morris

Dave will discuss how to prepare products of the hive for honey shows and for sale. This will include easy tips and tricks for producing outstanding honey, beeswax and other products harvested from the bees. Dave is a long-time friend of the AABA. He has spoken to the club in the past and judged honey at the AA County Fair and at numerous other honey shows. Dave is an Eastern Apiculture Society Master Beekeeper, he is past president of a number of beekeeping organizations including the Maryland State Beekeeper’s Association, and he is currently the newsletter editor for the Bowie-Upper Marlboro Beekeeper’s

association.

Tuesday August 18, 2015, 7-9 p.m.:

“Breeding Honey Bees for the Mid-Atlantic Region” – Sean McKenzie

Sean is the head beekeeper at St. Anselm’s Abbey and the Franciscan Monastery, both in DC. He is also president and CEO of Capitol Bee Care which has a goal of breeding honey bees that are especially well suited to the Mid-Atlantic Region and have a proven record of survival and productivity. Sean is an instructor with the DC Beekeeper Alliance and teaches an urban beekeeping short course in conjunction with the University of the District of Columbia’s Extension Service program. He has also trained beekeepers in Haiti.

Saturday, November 14, 2015:

“Maryland State Beekeeper’s Association Annual Meeting and Honey Show”

The MSBA will hold their annual meeting and honey show at the Maryland Department of Agriculture Headquarters, 50 Harry Truman Parkway, Annapolis, Maryland. Members and non-members are welcome to attend so don’t miss this top-notch meeting. The keynote speaker will be Dr. Michelle Flenniken from Montana State University. Additional information about the MSBA and future meetings can be found at <http://www.mdbeekeepers.org/>

*****We will answer some beekeeper questions regarding colony management at every meeting, and time permitting, have a panel discussion during each program – in addition to the “Panel of Experts” listed for the April meeting.*****

“BEEKEEPER’S SOCIAL”

Want to become more involved in the Anne Arundel Beekeepers Association? Want to assist in being part of a committee that can plan and carry out our annual pot-luck social? If so, please contact Lindsay Barranco at lbarranco@comcast.net or 410-570-1132. Every year the AABA holds a pot luck social in September, time and place to be determined. This year we are in need of people who can help plan the event. Please let us know if you can help! This is a great opportunity to meet fellow beekeepers and talk “bees”.



2015 SHORT COURSE

By Lindsay Barranco

This will be our eighteenth year to offer a Short Course--*Beekeeping, A Hobby of A Hobby*. Last year 42 people completed the course. The fees for this year's course are: \$25 for an individual and \$5 for each additional family member. Here is the schedule:

Session 1 (February 24) - Introduction – Lindsay Barranco; Equipment Assembly – Dave Polk, Free State Bees

Session 2 (March 17) - Honey Bee Biology - Rick Derrick.

Spring and Summer Management – Lindsay Barranco and Pat Beers-Block.

Session 3 (March 24) - Fall and Winter Management - Steve McDaniel. Tim McMahon – EAS representative on MSBA Board.

Session 4 (April 7) - Maintaining Healthy Bees - Bart Smith; Nectar Sources - Bart Smith.

Session 5 (April 11) - Honey Extracting – Bridgett Kennedy; Products of the

Hive - Bart Smith; Hive Management/Manipulation - Bart Smith; Installing Packaged Bees - Bart Smith and Lindsay Barranco.

Sessions 1 - 4 are 7-9 P.M.; Session 5 is 9 A.M. - 1 P.M. The course coordinator is Lindsay Barranco 410-570-1132 or lbarranco@comcast.net

Dave Polk, Free State Bees, in Waldorf, Maryland has asked that the following item be included in this newsletter. Dave has been a faithful supporter of AABA for many years; he has taught the equipment portion of our short course, and equally important, he has provided very high quality equipment to many of our members at very reasonable prices. Dave is one the few local providers in our area. The only thing more valuable is the advice and assistance he has given to scores of our members. Thank you Dave!

From Dave Polk:

10th Anniversary Sale! It's hard to believe, but it's been 10 years since Laura and I have been running Free State Bees, and it's the 11th season we've been supporting the local beekeeping community with a full line of locally available equipment and supplies.

10% off AND Free Shipping Sale
Details: All orders received by Feb 22 will receive a 10% discount (discount will apply to most, but not all items). You can order any item from the Brushy Mountain catalog
<http://www.brushymountainbeefarm.com/> I'll have your order ready for pick up in Waldorf beginning Feb 28th.

To order, send an email to freestatebees@gmail.com with your full name, address, and primary phone number. Include the Brushy Mountain catalog item number, quantity, and short title. I'll confirm your order by sending

you an invoice with details on payment.

2015 PACKAGE BEES: To order 3lb package bees, please send an email with your full name, address and primary phone number along with the number of packages you'd like with which type of queen (Italian (\$99) or Russian (\$102)). Queens will be marked. I'll confirm your order by sending you an invoice with payment info. (Normally, I will work on invoices over the weekend.) I'll be picking up the main shipment as early in April as possible as soon as the bees are available. A smaller shipment will be sent to me via USPS approximately 2 weeks later (mid-late April).

PAYMENT METHODS: I prefer cash or check. I can accept credit cards. Effective 1 Jan, there will be a 3% handling fee for processing payment by credit card.

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Free State Bees
www.facebook.com/freestatebees
(you don't need to log in to view the page!)

TREASURERS **REPORT FOR 2014**

By Pat Beers-Block

Income Statement Anne Arundel Beekeepers Assoc. (for the year ending 12/31/2014)

Revenue

Membership fees	724.00
Extractor Rentals	155.00
Auction Donations	290.00
2014 Short Course	933.00
2015 Short Course	1255.00

Total Revenue
3357.00

Expenditures

AAC Fair Exhibit	212.44
AA C Fair Judge honorarium	100.00

AABA Meeting Quest	
Speaker honorarium	175.00
AABA Door Prizes, Refreshments & Beekeeper books	508.40
AABA 2014 Short Course books	200.00
AABA 2014 Short Course Packaged bees	180.00
AABA Library Books (Guerci)	54.95
Repairs to Electric extractor	416.75
Purchase Hand crank extractor	429.95
Well Being (Penn State) donation	100.00
LAUNCH donation (sentinel hive)	100.00
Total Expenses	(2477.49)

.....
Net Income for 2014 **879.51** *

*
 Checking Account Balance (12/31/2015) \$ 5350.70
 Checking Account Balance (ending 12/31/14) \$ 4470.69

.....
 Actual Net Income 2014 \$ 880.01

ELECTION YEAR!

At our August 2014 meeting we held an election of officers. This election was held earlier than usual due to the fact that Loyd and Doris Luna were moving to Alabama:

President – Lindsay Barranco
 Vice President – Michael Doyle
 Treasurer – Pat Beers-Block
 Secretary – Vacant (Debbie Hewitt since volunteered to serve as the new AABA Secretary)
 Chairlady, Publicity – Amy Jameson
 Chairman, Programs – Bart Smith
 Chairlady, Competition – Amy Jameson
 Chairman, Awards – Dwight Fielder
 Chairlady, Refreshments – Heather McCarthy
 Librarian – Carl Guerci, Jr.
 Web Master - Ollie Snyder

AABA Extractors for Rent **By Chrissy Perry**

The AABA now owns three honey extractors that are available for rent to our members.

We own a Maxant 3100P 9 Frame Power Extractor. This is the extractor that most AABA members are likely familiar with, and it has a new motor that was installed this summer.



We also own a brand new hand-cranked extractor, a Mann-Lake HH-190, which AABA purchased this summer when the motorized extractor was not available.



Finally, we own an additional hand-cranked extractor that was generously donated by the friend of an AABA member.

Each extractor has advantages and drawbacks. The motorized extractor is powerful (a pro and a con), but it is very heavy, and dependent on an operational motor, which was in short supply this summer. The new Mann-Lake extractor does not depend on a motor, making it more reliable and easier to use. It is, however, a bit larger and will require more space for transport. Finally, the donated extractor is light and easy to transport, but not quite as intuitive to use.

We are fortunate to have so many options, which should allow a greater availability for next season's harvest. The fee for renting an extractor is \$25; \$15 is refunded upon return of the clean extractor. The club also owns an electric uncapping knife, which can be rented for no additional fee. Members must be current on their dues in order to rent an extractor; extractors are available on a first-come, first-served basis. The ability to rent a honey extractor is one of the many benefits of AABA membership, and at \$10 per use (as opposed to per day,

which is charged elsewhere), it is a bargain. To make arrangements to rent one of the AABA extractors, contact Chrissy Perry at perry641@verizon.net (preferred) or (410) 849-2726.

EAS 2015 at the University of Guelph, in Ontario, Canada

by Timothy McMahon



Have you ever considered taking a “Beekeeping Vacation”? Well now is the time to go out and get your passport renewed as EAS

2015 will be taking place in Guelph, Ontario (about 1.5 hours north of Niagara Falls, New York, this is 8 to 10 hours away from Maryland, by car, depending upon where you live). EAS (Eastern Apiculture Society) is one of the largest noncommercial beekeeping organizations in the United States and one of the largest in the world. Every summer EAS conducts its week long Annual Conference of lectures and workshops in one the 26 member states or Canadian provinces. This year’s EAS conference will be held at the University Guelph, Ontario, from August 10 through August 14. The conference usually brings in about 600 to 800 beekeepers from around the world to attend. The conference is made up of the Short Course, running from Monday to Wednesday, and the conference proper, running from Wednesday to Friday, with Wednesday as the overlap day. Normally about half of the attendees stay the whole week with the other half coming just for the conference. The Short Course will contain classes for beekeepers of all levels and special events such as an open apiary with Langstroth, Warre’ and Top Bar Hives, a microscope workshop on bee anatomy, a Honey Show for you to enter your bee products, and classes on all aspects of beekeeping. The conference proper will consist of over 100 different talks about all aspects of

beekeeping including classes on Queen rearing, Mead and Beer brewing and on IPM (Integrated Pest Management). Along with the workshops there are many social events such as a tour of a large commercial beekeeping operation, a meadery and The Niagara Butterfly Conservatory. In one week's time, you can learn more about beekeeping than you ever possibly imagine. I first attended EAS several years ago in Boone NC, and the experience was so great that I became a lifetime member. I've not missed an EAS conference since. Every year I go with a set of questions in mind that I then try to find the answers to from the best minds in Beekeeping. Can't get much better than that. Maybe the best thing about the week long EAS was that I get to talk "bees" all week long and no one says that they had heard enough (normally my family asks me to shut-up after the first 2 minutes or so). You can find out all about the specific topic covered and how to sign up at the EAS webpage here <http://www.easternapiculture.org/>. I hope to see you there. EAS 2016 is scheduled for New Jersey, 2017 in Delaware and 2018 in Virginia. Come and join the fun!

RECIPES WITH HONEY

Susan's Honey Marmalade Cake

(Source: Personal)

By: Susan Langley

2 cups sifted all-purpose flour
1/2 tsp. salt
1 tsp. baking soda
1 tsp. ginger
1/2 tsp. nutmeg
finely grated rind of 2 large lemons
1 T. dark or light rum or Cognac
4 oz. (1 stick) unsalted butter
3/4 cup honey
3/4 cup sweet orange (ginger also works) marmalade
2 eggs

Adjust a rack to the center of the oven and preheat to 350F. Butter a 9x5x3-inch loaf pan, dust all over with fine, dry bread crumbs, and shake out the excess. Set aside.

Sift together the flour, salt, baking soda, ginger, and nutmeg. Set aside.

Mix the lemon rind and the rum/cognac and let stand.

In large bowl of electric mixer, cream the butter. Add honey and beat to mix. Mix in marmalade. On low speed add half the dry ingredients, scraping bowl and beating only to mix. Then mix in the eggs one at a time, and then the remaining dry ingredients. Remove from mixer and stir in lemon rind and rum/cognac.

Turn into prepared pan and smooth the top.

Bake for 1 hour, until top feels semi-firm to the touch and a cake tester inserted in the middle comes out clean. If loaf

begins to brown too much during baking, cover loosely with foil.

Cool in the pan for 10-15 minutes. Cover with a rack, turn pan over with rack, remove pan, and leave loaf upside down to cool.

Frosting:

¼ lb. butter

¼ lb. shortening

1.1 lbs confectioner's (icing) sugar

½ tsp. vanilla extract

½ tsp almond extract

½ small can evaporated milk (approx.

2.5 oz.)

Mix well. **Topping:** crystalized ginger, chopped and granulated honey

Honey Granola
By Lindsay Barranco

1 (18 ounce) container of old fashioned oats (6 cups)

8 ounces sliced almonds

1 cup dried apricots, chopped

1 cup dried cranberries, chopped

1 cup light brown sugar

1 teaspoon ground cinnamon

½ teaspoon salt

1 ½ sticks of unsalted butter

½ cup honey

Directions:

Preheat oven to 350 degrees F. In a large bowl mix together the dried fruits, oats, almonds, brown sugar, cinnamon and salt. Melt the butter in a small saucepan

over medium heat. Stir in the honey. Pour the honey/butter over the oat mixture and toss to distribute it over the ingredients. Spread the granola onto a parchment-lined baking pan (preferably with sides to hold the mixture in) and bake until the oats are toasted and the sugar begins to caramelize. You will need to stir and oat mixture several times while baking to get it to bake evenly. Bake for 35-40 minutes. Cool the granola completely on the pan and transfer to an airtight container.

A FINAL REMINDER
FROM YOUR EDITOR:

Many colonies starve to death in February and March. If you have a surplus of your own honey, feed it back to them. Since they can't get to sugar syrup, feeding fondant is the best option.

Fondant Recipe

15 pounds sugar

3 pounds glucose or white syrup (Karo)

4 cups water

½ teaspoon cream of tartar

Dissolve the sugar and other ingredients in the water by stirring and boiling the mixture until the temperature of the syrup rises to 242°F. You will need a candy thermometer. Let syrup cool to 180°F and then beat until thick. Pour the candy into molds lined with wax paper. Place a cake of sugar on two small, ½-inch square strips of wood in an empty super above the cluster of bees. Cover the candy and the space around it with cloth or newspaper to keep it warm. Remove any remaining candy and feed syrup when the weather gets warm.

