

# Missouri State Beekeepers Association

December 2000

## CONGRATULATIONS

### Missouri State Fair Grand Champions

Sharon Gibbons - Individual  
Eastern Missouri Beekeepers - Group  
Mrs. Ed Walters - Cooking

### Beekeepers of the Year

Ian & Pam Brown

### Message From the President

This issue of the newsletter, will be my last President's Message as I am closing my tenure as President of MSBA. Effective January 1, 2001 the leadership will be passed to Art Gelder, a very capable and energetic person. I am certain that Art will handle the business and guide our organization in a responsible and professional manner. I certainly pledge my support to him and am encouraging you to do the same. We each need to remember, this is a time consuming position, all done without any remuneration, all volunteer.

The two and one half years as president have been interesting, rewarding, disappointing, difficult, enjoyable, happy, frustrating, pleasing and any other adjective one can think of! Of course, it all just goes with being President.

A lot has been accomplished over the past two and one half years. Some of the accomplishments are:

1. Changing the way of conducting MSBA business by shifting a major portion of it to the Executive Committee and streamlining the business portion of the two yearly meetings, thus allowing more time for educational sessions for the benefit of our members.
2. Revamping the State Fair booth and paying expenses for the workers, by establishing our goal of the fair we were able to do this. In case you have forgotten, our goal is, education of the public; if our expenses break even, we will consider the fair a success.
3. Starting an Auxiliary.
4. Dividing the state into 4 geographic districts, assigning each director to a district. Giving them more opportunities to serve the members.
5. A new local was formed in Farmington, MO.
6. I started out in 1998, with plans that Pam or I was to visit every beekeeper in the state; however, this did not get completed, due to serious

time consuming illnesses of Pam's parents. To those beekeepers we did get to visit, thank you for your hospitality and for showing us your beekeeping process.

7. Establishing two new committees, Education and Marketing, with plans to have a children's presentation at the Spring 2001 meeting.

lan

## Honey of a Verse

The honeybee, organized, courageous and apparently indestructible, has gone her own way, ignoring man's insatiable curiosity about her. Challenged by her mystery, writers have worshipped her, attributed supernatural powers to her, romanticized and characterized her in literature and naturalists have devoted to her years of painstaking research.

Homer, speaking from about 850 BC, said in *The Iliad*, "Words sweet as honey from his lips distilled." Aristotle and Cato, centuries before Christ, studied the life of the bee and wrote their impressions. Aristotle compared honey to "dew distilled from the stars and the rainbow." In one of his *Epigrams*, Virgil wrote:

So you for others, oxen, bear the yoke;  
So you for others, bees, store up your honey . . .

## For Your Funny Honey Bone

**Top 10 Reasons Bee Trucks are Never Stolen:**

10. They have a range of about 20 miles before they overheat, breakdown or run out of gas.
9. Only the owner knows how to operate the door to get in or out.
8. It is difficult to drive fast with all the smokers, veils, gloves, burlap, paperbags, newspaper, honey jars, jars of honey, bee brushes and khaki shirts in the cab.
7. It takes too long to start and the smoke coming up through the rusted-out floorboard clouds your vision.

6. The bees flying around the hives on the back keep anybody from coming near it.
5. They're too easy to spot. The description might go something like this: The driver's side door is red, the passenger side door is green, the right front fender is yellow, etc.
4. Stacks of boxes or 55 gal. drums on the back, makes it hard to see if you're being chased. You could use the mirrors if they weren't cracked and covered with duct tape or missing altogether.
3. Top speed is only about 45 mph-at which point the noise level from the engine wipes out any thought of conversation.
2. Who wants a truck that needs a year's worth of maintenance, u-joints, \$3000 in body work, tail lights and windshield?
1. It is hard to commit a crime with everyone waving at you.

Journal of the Texas Beekeepers Association  
May/June 2000



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## Time in History



"Oh honey," **Aristotle** wrote, "that bees collect it from the air especially when the constellations appear in the sky and when the rainbows wraps the earth. He answers that usually honey is not produced before the Pleiads are high in the sky."



**Phiny**, the Roman naturalist wrote: "Honey comes from the air and in most cases at the same time as the apparition of stars, especially at the height of Canicula and not too long before Vergilia stars appear in the morning; so that at dawn, the leaves of trees have drops of honey on them." He insists on this, saying that when somebody has a walk at dawn "his clothes will become smeared and his hair will become sticky", and that honey "is either the extrudation of the sky or a sort of sap of stars, or a juice released by the air".



How much did a gallon of honey cost in **1841**? A gallon of honey was worth between \$.25 to \$.37. A large tree could yield up to 50 gallons of honey, so in a good season, an individual could make up to \$170.



It is important for us to remember our **heritage**. Below are listed three men that are credited for inventing or perfecting the four most important items/concepts that make modern beekeeping what it is today. Match the men, with their country, invention and the year of their discovery.

### Year Country Discovery

Rev. L.L. Langstroth

Johannes Mehring

Major Hruschka

Moses Quinby

Answer selections:

1875 1865 1851 1857

U.S.A. U.S.A. Austria Germany

1. First practical bee smoker, bellows-driven
2. Bee space, modern hive
3. Centrifugal motion to remove honey, idea of extraction
4. Foundation, pressed wax wafers, with indentations

Answers:

	<u>Year</u>	<u>Country</u>	<u>Invention</u>
Rev. L.L. Langstroth	1851	U.S.A.	2
Johannes Mehring	1857	Germany	4
Major Hruschka	1865	Austria	3
Moses Quinby	1875	U.S.A.	1

**To request apiary inspection or information regarding honeybees leaving or entering the State of Missouri contact:**

Michael Brown  
State Entomologist  
Missouri Department of Agriculture  
PO Box 630  
Jefferson City, MO 65102  
(573) 751-5505 / 5507

### Attention Local Secretaries

Please send 2001 information to our new State Secretary, Jim Wulfers, 314-739-1819, or [jimwulfers@ninenet.com](mailto:jimwulfers@ninenet.com) Included should be officer information, meeting information, web sites, etc. Thank you



# **Missouri Revised Statutes**

## **Chapter 264 Apiaries Section 264.061**

August 28, 1999

### **Movement permit required, when—form— issuance—fee—verbal authorization.**

264.061. 1. It is unlawful to move, carry, transport or ship bees, combs or used beekeeping equipment into the state of Missouri unless accompanied by a valid permit issued by the director of the department of agriculture. Applications for permit to transport bees or used beekeeping equipment into the state shall be submitted on a form approved by the director. This application form must be accompanied by a certificate of health, issued by the authorized official of the state from which the bees are to be moved, certifying that the bees and used beekeeping equipment have been inspected by an approved inspector, during a period of active brood rearing, within ninety days prior to the proposed date of movement, and that such bees and used beekeeping equipment were found apparently free from any diseases or pests. Each application shall disclose the number of colonies of bees to be transported and a description of the location or locations where said bees are to be kept. Upon receipt of an application for a permit to move bees or used beekeeping equipment into the state, accompanied by a proper certificate of health and an application fee of five dollars per application, the director shall issue the desired permit. This shall not apply to honey bees from quarantined areas outside the state of Missouri. These quarantines shall include all federal, state or Missouri exterior quarantines. Importation of honey bees from quarantined areas shall be in accordance with the rules made pursuant to this chapter.

2. Regardless of the above provisions of this section, the director shall have the authority to issue a permit without inspection to the person or persons owning such bees and equipment if he is satisfied that such bees and equipment were certified and moved from the state of Missouri within ninety days prior to the desired date of reentry and have not been exposed to diseased or pest infected bees or equipment.

3. A verbal authorization may be allowed by the Missouri director if the written permit outlined

above has been requested but has not been received by the time that the bees are to be moved.

4. Combless packages of bees or queens, or both, are admitted into Missouri, without a Missouri permit, when accompanied by a valid certificate of inspection from the state of origin stating they are free of diseases and pests. This shall not apply to honey bees from quarantined areas outside the state of Missouri. These quarantines shall include all federal, state or Missouri exterior quarantines. Importation of honey bees from quarantined areas shall be in accordance with the rules made pursuant to this chapter.

## **Section 264.063**

August 28, 1999

### **Quarantined areas outside state—seizure— inspection—eradication.**

264.063. Whenever the director shall find that there exists in any other state, territory or district or part thereof, any harmful pests or diseases of honey bees, he may promulgate and enforce by appropriate rules, a quarantine prohibiting the importation of or the transportation into or through this state or any portion thereof, from such other state, territory or district, any honey bees, used beekeeping equipment or any other article or product capable of carrying such pests or diseases. The director may make rules for the seizure, inspection, disinfection, eradication, destruction or other disposition of any honey bees, used beekeeping equipment or any other regulated article or product capable of carrying such pests or diseases in violation of this quarantine.

**To be Continued Next Newsletter**

## **Ray's Remarks**

Ray Nabors, Ph.D.

If there is one thing I would change about our beloved beekeepers of Missouri I will illuminate that subject in this letter.

It has ever been my intent and vocation to positively impact apiculture in Missouri. I will share with you a quote from one of my high school teachers. Mr. Ralph Hale had a sign on the wall of his classroom "Any fool can complain, criticize and condemn and most fools do!" There are so many

dedicated people that have devoted their time and greatly improved our Association. These people are making a positive impact on beekeeping every year. If these people stop what they are doing, the association will suffer a loss. When we have someone willing to work that is doing a good job, give that person the freedom to do that job to the best of their ability. Graciously accept what is freely given in generosity. No one is going to do the job to suit you. If you want a job done your way, do it yourself.

If you want to change our organization, get active and make positive changes from inside. Complaining and criticism has a negative effect. Before you criticize someone ask yourself "Has this person had a positive effect on the association?" If the answer is yes, thank them and respect their contribution. Suggesting improvements is not working but do not engage in destructive conversation and behavior. Almost everyone that has made a contribution to our organization has been criticized. No one is perfect we all make mistakes. The only way to avoid mistakes is to do nothing.

Support positive attitude and contributions of time, material and resources. If a member has a disaster, chip in and help one another. What really counts is our beekeepers. If you cannot say or do something good, keep quiet, and wait for an opportunity to improve your association. Recognize that beekeepers are all good people. Respect and support beekeepers and beekeeping. Market your honey and market your association by helping beekeepers get started or reaching out to replace desaterous loses. **Do not rush in where angels fear to tread!**

Ray

## Director's Digest

We would like a Director's article for each newsletter, unfortunately, we didn't receive one for this issue.

Northeast Missouri - Ruben Carter (Stand-in) - 2000

Northwest Missouri - Glenn Davis - 2001

Southeast Missouri - Ted Jansen - 2002

Southwest Missouri - Chris Gibbons - 2003

If you encounter any problems, questions, or want to start a new local organization your first contact will be your area Director. Give him a call.

As of January 1<sup>st</sup>, our new directors will be:

NE MO - Ian Brown - Past President - 2002

NW MO - Glenn Davis - 2001

SE MO - Ted Jansen - 2002

SW MO - Dr. Richard Houseman - 2003

The Member-at-Large will be Don Reinkemeyer

## To Our Health

**Honey and Healing** - There has been a raft of publicity recently about use of honey as a healing and antiseptic agent. A particularly heart-wrenching story is that of Jem Bonnievale, "who was 15 then he contracted meningococcal septicemia caused by an infection of *Neisseria meningitidis*. By the time the British teenager reached the hospital, he had multiple purple patches on his legs and fingers, which rapidly progressed to tissue death. Both legs were amputated below the knee as well as fingers on both hands. He endured multiple skin grafts and suffered for months with non-healing infected sores. His case was extreme and difficult to treat because of the severe pain it caused. "I can't even begin to explain how painful it was just to have a small piece of dressing changed. The nurses tried everything to make it easier, like changing the dressing in the bath, but it was agony," said Jem. Over the next six months the success of the grafts was variable and the sores showed heavy growth of *Pseudomonas* and *Staphylococcus aureus*. All traditional treatments were tried without success.



"When nothing else had any effect on the chronic infected sores, clinical nurse Cheryl Dunford and her colleagues turned to honey. Dressing pads impregnated with sterilized active manuka honey from New Zealand were applied to one leg and a traditional dressing to the other leg. Within a few days, the honey dressed leg showed a reduction of wound bacteria. Both legs were then treated with the honey dressings. Within 10 weeks, all lesions



were healed. Jem was released from the hospital, fitted with artificial legs and is getting on with his life".

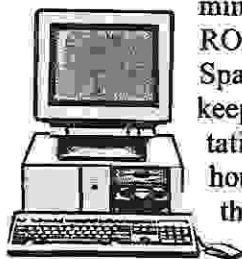
This and other reports refer to the work of Dr. Peter Molan at Waikato University with manuka honey. Dr. Molan is now convinced that honey belongs in the medicine cabinet, as well as in the kitchen. Honey has been used for centuries as a healing substance, but only now is it becoming more recognized as good medical practice. Honey is effective, Dr. Molan says, for a number of reasons, including its acidity and hygroscopicity, providing unfavorable environments for bacterial growth. Diluted honey also produces small amounts of bactericidal hydrogen peroxide. All honey is not created equal, however, and certain types such as "active" manuka from New Zealand and perhaps honeydew from central Europe, are more effective for infections. In general, honey is a good wound and burn dressing because it keeps the skin moist and supple and is easy to wash off. This means fewer traumas when hanging bandages and noticeably less scarring. Unfortunately, the natural properties of honey as a healing substance can be damaged, especially through heating, which destroys enzymes. Thus, honey from a supermarket, which has been heated and heavily filtered to increase shelf life, may not be as therapeutic as that taken directly from the comb with minimal processing.

Tom Sanford  
Apis-Apicultural Information and Issues  
Florida Extension Beekeeping Newsletter  
Volume 18, Number 8, August 2000

**NOTE:** Dr. Ray Nabors, our UM Extension Specialist, thinks all honey is medicinal and it is necessary to market honey in that context. Ray is our Association's contact for apitherapy information. His number can be found on the front page of every newsletter.

### **Apitherapy CD-ROM: Release Expected in September, 2000**

The Apimondia Standing Commission of Apitherapy is advertising the imminent release of its official CD-ROM in French, English and Spanish at the Apiservices beekeeping megasite. Video presentations, animations, pictures, one hour of sound comments and more than 200 screens offer over three hours of fascinating informa-



tion to a diverse audience about this fast-growing field. The CD-ROM is both Macintosh and P.C. compatible and contains the following topics: biology of the honeybee and its nest (hive), products of the beehive, medicinal plants and essential oils, human pathologies (diseases), apipharmacopoeia, medical techniques (treatments), standardization and chemotypes, humanitarian action, and other general information about apitherapy.

Early-bird prices are still available at 49 Euros. The regular price, when published, will be 69 Euros. Release is expected in September, 2000.

Apimondia will receive royalties from this work, which will help the Apitherapy Commission carry on its humanitarian activities in many countries. For further information consult

<http://www.beekeeping.com/cd/us/index.htm>.

Dr. Malcolm (Tom) Sanford, Extension Apiculturist  
University of Florida  
Author of "Beekeeping in the Digital Age"

**Honey Actually Does Promote the Healing of Wounds**, and it has been used on burns and postoperative infections. Medical literature contains a number of interesting reports about the use of honey to treat various wounds. Health authorities in Australia recently approved the marketing of a product called "Medihoney" for home treatment of wounds and infections.

Last year, results of a study from Yemen showed that putting crude undiluted honey on infected surgical incisions -- from cesarean sections to hysterectomies -- worked faster than the antibiotics typically used for this purpose. In Israel, researchers reported on a study of babies whose open, infected wounds were treated with honey after antibiotics failed to work. Researchers applied unprocessed honey twice a day and found that after 21 days, all the babies' wounds were closed, clean, and sterile. (Honey should not be fed to children younger than 24 months -- although it's safe for adults, honey can harbor spores which cause botulism in infants.) A few years ago, researchers in India compared two folk remedies for burns: They tested honey and boiled potato peel dressings. (I've never heard of using boiled potato peels and am not sure how they can help.) All the burns treated with honey healed within 15 days -- compared to

only half of the ones treated with boiled potato peels. According to the Australian researchers who developed Medihoney, honey has a number of benefits:<UL><LI>The viscosity provides a protective barrier that prevents wound infection.<LI>It promotes a moist environment which allows skin to grow across wounds without forming a scar.<LI>Honey stimulates tissue regrowth under the surface of the skin.<LI>It has an anti-inflammatory action which reduces swelling and pain and improves circulation, which hastens healing.<LI>Honey also acts as a disinfectant, killing bacteria that can infect wounds.</UL>Does this mean you should move the honey from your kitchen shelf to the medicine cabinet? I certainly wouldn't recommend honey for serious injuries. See a doctor if you have an open wound or get a serious burn -- but it may help for minor cuts, scrapes, or if you accidentally touch a hot pan. Note that the studies mentioned above tested unprocessed honey, not the commercial varieties you buy in the grocery store. If you have natural, raw honey at home, you might want to give it a try.

Dr. Andrew Weil  
<http://www.drweil.com>  
 Forwarded by Sharon Gibbons  
 Eastern Missouri Beekeepers

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### **NEEDED**

At the Spring Meeting, we will be having a Kid's Expo, volunteers are needed to work at the different stations. Please call JoAnn Davis to volunteer, 816-690-8007 or bellhill@rigger.cosmo.net

We would also appreciate receiving newsletter articles from individuals that attended the ABF and AHP, please send to the editor my March 1. Thank you,

## **BEE HIVE BOTANICALS**

Rt. 8, Box 8257  
 Hayward, WI 54843  
 1-800-283-4274

### **DID YOU KNOW?**

**Beehive Botanicals, Inc./Propolis U.S.+A> has been buying propolis and hive scrapings for over 20 years? Call for current prices, shipping and handling instructions.**

**We have a full line of Health & Beauty aids as well as food supplements made with propolis. Call for our wholesale order form.**

### **Pollination Power**

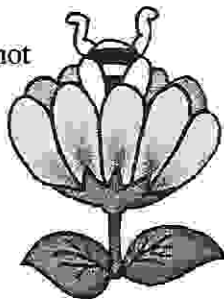
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Many gardeners and backyard fruit growers, unfortunately leave pollination to chance. Some are lucky; others suffer losses that would not be necessary, if they took some positive steps. Some try to "attract" bees, which is an exercise in futility if the bees are not there. Sometimes you have to put them there. Butterflies are valuable pollinators for many wild-flowers, but for fruits and veggies, you need bees.

How do we know if pollination is lacking? There are many symptoms. Remember that for most fruits pollination requires many bee visits (not just one) to distribute enough pollen to fertilize most of the seeds. At fertilization of the ovules (seeds) the chemicals are released to make the flesh of the fruit grow, so you must have most of these fertilized to get full growth and maximum sweetness.

Some symptoms of inadequate pollination: **Apples, pears,** most tree fruits: With good bloom, few fruits form, or they form but drop while still small. Fruits

small, malformed and starchy, only 3-4 seeds in some fruits rather than 7-10. **Blueberries:** Sparse set, or a lot of undersized berries. **Strawberries:** Undersized berries, one undeveloped (green) side on a lot of berries, small number of achenes. **Brambles:** Undersized berries, droplet number is small, and center section of berry does not form at all, flower parts remain at "maturity" in the center bottom of the fruit. **Squash, pumpkins, cukes:** Female blossom drop or fruit starts to grow, then molds and drops off. (The mold is not the cause, it is an opportunist. Poor pollination limits the development.) Fruit that curls excessively, or has an end or middle that is undersized. Slow growth makes cukes or summer squash tough. **Cantaloupes:** Blossom drop. Undersized fruit that is not sweet. **Watermelons:** Blossom drop, Undersized fruit, necked or flat-sided fruit. Lots of white seeds in standard varieties (okay in seedless hybrids). **Lima Beans:** seeds missing in pods.



Basically, if you have honeybees, you have a nearby beekeeper. Wild honeybees are just about gone from the US scene. Find out who he/she is, and do all you can to encourage them. Share some of your produce; they are helping make it possible.

If you don't have honeybees already, forget about attracting them, instead try to attract a beekeeper. Encourage a young person in the neighborhood to take it up. Insist that your local extension office provide a beginner beekeeping course. Involve 4-H clubs, scouts, garden clubs, etc.

Or become a beekeeper yourself. There are two kinds of bees that you can keep. Solitary bees, such as orchard mason bees and Japanese hornfaced bees, are gentle and good pollinators for spring blooms. They do not make honey and they are worthless for later garden veggies. Honeybees are generalist pollinators that are available year around, not just seasonally. They are excellent for almost all fruits (exception: southern rabbiteye blueberries), cucurbits, lima beans, and many other plants. They will sometimes do tomatoes, eggplant and peppers, but they prefer other flowers, so they may not.

Honeybees also provide honey. Unfortunately they do sting, which generations of folks have accepted

and lived with, but the present generation does not, so you have to plan around this.

Carpenter bees are important pollinators. Bumblebees are available and extensively used in commercial agriculture, but are too expensive for home gardeners. Carpenter bees are hated by many homeowners and killed at every opportunity, because they drill small holes in wood to make their nests. Though the damage is normally only cosmetic, and they are valuable early pollinators, they have been just about eradicated in some areas. Protect bumble bees and carpenter bees as much as you can.

### SOLITARY BEE SOURCES

Generally the deadline for orders is about February 1, because these must be shipped in cold weather. Don't wait until spring!

Here is a newly revised list of those who offer orchard mason and Japanese hornfaced bees.  
<http://www.uidaho.edu/pscs/Strickler/SolitaryBees/supply.htm>

### HONEYBEES

For honeybees, I recommend nucs from a local supplier, if possible. They will get established and come on faster than package bees. But get your orders in early! Many will be sold out by spring.

If you cannot find nucs, then the package suppliers I have dealt with (and can recommend) include: Wilbanks Apiaries, PO Box 12, Claxton, GA, 30417 912-739-4820, Weaver Apiaries, Rt 1, Box 260, Navasota, TX 77868-9704 ([rweaver@myriad.net](mailto:rweaver@myriad.net)), (Weaver sells the Buckfast strain of tracheal mite-resistant bees.) Wooten's Golden Queens 11189 Deschutes Rd. Palo Cedro, CA 96073 530-549-3555. Again, order early!

Many northern commercial beekeepers, or beekeeping supply places also get package bees in the spring. It is more reliable (and probably cheaper) to get



trucked in packages, than to get delivery by post office. They are generally moved by someone knowledgeable, and they don't pick up traces of the exterminators' sprays in the post office, or get left in a hot mailbox to cook. Draper's Super Bee Apiaries in



northern Pennsylvania has packages and nucs. Contact [draperb@ptd.net](mailto:draperb@ptd.net) Also, Betterbee in eastern NY, 518-692-9669

### SOME OTHER VALUABLE LINKS

Hive plans, if you wish to build your own equipment: It is important that you use standard sizes. Plans are available, as well as other beekeeping info, at: <http://birkey.com/BLB/index.html>

An online course in beekeeping is available from Dr. Keith Delaplane at the University of Georgia: <http://www.ces.uga.edu/pubcd/b1045-w.html>  
He also has the Georgia Pollination Guide <http://www.ces.uga.edu/pubcd/b1106-w.html>

[Pollinator@aol.com](mailto:Pollinator@aol.com) Dave Green Hemingway, SC USA  
The Pollination Home Page: <http://www.pollinator.com>  
Jan's Sweetness and Light Shop (Varietal Honey and Beeswax Candles)  
<http://users.aol.com/SweetnessL/sweetlit.htm>

**NOTE:** How many Garden Club's have you spoken to this year? Try it, you will find it quite enjoyable, and will be surprised how little they know of pollination and honeybees. Be certain to charge, all of the Garden Clubs have budgets established to pay all of their speakers. This Editor has spoken to two Garden Clubs this year, both enjoyable. When they ask me what I charge, I tell them to make a contribution to Cardinal Glennon Children's Hospital in my name. All of the Clubs that Ian or I have spoken to have each made a \$25 contribution. They are happy to do it. Some of the clubs allow you to bring some honey to sell, some do not. Ask in advance, so you will be prepared.



### **Craft & Hobby Corner**

We started a new column about crafts/hobbies, but we need your input, I know some of you are collectors, please send in your articles, thoughts and ideas. I have heard one than one person say, that they can't write articles. Tell you what. If you submit an article, you tell me, print it as is or edit it. I will do either. We want to hear from you!

**How Much Wick?** When making candles the wick should be at least 1/2" longer than the desired height of the candle. If you want to make tapers, the

general rule of 1/2 yard (18") per sheet (or 1 yard for every 2 sheets) should work. If you wish to make two tapers that are joined by their wicks (so you can hang the pair on a peg), you will obviously need more wick. Use 1/0 square braided wick for beeswax candles from 1/2" to 1 1/2" in diameter and size #3 square braided wick for larger pillars, 2 1/2" to 3 1/2" in diameter. Wick should be trimmed to 1/4 inch before burning.

### **Honey Pots International**

- For those of you that are collectors of honey pots and other beekeeping memorabilia, there is an international organization catering to you. Members are from all over the world and they have a monthly newsletter. Ian and I have just joined and have received one newsletter, it is two typed pages long, with pictures of honey pots and other honeybee items on the back. The dues are \$10 per year, contact:



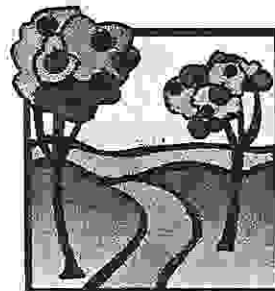
#### HONEY POTS INTERNATIONAL

Betty Ramsey  
4455 Nevada St. NE, Salem, OR 97305  
1-503-393-3357  
[bettybee@cyberis.net](mailto:bettybee@cyberis.net)

The MSBA has an audio visual library, and as a member you are eligible to use the films, videos and slides. Contact Pam Wright - [wri@townsqsr.com](mailto:wri@townsqsr.com) or 417-257-17700

### **Apples with Honey Recipes**

Apples come in many varieties. The ancient Romans knew twenty-two of them. At a banquet given by the Grand Duke Cosmo III of Tuscany in the year 1670, fifty-six different kinds of apples were served. Today, there are a staggering 6,5000 or more horticultural forms and as we know, they need honeybees for pollination.



Since the days of the Garden of Eden, apples have played a part in legend, science, art and history.

Newton is said to have discovered the law of gravity when an apple fell on his head and we all know the story of John Chapman, affectionately nicknamed Johnny Appleseed.

With the feel of fall in the air, comes the desire, to pack up the kids, hop on a hay wagon and go apple picking. Since you are having such a good time in the orchard, you come home with more apples than you intended. Well, we are offering you a solution to your excess apple problem. Following are some delicious apple recipes, including two 1<sup>st</sup> place recipes from the Missouri State Fair.

### Applesauce - 1<sup>st</sup> Place Missouri State Fair - 2000 - Sarah Patterson

5 apples (peeled and diced)  
1/2 c honey

Cook apples until tender. Put through blender. Reheat and pack in hot jars. Process 8 minutes at 5 lbs, pressure.

### Honey Apple Raisin Fruitcake - 1<sup>st</sup> Place Missouri State Fair - 2000 - Mrs. Ed Wallace

3 c chopped apples	1 t ground cloves
3 c sifted flour	1/2 t baking powder
1 c honey	2/3 c raisins
1 1/2 c sugar	1/2 c nuts
1 1/4 c sugar	1 1/2 t salt
4 eggs, beaten	1 1/2 c oil
1 T & 1 t vanilla	
2 t cinnamon	
1 1/2 t baking soda	



Beat all ingredients for 2 minutes. Bake in 2 loaf pans at 350 degrees F for one hour. Cool 10 minutes, remove from pan.

### Honey - Apple Pie

Graham cracker pie crust (smashed crackers and 1/4 cup melted butter)  
2 c sliced and peeled apples  
1 c honey  
1 T cinnamon

Make crust and save enough to top pie. Mix apples, honey and cinnamon, pour into crust, top with leftover crust sprinkle with brown sugar and bake at low heat for about 40 minutes. Perfect with ice cream. No preservatives!!!!

### Honey-Applesauce Salad Dressing

1/2 c applesauce	1/4 t grated lemon peel
1/2 c honey	1/2 c vegetable oil
3 T fresh lemon juice	1 T poppy seeds
1 T white vinegar	
1/2 t paprika	
1/2 t salt	
1/4 t dry mustard	



Process first 8 ingredients in a blender until smooth, stopping to scrape down sides. Turn blender on high; add oil in a slow, steady stream. Stir in poppy seeds. Serve over fresh fruit or spinach with apple and pear slices. Makes about 2 cups.

### Apple-Honey Custard Pie

375 degree oven 45 minutes baking time

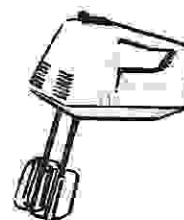
1 9" pie shell, unbaked  
2 c peeled and sliced apples  
4 large eggs  
3/4 c honey  
1 c yogurt  
1 t vanilla  
1/2 t cinnamon  
1/4 t salt



Spread apple slices evenly over pie shell. Combine remaining ingredients in the blender and run at high speed for several seconds. Pour custard over apples. Sprinkle on some nuts (walnuts or almonds) if desired. Bake 45 minutes until solid when jiggled. Cool to room temperature.

### Applesauce Cookies

1/4 lb butter	1 c raisins
1/2 c honey	1/2 c chopped nuts
1/2 c brown sugar	1 egg
1 c applesauce	1 t cloves
2 c flour	1/2 t salt
1 t baking soda	
1 t nutmeg	



Preheat the oven to 375 degrees and grease a cookie sheet. Cream the butter and add the honey and sugar, beating. Stir in the egg and applesauce. Mix together the flour, baking soda, salt, cinnamon, nutmeg, and cloves. Add to the first mixture, beating until smooth. Add the raisins, and nuts. Arrange by teaspoons on the cookie sheets and bake 5-7 minutes or until lightly brown.

## Honeyed Apple Cake

2/3 c butter, softened  
3/4 c packed brown sugar  
3/4 c honey  
2 t lemon zest  
1/2 c strong brewed coffee  
2 c all-purpose flour  
1 1/2 c whole wheat flour  
1 t ground cinnamon  
2 c apples - peeled, cored and diced  
1/2 c coarsely chopped walnuts

3 eggs  
1 t baking soda  
1/4 t salt  
2 t baking powder  
3/4 t ground nutmeg

1. In a large bowl, cream the butter or margarine with the brown sugar. Beat in the eggs, then the honey, lemon rind, and coffee.
2. In another bowl, stir together the flours, baking powder, baking soda, salt, cinnamon and nutmeg. Beat into the creamed mixture. Stir in the apples and walnuts.
3. Turn the batter into a greased and floured tube pan. Bake the cake into a preheated 350 degrees F (175 degrees C) oven for 1 hour and 10 minutes, or until it tests done with a toothpick. Let cool on a rack.  
Makes 16 servings, 1 - 9 or 10 inch tube pan

## Cardamon Apple Pie

Pastry for a 2 crust pie  
5 cups tart juicy apple slices  
2 T butter  
3/4 t ground cardamom  
1 t vanilla extract  
1/2 cup honey

Preheat the oven to 350 degrees. Line a 9 inch pie plate with a layer of pastry and arrange the apple slices over it. Dribble honey over apples. Dot with the butter and sprinkle with cardamom and vanilla. Arrange top pastry over apples and flute edges. Bake 35-40 minutes

## Slowcooker Breakfast Cobbler

Apples and granola flavored with honey and cinnamon. This recipe is from *Table Talk* by Mimi Wilson and Mary Beth Lagerborg, authors of *Once a Month Cooking*.

4 medium-size apples, peeled and sliced  
1/4 c honey  
1 t cinnamon  
2 T butter, melted  
2 c granola cereal

Place apples in slow cooker and mix in remaining ingredients. Cover and cook on low 7 - 9 hours (overnight) or on high 2-3 hours. Serve with ice cream.

## Rosy Apple Rice Dessert - from the UK

4 c ready cooked rice  
1 egg, beaten  
2 cooking apples  
1 c light brown sugar  
1/2 c walnut pieces  
1/2 c honey  
2/3 c milk

1 t mixed spice  
red food coloring



Melt butter in a saucepan. Cut each unpeeled apple into 4-5 slices and remove the core. Add honey and apples into the butter, then mix in the red food coloring until the apples are tinted red. Arrange apples in bottom of a deep ovenware dish (or a round 7 cake tin) then place the walnut pieces into the spaces. To the hot rice add spice, milk, brown sugar and egg. Carefully spoon over the apple nut mixture so as not to disturb. Cover and bake at 350 degrees F until set.

## Ham with Fruit Rice Dressing

2 c ready cooked rice (hot)  
2 center cut slices ham (1/2" thick)  
1 sm. tart apple, diced  
1 c orange segments, diced  
1/4 c seedless raisins  
1/8 t ground cloves

2 T honey  
3 t brown sugar  
1 T butter

Combine rice and butter, toss lightly with a fork until butter is melted. Add oranges, apples, raisins, brown sugar and cloves and spread in a baking pan (10x6x2"). Cut the ham into six pieces and place over the dressing, then brush them with the honey. Cover and bake in an oven at moderate temperature 350 degrees F for approximately 45 minutes, until the apples are tender and the ham is glazed.

**NOTE:** The next newsletter will feature Oriental food prepared with honey, followed by preserving (canning) using honey in the next issue. Send in those recipes, you will tire of my recipes, we need new input!



**The Cookbook Committee is still accepting recipes to publish in our new upcoming cookbook. Hurry and submit your recipes to Vera Gelder.**

## Know Your Own Beeswax

We are discovering that more and more beekeepers do not know the true value of beeswax or of uses to share with prospective customers, even though we have had several articles in the newsletter. So with this edition, we will start a new column, talking ABOUT and sharing uses of beeswax. Again, the Editor is requesting your input, I know it may come as a shock to you, but the Editor doesn't KNOW EVERYTHING!!

**Deep Scratches** - cracks in slate pool table tops and deep cracks in wood furniture can be repaired by melting beeswax and adding turpentine, until it makes a syrup. Apply this mixture to the scratches and cracks and rub with a soft cloth to make a repair.

### **BEGINNING BEEKEEPING CLASS JEFFERSON COLLEGE Adult Education**

In cooperation with Jefferson County Beekeepers Association we will be offering an Adult Education class entitled Beginning Beekeeping At the Hillsboro Campus. This continuing education class will be offered This spring beginning Feb. 6 2001. This 5 week course will introduce the Student to the wonderful and interesting world of beekeeping. The students will learn the history, procedures, equipment, care and Medication of the honeybee. A team of local beekeepers of the area teaches the course, with a combined experience of more than 100 years! In addition the students will earn adult education credit from Jefferson College. Class size is limited, so sign up early! Information:

Dates: 2/6, 2/13, 2/20, 2/27, & 3/6 2001

Time: 6:30-8:30 PM.

Cost: \$45.00 including textbook

For more information, call Jefferson College at:

(636) 797-3000 or (636) 789-3000



## USA Honey Production Down 7% and Honey Prices Down 8%

Honey production in 1999 from producers reporting with five or more colonies totaled 205 million pounds, down 7% from 1998. There were 2.69 million colonies producing honey in 1999, up 2% from 1998. Yield per colony averaged 76.3 lbs., down 7.4 lbs. for the 83.7 pounds in 1998. Colonies which produced in more than one State were counted in each State and yields per colony may therefore be understated. Colonies were not counted if honey was not harvested. Producer honey stocks were 79.4 million pounds on December 15, 1999, down 2% from a year earlier. Prices for the 1999 crop averaged 59.9 cents per pound, down 8% from 65.5 cents in 1998. Prices are based on retail sales by producers and sales to private processors and co-ops. Missouri numbers are not accurate, because all beekeepers having more than 5 colonies are not required to report. Some states require registering each hive and reporting. Missouri does not.

	'98	'99
Colonies	23,000	24,000
Yield per	66	65
Production lbs.	1,518,000	1,560,000
Avg. \$/lb.	.76	.68
Value of Prod.	1,154,000	1,061,000

If you want to be included in these statistics, contact, Missouri Agricultural Statistics Service, P.O. Box 1, Columbia, MO 65205, 573-876-0950. Information given to this service is NOT shared with the IRS. Missouri beekeepers are not given the respect they are due, because we are not considered a major commodity, due to these low numbers.

Information obtained from Missouri Farm Facts 2000

**NOTE:** Missouri beekeepers, let us be proud of our products and get a fair price when we sell our honey products locally. Let the customer know they are getting a quality product and should therefore expect to pay a premium price! As was reported in a former newsletter, Europeans say, we do not respect our honey enough, well, let's start tooting our horn!

## **Governor's Agricultural Dinner**

We regret that Gov. Carnahan did not host the annual Governor's Agricultural Dinner. We extend condolences to his family.

The enjoyable annual dinner was Sunday, December 10, 2000 at Tan-Tar-A Resort, Lake of the Ozarks. Vera & Art Gelder, Sharon Gibbons, Chris Gibbons, and Pam & Ian Brown served salad with honey dressing.

## **How Can You Tell if the Bees Aren't Getting Ahead?**

When I first open a hive there are a number of quick check factors to look for, first, eggs. If you see eggs in the upright stage, then you know the hive is queen right and that she has been present in the last 3 days, after that the eggs lean over and the bees start to feed them. At that point the eggs will be surrounded by brood food and the larvae will be in a pool of wetness.



Second. The amount of stores. If you look to the cells immediately surrounding the brood, and I mean close in, then those cells will always have open stores. In a hive that's well fed, these are the cells the nurse bees visit to feed the brood. It is possible that all sealed brood will have a few dry cells as that brood doesn't need feeding and the brood nurse bees are off on another frame, hence wet open stores are not needed there. If the surrounding cells are empty or dry, then the hive isn't getting enough nectar and help should be considered.

I take a quick look at the roof of the cells of recently emerged bees by holding the frame to get full light into that area, looking for a small white or off white deposit. This is the droppings or feces of Varroa and it is always on the cell roof and notice-



able in newly emerged cells. A little will not be a case of panic, lots, and you've got a problem that needs investigation and possible treatment.

Finally a general look around. Are the bees making excess propolis? Ants? How does the hive sound? I always listen to the sounds the bees make, should be a gentle hum, loud buzzing means a discontented hive and further examinations would be worth the trouble. Don't forget to look for general space! If every cell is full of something, be it brood or nectar, then swarming is a good possibility, consider another super and interleave with the full ones.

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### **Simpson's Bee Supply**

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Distributor of **Pierco Inc.**, molded 1 piece plastic frames and Plastic foundation for use in wood frames. Available in deep and medium sizes. Available in white or black.

Distributor of **Ross Rounds**, assembled supers with foundation installed 40.00, also foundation, rings, covers, labels.

Mite treatments; **Apistan** 10 pk. & 100 pk. **Checkmite** + 10 pk. & 100 pk. Varroa mite screens 10.00. Check with us before purchasing mite treatment. Clubs can buy as a group and save on shipping to one delivery point. Complete line of bee supplies

## **Communicating the Joy of Keeping**

There has been much hand wringing over the lack of young beekeepers in the United States and elsewhere. The reasons are many; the most prevalent opinion is that young people are not attracted to activities that have little monetary reward. In my discussions with beekeepers, however, I find that money is not always, indeed may not be the main reason, most people keep bees. There are other



possibilities including love of nature and the outdoors, fascination with social insects and cooperative systems, and the beauty of the individual insects as exhibited in queen, drone, and worker morphology and behavior. Many beekeepers are creative types and love to develop gadgets to help themselves and others keep bees more efficiently. These reasons bring to mind the book *The Joys of Beekeeping* by Richard Taylor (New York: St. Martin's Press), which continues to be widely read and appreciated. In the preface, Dr. Taylor writes: "I have in mind readers who have never seen a beehive and who have no intention of ever owning one but who might want to know how things are done by devotees of this strange craft. I have also had in mind my fellow victims of this obsession, hoping that I have expressed something of their own joys and supplied them with an idea or two."

Other possible joys for beekeepers might be interest in the rich variety of worldwide honeybee races based on behavior and ecological niche, or the plants that honey bees as vegetarians depend on and that they pollinate in return. And, of course, there's the use of bee products like honey, beeswax, royal jelly, even venom. The latter is a reason for much recent excitement, given advances in apitherapy and the respect this activity is increasingly being given by the mainstream medical community

<<http://bee.airoot.com/beeculture/digital/1999/column14.htm>>.



How then is it possible to encourage more young folks to take up the craft? One way is for each and every beekeeper to communicate their own individual passions and joys when they are involved with these insects. In reality this is not hard to do. My experience is that just taking an observation hive, jars of honey, cakes of beeswax, lumps of propolis or some other honey bee-related material (pictures, video tapes, books, beekeeping equipment smoker, veil, bee suit, gloves) into a classroom is enough. Not only students, but teachers also get excited when this happens. One doesn't have to be a wonderful public speaker; but only need to authentically communicate what turns you on about the insects. Generally, the materials or props you bring take care of themselves by pro-

viding the basis for questions and answers. Will this activity ensure that young folks take up the craft? Hard to determine in advance, but if youngsters cannot first hand see the excitement of a real live beekeeper describing their experiences, the chances they will become beekeepers are certainly increased.

## **Social Insects and the Earth's Magnetic Field: Magnetite in Bees and Ants**

In the June 2000 issue of *Ciencia Al Día Internacional* (Vol. 2, No. 3), authors S. Darci, et al have written an article entitled "Efectos del campo geomagnético en insectos sociales". My translation is: magnetic field affects on social insects. The animal most studied in this area, according to the authors, has been the honeybee, *Apis mellifera*. It is known that the famous bee dances are oriented toward the earth's gravitation field. The dances, however, often contain "errors" that can vary with the magnetic field. These "errors" the authors say, are not "system noises," but are constant with all bees that are dancing at any particular time. Magnetite has been found in bees' abdomens and swarms also show an inherited magnetic field effect; they invariably construct new comb oriented in the same direction as their parent colony. The authors have only been able to change this orientation using relatively strong magnets, 10 times the earth's force, which is approximately 0.25 Oe (Oersteds) in Rio de Janeiro, Brazil

The best hypothesis for how bees can maintain their electro magnetic orientation, according to the authors, is the presence of very small (nano) particles of magnetite in the bee abdomen. The authors say that the magnetic properties of these particles change with their size and shape. Certain small particles (supermagnetics) below a certain critical size can modify their direction (magnetized vector) based on temperature changes without losing their magnetic properties or physically moving. Thus, they can respond rapidly to magnetic field variations during a honeybee's flight. The authors reveal that their studies using Paramagnetic Electronic Resonance confirm the presence of supermagnetic particles isolated from magnetite such as that found in honey bee abdomens.

Magnetic material has also been found by the authors in ants, which appear to use this as an orientation device during migration. An important characteristic of magnetoreception is that it is species-specific the authors say. Three mechanisms are postulated as the basis for magnetoreception: a) ferromagnetic, magnetite particles that act in conjunction with magnetic fields; b) modification of insect vision through chemical radicals, which depend on the presence of magnetic fields; and d) electro-magnetic induction, where magnetic flux produces electric fields and currents, such as those found in certain species of electric fish.

Dr. Malcolm (Tom) Sanford  
Extension Apiculturist, University of Florida

## **Beekeeper Sanitation: The Other Side of the Hygienic Behavior Coin**

Much has been articulated in recent years concerning hygienic behavior in honeybees. Although this trait was identified early on, it only recently has gained prominence as a valuable trait in honeybee breeding. The other side of the cleanliness coin is the beekeeper. Carl Wenning discusses this in the May 2000 American Bee Journal ("The Hygienic Behaviors of Beekeepers - Part 1," Vol. 140, No. 5, pp. 371-4). Mr. Wenning describes his first counter with another beekeeper's lack of hygienic behavior when he became the recipient of a jar of honey brimming with foam and swimming with particulates. The first time he found his own behavior at fault was in the fall, when his bees became "propolis bound," and he couldn't physically dismantle colonies to inspect them.

Appropriate beekeeper hygienic behavior, according to Mr. Wenning, includes maintaining clean colonies, clean hives, clean apiaries and clean honey. Clean colonies are those free of bacteria (causing American and European foulbrood), fungi (causing chalkbrood), protozoans (causing nosema), parasites (mites), and other insects (wax moths and small hive beetle). The best way to do this is by continual inspection, particularly examining the outside of the hive, as well as adults and brood. These include numerous observations, looking for aberrant flight behavior, dead bees near

the entrance, fecal spotting, sunken and discolored brood cappings, and a "pepper box" mix of capped and uncapped cells associated with a "sour" odor.

One way to keep colonies clean is by routinely replacing old brood comb. This has been proposed a number of times, Mr. Wenning states. Old combs are sinks for everything from bacterial spores to heavy metals. They also can become contaminated with the pesticides used in controlling Varroa mites. Thus, he suggests beekeepers should consider marking brood frames with the date they first are used by bees for brood rearing. Mr. Wenning also recommends a 5-year rotation program, introducing new foundation into the center the nest and gradually moving the older brood comb to the outside of the colony, where it finally is removed and recycled.

This concept of recycling comb wax brings up a point not mentioned by Mr. Wenning. What is the status of the foundation that will be used to renovate combs? The continued use of pesticides, and their accumulation in wax by recycling contaminated foundation, might affect future generations of honeybees in unknown ways. Wax contamination has become a serious problem in Europe, but there are no studies on this phenomenon in the United States to my knowledge. Nevertheless, there is continuing information that sublethal doses of pesticides in colonies may have long-term adverse consequences.

Clean hives, Mr. Wenning says, as opposed to clean colonies, refer to the physical state of the boxes bees are kept in. Thus, he says beekeepers should routinely clean their colonies of accumulated debris, brace comb and propolis.

The physical cleaning of hives is something that is routinely carried out by queen and package bee producers in the South. It is a prelude to getting ready for the next active season's activities as colonies clogged up with brace comb and propolis are simply too difficult to be dismantled to search of queens and to shake package bees. Two other areas of importance, Mr. Wenning concludes, are to keep



colonies free of mold and mildew, and to exercise great care in using the smoker so as to avoid contamination of comb from smoke itself, cinders, and ash. His next article will touch on cleanliness in the honey house and processing the crop. The former is extremely important to beekeepers in danger of being infested by the apiculturist's newest pest, *Aethina tumida*, the small hive beetle.

Tom Sanford  
Apis-Apicultural Information and Issues  
Florida Extension Beekeeping Newsletter  
Volume 18, Number 6, June 2000

## **Classified**

Missouri Pollen: cleaned and dried or fresh and frozen. Retail/Wholesale - call for prices 636-629-5814, Troy Hart.

Nucs, 4 frame, \$42.50 w/frame exchange, \$50.00 wo/frame exchange. 5 frame \$48.50 w/frame exchange, \$55.00 wo/frame exchange. Caucasian queens, all Nucs treated w/Apistan & Fumidil. Available approx. May 1<sup>st</sup> thru fall. Corn syrup, 5 gal. pails (60 lbs.) makes 20-25 gallons of feed, \$15.00 w/bucket exchange. Call for pricing on 55 gal. barrel. Caswell-Massey Goat's Milk & Honey Soap - \$2.00 each or \$1.80 each in quantity. Ian Brown, 636-398-5014 or [ibrown@mail.win.org](mailto:ibrown@mail.win.org)

3 or 4 frame nucs transferred to your equipment. Will be ready approx. April 30. Includes overwintered local queens, gentle and productive marked for easy ID. \$10 per frame, 10% deposit. Limited supply. Bob Graham, 9827 Morse Mill Rd., Dittmer, MO 63023, 636-273-4609

## **Fall Meeting Prices**

Just to give you a comparison, we received notices of several other State Beekeeping Association Fall Meetings and there costs are:

Alabama - \$45 with one meal

Oregon - two meals and a wine/cheese reception - \$95

Kansas - \$33 with one meal

Missouri - two meals - \$37

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## **One Hive Equals Two Bottom Boards**

Several years ago, during a March colony check of the OSU hives, I noticed that the hive bottom boards seemed quite wet. This certainly is not an unusual phenomenon for colonies overwintered in the Willamette Valley. I replaced all the wet bottom boards with new ones. The wet bottom boards piqued my interest enough that I took them all and weighed them individually. Then I placed them in the furnace room of the laboratory and waited about six weeks to re-weigh them. I was curious as to how much water was going to be removed. The figure that accompanies this short piece dramatically displays the difference in average bottom board weight.

The average "wet" bottom board weighed almost 7 and one-half pounds. The average "dried" bottom board weighed nearly 5 pounds. With some simple subtraction, the average bottom board had held a little more than 2 and one-half pounds, or two and a half pints of water.

These bottom boards came off of colonies that were in a well protected apiary site and all the colonies had been given a slight "tilt" forward expressly to prevent rain from running into the colonies through the colony entrances. The excess water is picked up during the winter and early spring from rainfall (by wicking), high humidity and activities within the beehive.

So what is the harm of leaving such wet bottom boards on the colonies, after all that is what most beekeepers normally do? One feature of a natural honeybee colony and our human-made imitations, is that the cavity used by the bees is dry. If not, the

bees will expend energy to dry it to the best of their abilities. Wet conditions within a hive increase the incidence of disease, especially Nosema and Chalkbrood. By replacing a wet bottom board in the spring the beekeeper is saving the bees unnecessary work and energy which the bees can then direct to a more productive and healthy colony. It is for these reasons that I always maintain two bottom boards for each colony and these bottoms are rotated annually. A small thing, yes, but a proactive that when combined with others will produce healthier and more productive honeybee colonies.

Dr. Michael Burgett, Oregon State University  
*The Bee Line*, Oregon State Beekeepers Newsletter  
 September 2000

## New Insect North of the Missouri River

If you have seen an unusual hornet or have received telephone calls regarding a large hornet you have never heard of, it probably is the European hornet, *Vespa crabro*

*Linnaeus*. The European hornet is the largest hornet in Missouri (1 1/4"). The so-called baldfaced hornet is actually an aerial nesting yellowjacket.



The European hornet has been seen in the Ozarks, but we have just been notified from the Extension Agent in Warrenton, that they crossed the Missouri River the middle of August. These hornets fly at night and raid domestic honeybee hives. For more information log onto: [www.ag.ohio-state.edu/~chioline/hyg-fact/2000/2128.html](http://www.ag.ohio-state.edu/~chioline/hyg-fact/2000/2128.html)

**NOTE:** After this was typed, two of our fellow beekeepers had encountered these hornets. Rev. Don Buford of Warrenton, stated that these hornets had been in his apple tree, eating the inside of the apples, so that when they were picked, the apples collapsed. He reported the European hornet was not aggressive during their apple picking. They

caused Jim Buxton of Catawissa, aggravation, however, no stings.

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Auxiliary - \$10 \_\_\_\_\_

Subscriptions:

*American Bee Journal* - \$15.30 \_\_\_\_\_

*Bee Culture* - \$16.30 \_\_\_\_\_

*Speedy Bee* - \$13.60 \_\_\_\_\_

If you belong to a local beekeeping organization, please pay your state dues through the local treasurer. If not, make checks payable to: Missouri State Beekeepers Assn. or to the Missouri State Beekeepers Assn. Auxiliary and mail to:

Ron Vivian  
 Treasurer - MSBA  
 P.O. Box 448  
 Oak Grove, MO 63075

Rose Terrill  
 Treasurer - MSBAA  
 9401 S. Hardsaw Rd.  
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## **The African Queen**

Forwarded by Knox Adler, Missouri Valley Beekeeper

The Conference held in Tucson in April had several surprises, and loads of great information. This is the first of many findings that were discussed at the conference.

This news of African bees is EXCITING!

Africanized honeybees have an unexpected advantage in the battle to keep beekeepers from replacing highly defensive Africanized queens with gentle, easily managed European ones.

Within only one week after their queen dies or is removed by beekeepers, Africanized worker bees--which are female--are capable of activating their ovaries to produce viable female eggs for re-queening the hive. That's according to preliminary findings by Gloria DeGrandi-Hoffman of the ARS Carl Hayden Bee Research Center, Tucson, Ariz., and Stanley S. Schneider of the University of North Carolina at Charlotte.



European worker bees' ovaries can't start producing eggs until the queen has been missing for at least three weeks. And, egg-laying worker bees that are queenless typically produce male offspring. In contrast, the Africanized workers' faster, one-week response to queenlessness, and ability to produce a queen from their own female eggs, could explain why many beekeepers' efforts to re-queen an Africanized hive with a docile European queen haven't succeeded. Queens introduced into colonies that have egg-laying workers will be attacked and killed.

Scientists already knew that some kinds of African honeybees, such as the Cape bee of South Africa, can lay viable female eggs within one week of becoming queenless, and nurture them to become their queen. But the ARS and University researchers are apparently the first to observe this phenomenon in Africanized worker bees in the northern hemisphere.

Migrating from Brazil, Africanized bees are today found in Arizona, California, Texas, New Mexico



Migrating from Brazil, Africanized bees are today found in Arizona, California, Texas, New Mexico and Nevada.

The scientists are developing new tactics to foil the Africanized workers' ability to make their own Africanized queen. DeGrandi-Hoffman reported the findings at the Second International Conference on Africanized Honey Bees and Bee Mites, held recently in Tucson. ARS, the U.S. Department of Agriculture's chief research wing, was co-sponsor.

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### **USDA Handbook #690**

#### **Diagnosis of Honey Bee Diseases**

By

Hachio Shimanuki & David A. Knox

While supplies last, single copies may be obtained at no cost from Bee Research Lab, Build. 476, BARC-East, Beltsville, MD 20705. After that they can be purchased from NTIS.  
703-605-6000.

### **Market That Honey!!**

We know that the true importance of honeybees is pollination. However, most of the income for Missouri beekeepers is derived from honey. The per USA capita consumption of honey, per the NHB is 1.1 lb., in the scheme of things, that isn't very much. Especially if you consider the imports and USA production amounts. According to the AHP, during the month of July, 23,000,000 lb. of honey was imported, with 10 million lbs. coming from Argentina and 7.5 million lbs. coming from China to a total of 17.5 million pounds. This is a 12% increase over the same time frame in 1999. If the

trend continues, imports will exceed 2000 million pounds. If our domestic production is 200 million pounds and we couple that with the 80 million pounds carryover from 1999 we come up with a total of 480 million pounds. You calculate the figures!

We can't totally rely on the NHB or the "Big Guys" we each need to establish new honey consumers. If you have any "tactics", please send them to me for publication.

### **America's Country Store Hawks Ridge Feed & Pet Supply**



8621 Hwy. N  
Lake St. Louis, MO 63367

636-561-6637

**NEW from Mann Lake..**

# **Rite-Cell™**

## **Plastic Foundation**

*Here's the buzz on the latest way to make your bees more productive and your operation run more dependably. Our new Rite-Cell plastic foundation provides a deeper cell and higher definition that encourages bees to work it faster. And that spells increased honey yields. Call us toll free for the full story and complete details. Ask about New Pre-Assembled Frames equipped with Rite-Cell Foundations!*

**Mann Lake Ltd. - 501 S. 1st St.  
Hackensack, MN 56452-2001**

**Fax 218-675-6156**

**E-Mail [beekeepr@mannelakeltd.com](mailto:beekeepr@mannelakeltd.com)**

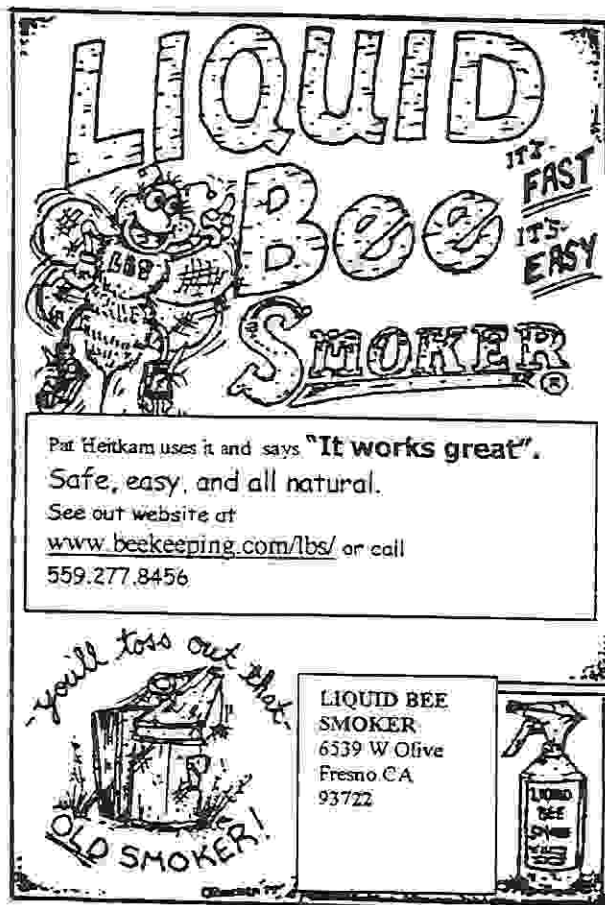


# **1-800-233-6663**

## Thank You

A special thank you to those that provided the refreshments at the Fall Meeting at Lake of the Ozarks. They were:

Brenda & Larry Draper  
Joli Winer and Cecil Sweeney  
Don Reinkemeyer  
Vera and Art Gelder  
Pam and Ian Brown



**LIQUID BEE SMOKER**

IT'S FAST  
IT'S EASY

Pat Herkam uses it and says "It works great".  
Safe, easy, and all natural.  
See our website at  
[www.beekeeping.com/lbs/](http://www.beekeeping.com/lbs/) or call  
559.277.8456

you'll toss out that  
OLD SMOKER!

**LIQUID BEE SMOKER**  
6339 W Olive  
Fresno CA  
93722

## MISSOURI STATE BEEKEEPERS ASSOCIATION MISSOURI STATE BEEKEEPERS AUXILIARY

### 2001 SPRING MEETING NOTICE

Runge Conservation Nature Center  
2901 W. Truman Blvd.  
Jefferson City, MO

THE 2001 SPRING MEETING WILL BE HELD AT THE RUNGE CONSERVATION NATURE CENTER IN JEFFERSON CITY, MISSOURI ON FEBRUARY 24. WE HAVE A LARGE BLOCK OF ROOMS RESERVED AT THE FAIRFIELD INN. THE PHONE NUMBER IS (573) 761-0400 AND THE RATE IS \$69 FOR DOUBLE/SINGLE. WHEN YOU CALL THE FAIRFIELD INN PLEASE IDENTIFY YOURSELF AS A BEEKEEPER. THE SOONER YOU CALL THE BETTER. IF YOU WAIT TOO LONG ALL THE ROOMS WILL BE TAKEN.

OUR MAIN SPEAKER FOR THE SPRING PROGRAM WILL BE MR. PAUL JACKSON, CHIEF APIARY INSPECTOR FOR TEXAS.

EVERYONE IS INVITED TO ATTEND THE EXECUTIVE BOARD MEETING AT 7:00 P.M. ON FRIDAY, FEBRUARY 23, 2001 AT THE FAIRFIELD INN AT JEFFERSON CITY.

THE FAIRFIELD INN IS LOCATED AT 3621 WEST TRUMAN BOULEVARD.

**MISSOURI STATE BEEKEEPERS ASSOCIATION & AUXILIARY**

**2001 SPRING MEETING  
FEBRUARY 23 & 24, 2001**

**FEBRUARY 23 - Fairfield Inn**

**7:00PM EXECUTIVE BOARD MEETING** - Everyone is invited to attend

**FEBRUARY 24 - Runge Conservation Nature Center**

**MORNING SESSIONS**

**8:30 REGISTRATION**  
**SET-UP SILENT AUCTION** - Vera Gelder - Fish & Forestry Room  
**BEE SMOKER DISPLAY** - Paul Jackson - Fish & Forestry Room  
**VENDORS DISPLAY OPEN** - Fish & Forestry Room

**9:00 INVOCATION** - Auditorium

**9:05 - 9:15 WELCOME** - Art Gelder, President, MSBA

**9:15 - 10:00 HISTORY OF U.S. BEE SMOKER** - Paul Jackson, Texas Chief Apiary Inspector - Auditorium

**9:15 - 10:15 SET-UP OF KIDS 'N BEES EXPO** - Auxiliary Officers - Forest Room

**10:00 - 10:30 BREAK** - Fish & Forestry Room

**10:30 - 11:45**  
**1. PREPARING HONEY FOR SHOW - OR ALWAYS PRESENTING YOUR HONEY AS IF YOU ARE ENTERING IT IN THE FAIR** - Joli Winer & Cecil Sweeny, owners of Mid-Con - Fish & Forestry Room  
**2. WEIGHTS & MEASURES/LABELS** - Auditorium  
**3. AUXILIARY BUSINESS MEETING** - JoAnn Davis, VP MSBA Auxiliary - Forest Room

**11:45 - 1:00 LUNCH** - on your own

**AFTERNOON SESSIONS**

**1:00 - 3:00 KIDS 'N BEES EXPO** - Forest Room

**1:00 - 1:45 AFRICANIZED HONEY BEE BIOLOGY** - Paul Jackson - Auditorium

**1:45 - 2:15 FUN WITH FLIES** - Raymond Nabors, Ph.D., Extension Specialist, Missouri University - Auditorium

**2:15 - 3:15 BREAK** - Fish & Forestry Room

**2:45 - 3:30 LAB TECHNIQUES FOR IDENTIFICATION OF AFRICAN HONEY BEE** - Paul Jackson - Auditorium

**3:15**  
**END OF SILENT AUCTION**  
**CLEAN-UP OF KIDS EXPO**  
**END OF BEE SMOKER & VENDOR DISPLAYS**

**3:30 - 4:00 BUSINESS SESSION** - Art Gelder - Auditorium

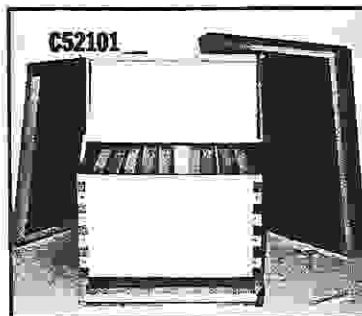
**4:00 ATTENDANCE PRIZES**

# DADANT COMPLETE HIVES & SUPERS

Assembled We've Got 'Em Both Ways Unassembled

*A Real Time Saver*

## Complete Hive with "Beeswax Coated" Plasticell Foundation

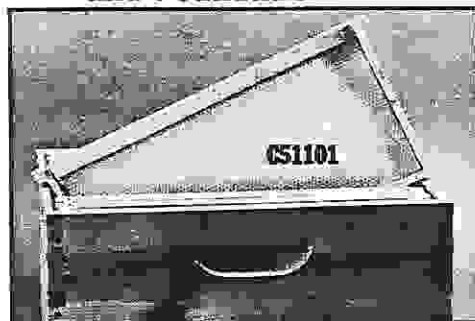


- 10-9<sup>1</sup>/<sub>8</sub>" Grooved Top Bar Frames with Beeswax Coated Plasticell foundation
- Superiorly constructed 9<sup>5</sup>/<sub>8</sub>" Commercial Ponderosa Pine Hive Body
- Metal frame rests
- Telescoping cover with galvanized metal top
- Inner Cover
- Reversible Bottom Board for summer and winter bee entrance

Ship Wt. 50 lbs.

**C52101** Carton of 1, ..... \$78.00 ea.  
5 or more ..... \$72.50 ea.

### Hive Body with Frames and Foundation



**C51101** comes assembled with 10-9<sup>1</sup>/<sub>8</sub>" Grooved Top Bar Frames with Beeswax Coated Plasticell foundation installed in the frames.

Commercial grade wood.

Ship Wt. 33 lbs

**C51101** Carton of 1, ..... \$39.25 ea.  
20 or more ..... \$36.75 ea.

## 9<sup>1</sup>/<sub>8</sub>" Groove Top Bar Frames with Beeswax Coated Plasticell Foundation Installed



**C75210** comes assembled and packed 10 per carton. Commercial Grade Wood. Ship Wt. 11 lbs

**C75210** Carton of 1, ..... \$25.50 ea.  
20 cartons ..... \$23.50 ea.

Call for Quantity Pricing

On-line  
Ordering  
at  
[www.dadant.com](http://www.dadant.com)  
or  
stop by  
your  
nearest  
Dadant  
Branch  
and save  
on  
freight!

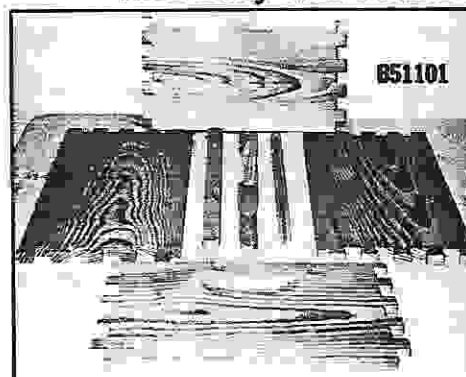
## Complete Hive without Foundation



- 10-9<sup>1</sup>/<sub>8</sub>" Wedge Top Bar Frames  
(See page 9 of our catalog for your favorite Dadant foundation.)
- Superiorly constructed 9<sup>5</sup>/<sub>8</sub>" Select Grade Ponderosa Pine Hive Body
- Metal frame rests
- Telescoping cover with galvanized metal top
- Inner Cover
- Reversible Bottom Board for summer and winter bee entrance

Item Number	Quantity	Ship Wt.	Price
<b>B52101</b>	Carton of 1	35 lbs.	<b>\$52.50</b>
<b>B52105</b>	Carton of 5	160 lbs.	<b>\$215.50</b>

### Hive Body with Frames



**B51101** comes unassembled with 10 Wedged Top Bar Frames. Nails and Frame Rests included. Select Grade Wood. (See page 9 of our catalog for your favorite Dadant foundation.) Ship Wt. 17 lbs

**B51101** Carton of 1, ..... \$29.50 ea.

### Honey Supers With Frames



**B31101** and **B32101** come unassembled with 10 Wedged Top Bar Frames. Nails included. Select Grade Wood.

(See page 9 of our catalog for your favorite Dadant foundation.)

6 5/8" Depth Super with Frames

Ship Wt. 13 lbs

**B31101** Carton of 1, ..... \$19.50 ea.

5 11/16" Depth Supers with Frames

Ship Wt. 13 lbs

**B32101** Carton of 1, ..... \$19.50 ea.

### Dadant & Sons

51 South 2nd Street • Hamilton, IL 62341  
217-847-3324 • 800-637-7468 • 217-847-3660 Fax

E-mail: [Dadant@dadant.com](mailto:Dadant@dadant.com)

Web: <http://www.dadant.com>

## 2001 SPRING MEETING PRE-REGISTRATION

<u>          </u> <u>Member</u>	<u>          </u> <u>Non Member</u>	<u>          </u> <u>New Member - (include 2001 dues)</u>
		<u>          </u> <u>Single - \$10.00</u>
		<u>          </u> <u>Family - \$15.00</u>
		<u>          </u> <u>Student - \$5.00</u>

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_

STATE \_\_\_\_\_ ZIP \_\_\_\_\_ PHONE \_\_\_\_\_

E-MAIL \_\_\_\_\_

## Meeting Registration

## Pre-registration

Member - number in party _____	@ \$10.00 each	\$ _____
Non-member - number in party _____	@ \$13.00 each	\$ _____

Late Registration (after February 19)

Member - number in party \_\_\_\_\_ @ \$13.00 each \$ \_\_\_\_\_

Non-member - number in party \_\_\_\_\_ @ \$16.00 each \$ \_\_\_\_\_

GRAND TOTAL DUE \$

Make checks payable to: **MISSOURI STATE BEEKEEPERS ASSOCIATION**

Mail to: LARRY HENSLEY  
13520 OLD JAMESTOWN ROAD  
FLORISSANT, MO 63033  
314) 355-6935





## ORDERING INSTRUCTIONS

Order toll-free at:

**1-800-553-7162**

using a credit card or send completed order form with check to:

National Honey Board  
Attn: Fulfillment Department  
390 Lashley Street  
Longmont, CO 80501-6045

\* Assessment-paying supporters of the National Honey Board may order up to 500 "Honey I Love You" Recipe Cards and 200 Spanish Language brochures free of charge each year. Beekeeping associations may order up to 1,000 free "Honey I Love You" Recipe Cards and 200 free Spanish Language brochures.

Items, price and availability are subject to change. Please see [www.nhb.org](http://www.nhb.org) for changes and updates.

**Please allow  
four weeks  
for delivery.**

**NOTE:** We update our publications and product designs frequently. As a result, the items you receive may be slightly differently than those shown in this catalog.



June 2000

## ORDER FORM

Item	Quantity	Price/Unit	Total
Camera Ready B&W Clip Art Package	_____	25¢	_____
Chalkboard Poster	_____	\$1	_____
Honey Bear Apron	_____	\$12	_____
Honey Bear Clock	_____	\$17.50	_____
Honey Bear Plush Toy	_____	\$15	_____
Honey Bear Stickers (1,000 per roll)			
1 roll	_____	\$9	_____
2 to 4 rolls	_____	\$8 each	_____
5 or more rolls	_____	\$7 each	_____
"Honey, I Love You" Poster	_____	\$1.50	_____
"Honey, I Love You" Table Tent	_____	25¢	_____
"Honey I Love You" Recipe Cards	500	FREE*	_____
(Over 500 Recipe Cards)	_____	10¢	_____
"Honey I Love You" Recipe Cards (Assoc. Only)	1,000	FREE*	_____
(Over 1,000 Recipe Cards)	_____	10¢	_____
Honey Tip Sheet and Recipes	_____	10¢	_____
"Let's Get Cooking" Hang Tags (500 Tags)	_____	\$10	_____
Recipe Brochures			
<i>Swift &amp; Savory</i>	_____	12¢	_____
<i>Good &amp; Golden</i>	_____	12¢	_____
<i>Healthy &amp; Hearty</i>	_____	12¢	_____
<i>Bright &amp; Beautiful</i>	_____	12¢	_____
<i>Honey for Health</i>	_____	12¢	_____
Spanish Language Brochure	200	FREE*	_____
(Over 200 Spanish brochures)	_____	10¢	_____
Sweetened Naturally with Honey Cookbook			
1-9 books	_____	\$2.95 each	_____
10-49 books	_____	\$2.65 each	_____
50-119 books	_____	\$2.25 each	_____
120 or more books	_____	\$1.75 each	_____
Technical Brochure	_____	75¢	_____
Educational Videotape and Teacher's Guide	_____	\$15	_____

MERCHANDISE TOTAL

SHIPPING & HANDLING

INCLUDED

TAX (Colorado Residents Add 3% Sales Tax)

**ORDER TOTAL**

Name \_\_\_\_\_

Company \_\_\_\_\_

Street (No P.O. Boxes) \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

Phone \_\_\_\_\_

Please charge my: ☐ Visa

☐ MasterCard

Card # \_\_\_\_\_

Exp. Date \_\_\_\_\_

Signature \_\_\_\_\_

I've enclosed a check or money order in the amount of \$\_\_\_\_\_. Please make check payable to: National Honey Board.