

FSBA . . . A Brief History (continued from Page 1)

Local associations have traditionally been the heart and soul of the association. To see information about their activities, access the “Local” button at floridabeekeepers.org. Four new groups have recently been organized, making a total of 12 associations supporting the 1,300 legally-registered beekeepers spread out across an impressive 54,252 square miles, making up what is fondly called “The Sunshine State.”

The Florida State Beekeepers Association has also been involved recently in initiatives that have injected new funding into Florida honey bee programs via its involvement in the Florida Department of Agriculture & Consumer Services’ Honey Bee Technical Council. Over the last two years, around \$700,000 in funding for bee research and extension efforts has been appropriated by the Florida legislature due principally to association lobbying efforts. Another association initiative, which is expected to go nationwide, is developing a standard of identity for honey, based in part on that found in the International Codex. When adopted, Florida, one of the four largest honey-producing states in the nation, will be the first to have adopted a compositional standard of honey.

Each year in the fall, the association sponsors a yearly convention, and in the last few years has held a one-day, mid-year event offering practical beekeeping sessions. Beyond its regular membership, the association sports 80 lifetime members, whose dues are paid by proceeds from the association’s apiary which is named after Florida beekeeping icon, Conrad Cramer. Finally, it publishes *The Florida Beekeeper*, a quarterly 48-page booklet crammed with news and advertising.

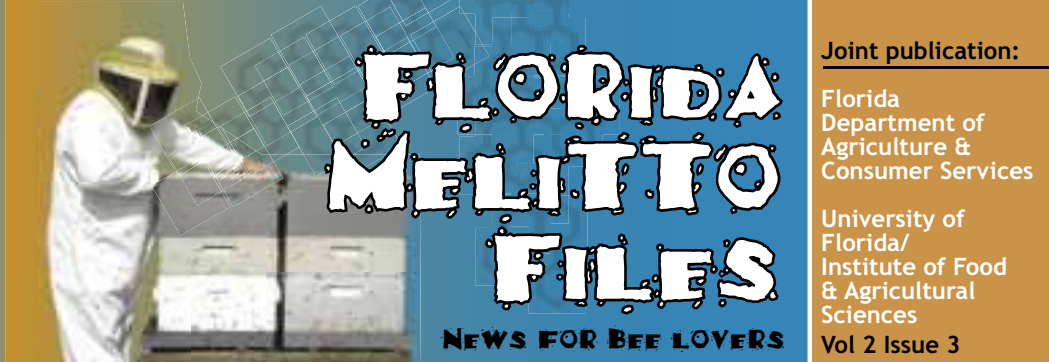
These are exciting and troubling times for Florida beekeepers. The media attention given to the plight of honey bees has brought tremendous public awareness to beekeepers’ efforts in maintaining bees as part of the fragile ecosystem.

Elmore Herman, past-president of the association, stated last year, “We are at the crossroads of beekeeping; we can either stay in our bee yards and take no interest in the bigger issues facing beekeepers, or we can join together, unify our position, and make ourselves known in the state of Florida, to our government and its citizens.” The best way for Florida beekeepers to do this is by joining the Florida State Beekeepers Association. For more information, visit floridabeekeepers.org or contact Dr. Malcolm T. Sanford, Executive Secretary, Phone: 352-336-9744 or e-mail: beeactor@apisenterprises.com.

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DAACS-P-01492



Florida State Beekeeper’s Association: A Brief History by Dr. Malcolm T. Sanford

This year marks the 88th anniversary of the Florida State Beekeepers Association (FSBA). Some state associations may have been organized for a greater number of years, but few have made more significant contributions to the beekeeping community, not only in Florida, but across the nation.

According to Laurence Cutts, Florida Chief Apiarist Emeritus, the organization was founded in Gainesville, October 6, 1920, its mission being “to provide resources for the improvement of beekeeping using proven techniques and procedures in the management of honey bees and to share this knowledge with everyone interested in the art of beekeeping.” At its first meeting, among the 100 attendees were some of the state’s legendary beekeepers who became the association’s first officers: J. W. Barney of Bradenton, President; F. K. Isbell of Wewahitchka, Vice President; K. E. Bragdon of Cocoa, Secretary; and J. R. Hunter of Wewahitchka, Treasurer.

The association’s first significant contribution was helping to promote tupelo as a premier honey. “Between 1920 and 1940, tupelo honey shifted from a honey for blending to a specialty honey recognized as one of the premier honeys of the United States. Since then beekeepers have exercised care to produce and market as pure a product as possible. In 1962, the Florida Department of Agriculture & Consumer Services initiated a certification program for tupelo honey as a marketing tool for those who produce a quality product. This continues to be the only program of this nature in the United States.” (Packard, 1962).



Hives destroyed due to foulbrood

In the past century, the high watermark for the state association was the passage of Florida Statutes 586.14 on July 1, 1957. This act compensated beekeepers for bees and equipment destroyed by the state because of American foulbrood, a measure which greatly helped reduce the incidence of the disease and increased cooperation between the Department and the beekeeping industry. Florida was the first state to implement such a program. Part of this program was to ensure all beekeepers were registered with the Department, which continues to be mandated by state law.



State inspector in the 1920's

Joint publication:

Florida
Department of
Agriculture &
Consumer Services

University of
Florida/
Institute of Food
& Agricultural
Sciences

Vol 2 Issue 3

JULY - SEPT 2008

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FROM THE DESK OF JERRY HAYES

In this issue, I want to take the opportunity to reinforce the importance of responsible beekeeping practices.

Voluntary Best Management Practices

Protect yourself and the Florida beekeeping industry by participating in the voluntary Best Management Practices (BMP). BMP's are one way to show that you are trying to follow practices designed to help you be as professional, prudent, and conscientious a Florida registered beekeeper as possible. We have two separate issues in Florida. We have the feral environment transitioning to dominance by AHB. And, we have the managed honey bees that are so important to Florida agriculture and

its environment and wildlife. We cannot have anyone in Florida think that our registered beekeepers and their colonies are part of the problem and not part of the solution. There are approximately 1,100 registered beekeepers in Florida. There are approximately 17 million other Florida citizens who may not understand the issue. Florida beekeepers have to be perceived as an asset not a liability. Remember, being informed and educating others can be a valuable tool for the vital beekeeping industry.

On a sad note, as we all feared was probable, there has been a fatal Africanized honey bee stinging incident. Below are excerpts from the April 2008 DPI press release.

Okeechobee County Man Stung by Bees Dies

GAINESVILLE—The Florida Department of Agriculture and Consumer Services' Division of Plant Industry (DPI) in cooperation with the University of Florida's Institute of Food & Agricultural Sciences (UF/IFAS) announced today that a resident of Okeechobee County died as a result of being stung over a hundred times by bees that initial lab results indicate are Africanized honey bees (AHB). Though numerous domestic animals and livestock have been killed by AHB in Florida, if further testing confirms these were AHB, this would be the first human fatality. In other states where AHB are established, there have been over 17 human fatalities since 1990. The stinging incident happened on April 9 in a rural area in the northwest section of the county. Though details of the incident have not been confirmed, it was reported that the victim was attempting to dismantle a trailer where a nest of bees had been observed. County rescue workers transported the victim to an area hospital where he died after being on life support for an extended period. Medical staff indicated that the victim had a fatal allergic reaction to the bee stings. On April 10, a DPI apiary inspector went to the site of the attack with county fire and rescue personnel to collect samples for laboratory analysis to determine if the bees were Africanized honey bees. The colony has been destroyed. The samples are being analyzed at DPI's Gainesville laboratory and preliminary testing methods indicate a high probability that the bees are Africanized. Full morphometric testing, which measures body size, wing and leg length, and other identifying characteristics are underway.



Dr. Jamie Ellis
UF Asst. Professor

FROM THE DESK OF DR. JAMIE ELLIS

I once heard that honey bees are the second most written about subject on the planet, behind religion. I'm not sure how accurate the statement is, but it does reflect that a tremendous amount of information exists on honey bees. I would like to use this article to let you know what Florida bee resources are available to you.

1) FDACS/DPI Apiary Section website:

www.doacs.state.fl.us/pi/plantinsp/apiary/apiary.html

Through this site, Jerry Hayes (Chief of Apiary Inspection) and his team of bee inspectors list rules for keeping bees in Florida, information on Best Management Practices, African bee information, and so much more.

2) University of Florida Honey Bee Research and Extension

Laboratory website: UFhoneybee.com – This is my lab's website. Here, you will find information about our extension, research, and instruction efforts. Included under the "extension" tab is information on the UF Bee College; the UF Master Beekeeper Program; archived, electronic copies of the Melitto Files; and training videos, informational documents, presentations, etc. (this part is under construction). Under the "research" tab, we list all of the research projects that my lab is undertaking currently (this part is under construction). To meet the UF team, check out the "people" tab.

3) UF Solutions for Your Life website: solutionsforyourlife.ufl.edu

This website exists to put the breadth of knowledge of UF at your fingertips. Type your keyword in the search box, and everything that the UF faculty has created on the subject will appear. For beekeepers, this includes all of the beekeeping-related information we offer. (ps: this site is not only for your beekeeping questions, but all of your questions. Go ahead, do a search here and watch the information pour fourth).

4) UF EDIS website: edis.ifas.ufl.edu - This website hosts UF's informational documents. When you go to the site, type "honey bee" in the search box and you will find all documents related to honey bees, produced by UF employees.

5) Florida State Beekeepers Association: floridabeekeepers.org - Here, you will find information about all of Florida's local bee associations (click "local" on the left side of the homepage – there are 11 such groups) as well as information on upcoming FSBA events. Every beekeeper in Florida should be a member of the FSBA! The FSBA has a quarterly newsletter (The Florida Beekeeper) and a group list on yahoo.com. For info on both, click the "news" tab on the FSBA homepage.

6) Other beekeeper groups: groups.yahoo.com - Go to this website, and type "Florida Beekeeper" in the search box. This will give you a list of nine "Yahoo! groups" that discuss honey bees; it appears that only eight are related directly to beekeeping in Florida. Through these forums, you can share ideas with other beekeepers. It always helps to get advice from other beekeepers facing the same challenges as you!

7) UF African Bee Extension and Education (AFBEE) program: afbee.com

The AFBEE program is a joint effort between FDACS-DPI and UF/IFAS. Through this program, we are trying to educate Florida citizens about African bees. At this website, you will find presentations, videos, informational documents, etc. You can use these resources to help spread the word about African bees, or simply refresh your understanding of this bee.

FDACS/DPI

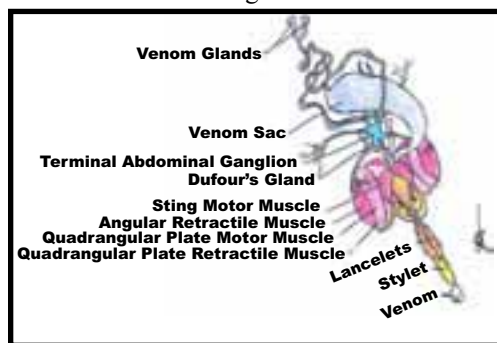
UF/IFAS

EVERYTHING YOU WANTED TO KNOW ABOUT BEE STINGS, BUT WERE AFRAID TO ASK

Jason Graham - UF Entomology Graduate Student

Beekeepers are familiar with getting stung. It's an occupational hazard similar to a chef's burn or a carpenter's hammered fingernail. The sting however carries with it a stigma that terrifies much of the general public. To excuse the running and screaming associated with fleeing a rogue bee, people often claim a bee allergy. While allergic reactions to stings are serious, it's likely only a fraction of those who claim bee allergies have actually been medically diagnosed as allergic. The fear may be due to panic that sets in when one is stung, and the shock that something so small has caused such an overwhelming reaction.

The honey bee sting is tucked inside of a chamber in the abdomen and is made up of many parts: a stylet with paired knife-like lancelets and associated muscles and nerves. The shaft projects out of the abdomen while the lancets and stylet slide up and down. They are driven by four pairs of muscles connected to neurons controlled by the terminal abdominal ganglion (TAG).



Sensitive hairs on the sting provide feedback to the TAG, relaying the position of the sting. Seven or more barbs on the end of the serrated lancelets catch the skin and slide against each other dragging the stylet deeper into the skin. The top of the sting contains a venom sac which pumps venom down the stylet into the wound.

The venom is a complex cocktail of chemicals with the purpose of attacking cells and tissue. Mellitin, a peptide, makes up about 50% of the venom. It acts to move in between the phospholipids of the cell membrane and force it open. This exposes the cell to the rest of the components of venom. If this cell is a neuron, the damaged membrane upsets the balance of ions within and out of the nerve cell causing jolts of pain through the human central nervous system.

Norepinephrine shuts off the blood flow, concentrating venom in the area of the sting and turning the skin white and hard. Mast cell degranulating peptide targets the mast cells triggering them to release histamine and dilating the blood vessels. In people allergic to bee stings, this flood of histamine causes plummeting blood pressure and bronchial spasms and swelling which are all symptoms of anaphylactic shock.

When the stinging bee takes to flight, the barbs of the sting are anchored into the skin and cause the bee abdomen to tear. This exposes additional alarm pheromones and leaves the sting and venom sac pumping venom for up to 10 minutes. This is why it is important to scrape out a sting as soon as possible with a finger nail or card, and not to squeeze the venom sac.

The sting is a fascinating biological weapon which costs the life of an individual bee in protection of the colony as a whole. The physiology of the bee sting works like a well-oiled machine delivering a precise mixture of chemicals that scream to the invader "RUN AWAY!," but to understand, accept and respect the sting is as much a part of beekeeping as enjoying the honey.

FROM MICHAEL K. O'MALLEY

COORDINATOR, UF AFRICAN BEE EXTENSION AND EDUCATION PROGRAM

EXPLAINING THE BEST MANAGEMENT PRACTICES

These Best Management Practices (BMPs) aim to preserve public safety and protect the beekeeping industry from being liable for any AHB incidents. To help beekeepers understand the importance and reasoning behind them, two BMPs, along with a brief description, will be featured in this and upcoming issues of the Florida **MELITTO FILES**. I discussed BMP points 7 and 8 in the last issue of the Melitto Files and, I continue with points 9 and 10 below (there are 12 total). A complete list of Florida BMPs is available by visiting on the web <http://www.doacs.state.fl.us/pi/plantinsp/apiary/apiary.html>.

9. Immediately re-queen with a European Queen if previously installed clipped or marked queen is found missing. If the clipped/marked queen is missing, the bees will begin to rear a new queen. When this virgin queen emerges, she will begin her mating flight and will mate with several drones from the surrounding area. African honey bees produce a much higher proportion of drones than do European bees. Consequently, when a virgin European queen conducts a mating flight in an area where African bees are present in the feral environment, she may encounter and mate with African drones, thereby producing hybrid progeny. As a result, it is important that beekeepers do not allow their bees to rear queens but replace a superceded or missing queen with a European clipped/marked queen.

10. Maintain one European drone source colony (250 square inches of drone comb) for every 10 colonies in order to reduce supercedure queens mating with AHB drones. Generally, a beekeeper should cut queen cells in an effort to thwart both swarming and the production of virgin queens. However, if an accidental supercedure queen does emerge, a beekeeper should maintain in his or her apiary a drone source colony that contains at least 250 square inches of drone comb to prevent a virgin queen from mating with AHB on her mating flight. Drone cell foundation is available from most bee equipment providers and can be used to create drone source colonies. One side of deep foundation is about 140 square inches. As such, including one frame of drone foundation per 10 colonies of bees will satisfy this requirement.

For more information visit: afbee.ifas.ufl.edu

FLORIDA BEEKEEPER MANAGEMENT CALENDAR – SUMMER 2008

	Month	Management Calendar	Blooming Plants
North Florida	July	<ol style="list-style-type: none"> 1) Remove and process honey - main flow stops 2) Varroa populations begin to grow – monitor colonies closely. The economic threshold is 60+ mites/day on a sticky screen or 17+ mites in an ether roll for a colony of average strength. Treat if you exceed these numbers. Options include: Apiguard, ApilifeVAR, Mite Away II 	Spanish Needle ^{AS} , Palmetto, Mexican Clover ^{AS} , Buttermint, Palm, Gopher Apple, Joint Weed ^A , Redbay ^{AS} , Sandhill Prairie Clover ^A , Partridge Pea ^A , Mangrove ^A , Primrose Willow ^{AS} , Spiderwort/Dayflower ^{AS}
	Aug	<ol style="list-style-type: none"> 1) Monitor colonies for varroa (see July)! 2) Treat with Terramycin dust for AFB/EFB 3) Feed colonies if light 4) Monitor for and control small hive beetles 5) It's hot! Ensure adequate colony ventilation 	Spotted Mint ^S , Goldenrod ^S , Vine Aster ^S , Sumac ^S
	Sept	<ol style="list-style-type: none"> 1) Monitor colonies for varroa (see July)! 2) Consider treating colonies for Nosema disease using Fumidil-B. Colonies may need as much as 4 gallons of medicated syrup to control <i>Nosema cerana</i> 3) Continue to feed colonies if light 	Smart Weed, Bush Aster
Central Florida: similar to N. FL but 2-3 weeks ahead	July	<ol style="list-style-type: none"> 1) Remove and process honey - main flow stops 2) Varroa populations begin to grow – monitor colonies closely. The economic threshold is 60+ mites/day on a sticky screen or 17+ mites in an ether roll for a colony of average strength. Treat if you exceed these numbers. Options include: Apiguard, ApilifeVAR, Mite Away II 	Spanish Needle ^{AS} , Palmetto, Mexican Clover ^{AS} , Buttermint, Palm, Gopher Apple, Joint Weed ^A , Redbay ^{AS} , Sandhill Prairie Clover ^A , Partridge Pea ^A , Mangrove ^A , Primrose Willow ^{AS} , Spiderwort/Dayflower ^{AS}
	Aug	<ol style="list-style-type: none"> 1) Monitor colonies for varroa (see July)! 2) Treat with Terramycin dust for AFB/EFB 3) Feed colonies if light 4) Monitor for and control small hive beetles 5) It's hot! Ensure adequate colony ventilation 	Spotted Mint ^S , Goldenrod ^S , Vine Aster ^S , Sumac ^S
	Sept	<ol style="list-style-type: none"> 1) Monitor colonies for varroa (see July)! 2) Super colonies if strong B. Pepper flow 3) Consider treating colonies for Nosema disease using Fumidil-B. (see N. FL Sept above) 4) If no nectar flow, feed colonies if light 	Smart Weed, Brazilian Pepper, Bush Aster
South Florida	July	<ol style="list-style-type: none"> 1) Remove and process honey - main flow stops 2) Varroa populations begin to grow – monitor colonies closely. The economic threshold is 60+ mites/day on a sticky screen or 17+ mites in an ether roll for a colony of average strength. Treat if you exceed these numbers. Options include: Apiguard, ApilifeVAR, Mite Away II 	Spanish Needle ^{AS} , Palm ^{AS} , Mexican Clover ^{AS} , Primrose Willow ^{AS} , Smart Weed ^{AS} , Melaleuca ^{AS}
	Aug	<ol style="list-style-type: none"> 1) Monitor colonies for varroa (see July)! 2) Treat with Terramycin dust for AFB/EFB 3) Feed colonies if light 4) Monitor for and control small hive beetles 5) It's hot! Ensure adequate colony ventilation 	Same as above
	Sept	<ol style="list-style-type: none"> 1) Monitor colonies for varroa (see July)! 2) Super colonies if strong B. Pepper flow 3) Consider treating colonies for Nosema disease using Fumidil-B. (see N. FL Sept above) 4) If no nectar flow, feed colonies if light 	Same as above + Brazilian Pepper

^AContinues to bloom in August, ^SContinues to bloom in September, ^{AS}Continues to bloom in Aug and Sept