President’s Message

As we begin to plan for our next honey flow, we also need to get ready for our spring 99 State Beekeeping Conference. This year it is a combined meeting with the North Carolina State Beekeepers in Albermarle, North Carolina on 9 and 10 April. The North Carolina beekeepers are hosting this joint meeting and are putting together the program. This should be a fun time and rewarding educational experience as we learn the latest news on beekeeping. A part of this program is the bi-annual bee bowl. This is where a team of four beekeepers from South Carolina challenges a team of four beekeepers from North Carolina. Each team has to answer beekeeping questions. It has been suggested that if a local beekeeping organization could put together a team, this team would represent South Carolina. If your organization would like to do this, please let me or Dr. Mike Hood know. Mike has a bank of questions, which the team can use to practice.

Another portion of this meeting is a business meeting. Our current by-laws state that we should elect a new slate of officers at our first business meeting of the year. I have asked the board of directors to consider a change to our by-laws to where officers are elected at the summer meeting in Clemson. The reason for this change is that sometimes we have had less than our average meeting attendance at the combined spring meeting when it is held in North Carolina. I believe that officers should be elected when the most members are present. A majority of the board has agreed with me, that the officers and directors should be nominated and elected at our summer meeting. We will bring this recommendation to you for a vote on changing the by-laws at the summer meeting.

We are still having problems with the Small Hive Beetle. I found a small number of beetles at two of my bee yards.

They were beetle free last year. We now have a product approved in South Carolina to control this pest. You will find information on this product in an article in this newsletter.

Our South Carolina Master Beekeeper Program is growing. We have had a certified level course taught by Diane and Archie Biering in Cottageville recently. Seven beekeepers took the written exam and all passed. Three more certified level courses are being taught in our state this spring and we have several beekeepers who will attain the Journeyman Level by the summer meeting.

If you would like to be a member of our board of directors you need to contact Archie Biering (Lowcountry), Ron Moore (Pee Dee), Jack Morris (Midstate) or Larry Williams (Upstate). I have made a proposal to the board to change the number of directors. We currently have three directors and we elect one director each year for a three-year term. I have recommended that four directors be elected each year, one from each area. If this is approved at our spring board meeting, I will notify you as to how many directors we will elect at the summer meeting.

If you have any suggestions for the South Carolina Beekeepers, please contact Dr. Mike Hood, a board member or me. We want to be able to respond to your needs as a beekeeper. If you do not belong to a local beekeeping organization, I urge you to take the time and attend a meeting. Thank you for being a part of the South Carolina Beekeepers. I look forward to meeting you at one of our conferences or at a local organization meeting.

Ron Taylor
President of South Carolina Beekeepers
203 Bama Road, Cottageville, SC 29435
843-835-2482,
E-mail: RTaylor@lowcountry.net
South Carolina Beekeepers to meet in North Carolina

The North Carolina State Beekeepers will host our joint spring meeting in Albermarle on 9-10 April. Albermarle is located about 30 miles east of Charlotte and the meeting will be held at the Civic Center which promises to be an excellent facility for our meeting. This will be our fifth joint meeting over the past 9 years with our beekeeping friends from the "Tarhill State." This has proven to be a very successful series of meetings over the years.

If you are a member of the South Carolina Beekeepers, you will be receiving a meeting registration packet soon. If you are not a member, and would like to receive meeting registration information, give me (Mike Hood) a call at (864)-656-0346. This meeting will give beekeepers the opportunity to learn more about many of the important issues facing beekeepers today such as the "small hive beetle" which has now been discovered in 16 counties in South Carolina. Make plans now to attend this important meeting and invite some beekeeping friends to join you for a good time of education and fellowship.

Queen Rearing Short Course to be offered at Clemson University

A queen rearing short course will be offered 13-15 May 1999 at Clemson University Cherry Farm Honey Bee Laboratory and Workshop in Clemson, South Carolina. Most classes will be taught by instructors Steve Taber and Dr. Wyatt Mangum. Steve has over 50 years of queen rearing experience and is a regular column writer for the American Bee Journal. Steve is a retired USDA bee scientist who worked for USDA for 30 years. Wyatt is an expert on queen rearing, queen cell biology, and queen management. Wyatt is also a columnist on honey bee biology for the American Bee Journal and is currently employed at Mary Washington College in Virginia.

Candidates should have a basic knowledge of honey bee biology and beekeeping skills. Beekeepers should bring a bee veil and other equipment as desired. All queen rearing supplies will be provided.

Course registration fee is $250 which will cover all queen rearing supplies and lunch meals. Deadline for registration is 15 March. Class size will be limited to the first 20 applicants. Lodging information will be provided with the registration packet.

Make checks out payable to Clemson University and mail to Mike Hood, Dept. of Entomology, Box 340365, 305 Long Hall, Clemson University, Clemson, South Carolina, 29634-0365. For more information call Mike at Ph.(864)-656-0346, FAX 864-656-5065, or Email: mhood@clemson.edu.

Small Hive Beetle Control Product Approved for use in South Carolina

The Environmental Protection Agency has granted a specific exemption under the provisions of section 18 of the Federal Insecticide, Fungicide, and Rodenticide Act to the Department of Pesticide Regulation and Public Services at Clemson University for the use of coumaphos impregnated in plastic strips to be hung in beehives to control varroa mites and small hive beetles in beehives. We owe much thanks to Director Neil Ogg (Regulatory and Public Service Programs), Von McCaskill and Don Adams (Department of Pesticide Regulation and Public Services) at Clemson University for their role in making this product available in South Carolina.

This is good news to South Carolina beekeepers. The product, Bayer Bee Strip, contains 10% coumaphos in plastic strip form similar to Apistan. Coumaphos is an organic phosphate which has a different mode of action than Apistan and may be used in rotation with other products for varroa mite control to delay mite resistance to a single product. There has been no reports of mite resistance to Apistan reported in our state, but a few other states have reported this problem.

The Bayer Bee Strip has been tested by USDA bee scientists and found to be very effective in controlling small hive beetles. The distributor for this product is Mann Lake Ltd., 501 S. 1st St., Hackensack, MN 56452-2001, ph. 800-233-6663. A local dealer for the product is Circle B Ranch, 2000 Cannon Rd., Round O, SC. 29474, ph. 843-835-8314. The smallest quantity pack will be 10 strips.
The Bayer Bee Strip can only be used at a time when bees are not producing a surplus honey crop. Gloves must be worn when handling strips.

To control small hive beetles, prepare a piece of corrugated cardboard box approximately 4 x 4 inches by removing one side. Remove one Bayer Bee Strip from the package and cut strip in half cross ways and staple the two pieces to the corrugated side of the cardboard. Place as near to the center of the bottom board as possible with the strips down and leave treatment in hive at least 3 days.

Remove treatment after 7 days. Do not treat more than 4 times per year for the small hive beetle.

I do not recommend the use of Bayer Hive Strips as a preventative measure for small hive beetles, especially in areas where the beetle has never been found. Treat only if beetles are present. The placement of the Bayer Hive Strip between frames as discussed below gave excellent Varroa mite control, but this placement location gave poor control of the small hive beetle.

To control Varroa mites, use 1 strip for each 5 frames of bees in each brood chamber (Langstroth deep frames or equivalent in other sizes). Hang strips within 2 frames of the edge of the bee cluster. If 2 deep supers are used for the brood nest, hang strips in alternate corners of the cluster, in the top and bottom super. Remove honey supers before application of strips and do not replace until the end of the treatment period. Treat all infested colonies within yard. The treatment is most effective when brood rearing is lowest. Effective control may be achieved by treating colonies in spring before the first honey flow and in the fall after the last honey flow. Leave the strips in the hive for at least 42 days (6 weeks). Do not leave strips in hive for more than 45 days. Do no treat more than twice a year for varroa mites.

The small hive beetle has now been found in Florida, Georgia, North Carolina and South Carolina. The beetle confirmed counties in South Carolina are Aiken, Bamberg, Barnwell, Beaufort, Berkeley, Charleston, Colleton, Dorchester, Florence, Hampton, Jasper, Lexington, Orangeburg, Pickens, Richland, and Sumter.

-- William Michael Hood

Investigations of the Pollen Producing Plants in South Carolina

Many of you have been contacted by Mrs. Carroll Simril, who is a research assistant in the Department of Geological Sciences, University of South Carolina, Columbia. Carroll is working on a special research project investigating the various nectar producing plants throughout South Carolina. She plans to collect 2 honey samples from each county in our state and will analyze each sample for the primary and secondary pollen content. From this study, she plans to publish an Atlas of the Distribution of Honey Bee Foraging Plants in South Carolina.

This is a very important and extensive project which Carroll is involved in and her investigations will provide us much information as to the various nectar bearing plants in South Carolina. If Carroll calls upon you for assistance in this project, please give her your full cooperation. She will provide each cooperator a final report of her project. Carroll is a hobbyist beekeeper who lives in Lexington, SC and is a member of the South Carolina Beekeepers and the Mid-State Beekeepers in Columbia. Her address is 1091 Three Chop Run, Lexington, SC 29072 and phone no. is 803-957-5954.

Honey —

The Darker, the better?

There continues to be more good information about alternative uses of honey. In a recent article, Janet Raloff of science News (Vol. 154, No. 11), discusses studies at the University of Illinois (Journal of Apicultural Research) and Clemson University (Paul Dawson, Associate Professor, Food Science) suggesting a number of ways honey may be marketed besides its traditional role as a sweet <http://www.sciencenews.org/sn arc98/9 12 98/bob1.htm>. She reports that Dr. May Berenbaum and colleagues in Illinois examined 19 honeys from a wide variety of sources for biological significance. General results were that the darker the honey, the more its antioxidant content, presumably because of flavonoid content. This is particularly
important for a major local Illinois honey derived from soybean nectar
<http://www.ifas.ufl.edu/~mts/apishtm/apis97/apoct97/htm#3>
. Some honeys, however, bucked the trend, the article says, including light sweet clover with a high antioxidant content and dark mesquite, with relatively little.

Experiments at Clemson University, according to the article, revealed that darker honeys also provide more protection against oxidation in ground-up fruits (apples, pears) and vegetables (yams, potatoes). They also provided better protection for cooked ground turkey. Other information from Clemson University shows that adding honey to foster the browning of meats (Maillard reaction), which retard oxidation and subsequent spoilage, adds to shelf life. This along with use in other value-added foods makes the sweet an attractive alternative in a wide variety of products.
<http://www.ifas.ufl.edu/~mts/apishtm/papers/NHBSEM.htm#4>
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Finally, the article reports on research sponsored by the National Honey Board in using honey, which produces alpha hydroxy acids (AHAs), a vital ingredient in skin creams and moisturizers. Antioxidants can protect key components of the skin's cells from damage. Thus, many firms are adding antioxidants to sun screens. If honey can act both as a moisturizer and antioxidant, the article concludes, the commercial potential is enormous
<http://www.ifas.ufl.edu/~mts/apishtm/papers/COLORADO.htm#11>
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Source: September 1998, APIS, Tom Sanford

New Honey Use

Robitussin recently introduced a honey cough syrup. The cough syrup is, as I understand it, about 30% honey.

Robitussin understands the fact that consumers believe honey is a healthy, good for you product. Folk medicine has been using honey in cough and throat remedies for centuries. The cough syrup, using honey, blends modern medicine with powerful traditional perceptions. We will soon see how successful this new product is.

The best way to gauge this will be to see how many other manufacturers also introduce a honey cough syrup. This adds value to honey.

How much value is added to honey? Here is a simple analysis. The cough syrup at my store was $4.70 for four ounces. Cost per ounce is about $1.17. 128 ounces to gallon X $1.17 totals $150 a gallon for cough syrup. If the syrup is 30% honey, the value of the honey is now about $45 for 30% of a gallon; a little under four pounds. Using this thumb nail arithmetic, the value of the honey is about $12 per pound.

I do not begrudge Robitussin adding value to honey's good name. I welcome it. I welcome a new product introduction fusing modern medicine with traditional uses. Honey producers will see more products using honey to promote health. Scientists and universities are today documenting the functional uses of honey to promote health and well being. Consumers are taking steps, active purchasing steps, to enhance their health and well being as never before. By taking advantage of 'honey's healthy, good for you' image, honey producers are well positioned to sell more honey for more money.

Good science backs up the message.

John Miller, Newcastle, CA, via - Bee Culture, Jan. 1999

Night life discovered for bumblebees

Bumblebees, supposedly your basic daylight travelers, can navigate outside their nests in the dark, researchers have accidentally discovered.

One night last year, someone left on an infrared monitoring system in a bumblebee colony in the darkened lab of James D. Thomson a the State University of New York at Stony Brook. The next morning, researchers were startled to realize that the bees had slipped out of their nest to visit a feeding station after hours.

Bees must be able to get around in the dark since they live in underground nests, Thomson points out. Yet researchers know little about the dark side of navigation. Outdoors, some bees will fly in bright moonlight, but they don't buzz over the landscape in pitch blackness. The lab bees didn't fly, either. They walked.

Subsequent studies of their late-night hikes suggest they use odor and perhaps some kind of magnetic compass, report Lars Chittka of the University of Würzburg in Germany,
Thomson, and their colleagues. The analysis appears in the Jan. 7 Proceedings of the Royal Society of London B.

Bees respond to scents once they reach a flower, but previous studies had not turned up evidence that scent guided foragers. The researchers let bees troop out to the feeder, then remove it and reoriented the surface they walked on. In the next forays, bees headed in the wrong direction, as if still following the scent trails laid down on earlier treks.

When researchers cleaned the surface, the bees headed in the compass direction of the feeder’s original location. Other research has suggested that honeybees and a few other arthropods have internal magnetic compasses, but this evidence is new for bumblebees.

In another novel finding, the lab bees going out to forage showed two rush-hour peaks: one in full light at midday and one in the dark at midnight.

— S.M.


Beginning Beekeeping Course

A beginning Beekeeping short course will be offered by the Mid-State Beekeepers on two Saturdays in March, starting March 6 and completing March 27, from 8:30 a.m. to 4:30 p.m. The March 6 class will be held at the Lexington County Clemson University Extension Office Auditorium, 219 E. Main Street (US 1), Lexington, SC. The March 27th class will be at the Lexington County Library, 5440 Augusta Road (US 1) Lexington, SC and end with a tour through a bee yard, which will include going into a bee hive.

The fee for the course will be $30.00 which will include:

- Beginning beekeeping book - "How to keep Bees and Sell Honey", by Walter T. Kelley
- Year membership in the Mid-State Beekeepers
- Year Membership in the South Carolina Beekeepers
- Miscellaneous Course Material

The beekeeping course will concentrate on how to get started in beekeeping. It will be taught by experienced hobbyist and commercial beekeepers from the Mid-state area. These same experienced beekeepers will be available to assist you in getting started in beekeeping. The course is open to the first 30 applicants. Contact Frank Blanchard (803)345-3463 for further details and to register for the course.

Calendar of Events

March 6 & 27, 1999  Beginning Beekeeping short course, Lexington County.

April 9-10, 1999  South Carolina/North Carolina State Beekeepers will meet in Albemarle, North Carolina.

May 13-15, 1999  Queen Rearing short course, Clemson University

July 15-17, 1999  South Carolina Beekeepers will meet at Clemson University.

SOUTH CAROLINA BEEKEEPERS OFFICERS AND BOARD OF DIRECTORS

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Respectfully submitted,

William Michael Hood
Extension Apiculturist

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Issued in Furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of May 8 and June 30, 1914 Public Service Activities
Baked Ham with Orange Honey Sauce

6 - 10 pound canned ham
1 3/4 cups water
1/2 cup honey
1/2 teaspoon salt
1/8 teaspoon nutmeg
2 oranges, sectioned

Whole Cloves
1 can (6 oz) frozen orange juice concentrate thawed, undiluted
1 teaspoon dry mustard
1 cinnamon stick
3 tablespoons cornstarch

Score ham; stud with cloves. Bake in 350° oven 10 to 12 minutes per pound. While ham is baking, put undiluted orange concentrate, water, honey, dry mustard, salt, cinnamon stick, and nutmeg in a saucepan. Blend cornstarch with 1/4 cup of the mixture and return to saucepan. Cook over medium heat, stirring constantly, until mixture thickens and comes to a boil. Boil 1 minute. Remove from heat; cool. Brush ham with small amount of the sauce two or three times during last 30 minutes of baking time. Add orange sections to remaining sauce; heat. Serve with ham. Yield: 3 to 4 servings per pound of ham and about 2 1/2 cups sauce.


Please mail your change of address to: News for SC Beekeepers, Laura Reeves, 113 Long Hall, Clemson University, Clemson, SC 29634-0365,

Name: _______________________________

Address: ____________________________________________________________ State ______ Zip Code ______________

County: ___________________________ Phone number: (______) ___________________ Member ___ Non-Member ___