News For South Carolina Beekeepers

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PRESIDENT'S MESSAGE

I am honored to have been elected president of the South Carolina Beekeepers. I look forward to the next two years. I want to take the opportunity to thank all of the members, speakers, exhibitors who have participated in our Spring and Summer Conferences. There is a great need for beekeepers to get together and talk about their beekeeping techniques, both successes and not so successful. I would also like to thank the vendors who supply the door prizes at each conference.

We have had programs which have been very educational and informative because many of the latest techniques in beekeeping have been presented. I would like to thank Mike Hood, our State Apiarist, who has been able to get these speakers to attend our conferences. Also SC Beekeepers Board of Directors who has provided support to put together these programs. For the past two terms I would like to thank Past President, Frank Blanchard, for providing the leadership and direction for the State Beekeepers.

We have had a lot of bee activities this past year. The terrific support of the local associations has helped increase our membership. Over 100 new beekeepers have been trained in beginning beekeeping techniques by local associations. We hope to see many of these new beekeepers at our next conferences.

If you ask about local beekeeping and honey flow, the answer will vary depending on the area and the changes in temperature. Some areas have many swarms, some areas little honey collected due to cold temperatures and some areas the honey flow is so great the beekeepers do not have enough supers to collect the harvest.

This past week the SC Beekeepers, Low country and Colleton Beekeepers lost a dear friend. W.R. Youmans, age 86, of Walterboro past away this weekend. He was my mentor because when I was learning about beekeeping he was in his 80's. He was the first president of the Colleton County Beekeepers. I went on my first bee removal at a plantation with him. He will be greatly missed by all. If you know a beekeeper who has passed away since our summer meeting, please let me know. We would like to recognize them during our summer '97 meeting.

If you have suggestions for the SC Beekeepers, please contact me or a board member. We want this organization to respond to your needs as a beekeeper. If you do not belong to a local association, I urge you to take an active part in that association. Thank you for being part of the SC Beekeepers and I look forward to meeting you at our conferences or at a local association meeting

Ron Taylor
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SOUTH CAROLINA BEEKEEPING UPDATE

The South Carolina Beekeepers and the York County Beekeepers hosted a very successful joint spring meeting with the North Carolina State Beekeepers in Rock Hill. An estimated 300 beekeepers or family members attended the meeting making it the largest beekeepers event ever held in our state. Thanks to all who supported this event especially the many volunteers from the York County Beekeepers.

Mr. Spann Leitner, Fairfield county commercial beekeeper, was presented a distinguished service award and Life Membership in the SCBA at this meeting by president Frank Blanchard. Mr. Leitner has kept bees for over 70 years since he was 11 years old and stated that, “if he had known how much fun it was he would have started at an earlier age.” He was recognized as having a great sense of pride in the honey bee and the beekeeping industry and having assisted many new beekeepers over the years.

Congratulations to the South Carolina Bee Bowl Team which represented us well and came away with a surprising victory over the North Carolina State Team at this meeting. The South Carolina team was made up

of Barbara Tate, Archie Biering, Bill Childers, David MacFawn, and Larry Williams. Keep up the good work, team. And, thanks to Dr. John Ambrose, NC State Univ. Extension Apiculturist, for hosting this competition.

During the business meeting, the South Carolina Beekeepers elected new officers including Ron Taylor as president, Bill Childers as vice president, David MacFawn as secretary/treasurer, Mike Hood as executive secretary, and Steve Genta as director. Other members serving terms as directors are Ron Moore and Clyde McCall. Tommy Grant also serves as a director who represents the Oconee County Beekeepers.

Special thanks to Frank Blanchard and Rick Godshall for serving 2 terms as President and Sec/Treas, respectively. Both Frank and Rick have done a great job over the past 4 years. We appreciate their many hours of dedicated service to the South Carolina Beekeepers.

The South Carolina Master Beekeeper Program got off to a good start in 1996 with 22 beekeepers completing the Certified level requirements. Thirty-nine more South Carolina beekeepers have attended short courses this year (1997) and are in the process of finishing up the written and practical portions of the entry level. The next level, journeyman level, requirements will be introduced by David MacFawn at our summer meeting in July.

South Carolina beekeepers are reporting a low to moderate level of honey production this year, but the swarm season has been tremendous. Mild weather early in the year contributed to early colony buildup which resulted in swarms as early as February which was the earliest that I've ever heard of in South Carolina. Past-president Frank Blanchard (Chapin, SC) reported that it looked like all 30 of his colonies swarmed this spring and that this year proved to be an exceptional year when swarm prevention techniques did not work. Better luck next year, Frank.

Beekeepers should continue to do a good job of disease and pest management this year considering that many colonies have swarmed and may not be very strong going into summer. One recommendation is to treat colonies for varroa mites with Apistan according to labeled directions in August or no later than early September unless the you have verified extremely low mite levels through surveys.

Apistan continues to be the only registered product for varroa mite control in the US. No varroa mite resistance to Apistan has been reported in the US, although data reported from Italy, "shows a step by step spread of resistance from southern to northern Italy beginning in 1991" (Sanford, Tom, Apis - Mar. 23, 1997). Beekeepers are urged to not use alternative miticides that are not registered for use in the US.

SUMMER MEETING

The summer meeting of the South Carolina Beekeepers will be held at Clemson University, Clemson, SC on July 17-19. The meeting will begin at 1PM on Thursday, 17 July in the Poole Agricultural Science Building Auditorium with a beekeeping short course for beginners. Various instructors will lead in the afternoon training session.

On Friday, 18 July, we will begin with a general session with several out-of-state speakers including Keith Delaplane from the Univ. of Georgia, Paul Arnold from Young Harris College, Wyatt Mangum from NC State University, and Reg Wilbanks from Wilbanks Apiaries, Claxton, GA.

An afternoon of workshops are planned for Friday including a demonstration of pollen analysis of honey, detection and treatment for disease and pests, Kenya beehives, beekeeping on the internet and a separate workshop for continuation of the short course began on Thursday.

On Saturday morning, we will begin with another general session that will include many South Carolina speakers. For more meeting details, see the attached program at the end of this newsletter. A chicken barbecue dinner is planned for July 18, at Jimmy Howard's home in Pendleton. Activities scheduled are the annual horseshoe pitching tourney and tall tales contest. Dinner including half chicken, cole slaw, beans, chips, bread and tea will be served for $5/plate.

The Clemson House Residence Hall on campus has rooms for lodging at $22 per night, single or double occupancy (linen cost $5 extra). Linen packets include sheets, two towels, washcloth, blanket, and pillow. Room registration will be at the Clemson House front desk. Please do not mail a room deposit in advance; you may pay upon arrival.

Other accommodations are available off campus in the Clemson area as follows: Clemson Holiday Inn, $46 , 864-654-4450; Clemson Comfort Inn, $45, 864-653-3600, includes continental breakfast; Clemson Hampton Inn, $48.60, 864-653-7744, includes continental breakfast; Clemson Ramada Inn, $44, 864-654-7501, includes continental breakfast. Prices listed above are based on double occupancy. Mention that you are attending the South Carolina Beekeepers Convention

and would like to get the University rate.

Let's continue to make the South Carolina Beekeepers summer meeting a great success; invite some beekeeping friends to come along for an educational vacation. If you have questions about the meeting, please contact Mike Hood, ph. 864-656-0346 or President Ron Taylor, ph. 803-835-2482.

STATE FAIR - 1997

The 1997 South Carolina State Fair is scheduled to be held October 2-12, 1997 in Columbia. Our beekeeping exhibit at the fair provides us a great opportunity to promote our products and the beekeeping industry. Fair visitors have been fascinated by our attractive displays of honey and other apiary products, including the observation hive and other educational items.

Our hats are off to those who participated in the 1996 fair, especially Jack Morris who served as coordinator of our booth. Jack has agreed to serve again this year as coordinator and will be giving a "State Fair Report" at our summer meeting in Clemson. Beekeepers who worked the booth last year were given the opportunity to sell their honey. I've heard some beekeepers did quite well so come to our summer meeting prepared to sign up to spend a day at the fair.

Plan now to enter some of your most attractive products and possibly an exhibit in the competition. Honey will be judged on absence of granulation, cleanliness (absence of lint, wax and foam), flavor, color and brightness, and overall appearance of the container. There will be two classes of honey competition, light and dark. Each class will have the following entry categories: 1 lb. Jar extracted, pint jar extracted, pint jar with comb, quart jar extracted, quart jar with comb, 2 lb jar extracted and 1 lb jar with comb. There will be a 1st, 2nd and 3rd place winner for each category with a monetary prize of $10, $8 and $6 awarded respectively. Other categories include 1 lb beeswax.

A "Best Beekeeping Display" offers the largest monetary prizes ($75, $50, and $25). In the past, we have had only 3-4 beekeepers enter the display competition. This year we hope to have additional space so we might be able to accommodate more displays. Displays are judged on educational value , advertizing value, attractive arrangement, originality and variety, appearance, and quality of products.

For more details of our South Carolina State Fair booth, call Jack Morris in Columbia at 803-783-0451.

NORTH CAROLINA BEEKEEPERS TO HAVE BIRTHDAY PARTY

The North Carolina State Beekeepers are going to have a birthday party and you are invited to attend. On January 11, 1997, the North Carolina Beekeepers became 80 years old and we have decided to have a party. The party will be in conjunction with our annual Summer Convention and all beekeepers are invited to attend. The Convention will be on July 24-26, 1997 in Clemmons (just west of Winston-Salem), North Carolina.

Our annual conventions always consist of a mixture of great speakers; beneficial and entertaining workshops; a beekeeping short course; judging contests for honey, foods cooked with honey, bee gadgets, and beekeeping pictures; a large number of bee supply dealers and their tables; N.C. Master Beekeeping tests; a chance to socialize with the other attendees; and much, much more.

In addition, we will also have a party this year and a recap of the last 70 years of beekeeping in North Carolina. All of this at very reasonable costs.

If you would like some additional information on this convention and birthday party, then write to:

Dr. John Ambrose
Box 7626
N.C. State University
Raleigh, NC 27695-7626

Y' ALL COME!

MORE SPRING GOLD IN SOUTH CAROLINA

An increase in canola production is expected in South Carolina next year according to the Clemson University Extension News Release entitled "Canola Contract Gives Growers Protection" dated April 14, 1997. The increase in acreage planted with canola is more good news for South Carolina beekeepers because canola blooms in early spring and is highly attractive to bees.

The canola nectar flow may be best used for early colony buildup in preparation for making increases or taking advantage of later nectar flows, rather than honey production. Although canola honey is light colored and

delicious, it crystallizes very quickly. Beekeepers are advised to pull supers during bloom and to extract the honey within three to five days to avoid solid combs, because the honey crystallizes quickly See the news release below for more information on canola.

Blackville--The Calgene Ameri-Can Seed Co. is looking for enough South Carolina farmers to grow 18,000 acres of specialty canola next fall.

That's six time the 3,000 acres planted in the state last fall, which was a ten-fold increase over the 300 acres planted in 1995, according to Dan Robinson, agronomist at Clemson University's Edisto Research and Education Center.

He said that Calgene canola varieties have been genetically engineered to produce laurate fatty acids, a key ingredient in the manufacture of soaps, detergents and chocolate. Most of the lauric oils consumed in the United States come from coconut and palm kernel, grown primarily in Southeast Asia.

If Calgene's plans to commercialize laurate canola work out, 400,000 acres of the crop could be growing in Southeastern states with five years, and a fourth of that could be in South Carolina, according to Robinson.

He said canola is best grown in the state's coastal plain. Cold damage is too much of a threat in the Piedmont. Calgene is targeting the counties of Allendale, Barnwell, Bamberg, Aiken, Edgefield, Orangeburg, Calhoun, Clarendon and Sumter. Contracting agents are already to work in these counties.

JUDGING QUEEN CELLS
BY WYATT MANGUM

Queen cells from reliable bee breeding stock can be a good source of new queens in a beekeeping operation. Independent of whether the queen cells were built in response to swarming, supersedure, or emergency queen loss, only the best cells should be used for producing new queens. The egg laying capacity of these new queen bees will vary, in part, because of differences in their developmental environments. For example, queen larvae that received generous amounts of royal jelly grow larger, and as queens, are expected to have a larger egg laying capacity. Some of the differences in the queen's developmental environment are reflected in the size and the appearance of her queen cell. Therefore it is important to be able to distinguish good queen cells from inferior queen cells because we expect the better queens to come from well-constructed queen cells.

Queen cells vary in size and in judging queen cells, size is very important. Larger queen cells tend to indicate a better developmental environment. Therefore, larger queen cells are better than small ones. If a smaller queen cell is opened and the pupa is removed, very often, little or no excess royal jelly remains in the cell. This lack of excess food can indicate that the former larva may not have been properly fed and may result in a poor queen. In contrast, the larger queen cells, that typically result from swarming or supersedure, contain excess royal jelly, i.e., more royal jelly than the larvae could consume. Therefore, these larvae were probably fed properly. By the time the queens emerge, the previously glistening white royal jelly will appear as a reddish-brown substance at the base of the cell.

The amount of sculpturing on the queen cell can also indicate its quality. This sculpturing is seen as a series of small pits on the sides and base of the queen cell. Inferior queen cells tend to be smoother because they lack extensive sculpturing. The lack of sculpturing indicated the queen cell received less attention during its construction, and hence its larva, received less attention during its development. Typically, queen cell size and the amount of sculpturing occur together, such that larger cells have more sculpturing.

Source: Henderson County, NC, Beekeeping News

PREDICTING THE RANGE OF AFRICANIZED HONEY BEES

Africanized bees were introduced into Brazil at 22° S latitude, and spread both north and south. They reached their southern limits of expansion first, at approximately 34°S latitude in Argentina. South of this, one finds hybrid bees intermediate between AHB and EHB, and then, further south, mostly EHB. During periods of mild weather, AHB are able to expand further south, sometimes to 40° S latitude or even further. This range expansion is temporary, however, and colder winters push the front of the AHB range back to around 34° S latitude.

Several predictions of the final range of AHB in the United States have been made, based upon various assumptions regarding the bees' tolerance for low temperatures. The most conservative of these predicts AHB will inhabit just the southern extremes of the United States, approximately the area it now occupies plus all of Florida and the southern Gulf states. Some studies, however, indicate that AHB can tolerate cold temperatures for sustained periods of time, leading other

scientists to extrapolate that AHB might extend as far as the mid-latitudes of the United States, and might even survive in climates as far north as Michigan, Maine, and Canada.

Although most of these predictions rely heavily on temperature data, there are additional factors that could play a major role in limiting AHB. These might include intense competition from EHB maintained by the U.S. beekeeping industry; patterns of seasonal forage availability in the temperate zone; more extreme seasonal photoperiod changes than in the tropics and subtropics (which may affect the bees' annual cycle); and the effects of Varroa mites (which are apparently more detrimental to bees in temperate regions than in tropical regions). Until the AHB reaches the northern limits of its expansion, however, the importance of these factors will not be known.

An uncertain future

The rate of AHB expansion in the Western Hemisphere has slowed from its torrid 300-miles-per-year pace through the tropics to an almost stagnant rate in the United States. There has been very little northern movement of AHB in the last few years, and they might be reaching the limits of their northern expansion in the United States. If so, AHB may be reaching an equilibrium situation where further northern expansions will be seasonal rather than permanent.

On the other hand, the lull in movement may be only temporary. AHB expansion may speed up again with a change in climate conditions (such as hotter or cooler summers, or wet winters), or when the population breaches geographic barriers, such as the California deserts, and reaches more favorable habitat in coastal areas with abundant bee forage and nesting sites. Such factors are not so easily invoked in the eastern range, however, where the AHB has progressed little beyond eastern Texas in the past few years.

Any specific predictions of the ultimate distribution of AHB are more likely to be proved wrong than right. Nevertheless, if AHB do not move much farther northward, then the earliest and most conservative predictions may be close to correct. Important aspects of the temperate climate conditions in the northern and southern hemispheres around 34° latitude may be symmetrical and may mark the boundary between areas dominated by tropically derived AHB and areas where temperate-derived EHB dominate. These conditions could include both biotic and abiotic factors, such as temperature, photoperiod, timing of forage availability, and intensity of Varroa mite infestation.

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by P. Visscher, R. Vetter and F. Baptista

SOUTH CAROLINA BEEKEEPERS OFFICERS AND BOARD OF DIRECTORS

President: Ron Taylor
Vice President: Bill Childers
Secretary/Treasurer: David MacFawn
Executive Secretary: Mike Hood
Past President: Frank Blanchard
Directors: Clyde McCall, Ron Moore, Steve Genta, Tommy Grant

CALENDAR OF EVENTS

June 20-21, 1997 -- Georgia Beekeeping Institute, Young Harris, GA
July 17-19,1997 -- South Carolina Beekeepers Summer Meeting, Clemson, SC
July 24-26, 1997 -- North Carolina State Beekeepers Summer Meeting, Clemmons, NC
Oct. 2-12, 1997 -- South Carolina State Fair, Columbia, SC

Respectfully submitted,

Mike Hood
Extension Apiculturist

Cooperative extension work in agriculture and home economics state of South Carolina, Clemson University, the United States Department of Agriculture and South Carolina counties cooperating.