

North Carolina

Bee Buzz

Official Newsletter of the North Carolina State Beekeepers Association

Vol. 27, No. 3



Tarheel Beekeepers Put On Show For State Fair Visitors With New Exhibit



Many of the some 795,000 visitors to the 2005 North Carolina State Fair got a special treat at the honey bee booth, sponsored by the North Carolina State Beekeepers Association.

Volunteers, bee inspectors and students and staff of the NC State University apiary program worked the booth and stayed busy answering questions about the official state insect, the benevolent honeybee.

“Where is the queen?” seemed to be the number one question as visitors were drawn to the observation hive.

This particular queen was a busy lady as she moved about the brood frame laying eggs frequently to the delight of onlookers.

“How often do you get stung?” was an equally popular question.



Young Jayla Melvin of La-Grange is fascinated with bees in the observation hive.

Several of the booth visitors mentioned the successful cost sharing program and a few said they had applied for the “free” hives and were disappointed not to have been selected but were still interested in beekeeping and might become involved anyway.

Highlights of the expanded exhibit included the honey, wax, mead and other hive product winners, a counter where beekeepers could sell their products and the John Deere lawn mower on display where fair goers could purchase raffle tickets to benefit the apiary exhibit at the North Carolina State Zoo. (See page 6)

The honeybee booth was relocated this year from its traditional site in the industrial building to the brand new exhibition building where there was no provision for access to an outside passage way for bees in the observation hive. And, visitors were greeted with the aroma of fresh manure from the cattle and goats that also shared the new building.

Fall Is Best Time to Pay Attention to Your Bees!

It’s time for vigilance in the bee yard is the advice of Chief Inspector Don Hopkins to North Carolina beekeepers in the Fall of 2005. “I’m seeing a mixture of problems,” he said.

“Mites are becoming resistant to the approved treatments,” Hopkins added. “I recommend more aggressive testing for mites. If you normally use sticky boards, double-check with a sugar roll, or vice versa. Don’t rely on just one method of testing for mites. That’s too risky.”

There also seems to be an increase in the small hive beetle around the state. Keep your hives strong and they’ll take care of both the hive beetles and wax moths. Weak colonies are vulnerable to both pests.

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Congratulations NCSBA Volunteers, For a Job Well Done!

Take a good look at the fellow beekeepers around you and see if you like what you see. You should.

As a paid up member of the North Carolina State Beekeepers Association, you're part of the largest and best all-voluntary beekeeping organization in the nation, perhaps in all the world.

That's not just my opinion. The numbers speak for themselves. See the membership report on this page. That is also the learned opinion of numerous experts who have visited our recent conferences and praised our achievements.

Largely due to the Golden Leaf Cost Share Program we recorded the largest increase in membership in the history of the Association, 521 new members for a total paid membership of 1,414.

That's a tribute to President J. D.



Foust, all of the officers, Dr. David Tarpy, State Apiculturist, and his NCSU staff, Chief Inspector Don Hopkins and his crew.

It's a commendation to all of us volunteers brought together by our shared love of the marvelous honeybee.

There are so many remarkable things about our organization, not the least of which is that so many are hobbyists with 10 hives or less, who work so hard to overcome the constant challenge of uncertain weather and persistent pests to champion this benevolent creature that holds so much promise for mankind.

Charles Heatherly
Editor

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P. O. Box 33803
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J. D. Foust, President
Norman Faircloth, 1st Vice President
Billy Smith, 2nd Vice President
Paul Madren, Treasurer
Audrey Moore, Corresponding Sec.
Joe Smith, Recording Secretary
Charles Heatherly, editor
heath7@Bellsouth.net
James Harvey, Director of Sales

Contributions to the *Buzz* are welcome.

The Mission of the NCSBA is to advance beekeeping in North Carolina through improved communication with members, improved education about beekeeping and support of science enhancing the knowledge of beekeeping.



Scene from Alamance Heritage Days where visitors got an update on local bee events.

Membership Report (Oct '05)

Annual (2004-2005)	1414*
Commercial	9
Honorary	9
Information	33
Life	10
Permanent	112**
* New members in 2005	521
Deceased in 2004-2005	13
**New permanent members	3

From The President

NC State Beekeepers Association

Fall Management – Summer is about over and we must get our bees ready for winter. I hope all of you had a good spring honey flow and I am looking for a better than usual fall honey flow. When I went in all of my hives in the past two weeks I found lots of new uncapped honey. I don't know the nectar source. There is some goldenrod blooming but I haven't smelled any aster honey yet. Those who plan to re-queen this fall need to do it quickly because drones will be gone soon. Getting queens from Louisiana, Texas, and the other areas affected by the recent storms may be very difficult.

Be sure to check your bees for mites and treat where needed. Also, check the food supply. Much of the state has been dry and the bees have used up a great deal of the honey left on from the spring. Feed enough to keep the bees from starving and hope they will make enough fall honey to carry you through the winter. NCSBA has applied for a grant from the Golden Leaf Foundation to set up a sugar distribution program. We should know by early November if the grant is approved. If it is we will work expediently to get the program going. That should make it easier to get the sugar syrup but sugar, like gasoline, is no longer inexpensive.

Yellow Books-The Yellow Books were mailed in August. If you are a 2005 member of NCSBA and have not received the 2004- 2005 Yellow book, please let me know. My address is J. D. Foust, NCSBA President, 609 Lakestone Drive, Raleigh, NC 27609-6339 Phone (919) 787-3578 email jdfo@bellsouth.net. We have only a few copies left but we want you to have one if you are entitled to have one.

Membership-NCSBA is experiencing record membership. Be sure to look at the membership report elsewhere in this issue of NC Bee Buzz.

Propolis-Dr. Tarpy, Senator Fountain Odom, Charles Heatherly and I met with Costas Koumenis, Ph.D. and Dimitri Z. Pitovski, M. D., professors at the Wake Forest University School of Medicine a couple of weeks ago to hear about the things they are doing with propolis. Dr. Koumenis has a million dollar NIH grant to study the medicinal uses of propolis. Their experiments with treating animals in the lab were very revealing. If those results prove beneficial to people there will be a great demand for propolis. I hope we will be able to have those

President J. D. Foust

researchers on the program of one of our state meetings to share information about their work.

Advertisers-You will notice from the Yellow Book and this issue of the Buzz that we have increased the number of advertisers. We appreciate the support of these firms. They provide a great service to beekeepers in North Carolina. Please tell these advertisers how much we appreciate their support and buy from them.

Bee Schools-We experienced record enrollment this year across the state in the schools for beginning beekeepers. No doubt, some of the interest was the result of the "Cost Sharing Honey Bee Program" funded by the Golden Leaf Foundation and conducted by NCSU. Because of the extensive interest in the program, the bees were awarded by a lottery and most of those who participated in the bee schools were not chosen to receive bees. Fortunately most of those who completed the courses have become beekeepers- many of them very serious beekeepers. A new series of courses for beginning beekeepers will begin in early 2006. Let's work to fill the courses again this year.

Teachers/Speakers- The chapters are planning bee schools and will soon be developing program calendars for 2006. Many chapters have reported a big problem finding teachers for some of the subjects that need to be covered in the schools and with getting good programs. Dr. Tarpy taught at least one session in each of the bee schools across the state in 2005. He has informed me that he will not be able to participate in any of the schools in 2006. That will make the need for teachers more acute. If you are willing to teach or present meeting programs, please contact Dr. Tarpy or me giving us the subjects you are willing to teach or present as a meeting program and the distant you are willing to travel.

Awards-Two main NCSBA awards are presented each year at the summer meeting. You

probably know someone worthy of the "Person of the Year Award" or the "Extension Worker of the Year Award. Don't wait until time to submit the nomination. Start now to collect information so that you may develop a good nomination proposal and make your nomination a winner. Nominations must be received 60 days before the summer meeting. Application forms and requirements are in the NCSBA By-Laws and may be found on our web site www.ncbeekkeepers.org.

Zoo Fund Raiser- The raffle for a John Deere lawn mower to raise funds for a permanent exhibit at the North Carolina State Zoo ended October 23, the last day of the NC State Fair.

The exhibit is scheduled to open in 2007. Zoo officials need to know what money is available soon to properly plan and construct the facility. Our support is needed now.

Golden Achievement Program- The Golden Achievement Program proved very successful the first year (2004). The program was initiated late in the year with virtually no time to prepare or add new activities to comply with the components of the program. About twenty per cent of the chapters filed reports showing what they were already doing. The winning results were very impressive. We hope the program is better understood now and we expect larger participation for 2005. The program is on a calendar-year basis and the report for 2005 must be filed by January 31, 2006.

Pictures- I get many requests for pictures. During the spring and summer meetings I have been busy and had little time to take pictures. At the recent summer meeting I was trying to learn to use a new camera and the indoor shots I made didn't come out very well. We would also like to have photographs of local events. If you would send pictures to me, we will start a picture library and make them available for NCSBA publication and those publications that call and ask for pictures. We will try to give you credit if your pictures are published.

Spring Meeting 2006- The site of the 2006 NCSBA Spring Meeting will be March 17 & 18. The Village Inn Hotel, Golf and Conference Center in Clemmons, North Carolina will be host hotel for the conference. Everything will be under one roof with very beautiful and spacious facilities. Forsyth County Beekeepers, the host chapter is working with the arrangements committee to make this a very enjoyable conference. The summer meeting is scheduled for July 15-17 in High Point at the Raddison Hotel.

Treasurer's Report 10/10/05

Income	Budget	Expense
Apicultural Sci Fund	500	1,819
Gifts	700	3,049
Interest	530	324
McIver Audio Fund	200	00
Dues	15,765	15,915
Other Income	1,975	2,464
Publication Ads, Visa Rebates, etc.		
Summer Meeting	<u>7,500</u>	<u>8,225</u>

Total Income 25,205 33,382

Expenses		
Apicultural Fund	300	1,000
Bank Charge	48	54
Member Support		
Bee Buzz	4,065	3,759
Calendar	4,000	2,601
Misc	400	163
Postage	950	172
New Chapters	150	50
P. O. Box Rental	200	136
Supplies	765	204
Yellow Book	3,536	5,438
Projects (NC Zoo, State Fair)	875	1,998
NCSBA Support	650	125
Publicity	1,046	199
Special Executive Meeting	500	00
Special Projects	1,300	423
Spring Meeting	550	0
Subscriptions	260	30
Summer Meeting		
Awards	400	205
Banquet	2,500	3,450
Facilities	500	350
General Expense	1,500	5,441
Honorarium	250	637
Hotel Expense	1,250	806
Speakers	<u>1,000</u>	<u>1,252</u>
Total Expenses	27,555	29,555

NCSBA Account Balance 10/25/2005

Cash and Bank Accounts

Apicultural Science Fund	\$ 3,174.52
McIver Audio Fund	1,314.71
Member Support CD	10,203.20
NCSBA Checking Acct	13,603.47
Permanent Member Support	<u>10,001.10</u>

TOTAL ASSETS \$38,297.00

Africanized Bees Already Established in Florida; We Should Be Alert For Them in North Carolina!

Dr. David Tarpy
State Apiculturist

The history of the Africanized honey bees (AHB) in the Americas is well documented. Several mated queens were imported to Brazil from Africa in 1956 to breed a honey bee that was well-suited to a tropical climate. At that time, Brazilian honey production was very low because beekeepers manage hives of the European honey bee (EHB) which is better adapted to a more temperate environment. The goal of the Brazilian breeding program was to produce hybrids of AHB and EHB that exhibited the foraging success of African bees while maintaining the gentleness of European bees. The inadvertent escape of the African queens established a feral population of “Africanized” hybrids that, unfortunately, retained most of the unfavorable traits of their African ancestors.

The AHB spread at a remarkable rate, upwards of 300-500 km per year. They were first reported in Texas in the early 1990’s and has since become established throughout the desert southwestern and California. Curiously, however, they appeared not to migrate east of the Mississippi even though climatic conditions seemed to favor their establishment.

That is, until recently. Recent reports from the Florida Department of Agriculture confirm that the initial introgression of AHB has begun within that state. It remains unclear how they arrived; they could have been brought up from South America on large cargo ships, or they could have migrated through Alabama without detection. Regardless of how they arrived, the feral AHB population appears to be established and growing in the sunshine state.

While the AHB feral population has yet to reach North Carolina, the large-scale transport of managed honey bee colonies by commercial beekeepers occurs on a daily basis across state borders, including from those states that have AHB populations. With the high north-south traffic of commercial beekeepers on Interstates 95 and 77, and approximately 1.25 million hives migrating to and from Florida every year for citrus pollination, it is imperative that North Carolina is proactive about the eventual introduction of the AHB to our state.

The first step in our preparedness must begin with establishing an infrastructure for monitoring the AHB. Tracking the spread of the AHB requires an accurate system of detection. While the AHB is slightly smaller

than the EHB, there is still significant overlap in body size between the two races and therefore it cannot be used as a distinguishing character alone. Since the early 1970’s, the USDA has used FABIS (Fast Africanized Bee Identification System) as a means of distinguishing AHB from EHB. This system utilizes racial differences in adult worker morphology—including differences in wing venation, femur length, and dry weight—which can distinguish the two genotypes with high accuracy. More recently, researchers have developed a number of genetic tests to distinguish AHB from EHB genotypes, particularly DNA markers that separately determine maternal and paternal origin.

The NCSU Apiculture Program and the NCDA&CS Apiary Inspection Service has initiated an AHB detection program in the state of North Carolina, where we will use both the FABIS and genotyping methods to detect possible AHB within the state. We will obtain samples of honey bees within the state by collecting them from feral (or “wild”) colonies or from managed hives that are suspect. All collections will be performed by State Apiary inspectors to ensure proper sampling procedures. We will also obtain frozen bees of known African origin from the USDA Carl Hayden Honey Bee Research Facility in Tucson AZ (positive controls) and bees of known European origin from the Lake Wheeler Honey Bee Research Facility in Raleigh NC (negative controls).

In addition to this project, we are also updating the NC AHB Action Plan. This document outlines the recommended actions for detection, educational initiatives, and quarantine protocols in case the AHB becomes established in the state. The NCSBA will be intimately involved in this plan, as the state’s beekeepers are going to be our first line of defense in monitoring their hives for unusual defensiveness and dispelling the fears of the public about the potential hazards of the AHB. NCSU and the NCDA are both involved in a regional AHB discussion panel, which will also help coordinate efforts among various agencies in other states.

Although stinging incidents of humans, livestock, and domestic animals have increased in many AHB areas, the annual human mortality due to bee stings remains lower than lightning strikes. Nevertheless, it is going to take a collective effort to address the potential Africanized honey bee problem within the state in the coming years so that we are prepared for their possible arrival.

And The Winner Is.....

Milton Foster, of Lenoir, NC, a member of the Caldwell County Beekeepers, is the proud winner of the John Deere lawnmower raffle prize sponsored by the NCSBA to raise funds for the apiary exhibit at the North Carolina State Zoo.

"We're happy that the mower was won by a beekeeper," said Bill Waddell who spearheaded the raffle.

A preliminary report indicates that proceeds from the raffle would yield more than \$10,000 after expenses, according to Irvin Rackley, Chairman of the NCSBA Zoo Committee Project. Combined with cash and pledges already raised by North Carolina beekeepers, this would bring total contributions by North Carolina beekeepers to almost \$50,000 for the zoo exhibit.

A complete report will be published as soon as it is available.



Milton Foster of Lenoir is the proud winner of the John Deere Lawn Mower, the prize of an NCSBA raffle led by Bill Waddell pictured above presenting the mower to Mr. Foster.



Inspector Will Hicks, inside the bee cage, bravely talks about the interesting aspects of honeybees to curious visitors at the NCSBA Honeybee Booth during the 2005 NC State Fair in October in Raleigh.



Telling The Bees

Charles Wilson Griffin, Concord, August 18. Mr. Griffin was past president of the Cabarrus County Beekeepers.

Gordon Hardin,
Transylvania County

Propolis: Is This The Stuff of A New Miracle Drug?

By Fountain Odom, Chair
NCSBA Legislative Committee

Propolis, that sticky, gooey stuff that has annoyed beekeepers from the beginning of our long association with the benevolent honeybee is about to get a big promotion. Promising research underway at Wake Forest University Medical Center in Winston-Salem is exploring the use of propolis in treating cancer.

Having witnessed a presentation by Dr. Costas Koumenis on the progress of their preliminary research, I am now convinced that propolis will soon become a valuable bio-medical agent in the fight against cancerous tumors. Yes, you read that correctly. I believe that we will soon add to the historical shelf of medical miracle drugs like penicillin, aspirin and polio vaccine (just to name a few) a variety of propolis-based medicines.

Beekeepers know propolis as “bees’ glue.” Its use according to a scientific paper published in 1998 by G. A. Burdock, entitled “Review of the Biological Properties and Toxicity of Bee Propolis” published in Food and Chemical Toxicology 36 (1998) 347-363, is ancient, especially in home remedies, personal products, dermal applications and dietary supplements. Much of my conclusions for this article are taken from that paper.

Propolis has the following biological activity: antibiotic, antifungal, antiviral and antitumor. All of this good is done with very little toxicity.

“Because propolis is reputed to have antiseptic, antimycotic, bacteriostatic, astringent, choleric, spasmolytic, anti-inflammatory, anaesthetic and antioxidant properties, the list of preparations and uses is nearly endless,” concludes Burdock. “These applications include over the counter dermatological items where it has been claimed useful in wound healing, tissue regeneration, treatment of burns, neurodermatitis, leg ulcers, psoriasis, morphoca, herpes simplex and genitalis, pruritus ani and activity against dermatophytes.”

“Propolis is claimed to be an anaesthetic five times as effective as cocaine. It is used in toothpaste and mouthwash preparations treating gingivitis, cheilitis and stomatitis. It also has found its way into pharmaceutical and cosmetic products such as face creams (vanishing creams and beauty creams), ointments, lotions and solutions.”

We know that bees collect resin from trees and from unopened leaf buds. The “mighty” bee then chews the resin as salivary enzymes are added. This partially digested material is mixed with beeswax and is ready for immediate use.



Wake Forest Research Professor Dr. Costas Koumenis briefs J. D. Foust, Dr. David Tarpy and Fountain Odom on his research using propolis to treat cancer.

The finished product is 50% resin and/or vegetable balsam, 30% wax, 10% essential and aromatic oils, 5% pollen and 5% miscellaneous substances.

Propolis, originates from Greek words, “Pro” meaning, “in defense” and polis, meaning “city.” Honeybees have made and used it for millions of years to secure their hives from weather and intruders. It is an effective adhesive for gluing parts of the hive together. Or it can be an embalming agent to cover the carcass of a rodent that violates the hive and is killed but can’t be removed. Propolis seals and destroys bacteria from the decaying corpse so effectively that it does not threaten the hive.

Now the exciting news. A few weeks ago I was privileged to attend a briefing by Dr. Koumenis, along with NCSBA President J. D. Foust, Dr. David Tarpy, State Apiculturist and Buzz Editor Charles Heatherly. Dr. Koumenis, an American citizen now, is a native of Greece where he became fascinated with propolis and other products of the hive, growing up as the son of a beekeeper father.

Dr. Koumenis was candid with us about his work so far which shows promising results that propolis is effective in protecting healthy cells from radiation damage plus propolis also seems to make tumor cells more vulnerable to radiation, thus allowing effective treatment with lower doses of radiation, a substantial benefit to the patient.

As a cancer survivor and as a beekeeper, I am doubly intrigued by this research going on in North Carolina. Stay tuned for more developments.

Montgomery County Hopes to Organize New Beekeeper Chapter

Montgomery County beekeepers and other interested persons are exploring reorganizing a local beekeepers chapter. One was active up until the 1980s although many individuals in the area have continued their beekeeping. Thirty-five people met Thursday, August 25 at the Agriculture Extension Building in Troy for current beekeeping information and opportunities.

The evening's turn-out was exceptional, its enthusiasm for a local chapter evident and further planning encouraged. Many in attendance are currently active members of either the Moore County or Stanly County Associations and the state organization.

Extension agent Roger Galloway, together with Janno Daniel and Nancy Ruppert, both beekeepers and members of the Stanly County Beekeepers Association, organized the initial contact meeting.

Galloway welcomed the large group attending, introduced the program speakers and gave out vital information printouts from NCSU's entomology department.

Bill Sheppard, NCSBA/NCDA's State Bee Inspector, as well as a favorite NCSBA speaker, discussed the timely subject of requeening. Nancy Ruppert, NCSBA member and beekeeper, presented a thorough plan of pest management, available treatments and their affects, and the indications of beekeepers' intervention. A PowerPoint program was used to aid her discussions. Janno Daniel, NCSBA member and Master Beekeeper, closed with reference recommendations and websites of interest. One website was www.ncbeekeepers.org.

A committee was formed to determine further interest in founding a Montgomery County Beekeepers Chapter. Stanly County Beekeepers have offered to sponsor the organization of this new chapter.

2005 Chapter of the Year

Stanly County Beekeepers, a Family of Friends with a Common Interest

By Priscilla Perry

Stanly County Beekeepers were organized in 1978 and were encouraged by guest speaker, Fred Deer, to become affiliated with the state organization, which we did in 1980. The group met in the Agricultural Extension Office located in the Stanly County Court House. In 1986, the group began meeting in places where we could have a meal and fellowship together before the formal meeting. This encouraged beekeepers to bring their families, which led to increased attendance, interest and participation. Stanly County Beekeepers meet once a month, with an average of 60 to 70 members in attendance, to maintain continuity. The program chairman arranges interesting and educational programs pertaining to the art of caring for honeybees. They run a raffle at each meeting; the person with the winning ticket receives half, with the other half earmarked to help finance the beekeeping exhibit which is to open at the North Carolina Zoo in 2007. Once a year, these beekeepers hold a Field Day beginning with breakfast, followed by visiting up to eight bee yards and ending with dinner. Large numbers of SCB members attend state conventions to learn more about the art of caring for honeybees.

Throughout the years, this group has produced three cookbooks to raise money for projects and community service. The first was published in 1981; the second publication in 1996 was paid for by advertisements sold by the group, thus making all sales a profit for the organization. A third book, published in 2002, is still making a profit.



Enjoying Christmas Dinner Together

They have hats and shirts with logos, which they wear when they participate in community projects.

These beekeepers have hosted two conventions, a North Carolina State Convention and a joint North Carolina/South Carolina Convention.

They have conducted beekeeping schools with classes to educate people in neighboring areas as well as our own and to encourage young people to become interested in beekeeping. Many members are guest speakers in schools and other areas where they stress the importance of honeybees in our lives. Stanly County Beekeepers have promoted North Carolina's Finest and Goodness Grows in North Carolina by exhibiting in the Stanly County Fair, the Dixie Classic Fair, The North Carolina State Fair, the Big Lick Antique Festival, Mule Day in Denton and the Pottery Festivals in Seagrove and Sanford. The group sold honey as a charity fundraiser for the Red Cross to help flood victims in North Carolina.



Field Day with Stanly Beekeepers

Four Stanly County beekeepers have held state offices; four are Master Beekeepers, one is a Master Craftsman Beekeeper, and fifteen to twenty are actively working toward achieving the Master Beekeeping Award. This achievement comes when there is unity, love and respect coupled with a willingness to work together to promote interest in taking care of honeybees.



Another Field Day Scene with Stanly County Beekeepers, 2005 NCSBA Chapter of the Year.

In Celebration of the Marvelous Honeybee

Here are some interesting facts that could be used to present a classroom program or introduce neighborhood youth to beekeeping.

Bee Facts

Scientific name: *Apis mellifera*
Age of species: 19 million years
Castes in colony 3 (queen, workers & drone)
Size of eggs: 1/16 inch (1.6 mm)
Egg to adult queen: 16 days
Egg to adult worker: 21 days
Egg to adult drone: 24 days
Size of adult worker: ½ inch
Visits to fill honey stomach: 1,000 flowers
Visits to make 1 lb honey: 2 million
1 cell of honey = life's work of 60 bees
Bees gather 10 lb nectar for 1 lb honey
Bees fly 55,000 miles for 1 lb honey
1 quart honey = 3 lbs

* A populous colony may contain 50,000 60,000 bees during the late spring or early summer. In the winter, the hive declines to about 20,000 bees, just enough to protect the queen.

* Honey is 80% sugars and 20% water.

* The brain of a worker honey bee is about a cubic millimeter but has the densest neuropile tissue of any animal.

* Honey bees usually fly one or two miles, at 12 to 15 miles an hour, to forage on flowers, however, they can fly up to 15 miles.

Honeybees maintain a constant temperature of 92-93 degrees Fahrenheit in their central brood during both winter and summer.

* Honey bees produce beeswax from glands on the underside of their abdomen. Honey bees consume about 10 pounds of honey to produce each pound of wax.

* Worker honey bees live for about 6 weeks in the spring or summer and literally work themselves to death.

- The queen may lay 1,500 eggs each day. This daily egg production may equal her own weight. She is constantly fed and groomed by attendant worker bees. She can survive four years or more, but is usually replaced every two years.



* Honey has been used for millennia as a topical dressing for wounds since microbes cannot live in it. It also contains hydrogen peroxide. Honey has been used to embalm bodies such as that of Alexander the Great.

* Fermented honey, known as Mead, is the most ancient fermented beverage. The term "honey moon" originated with the Norse practice of consuming large quantities of Mead during the first month of a marriage.

* The queen may mate with up to numerous (an average of 12) drones over a 1-2 day period of mating flights. The queen stores the sperm in her spermatheca, thus she has a lifetime supply and never mates again.

* A queen bee controls the flow of sperm to fertilize an egg when she lays an egg. Worker bees are produced from fertilized eggs and have a full (double) set of chromosomes. The males, or drones, develop from unfertilized eggs with only a single set of chromosomes.

North Carolina has approximately 13,000 beekeepers, most of them hobbyists, who manage approximately 100,000 hives. They produce \$10 million worth of honey each year and the value of honeybee pollination to agriculture is estimated at \$100 million.

North Carolina was the second of 14 states to adopt the honeybee as its official state insect.

*Source: GEARS:
gears_web@tucson.ars.ag.gov

Hey Steve! Wanna Hear About the Birds and Bees...? Especially the Bees!

Buncombe County Beekeeper Chapter President, Janet Shisler, greets Agricultural Commissioner, Steve Troxler, at the Mountain State Fair when he views the honey bee exhibit. She bent his ear on the success of David Tarpy's Golden Leaf Grant Program for getting the word out about bees and the need for funds from corporations to sponsor our bee exhibit at the Asheboro Zoo. Her 4th graders made this part of the exhibit area with poster facts about pollination. The big plaster mache honey bee body has a feeding tube mouth, half egg eyes, packing foam popcorn yellow spray painted pollen, fake fur wrapped thorax, sheer cut up curtains with pipe cleaner borders for wings, and mountain laurel legs complete with pollen baskets. It hangs by a bird feeder hook up over a cross section poster of a flower with the male and female parts also with an arrow pointing to the "saran wrap" nectaries.



Gaston Beekeepers On the Move

By Jack Page
Past President

Gaston County Beekeepers are not only big in members, over 100, but are also big on action. We are fortunate to have had some good regional publicity this year through a prime time feature on WBTV's evening news regarding the beneficial aspects of having bees in a community. Also two of our beekeepers are regular contributors to the *Gaston Gazette*, W. S. Melton, Jr. who recounts humorous experiences in beekeeping, and Vince Hefner, minister at First Baptist Church in Cherryville, who has a regular *Gazette* column, "Faith Matters" in which he incorporates beekeeping experiences as applied to one's spiritual life.

Cindy Austin buzzes from one presentation to another, most recently to the Gaston Country Club. Art Duckworth, Stanley, N.C. beekeeper, runs a roadside market on his farm as a participant in North Carolina's "Certified Roadside Farm Market Program".

Angie and Chip Stowe got a full page spread in the *Gaston Gazette* as a result of having won several competitions in the State Summer Conference in Marion.

The Gaston County Beekeepers have averaged about 70 members present at meetings this year. Upcoming programs will feature J. D. Foust, State President; an allergist, and a program by Chip and Angie Stowe on how to enter and win state honey competitions.

We attribute a lot of our success to having had large January Bee School classes the last three years, and holding some exciting field days featuring door prizes, good food, and open hive inspections.

We look forward to working with our new County Agent, Mark Blevins, who intends to become immersed in bee activities himself.