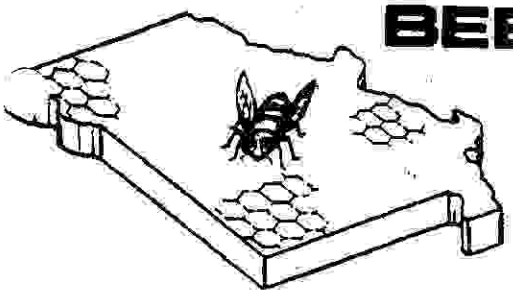

MISSOURI STATE BEEKEEPERS ASSOCIATION

VOLUME 19 QUARTERLY NEWSLETTER NUMBER 4
DECEMBER 1981

DEAR BEEKEEPING FRIENDS,

Warmest Holiday Wishes!! I am pleased to report that the Fall State meeting at Sedalia was quite well attended with a total of 95 registered. Although the weather was cold and windy, Dr. Jones procured an excellent site for the meeting. The facilities at the Yeater Learning Center at the State Fair Community College were attractive, comfortable, and warm.

CONGRATULATIONS TO MR. JAY TOHTZ UPON RECEIVING THE BEEKEEPER OF THE YEAR AWARD!!!!

Mr. Tohtz served an unprecedented 3 terms (1976 through 1978) as President of our State Association. Prior to this he was quite active as the President of the Eastern Missouri Beekeepers' Association. During his Presidencies the membership of both the State and the Local Association increased tremendously. Under his guidance, the State Meetings featured such prestigious speakers as Mr. John Root, Mr. W. A. Stephens, Mr. Glen Gibson, Dr. Richard Taylor, Dr. Elbert Jaycox, Dr. Eric Erikson, Mr. Jim Keuhl, and Mr. Lawrence Connors.

During his tenure, Mr. Tohtz spent hours, days, and weeks taking our Bee Law from a nebulous idea to a practical reality. He made approximately 29 trips to the State Capitol for Congressional sessions and lobbying individual Senators and Representatives.

To date Mr. Tohtz has never accepted one penny in compensation for hotels, meals, mileage, gas, telephone calls, or his work. This has been a portion of his gift to the State Association.

Mr. Tohtz has continued over the past 3 years as our Legislative Liaison. He brings to the beekeepers of the State any information concerning legislation before Congress that will aid or hinder the beekeepers. And he acts as our voice to Congress, expressing our views to the legislators. In addition, Mr. Tohtz has traveled to

several cities and towns in the State where ordinances banning bee-keeping were being proposed. Through his presentations, potentially disasterous situations have been transformed into compromises amiable to all sides — example, the St. Charles ordinance. And as a knowledgable and experienced beekeeper, he serves as one of the State bee inspectors. Again, over these past years our Treasurer has not received one bill from Mr. Tohtz.

Individuals, such as Mr. Tohtz, make associations viable, active, and interesting. Our Association is truly fortunate to have Mr. Tohtz, a man whose care and concern for beekeepers and bees is so evident. Our BEEKEEPER OF THE YEAR AWARD is only insignificant payment for such dedication, cooperation, and work. WE THANK YOU, JAY!!!

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The featured morning speaker at the Fall Meeting, Mr. Eugene Killion, gave a detailed and clear explanation of the precess used by his family to enable their bees to produce nationally judged 1st class section comb honey. As with any worthy venture, it requires time and hard work as evidenced by the scraping of 6000 supers each winter to prepare for the next spring's honey flow.

The afternoon speaker, Mr. Marvin Parker, spoke of his beekeeping experiences in Turkey, the Phillipines, and Egypt. In Turkey, Mr. Parker was able to purchase 3 colonies for $10. These colonies were housed in wickerwork covered with cow dung and wood ends. However, in 3 years he was able to expand these 3 colonies into 35. During 10 months of each year the bees have weather suitable for work. Mr. Parker found that for smoker fuel there is none to match dried cow dung. It burns slowly and gives a lot of smoke.

In Egypt Mr. Parker noted that queen rearing centers are often the breeders of the acarine mite. The Egyptians are trying to develop a queen rearing center in the desert away from other bees to rid the queens of this fatal pest. And in the Phillipines mite infestations are so rampant that the successful establishment of bee colonies is almost impossible.

THANK YOU to both Mr. Killion and Mr. Parker for sharing with us their knowledge and experiences!!

We wish to also thank Mr. Charles Wills, Mr. George Vanarsdall, and Mr. Jay Tohtz for participating in our panel discussion. They tackled such questions as 1) Why did the bees not draw out comb this year?, 2) Do bees take a vacation in August?, 3) Should we extract frames with capped and uncapped honey now that it is the end of October?, 4) Any management ideas for getting enough bees for April pollination of blueberries?, 5) What is the correct amount of apace to allow for winter?, 6) What effect does space have on the moisture problem and heat?, 7) What about the storage of supers on hives?, and so on. THANK YOU, GENTLEMEN FOR YOUR TIME AND COOPERATION!!

The movie viewed was a 22 minute entitled "Bee People" made in 1972 and distributed through Cornell University. It reviewed "research being conducted by the Bee Research Laboratory at Tucson, Arizona. Honeybees have an important impact on agriculture. Environmental stresses are causing a decline in the number of honeybees. In an effort to reverse this trend, experiments are being carried on with artificial insemination of queen bees; pollen research to create artificial diets; immunization against disease; color recognition and sense of taste to discover which flowers bees like most."

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NATIONAL MITE SURVEY

In the September newsletter information concerning the national mite survey was set forth. This survey is being conducted to determine if any varroa or acarine mites are present in the United States. The varroa mite is a flat mite found under abdominal segments of the bee. It is visible to the naked eye if you have good eyesight and know what to look for. The acarine mite lives in the tracheae of the bees and is invisible to the naked eye. No effective control has at present been found for either of these mites. Their effect on bees and honey production ranges from continual draining to disasterous. It is, therefore, imperative to ascertain that none are present in the U.S. If, by grave ill-fortune, either mite is found, it is hoped that measures can be taken to isolate the infestation.

Mr. Joe Francka, our State entomologist, asks your help in collecting the necessary 250 samples from the State of Missouri. In order to save you postage, take your sample to your local extension office and request that they send the sample to Dr. Flernoy Jones at the University of Missouri in Columbia.

The sample collection directions are as follows:

> A minimum of 100 bees should be collected from each selected apiary. This collection should be pooled sample of 5-10 bees from each colony. Try to collect moribund bees that may be crawling near the hive entrance. Do not collect bees that have been dead for an indeterminate period as they are less than ideal for acarine disease diagnosis. Young bees collected at the entrance as they are leaving or returning to the hive are ideal.
>
> Kill the bees immediately in a killing jar and then transfer them directly into a container partially filled with 70 percent alcohol. Be sure that you use containers that have been provided for the survey. These containers can be obtained by writing to Mr. Joseph Francka at Division of Plant Industries, P.O. Box 630, 2632 Industrial Drive, Jefferson City, Mo. 65102 or call (314) 751-2462.

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BEEKEEPERS' INDEMNITY PROGRAM

If you have lost any colonies over the past year due to pesticide poisoning, please report it. The proper forms can be obtained from our Secretary Mrs. Marilyn Smith at 4301 Walnut Tree, St. Charles, Mo. 63301.

Even if you lost only one colony or if you feel that you will not be reimbursed, please take the time to fill out the form. If only a few large commercial beekeepers report their losses each year, the legislators will attempt to cut or discontinue the indemnity program. Also the chemical companies use the argument that the small number of loss claims proves that their insecticides are not harmful to bees. So we must report each and every loss so that the legislators can see that the insecticides do harm more than just a few commercial operator. Regulation and enforcement of the proper use of insecticides is necessary for the health of the entire beekeeping industry - commercial and hobbyist - and for the health of the consumer.

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1982 MISSOURI STATE BEEKEEPERS' ASSOCIATION OFFICERS

President Henry Boeckmann	Kirkwood, Mo.
1st Vice President Mike Roling	Springfield, Mo.
2nd Vice President Dr. Flernoy Jones	Columbia, Mo.
Secretary Marilyn Smith	St. Charles, Mo.
Treasurer Truman Hardin	Springfield, Mo.
Editor Carol Boeckmann	Kirkwood, Mo.
President Emeritus Joe Maher	Kansas City, Mo.
3- year Board Member Jim Robins	Kennett, Mo.
2- year Board Member Charles Wills	Springfield, Mo.
1- year Board Member George Vanarsdall	Sibley, Mo.
Board Member At Large Tom Hawman	Lock Springs, Mo.

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HONEY MARKET NEWS - This is the last report from this publication. It is being discontinued due to insufficient funding. In the future, the most important sections of this report will be contained in the California honey report. If you would like to receive this California report, make your request in writing to Honey Market News Report, Bureau of Market News, California Department of Food & Agriculture, 1120 N. Street, Rm. 216, Sacramento, CA 95814.

"The honey flow was average to above average in Eastern and Southwestern Missouri and below normal in the Central and Northwestern areas where wet and cool weather prevailed throughout August. Soybeans were the main floral source. Most beekeepers started extracting the last two weeks in August which was later than normal. They had waited hoping for a better yield and also because of the high moisture content of the honey."

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MISSOURI STATE BEEKEEPERS' ASSOCIATION
Financial Report

Balance on hand March 24, 1981		$3405.27
INCOME		
Dues - March 21 thro Oct. 20, 81 (220)	$678.50	
Interest on checking account	72.82	
Interest - 30 month Certificate 12%	94.52	
Misc. - Decals	4.25	
Advertising in Newsletter	12.00	
Books-Fair account	13.69	
Cookbooks-Fair account	2.50	
Glass honey servers - 5 @$6.50	32.50	
Round glass honey pot	4.25	
	915.03	
Honey Booth Fair account	+4441.67	
		$5356.70
TOTAL INCOME		$8761.97
EXPENSES		
State meetings - programs	$301.09	
Newsletter publication	282.23	
Secretary	26.23	
Treasurer	37.64	
Dues - American Honey Producers	20.00	
American Bee Federation	20.00	
Dues refund - overpayment	2.00	
Awards	33.05	
	$ 722.24	
Honey Booth expense	+3476.75	
TOTAL EXPENSES		-$4198.99
ASSETS		$4562.98
ASSETS		
Checking account as of Oct. 20, 1981	$3056.19	
Bell Savings and Loan Cert. $1000 @12%	1000.00	
Reamining inventory - Fair account	506.79	
	$4562.98	

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For comparison - expenses

	PROGRAMS	NEWSLETTER	SECRETARY	TREASURER	MISC.	TOTAL
79-80 Oct to Mar	$326.31	$356.17	$12.99	$55.88	$90.09	$841.44
1980 Mar to Oct	322.48	172.85	9.19	65.19	37.96	607.67
80-81 Oct to Mar	86.18	206.84	45.44	35.34	158.00	531.80
1981 Mar to Oct	301.09	282.23	26.23	37.64	75.05	722.24

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As of December 1, 1981, your editor's card file shows the membership to be 573. The interesting statistic is that the records also show that 191 are brand new members since January 1. This means that 33% of the current membership is new.

BEE ORDINANCES

Our Legislative Liaison Mr. Jay Tohtz is attempting to put together a packet of all of the bee ordinances in effect in the towns and cities throughout the State. If your locale has any ordinance that bans or restricts beekeeping in your area, please either obtain a copy of that ordinance and mail it to Mr. Tohtz or at least notify him of the existence of such an ordinance.

Write to Mr. Tohtz at 113 Woodridge, Kirkwood, Mo. 63122 or call him at (314) 966-2014.

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FROM AROUND THE STATE

Honeydippers Bee Association

"On Sunday afternoon, October 18, Mr. Henry Vincent of the Eastern Missouri Beekeepers Association, spoke to members of the Honeydippers Bee Association and their families about how to prepare colonies for winter. Emphasizing that most winter losses occur because of starvation rather than freezing, Vincent demonstrated his method of feeding candy to his bees. He also described a new way of insuring ventilation of moisture from the hive during the cold months when the entrance is reduced to the minimum. This is also the time to dust Terramycin mixed with powdered sugar over the top bars of the frames in the brood chamber, as a preventive measure against disease, and to provide some windbreak to the North and West of the beehives.

A small but enthusiastic group of beekeepers plied Mr. Vincent with questions for over an hour after his talk, covering nearly every phase of beekeeping in any season. Members also exchanged news of their own experiences of the past season, and the joys and gratitude expressed for the bountiful harvest were in marked contrast to the gloom of the 1980 season. . . Mel Zielinski distributed copies of "Identification and Control of Honey Bee Diseases" to further the Association's educational activity."

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Johnson County Beekeepers' Association

Welcome to this new local association which has been gradually coming into existence during the past year. This new group is under the guidance of Mr. Dave Lindell. They meet once a month. If you wish

to find out more information as to date, time and exact location, please contact Mr. Lindell at P.O. Box 366, Clinton, Mo. 64735 or Mr. Jim Counts at Rt. 2, Warrensburg, Mo. 64093.

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Eastern Missouri Beekeepers' Association

The following seasonal piece was written by Carol Kaufmann, the wife of Eastern Missouri's President, and was published in the local newsletter.

"Christmastime is upon us once again, and our thoughts go back to Bethlehem and the Judean hills. The birth of the Lord Jesus Christ divides time and history in a very definite way. We need only to look at the date on our calendar, and realize that 1981 years have passed since that great event, and yet it is still very real and important to our lives.

Earlier this year, at one of our meetings, we presented a short item on Bees and Honey as found in the Bible. Here this information is recapped for our Christmas newsletter.

Honey was a special and precious commodity even in the earliest history as recorded in the Old Testament. The first mention of honey is found in the first book of the Bible - Genesis 43:11. In that account, the father of Joseph commands the brothers of Joseph to gather the best fruits of the land and present them as a gift to this great man in Egypt. One of the items to be presented was a gift of honey.

Honey was so prized that, when God described the abundance of the promised land that he would give to the children of Israel, he called it a land that flowed with milk and honey. Joshua 5:6

Also, the food that was the mainstay of their diet as they traveled in the wilderness before they were allowed to enter the promised land was called Mana. It was described as a coriander seed, white and the taste of it was like wafers made with honey. This Mana was given by God on a daily basis and continued for a period of 40 years. Exodus 16:31

The children of Israel were required to bring burnt offerings to the Lord, but they had to follow exact and precise instructions. One of these instructions was that honey was not to be burnt in any offering of the Lord made by fire. Lev. 2:11

Coming back to our Christmas theme, brings us to the prophecy of the Messiah in Isaiah 7:14-15. "Therefore the Lord himself shall give you a sign. Behold a virgin shall conceive and bear a son and shall call his name Immanuel. Butter and honey shall he eat, that he may know to refuse the evil and choose the good."

Many of the facts that our beekeepers are fully aware of can be verified from information listed in the Scriptures. Such as the fact that honey is an energy producer. An account is recorded of a battle between Israel and the Philistines. The king of Israel made an oath that no one of his army would eat until the battle was won. The battle was not won as easily as had been expected, and all the men were weary and tired. When they came to a woods, they found honey but were afraid to eat it because of the oath. The king's son came along and, since he had not heard the oath that his father had made, he immediately ate some and his energy was revived. His energy was up, but he definitely had a problem. Anyone who dared to violate the king's oath would be guilty of death. Turn to I Samuel 14 and read the outcome of this event.

The Bible is very definite about eating too much honey at one time. Proverbs 25:16 says: "Hast thou found honey? Eat so much as is sufficient for thee, lest thou be filled therewith and vomit it." Also in Proverbs 25:27, "It is not good to eat much honey; so for men to search their own glory is not glory."

The bees of Biblical times must not have been as gentle as some of our present day bees because the Israel army was warned that their enemy would chase them in battle in the same way as bees chase you. Deut. 1:44

Wild honey is also spoken of in the description of John the Baptist, who was the forerunner of Jesus. He was described as wearing raiment of camel's hair and a leathern girdle about his loins, and his meat was locusts and wild honey. Matt. 3:4 and Mark 1:6

The only reference to a swarm of bees is found in the Old Testament in the account of Samson in Judges 14:8. A swarm of bees and honey was found in the carcass of a lion which had been thrown by the side of the road.

All total, bees are only mentioned in 4 different places; whereas, honey is mentioned 24 or more times. This is just a sample of these verses. We have by no means touched on all of them. But we do invite you to spend time in the Word of God during this Christmas season and during the coming year. Psalm 119:103 says: "How sweet are they words unto my taste, yea, sweeter than honey to my mouth." Also, the Lord is "more to be desired than gold, yea, then much fine gold, sweeter also than honey and honeycomb." Psalm 19:10

We wish you the peace of Christmas which can only be found in the Lord Jesus Christ. May He be real and alive in your hearts as your Lord and Saviour."

Carol Kaufmann

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"Let us take time to thank the Lord for our richest gift - the people who fill our days with their warmth and kindness." Abbey Press

LET IT BEE KNOWN . . .

Taken from Bees & Honey, January 1977, "Care of Equipment After Extracting" by Elbert R. Jaycox.

"Honey extracting equipment needs special care between seasons to keep it in good condition. All traces of honey should be removed not only to prevent contamination of the next year's crop, but, more importantly, to prevent corrosion of the metal by the honey. The acids of honey, which has a pH (acidity rating) of 3.9 to 4.9, remove coatings from galvanized metals and damage other metals not designed to resist them.

Extractors, tanks, pumps, gates, valves, pipes, and other equipment used for handling honey should be washed thoroughly, first with cool or tepid water to remove wax particles without melting them and then with hot water and detergent. Plastic and stainless steel equipment need no other special care after they are dry. Equipment made of conventional uncoated steel or iron should be dried and treated to prevent rust. Mineral oil is the coating material to use to treat honey processing equipment. It can be used liberally on the stored equipment and washed off with detergent before the equipment is used again. Traces of mineral oil are not objectionable because it is acceptable for use in food products and it does not deteriorate in storage. Other oils, fats, and greases should not be used on extracting equipment even though some are food products. Some could cause unacceptable contamination that would make honey unsalable. Others become stale and rancid, producing off-flavors that could damage honey even at very low concentrations.

Honey gates should be given liberal coatings of mineral oil after being cleaned. To keep them working smoothly during the extracting season you can use a thin coating of the same oil on the movable parts. Never use any other lubricants such as the cooking fat."

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Taken from the October 1981 issue of the Oklahoma Apiary Newsletter.

"For every 10 pounds of honey that a colony consumes, about 1 gallon of water is produced. This water escapes from the overwintering colony as vapor. Provision should be made for the escape of this moisture-laden air, or ice may form on the cover above the cluster and drip over the bees during thawing. Some frost formation on the cover is not objectionable, but excess frost or ice is not good. A top entrance for the overwintering colony will allow the moist air to escape, as well as provide a ready flight entrance during thawing when cleansing flights are possible."

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Taken from the October 1980 issue of THE IRISH BEEKEEPER, "Cribbage" by Mrs. M. C. Keniry, p. 227.

Labelling Guide

"Once you have bottled all the honey which you will harvest next year don't spoil it by having the labels at sixes and sevens. Make a labelling guide. Cut a circular hole in a piece of hardboard into which the honey jar will fit. Measure the height where the bottom edge of the label should be. Glue a piece of hardboard of similar thickness to one side of the hardboard in which you have cut the hole. If the honey jar is stood in this cavity the top of the board acts as a guide when labelling, and all the jars are labelled in exactly the same way." -The Scottish Beekeeper

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Taken from the November 1980 issue of THE IRISH BEEKEEPER, "Cribbage" by Mrs. M. C. Keniry, p. 252

Advertising Honey

"Four jars of identical honey, each with a different label, were placed on an above-eyelevel supermarket shelf. One label had the picture of one large and several actual likeness bees. One had an old fashioned skep with small flying, actual likeness bees. The third was only printed words. The fourth had a bright red floral border. All had the words "honey" as a main line.

The potential buyers were watched and reaction recorded. As the hand would reach up, there was a noticeable reaction of jerking away from the label with large, actual likeness of honey bees; the skep label not as much. The plain word label was passed by with little reaction and ranked second to the floral label which was chosen 90 per cent of the time.

It seems that actual likeness art would not get the desired results in all advertising for honey except when directed to beekeepers -"Beekeeping"

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Found in the November 1980 issue of THE IRISH BEEKEEPER, "Cribbage" by Mrs. M. C. Keniry, p. 252. Mrs. Keniry took the following from the American publication GLEANINGS IN BEE CULTURE.

How The Honey Bee Sees

"All bees must have some means to function in a hive in the dark. Each bee must have some way to determine where it is in the hive and who it is dealing with.

It must, in some fashion, see in the dark. This may perhaps be done by the three eyes on its forehead. Not as we think of seeing, but by nature having constructed the three eyes as sensors, using red infrared energy below the level of light.

For what purpose would the queen put her head in an empty cell in a brood frame if she had no means of telling what would be found in the cell? A bee is red colour-blind. So perhaps she sees by infinitismal amounts of radiation in the red infra red spectrum.

This is all speculation in what is already known, based on the assumption that the two eyes, one on each side of the head, provide most or all of what we humans regard as sight or vision.

The three eyes found in the middle of the forehead do not provide vision as we understand it, but should properly be considered as sensors."

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Taken from the March 1980 issue of the BRITISH BEE JOURNAL in an article by Jeff Rounce, p. 40.

"Another interesting piece of research is that concerning Chalfbrood and emanating from Ottawa Research Station; the important points are that the causative agent, Ascosphaera apis does not kill honey bee larvae by destruction of tissues or the production of toxins but by competition for primary nutrients, notably glucose and trehalose. It looks as though the larvae die through starvation. Various suggestions are made as to the directions further research could take but nothing so far regarding treatments which might be effective. So for the time being we still have to live with it."

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Taken from the June 1980 issue of THE NEW ZEALAND BEEKEEPER, "Drones aren't really DRONES!" by David Williams.

"Your queen can be as golden as the sun (and may I remind you that Ivor Foster recommends evenly marked, light coloured bees to reduce swarming in his 1975 article in the Journal of Experimental Agriculture?) but it is her progeny you have to deal with, not Her Majesty in person, and her progeny takes half its characteristics from the drone(s) with which she is mated.

Chromosones are important; it is the hereditary characteristics we are concerned with here. What the drones are, your bees will tend to be.

Remember that there have to be drones around for any virgins to mate with. I played around raising queens a couple of years ago in mid-August and suddenly realized there wasn't a drone within miles - the bees simply hadn't started producing them, that part of the yearly cycle had not come round for them. Like male human beings, drones have to be of a certain age before they produce sperm.

A drone raised at the same time as the queen is useless. Firstly, he takes 24 days to emerge as against the queen's 16, but then he also has to reach puberty after that.

Murray quotes 10 days after emergence as a minimum for drone rearing, with a possibility that twenty is more reliable and more realistic. This means that drone rearing has to be successfully completed for a significant period before any virgin queens emerge. In

real terms, it means that drones should be emerged and flying before you even start any queen rearing.

Tage Johansson at the Flock House queen breeder's course January 1979 said that colonies in nature produce a brood nest with 6 to 10 per cent drone comb.

I don't know how this ties in with Ribbands (quoted in Eva Crane's "Honey") hive caste distribution but this theory describes the strong colony in the busy season as one queen, 300 drones, 25,000 older workers foraging, 25,000 young workers on hive duties, 9000 larvae requiring food, 6000 eggs, 20,000 sealed larvae.

Even if we accept that some of the larvae could be drone, drones must be a very small percentage in that colony however you calculate them - well under one per cent. Perhaps Ribbands' apiarist was one of those who actively purge all drone comb.

Tage also made the point, getting away from our subject a little, that if you want good worker comb drawn out from foundation, ensure that other combs have some drone cell areas in them or the bees will be impelled to tear down good worker foundation to satisfy the natural drone-producing instinct. This is another reason for not going too wild in the removal of all drone comb in hives.

What this article is about can be summed up in a few words. Drones are normal and drones are necessary - particularly if you are into queen rearing!"

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Taken from Vol. 2, No. 1 of the APPLE MAGAZINE, "Apple on Bees" p. 31.

"If bees ran the world everything would be on time.

Bees are amazingly punctual. They learn what time of day different species of flowers produce nectar, then time their rounds to hit each flower at its peak. "They are rarely more than 15 minutes early and they are never late," attests James Gould, professor of biology at Princeton University.

Gould is using an Apple II-based system to figure out how they do it.

Since bees can maintain their strict schedules without any light cues. Gould has hypothesized that they tell time by monitoring the daily fluctuations of the earth's magnetic field. To test his theory, he surrounded a hive with an electrically generated field and left laboratory lights on 24 hours a day to eliminate primary time cues. Gould's equipment simulates the magnetic day (from data stored on an Apple disk) slowly expanding or contracting the length of the cycle.

In order to maintain an accurate field around the hive, the Apple acts as a digital control loop, regularly measuring and compensating for external fields. "Whenever the Apple sees an external field produced by a solar storm or an electrical circuit in the building, it adds a new component to its calculations, introducing an orderly correction."

"You also have to be very quick about it," adds Gould. "The total change in the earth's field is about one percent over the course of a day, but you get a much bigger change than that every time a truck drives by. The important thing is to minimize transience." The

Apple updates the strength of the experimental field only once a minute, but it adjusts the generating coils each second. . . . .

When the bee experiments are finished, Gould plans to test the effects of magnetic fields on birds that navigate by the angle of the sun. . . . "

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BEEKEEPING QUESTIONS AND ANSWERS

1) In spring is it necessary or helpful to the bees to reverse the brood chambers around?

"When brood rearing begins in late winter or in early spring, the brood area is usually to be found in the upper portion of the brood nest at the time of the first thorough examination of the colony. The brood area will mainly be in the top hive body when two or more bodies are used for wintering the colony, or in the super and the top of the brood combs of the hive body when the colony has been wintered in a single hive body with a shallow super used as a food chamber. Inasmuch as the tendency of the colony is to expand the brood nest upward, the queen will not readily move down to empty combs. Therefore, it is good practice to set the top hive body or super on the bottom board, setting the bottom hive body on top, thus reversing the parts. This reversal brings most of the brood to the lower position with a less amount of brood at the top. It also breaks the circle of the brood, placing the two segments in inverse positions. The queen then moves upward readily, first into the empty portions of the brood area and then into the empty combs above. At the same time, the house bees rearrange the stores of the colony around the new brood area. This stimulates the colony to greatly increase it population. With a good queen in a populous colony, it may be necessary to reverse the brood bodies again before the flow occurs.

Before the beginning of the main honeyflow, the bodies that earlier were placed on the bottom boards in the reverse position will have become empty through the emergence of the brood and the rearrangement of the stores of honey. They then should be returned to their original positions. When the flow begins, they will be used for storing the first part of the flow. At the end of the season, these bodies will be well provisioned with honey and pollen and should be left on the colonies as food reservoirs for winter. During the flow, supers needed for storage of surplus honey are added above these food chambers." Taken from THE HIVE AND THE HONEY BEE as found in June 1976 issue of The American Bee Journal, p. 276.

2) During early spring I find a powdery substance on the bottom board. Does that indicate anything wrong in the colony?

"This substance is the cappings from honey where the bees have opened the cells to use the honey, or it could be some wax or propolis they have gnawed on, trying to remove it from the hive . . . This should cause no concern, but at the earliest possible time, it should be removed as this can only gather moisture entering the front of the

hive and also can be a likely spot where a wax moth could enter, crawl under the cappings and lay an egg. I have seen this wax almost an inch deep on a bottom board and later in the summer there would be a crawling mass of wax moth larvae." Taken from "The Classroom" in the March 1976 issue of The American Bee Journal, p. 113.

3) When should I order my package bees and queens for next spring?

Right now!!! A good delivery date to shoot for in our State is April 1.

4) All my queens are showing good brood patterns. One, however, has young bees which are colored very strangely. Their colors are yellow on over half of the abdomen and black on the other. Is this queen alright? Should I requeen?

"The condition which you describe concerning the colors of the worker bees is caused by a genetic condition and they are called Gynandromorphs. Besides the color variations which you have described, there are often such things as the head of a drone on a worker bee or the head of a worker bee on a drone or the eyes of one may be on the other type.

Normally this does not involve too many bees in a hive. However, should there be a great number of them it would be better to requeen the colony since there is little likelihood that this will ever change with your present queen." Taken from "The Classroom" in the July 1976 issue of The American Bee Journal, p. 321.

5) How much honey in the life span of the worker can or does she gather (in ounces)?

"A typical bee-load of nectar is 30 mg. and she may average 10 trips per day. Loads vary considerably according to temperature, honeyflow, and kind of plant being visited. Bees live an average of six weeks, but forage only during about the last three weeks of life. Therefore, at 300 mg. a day for 21 days, a typical bee might gather a total of 3600 mg. (3.6 grams) of nectar. When concentrated into honey, this would be about 1/8 or 0.0402 ounce." Taken from "The Classroom" in the May 1976 issue of The American Bee Journal, p. 230.

6) Should the queen excluder be left on the hive during winter?

"Remove the queen excluder in the fall. The real danger of leaving the excluder on the hive all winter is that should the cluster move through the excluder in search of food, the queen would have to stay below where she would die from lack of food and the cold." Taken from "The Classroom " in the June 1981 issue of The American Bee Journal.

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The recipe on this page and on page 16 won blue ribbons at the Kentucky State Fair. Taken from the Nov. 1981 issue of The Kentucky Bee Line.

HONEY PECAN PIE Agnes Drake, West Point, Ky.

2 eggs
½ c. sugar
½ c. honey
½ c. corn syrup
1/8 t. salt
1 t. vanilla
2 T. butter
1 c. pecans

Beat eggs. Add sugar, honey, corn syrup, salt and vanilla. Add butter. Stir in pecans. Pour into unbaked pie shell. Bake at 350 degrees for 50 to 60 minutes.

DUES - 1982

If you wish to beoome a member or to renew your membership for 1982 remember -

If you are a member or a local association, your dues for the State Association are $3.00 per calendar year. This $3.00 is to be paid through or by the local association.

If you are not a member of a local association, your dues are $4.00 per calendar year for the State Association. This is paid directly by filling out the application below and mailing it with your check.

MEMBERSHIP APPLICATION

I DO NOT BELONG TO A LOCAL ASSOCIATION. PLEASE ENTER ME AS A MEMBER OF THE MISSOURI STATE BEEKEEPERS' ASSN. DUES ARE $4.00 PER YEAR.

Enclosed is $ _____ for _____ years membership.

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Springfield, Mo. 65807

FIG HONEY COOKIES Mary Farmer, Louisville, Ky.

1 c. dried figs
½ c. shortening
2 eggs, well beaten
3 t. baking powder
3 T. chopped orange rind
2 T. milk
½ c. coconut
½ t. salt
3/4 c. sugar
½ c. honey
2 3/4 c. flour
1 t. lemon flavor

Wash figs, cover with water. Simmer 10 minutes. Drain. Cut into pieces. Cream sugar and shortening. Add honey, eggs, and milk. Mix thoroughly. Sift flour. Measure and sift with baking powder and salt. Adde to sugar and shortening mixture. Add figs, coconut and flavoring. Add orange rind. Mix thoroughly. Drop by teaspoonfuls onto well oiled baking sheet. Bake at 425 degrees for 12 to 15 minutes. Yield: 36 cookies. Ice with drop of chocolate or caramel.

"May you have love to light the way, friends enough to gladden the heart, faith enough to give you peace, hope enough to brighten your tomorrows."

MERRY CHRISTMAS - HAPPY HANUKAH
BLESSED NEW YEAR

Carol Boeckmann

MISSOURI STATE BEEKEEPERS' ASSN.
619 Mendelsohn Drive
Kirkwood, Missouri 63122

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