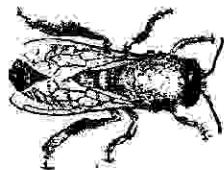


1ST VICE PRESIDENT  
CHAS. WILLS  
630 S. Newton  
Springfield, Mo. 65806

PRESIDENT  
JAY TOHTZ  
113 Woodridge, Kirkwood, Mo. 63122  
Tel. 314-866-2014

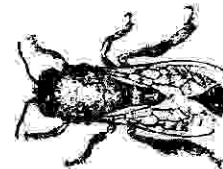
2ND VICE PRESIDENT  
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1829 W. Washita  
Springfield, Mo. 65807



SECRETARY  
WILLIAM GARESCHE  
451 N. Geyer Road  
Kirkwood, Mo. 63122

## Missouri State Beekeepers Association

EDITOR  
JAMES A. MARTIN  
6036 Highfield  
St. Louis, Mo. 63109  
314-351-9914



TREASURER  
JOE MAHER  
9410 Eastern  
Kansas City, Mo. 64138

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Dear Beekeeping Friends:

On February 8th, 1977 quite a few members of the Missouri State Beekeepers Association attended a committee hearing on the proposed Bee Law, Senate Bill #86.

There were a few in attendance who were against the law but they neither spoke nor presented testimony. But don't let that fool you. They will contact their representatives! It is important that each of us contact our representatives immediately and let them know how important the law is to us. Missouri and Alaska are the only two states in which Beekeepers are not protected by law.

As this law would be administered through the Agriculture Department, it is extremely important that the beekeepers from the county make themselves heard. The representatives from the rural areas are more sensitive to the agricultural needs of their constituents than the big city representatives. The proposed bee law protects both the professional and amateur beekeeper as it requires bees to be kept on removable frames.

This proposed law is the result of nearly ten years effort on the part of some of your present and past officers to get protection for you. Don't let them down. Get in touch with your representatives now and let them know that you need the protection provided in the proposed bee law.

The amateur actually needs some additional protection. Last year two beekeepers in St. Peters, Missouri were forced to get rid of their bees as litigation was too expensive.

### The Savage Bees

On November 11, 1976 both St. Louis newspapers carried a large advertisement:

"8 P.M. World Premier! "The Savage Bees" a terrifying mindboggler of a movie and it could really happen! Millions of African Bees whose sting is fatal invade a New Orleans Mardi Gras!

The January issue of The Speedy Bee states that the National Honey Packers and Dealers Association sent a letter to the National Broadcasting Company (NBC) president protesting the movie and demanding equal time. We will have to await the outcome.

### Keeping Bees

Be sure that you keep your bees in such a way as not to be a public nuisance. See "Don't Get Stung in Court" in January 1977 Gleanings in Bee Culture.

When someone in your area runs into trouble with a city or the law, the local association should immediately investigate. If the bees are being kept poorly, tell the beekeeper how to correct the situation. If he is keeping them correctly then get behind him en masse and use the news media to explain the situation to get the proper public image.

### Honored

Mr. J.G. Kibbey was honored recently for his work, dedication and leadership of The Central Missouri Beekeepers Association. A picture showing Mr. and Mrs. Kibby and Joe Maher was in the January Gleanings in Bee Culture. Congratulations Mr. Kibbey!

Mrs. Joe Maher has been very ill with a severe stroke, but we are happy to report she is recovering. Mrs. Jay Tohtz has been ill with severe thyroid trouble, her heart stopped beating for a short while but she is on the road to recovery now also. We are glad they are improving but continue to remember both of these good ladies in your prayers.

### Better Than Smoke!

For those of you who were not able to attend the meeting last Fall, Don Taylor had an article on the bulletin board showing that high intensity sound waves subdue bees. Most notably those sounds at frequencies between 600 and 800 cycles per second. That is the pitch of notes an octave and a half above middle C on the piano keyboard. When the sound producing object is placed about three feet from the hive the bees will become motionless in their tracks. This may be worthwhile for robbing bees in the city where there are a lot of young children around. I might try it this summer.

### Local Associations

Midwestern Beekeepers Association, Kansas City, Missouri and Kansas  
President, Leo J. Erickson, 9604 E. 65th, Raytown, Mo. 64133  
1st Vice Pres. Programs, Truman Mansell, 10302 Meadow Lake Circle, K.C.  
2nd V.Pres. Membership, Paul Clegg, 8500 Westridge, Raytown, Mo. 64138  
3rd V.Pres. Editor, Tleta Rose, 6005 Garnett Dr., Shawnee, Kan. 66203  
Secretary, Sue Nichols, 8754 83rd, Raytown, Mo. 64138  
Treasurer, Chester Grain, 1216 W. 38th, Kansas City, Mo. 64111  
Librarian, Charles Perrin, R. #1, Pleasant Hill, Mo. 64080

Eastern Missouri Beekeepers Association, St. Louis, Missouri  
President, Henry Boeckmann, 619 Mendelshon Dr., Kirkwood, Mo. 63122  
V. Pres., David McDonald, R#1, Box 238, Washington, Mo. 63090  
Secretary, Carol Kaufmann, 3743 Druso Dr., St. Louis, Mo. 63125  
Treasurer, E.R. Kaufmann, 3743 Druso Dr., St. Louis, Mo. 63125  
Editor, Carol Boeckmann, 619 Mendelshon Dr., Kirkwood, Mo. 63122  
Membership 134

Ozark Beekeepers Association, Springfield, Missouri  
President, Ray Southerland, 1442 S. Fort, Springfield, Mo. 65807  
V. Pres., William R. Hartley, Rt. 20, Box 2275, Springfield, Mo. 65803  
Sec.-Treas., Truman E. Hardin, 1829 W. Washita, Springfield, Mo. 65807

Jefferson County Beekeepers Association  
President, Myron T. Vail, Rt. 3, Hillsboro, Mo. 63050  
V. Pres., William C. Dunehew, R.R. #1, Box 78, Dittmer, Mo. 63023  
Sec.-Treas., Marko A. Biscon, Rt. #1, Box 84, Cedar Hill, Mo. 63016  
38 members including husband and wife and unmarried persons

Two Rivers Beekeepers Association, St. Charles County, Mo.  
President, Delbert Scott, R.R. 2, Box 144, O'Fallon, Mo. 63366  
V. Pres., Edward Peca, Rt. 1, Brown Road, St. Peters, Mo. 63376  
Sec.-Treas., Melvin Beach, 502 Norwich, St. Charles, Mo. 63301  
The above have not been officially elected because of bad weather but should be seated this month.

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By Charles Wills  
of Springfield, Missouri

I have had several inquiries about my Maraz colonies of which I now have 17 colonies. I'm afraid my comments may not be very conclusive as I've only been working with the Maraz queens about two seasons, however, here are some observations that I believe will be consistent in our area.

I have noticed a reduction of brood rearing in extremely dry periods of the summer, which in turn seems to bring them into the fall with more stores and helps with a better build up of winter stores. Also they seem to store fall honey lower in the brood chambers and not so much up in the top supers as my other colonies do. This fall I noticed that when I placed my extracting supers and partially filled supers of honey above an inner cover to be cleaned out, my Maraz colonies cleaned these supers very quickly and carried this honey down into the brood chambers where some of my other colonies did not, and even moved small clusters of bees above these inner covers as late as the fifth of December with plenty of honey in their brood chambers. My Maraz colonies start forming their winter cluster earlier than my other colonies and form their cluster low in the brood nest if there are sufficient stores. Spring build-up is the same as my other colonies as far as the last two springs are concerned, so I don't anticipate any problems in this way.

They are good honey producers and are easy to handle and winter well, so in conclusion I will have to say I am satisfied with my Maraz colonies, and believe that for the Ozarks area with its dry summers, fairly cold winters, and unpredictable weather for all seasons, that the conservative strain of honey bee whether it be Maraz or some other conservative strain should be considered especially if you are a "let alone beekeeper." In referring to my other colonies, they are Italian from southern bred queens of which I have thirteen, and thirteen from swarms collected in the area. Of these thirteen swarms ten came from bee trees in Taney and Ozark counties and they are very much like my Maraz colonies as far as conserving stores and wintering on a very small amount of honey, however some are a little harder to handle than my other colonies.

By Truman C. Hardin  
Ozark Beekeepers Association

The Beekeepers of the Ozarks had two really fine speakers for the February meeting at the Boys Club on Boonville on the 17th. Dr. Ernest Lorenc, a Dermatologist in Springfield, spoke on the effects of bee stings and other points of interest from a medical point of view. The Doctor is an avid beekeeper and last summer constructed one of the deep horizontal hive bodies patterned after that of Mr. Vasili Oranski of St. Louis. Dr. Lorenc says he will report later as to the results of his efforts in this direction. The other speaker was Mr. Clarence Feeney, another active beekeeper in Springfield on his activities with honey plants. He has been experimenting with over one hundred different species attempting to determine the best for his purpose.

Mr. and Mrs. Steve Hubbell of Mountain View, Missouri will be the featured speakers for our meeting on March 17th. Steve and Sue keep 150 colonies and Sue is a free-lance writer of some note. Her writings have appeared in the St. Louis Post-Dispatch and also in the American Bee Journal.

On the lighter side and a very tasty one according to the Family Food Garden publication of February 1977 is gooseberry jam made with honey. The article suggests combining 3 cups of green gooseberries with two cups of honey. Cook slowly until the mixture jellies on a cold dish. Put into sterilized jars and seal with melted paraffin. Try jam on hot biscuits, toast, muffins for a gourmet touch of good eating. It is also good on ice cream as a topping and why not try it rolled up in a hot buttered pancake?

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Questions and Answers  
Joe Maher, Treasurer

I NOTICED SEVERAL DRONES IN ONE COLONY OF MY BEES IN JANUARY. IS THIS UNUSUAL?

Most generally a good colony with a good queen, plenty of stores, and plenty of young bees will eliminate the drones in the fall. If you find a colony with many drones you possibly have a failing queen and in the spring a weak colony. They should be requeened about April 15.

I FOUND A HIVE IN MY BEE YARD IN EARLY SPRING WHICH HAD AN UPPER ENTRANCE (5/8 inch hole) AND THIS ENTRANCE WAS A RIM OF DARK FLAKY SUBSTANCE WHICH APPEARED TO BE WAX - WHAT IS THE CAUSE OF THIS?

This was wax and if you had examined further you would have found that the colony was dead or were extremely weak and robbing was taking place. The bees uncapping the honey in the hive were carrying cappings on their feet and depositing some as they departed from the hive. One taking a casual glance at such a hive would think the colony was very active, when in fact, all or most of the bees observed were robbers. Usually in this case one can see lots of cappings on the bottom board without looking into the hive.



IF I TAKE MY BEES OUT OF ONE YARD FOR 10 TO 20 DAYS THEN BRING THEM BACK, MUST I PUT THEM ON THE SAME LOCATION?

I had this experience this spring. I rented 5 colonies to an orchardist, selecting five of the strongest. They were in the orchard 12 days then brought back to me. Wanting to re-arrange my apiary, I did not put them back on the same locations. I had the most confused bee yard I have ever seen. They had all remembered their former location and on two locations there were no hives, consequently, it looked like a swarm of bees around the vacated locations and others were drifting from their hive to their former locations, causing some of the colonies to become weak and others to be overcrowded with bees. I do not know how long it takes a colony to forget their former location, but I do know it takes longer than 12 days.

WHY DOES ONE SELDOM EVER FIND BROOD IN A DEVELOPING COLONY IN THE SPRING WHEN OVERTAKEN BY STARVATION?

The bees will uncap the brood cells and eat the younger pupae and the stores in the cells, leaving all cells practically empty.

IN SPRAYING FRUIT AND VEGETABLES WITH TOXIC SPRAYS, WHAT IS THE BEST TIME TO SPRAY?

In spraying fruit with toxic sprays, spray the trees before the bloom opens and again after the petals fall. In spraying sweet corn, squash, melons, cucumbers, etc., spray late in the evening as most of these shed pollen early in the day and seldom are attractive to bees after 4:00 P.M.

IF MY NEIGHBOR SPRAYS WITH A TOXIC SPRAY AND I CANNOT MOVE MY BEES, HOW DO I PREVENT A LARGE KILL OF BEES?

Have your neighbor notify you when he intends to spray then early on that date cover your bees with burlap bags and keep the burlap wet all day. This will eliminate some of the poison kill and not too many will be lost.

HOW DO I PREVENT DRIFTING?

Bees usually come into the bee yard with the prevailing wind and will drift to hives other than their own when coming in heavily loaded and usually will go into the first hive in the line as they return from the field. This will cause overcrowding in some colonies, then swarming, while other colonies will become weakened. Guard bees will accept the field bees when coming in loaded with nectar into another hive other than their own. First, I would use an irregular pattern in placing the hives. Turn entrances in all directions and zig-zag the row. Different colored hives or colored strips near the entrance may help in eliminating drifting. Use colors of black, white, yellow or blue. One might try setting 4 hives facing each other and about 5 feet apart and all facing the center of the circle. Any irregular pattern will help in eliminating drifting of bees. Bees set in a straight row may vary as much as 24 lbs. less honey per colony average as those set in various arrangements to prevent the drifting. One may say why wouldn't the stronger colonies receiving the drifting

bees keep up the honey production average. The answer is that the stronger colonies are most likely to swarm, losing most of the production of that colony. Also, the stronger colony may rob out the weaker colony, causing a complete loss on that colony.

WHAT DO YOU DO WHEN YOU FIND A COLONY THAT IS PREPARING TO SWARM?

Usually, one will have a weak colony in the bee yard that needs assistance. I will go into the strong colony and take out at least three frames of brood from the center of the brood nest of the strong colony, shake all the bees off then take that brood to the weak colony and place in the center of the brood nest. When you find a colony that is full of bees you should inspect about once a week for signs of queen cells. If the colony is in a double hive body one will find the queen cells along the bottom of the brood frames of the upper hive body. After you have removed the three frames of brood, check often for signs of swarming by looking for new queen cells. When you find the cells, tear them down. This will not guarantee the bees will not swarm but it oftentimes keeps doing so by taking some of the force from them. According to the strength of the colony, if real strong, I put frames with foundation in place of the brood frames taken out. If the colony is not too strong, I put in drawn combs so the queen can immediately start to lay eggs.

IF YOU SEE A SWARM COME OUT OF A HIVE IN YOUR APIARY, WHAT PROCEDURE DO YOU TAKE?

If I see a swarm come out of a hive in my yard, I capture the swarm in a hive and when night fall comes, I move the old colony off location, and place the new swarm on the old location and put on a second hive body. In this manner you will have all the bees that left with the swarm plus many of the field bees from the old colony which will fly to the old location and join the swarm. If the hive that was on the original location has lots of brood in it, one could take several frames of that brood and put into the second hive body added. In this manner when the nectar flow starts you will have a good colony of bees that should produce you a crop of honey. The colony that swarmed possibly will not make any surplus honey at all.

WHEN SHOULD SUPERS BE TAKEN OFF?

If you are talking about comb honey, the supers should be taken off as soon as they are capped. The main reason for that is that if left on the hive the comb honey will be travel stained and secondly there is no real reason for leaving it any longer. Extracting supers can be removed when the combs are 80% capped, especially if the honey is to be extracted and processed soon. If the honey is not to be processed soon, it should be almost fully capped. The reason for that is that it might ferment if not fully capped. Bees reduce the water content of honey before it is capped, reducing the possibility of fermentation.

SHOULD THE INNER COVER BE LEFT ON WHEN PRODUCING COMB HONEY?

I do not believe the inner cover has much to do with the production of honey, only that it might keep the heat of the hive lower when on the hive in summer time. If the inner cover is on when producing

comb honey, one should close the opening in the inner cover to reduce the travel of the bees onto the top of the inner cover, consequently causing those combs under the opening to be travel stained. Travel stain is a brown streak across the comb where the bees walk back and forth while going up between the inner cover and the lid of the hive.

IN SEVERE HOT WEATHER WHEN YOU SEE BEES HANGING OUT ON THE SIDE OF THE HIVE WHAT DO YOU DO ABOUT THAT?

This is a case of crowded hives and too many bees to keep the temperature down, I have seen some commercial beekeepers go into the apiaries and take small blocks of wood, say  $\frac{1}{2}$  inch and go to each hive, break the joints between the upper and lower hive body and place one of these blocks under each corner, leaving a half inch space, then taking a block of wood and lifting the front of the hive cover and blocking it up so that there is at least a half inch of space between the upper hive body or super and the lid. This will allow much more ventilation and the bees will like it better.

WHAT CAUSES SWARMING?

In spring a colony of bees is not very large but does develop later. The rate of growth has great significance in regions of early nectar flows. The developing of a colony is from two opposing actions. The hatching of the brood and the dying of aged bees. In spring more bees die than new ones hatch. Real development of the colony begins when more bees hatch than old ones die. The first development states begin when the queen steadily lays many eggs with an increasing of larvai to be fed. The over wintered bees start flying in the spring weather and gradually dies off, causing a reduction of the colony. In 21 days new bees hatch and then they increase in numbers until they replace all the over wintered bees, this usually taking about 35 days. In the first period the colony does not grow but changes only quantitatively. The young bees are more able to feed more brood. The second stage is the intensive rearing stage of the worker force and the next stage is the accumulation of reserve bees in a hive. During the intensive stage the death rate of young bees is low. The development rate of increase amounts to about 15%. As the colony grows stronger the egg laying decreases, egg laying lagging behind the number of nurse bees. These groups of young bees accumulate and are too numerous to work at feeding brood because one queen cannot lay enough eggs and forage is not available as they are too early for it. This accumulation of inactive bees causes sudden intensive foraging flights and they also cause swarming. It is found that swarming occurs only as late as the 3rd stage of development when young bees already exist in a colony. Swarming is preceded by an intense and sharp increase in queen's egg laying then it slows down to the action of the bees, some bees causing the queen to lay in queen cells. When the queen slows in egg laying the ovaries of the queen become smaller and air sacs swell which allows the queen to fly. A great quantity of sealed brood is left after the swarm leaves. Fewer nurse bees are needed to feed the brood and releasing the many young bees for other work. Investigation shows that many young bees go with the swarm who have had no work in the colony. These bees remain near the queen in a new hive. Worker bees of the old colony fly to the old nest even though they swarmed with the others. From observations a swarm is made up of groups of bees that have accumulated in the parent hive with the new hatching

queens. These bees are of several ages in young bees able to build a nest quickly and to store food for the winter.

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### DISEASED BEES FREE TO ROAM STATE

A bill to regulate beekeeping was virtually laughed to death yesterday in the Missouri Senate as members poked fun at its unusual subject.

The 14-to-12 vote against the measure came despite the sponsor's protests that it was a serious bill. Missouri's lack of regulations has made it a "dumping ground for diseased bees," Sen. Nelson Tinnin (D-Hornersville) argued.

Kansas City Times - 3/1/77

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### INTERESTING FACTS ABOUT BEES

By William Garesche, Secretary

Fossil Bees found trapped in amber probably lived 50,000,000 years ago. A Honeycomb has walls that are only 1/80 of an inch thick, but can support 30 times their own weight.

The Largest Bee is a kind of bumblebee that is a little more than one inch long. The largest honeybee is the oriental hive bee, which is 3/4 of an inch long.

Size of a Colony. A strong colony of bees may have from 60,000 to 80,000 workers.

The smallest Bee is *Trigona minima*, a stingless bee that is only 1/12 of an inch long. The dwarf bee, the smallest honeybee, is less than 3/8 of an inch long.

Speed. Bees fly about 12 miles an hour.

Stinging requires a bee to use 22 different muscles.

Taste. Honeybees can identify a flavor as sweet, sour, salty, or bitter.

A Worker honeybee collects only about 1/10 of a pound of honey during its entire lifetime.

To Make a Pound of Honey, bees may have to travel 13,000 miles, or about four times the distance across the United States.