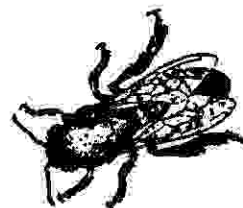


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## Missouri State Beekeepers Association

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VOLUME 14

QUARTERLY NEWSLETTER  
DECEMBER - 1976

NUMBER 4

DEAR BEEKEEPING FRIENDS:

The officers of the Missouri State Beekeepers' Association wish to take this opportunity to wish you a Joyous Holiday Season and a Very Happy and Prosperous New Year.

The last meeting of the Missouri State Beekeepers' Association was held at The Sherator Motor Inn, Springfield, Missouri on October 16, 1976.

It was a complete success with 168 people registered for the prize drawing, no children registered. There were many worthy door prizes and many people got prizes worth more than the cost of registration. Many of these came from the east, north and northwest parts of the state with many from ST. Louis and Kansas City areas.

The highlights of the meeting was the talk by Dr. ERIC Erickson, U.S.D.A., Madison, Wisconsin. One of the interesting points he brought out was that bees are carrying 1.8 volts of electricity while they are returning to the hive with pollen. He states that pollen is negative and the bee is positive and due to the fact pollen is attracted to the bee as steel shavings would be to a magnet.

He told of the research being done regarding bees and soy beans and told of some of the findings in that field. He also told of the many traits the bee has and many of the activities of the bee in the hive and how they signal, build combs and many other interesting facts.

MINUTES OF THE MEETING BY WILLIAM GARESCHE, Secretary:

Minutes of the Missouri Beekeepers' meeting in Springfield, Missouri on 10/16/1976 - Registered attendance 168.

The meeting was called to order at 9:00 A. M.. The invocation was by Mr. Jewell Lasater of Pierce City. Welcome was by Mr. Charles Wills, President of the Ozark Beekeepers' Association of Springfield.

The President, Mr. Jay Tohtz introduced the presidents or representatives of the various associations in Missouri as well as Mr. Lasater and his new association around Monett-Pierce City. All told of their activities and honey productions in their areas. The consensus was that honey production was fair this year in Missouri. Don Taylor introduced the state officers and talked about the extensive display he had set up around the meeting room. He also talked about the importance of the public relations.

Mr. Joe Maher gave a short resume of the reactivation of the Missouri Beekeepers Association which he started many years ago as the original organization was disintegrating..

The president introduced the guest speaker, Dr. Eric Erickson, U.S.D.A., Madison, Wisconsin. He spoke of soybean pollination and the importance of the beekeeper to soybean producers. He talked of the various bee labs maintained by the U. S. D. A. over the country, each specializing in various studies in regards to bees. He said that "Busy as a Bee" is a misnomer in that 178 consecutive hours of study showed a bee spends 73% of her time doing nothing and one bee took care of 143 larvae, not half

of the larvae she looked at during this time. A foraging bee makes about 10 trips a day of about 15 minutes per trip or works about 2½ to 3 hours a day. This study was made at a USDA lab. He stated the USDA is trying to breed a more efficient bee. He also said that Canadian research seems to prove that the entrance to the hive should be between the two hive bodies or hive bodies and supers rather than at the bottom. He stated that Mr. Lindauer a bee researcher had done much work on the placing of hives direction-wise and found bees seem to prefer a north-south direction - wild bees usually build combs in a north-south direction. As for nectar collection research seems to indicate that 50 to 80% of bees are nectar collectors. A full load of nectar is about 8 5% of bees weight and pollen about 35% of bees weight. Mr. Erickson said bees can discern color, can see in ultra-violet and do not use red flowers as much as white, blue and yellow. Reasoning of bees is very primitive. He stated the dance is only one of many ways the bees communicate; dance informs other bees of its trip to nectar in miniature is very complicated in that it takes in smell, taste, etc., but dance is not only way bees find nectar and all bees do not follow dance indications. Bees have other dances than the foraging one but it is not known just what they mean. Bees have been found to have an excellent memory, they work on an accurate time cycle every 24 hours, are programmed by the sun so cycle changes minutely during the season. The young bees take about 300 flights in order to learn to utilize the sun as a compass. He said that bees are the only insect with branched hairs and carry quite a bit of electricity, about 1.8 volts per bee, this was ascertained by having bees cross over a copper ring to which was attached very sensitive instruments. Charge varies during the day and only foraging bees seem to be charged. Instruments are most active on a sun-shiny day at about 3:00 P.M.. The instruments are less active on a cloudy day. When bees are super-active in foraging activity lines on chart attached to instruments get a very long stroke and move off the chart at times. As the bees legs are the most highly charged part of the bee, being positive and the flowers negative, pollen that is not sticky is attracted to the bees legs like a magnet attracts iron shavings. It has also been found that beeswax is a poor conductor of electricity and propolis a good conductor. He said bees find hive entrance by smell (hive odor) and exit by odor of fresh air, also he brought out the fact the research has indicated that the placing of hives under power lines seems to make bees more antagonistic.

Joe Francka, state entomologist named the state bee inspectors; Leslie Shaw; John Hartman; David Ramsey; Max Thiel and Joe Maher.

The spring meeting will be March 26th, 1977 at Columbia, Missouri, Agriculture Hall, University of Missouri.

Jim Martin, vice-president in charge of nominations read the names of the members nominated as officers for 1977. A motion was made and seconded to accept the slate, close nominations and approve the slate by voice vote.

President, Jay Tohtz, 113 Woodridge, Kirkwood, Mo., 63122

1st Vice-President, (Programs), Charles Wills, 630 S. Newton, Springfield

2nd Vice President, (Nominations) Truman C. Hardin, 1829 S. Washita, Springfield

Secretary, Wm., Garesche, 451 N. Geyer Road, Kirkwood, Mo., 63122

Treasurer, J. F. Maher, 9410 Eastern, K. C. MO., 64138

Editor, James Martin, 6036 Highfield, St. Louis, Mo., 63109

Board Member, Don Taylor ( 3 years); George Vanarsdall (2 years) and Jim Robins (1 year)

A motion was made by Joe Maher and seconded by Jim Robins that our Association donate \$100.00 to the American Honey Producers Association, Motion carried.

The Treasurers report was given by Mr. Joe Kibbey and accepted for audit, report to be shown later. signed by Mr. Kibbey.

Mr. Kibbey made a motion that the association donate \$500.00 to the Langstroth Memorial Fund for a scholarship. There was no second to the motion and Joe Maher recommended we review our finances, study details of the scholarship and the matter be brought up at the spring meeting.

A discussion of a new bee law was instigated by the president and he read the law, section by section and it was discussed by the members as he read it. There was quite a bit of discussion on some of the wording of the law and a few minor additions were made but the basic document was well received and approved by acclamation and will be presented to the Legislature in Jefferson City at the next session. Door prizes were then distributed and meeting adjourned at 3:40 P.M., Signed, Wm. Garesche, Sec. " Treasurers report by Mr. Kibbey:

Balance brought forward		\$341.91
Transferred from J. F. Maher typewriter fund	\$312.00	
Dues collected	1126.00	
Total receipts	<u>1438.00</u>	1438.00
Grand Total		<u>1822.91</u>

Expenses;	Women Unionville Church	30.00	
	Printing & Stationery	32.83	
	Mailing expense & Materials	263.15	
	Telephone exp. - J. Maher	2.50	
	Postage, John Fornelli	2.00	
	Honey Producers Ass'n.	10.00	
	Speaker	25.00	
	Chairman Programs expense (Taylor)	154.66	
	Treasurers (Kibbey) Exp.	6.03	
		<u>526.17</u>	526.17

Balance on hand, October 16, 1976

1296.74

J. G. Kibbey Treas.

The proposed bee laws were finalized at the state meeting and have been prepared to be presented to the State Legislature for passage; The most important points will be shown here:

Section # 3, # 1: The director of agriculture shall appoint a state apiarist. The state apiarist will be responsible for the administration of this act.

# 2 The state apiarist shall have the authority, after a public hearing; to adopt, amend or rescind such rules as he deems necessary to implement the provisions of this act.

# 3 Every person appointed as an inspector shall be a practical beekeeper, furnishing evidence that he possesses knowledge of beekeeping and able to diagnose and recommend treatment of bee diseases.

Section # 4, # 1 Inspection of bees for disease shall be made by the state apiarist or an authorized inspector. A fee shall be charged which is sufficient to cover the cost of inspection, plus mileage for the inspector. This to be paid by owner of bees requesting the inspection.

# 2, The state apiarist by request or suspicion of disease may inspect any apiary or hive. The apiarist, after notice to the owner, shall have free access to inspect all bees, equipment or buildings where equipment is stored. Bees must be kept in a modern type hive with removable frames. No fee will be charged for non-requested inspection and no certificate will be issued for this type of inspection.

Section 5, # 1 If the inspector finds no disease or evidence of, he shall issue a certificate of health.

2 Any hive or apiary found with disease will be quarantined until such time as the owner, to the satisfaction of the state apiarist, has cleaned up the situation, then the quarantine will be lifted. If the diseased situation is not cleaned up within six months, the apiarist shall have the authority to eradicate the diseased condition and lift the quarantine from the remaining bees and/or equipment.



Section 6 # 1. It is unlawful to move, carry or transport or ship bees, combs or used beekeeping equipment into the state of Missouri unless accompanied by a valid permit issued by the state apiarist of the department of agriculture. Applications for permit to transport such into the state shall be submitted on a form approved by the state apiarist, accompanied by a certificate of health issued by the authorized official of the state from which the bees are to be moved within 90 days prior to moving, the bees to be inspected during an active brood rearing period. A fee of \$5.00 will be charged for each application.

# 4. Combless package of bees or queens or both are admitted to Missouri when accompanied by a valid certificate from the state of origin..

This proposed new bee law was presented to "Committee on State Fiscal Affairs" on November 15th, will be printed and ready for the legislature to act on as soon after the first of the year as possible, and is practically the same as published in the March 6, 1976 news letter.

The above excerpts taken from the proposed bee law is to give you an idea as to what the new proposed laws will be dealing with. If you want a full copy as will be presented to the legislature, you should write Senator Tinnin, Room 333, State Capitol Building, Jefferson City, Mo., 65101.

Mr. wife and I motored to Jefferson City on October 20th to attend the meeting of the local Central Missouri Beekeepers' Association. At that meeting Mr. Joe Kibbey was presented an award which read:  
RESOLUTION Whereas, in 1958 Eldon Kibbey, son of Joe Kibbey was interested in starting a livestock project for 4-H. With limited space being a large factor, beekeeping was decided on, so Joe Kibbey with several others, accepted the leadership role in helping to establish a 4-H Bee Club for three boys which continued with other boys taking advantage of these projects for several years; and WHEREAS, in 1959, Joe Kibbey along with several other interested beekeepers, organized the local bee organization and Joe Kibbey served as its second president; and, WHEREAS, Joe Kibbey, a bee hobbyist, then entered into the activities of the state association in 1960 after hearing about the state group over the radio and served not only as vice president, but as president and treasurer; and, WHEREAS, he organized the first state meeting in Jefferson City at Lincoln University and in 1967 attended the International Beekeepers Convention at the University of Maryland and visited many beekeepers and supply houses in that area and other parts of the United States; and, WHEREAS, through his excellent leadership and deep interest in bees, beekeepers in this area and other parts of the nation have enjoyed many advancements in beekeeping, made a host of friends, and he has by efforts created a new interest in hobby and commercial beekeeping; NOW THEREFORE, BE IT RESOLVED that the members of the Central Missouri Beekeepers' Association go on record and express their deep appreciation and sincere "THANKS" to Joe Kibbey for his part in making the common Honey Bee of this species "Apis Mellifera", more than a stinging business, and particularly for his many and tireless efforts in promoting "HOBBY BEEKEEPING" in Missouri and the nation. Dated October 20, 1976 and signed by President Raymond Hager and Secretary, Herman Hoffman.

Mr. Kibbey was very deserving of this award and it makes me happy he was recognized by his local association. We may plan a similar recognition for him at the state meeting in the fall, which will be at Jefferson City.

I received a similar award from my local association for which I am very proud and thankful; It read; "CERTIFICATE OF AWARD - MIDWESTERN BEEKEEPERS ASSOCIATION - In recognition of many years of meritorious service and the editing of the Association's House Organ, we present this merit of award. The Officers and members of this association have caused this certificate of merit to be signed and issued to JOSEPH F. MAHER, presented this 12th day of December, 1976, Signed, Karl Beisel, President, Billy W. White, Sec."

AMERICAN BEE JOURNAL, August, 1976: The use of Ethylene Oxide as a fumigant to decontaminate honey bee equipment in the state of New Jersey. Prior to 1972, all apiary equipment in New Jersey infected with American foulbrood was sterilized in a lye bath and all bees, honey and beeswax were destroyed by burning. This method resulted in a serious financial impact on the beekeeping industry. In addition, various drugs and antibodies are employed to suppress European foulbrood and other brood and adult diseases.

Through the combined efforts of private citizens and state and Federal personnel, a surplus National Aeronautics and Space Agency (NASA) decontamination chamber was converted to an ethylene oxide (ETO) fumigation unit. This particular piece of equipment is now available to serve as an important tool in the New Jersey Department of Agriculture's apiary sanitation program once ETO is registered for such use. A preliminary report on earlier tests with this unit was published in the October 1975 issue of the Journal (Cantwell, 1975).

RESULTS: Approximately 100,000 pieces of diseased bee equipment have been processed through the ETO chamber to date. From this equipment, over 7100 colonies have been re-established with bees from existing colonies, some swarms and nearly 200 packages. Of these 7100 colonies put back into service, only 43 colonies have been reported as contracting American foulbrood within a 12 month period. These 43 cases represent less than 1 % recurrence of the disease. It should be noted that this equipment, when returned to the beekeeper from the ETO chamber, goes back into areas that may still harbor infection. Therefore, it is very possible that some of the disease detected in ETO sterilized equipment may very well be new infection. It is also possible that all of the AFB spores were not killed by the treatment. In the first 97 loads, all of the Bacillus Subtilis spore indicators (which are ETO sensitive) were killed or inactivated by the fumigation process. However, after fumigation 10.3 % of the AFB scales showed viable spores when tested in vitro. Tests have indicated that ETO has very little penetrating capability; that it will not penetrate through as little as 1 mm of either honey or wax. It is believed that the spores on the surface of the combs and wooden parts are killed and that in most instances, those also on the scale surface. This permits the adult bee to remove the scale without picking up viable spores which it might then feed back to the larvae.

For the first time in the history of apiary inspection in New Jersey, the New Jersey Department of Agriculture can now say that once registration for this use of ETO is obtained, a means exists by which all brood and some adult bee diseases in honey bee colonies can be controlled effectively and economically. By integrating this treatment with antibiotics the beekeeper will have at his disposal a very effective weapon in combating bee diseases. One of the biggest side benefits of the ETO program is the amount of bee equipment which has come out of attics, cellars, garages, etc., in the last three years. The beekeeper is no longer concerned about his colonies being destroyed.

NATIONAL PLANT BOARD MEETING: Richmond, Virginia, Resolution # 4, Registration of Ethylene Oxide;

Whereas, the incidence of American Foulbrood (AFB) disease in honey bees has been nearly constant for the past 25 years, during which time the control of the causal agent, Bacillus Larvae has been attempted by burning or treating with antibiotics, and

Whereas air quality and fire prevention regulations have curtailed the use of fire to control AFB, and

Whereas, the replacement cost of woodenware and foundation comb burned for AFB control has increased markedly in recent years, and

Whereas, a control program based on a less destructive method would engender an improved public relations position and, there, an improved success rate in locating and dispatching disease reservoirs, and

Whereas, efficacy data have been gathered for use of ethylene oxide by state agencies in fumigating bee hives contaminated with Bacillus Larvae or other pests of honey bees.



I have talked to our state entomologist, Mr. Joe Francka (pronounced France-ka), and he thinks it would be a good idea, provided the new law passes, to ask the Department of Agriculture to make a study of this equipment and the fumigant Ethylene Oxide (ETO). If this material is registered for bee hive fumigation, we could then try to obtain the needed finances for purchase of this equipment if the study proves that it is an effective disease eradication measure. If this is accomplished, would be available to all beekeepers in the state of Missouri at a very nominal cost. He states that from what he has read about the material, ETO, he is of the opinion that it would be very beneficial to the beekeepers of Missouri, eliminating many losses from AFB contaminated equipment and that within a reasonable time, the savings to the beekeepers of this state would more than offset the original cost of the equipment, while leaving it servicable for many years to come. It is however, an explosive compound and would require the services of a professional operator. Mr. Francka, a hobby beekeepers himself, is a member of the Missouri State Beekeepers' Association, will be joining the Central Missouri Beekeepers' Association in the near future, and has promised that association to assist them with programs for the local beekeepers of that area. The beekeepers of the state of Missouri are fortunate to have a state entomologist who has been so helpful to the state association in advising on the formation of the new proposed bee laws, always interjecting a thought about what the law would do to the small or hobby beekeeper, as well as the large commercial beekeepers. He has strived to make the meaning of the new proposed bee law one that would not cause a hardship on any Missouri beekeeper.

Mr. Don Taylor, retiring vice president in charge of programs wished to take this opportunity to thank each of the officers and members of the state association for the assistance given him while he served in that capacity. Don states he will be back later to assist in making the state association one of the best in these United States. We thank Don for all he had done for the association and hope when he finishes school that we will see much more of him.

In addition to giving up the editing of the Midwestern Beekeepers' Association newsletter, I am also giving up the editing of the Missouri State Beekeepers' quarterly newsletter, this being my last issue. I find it a great task and with my health, age and lack of desire to work, feel a better job can be done by a younger person.

I have greatly enjoyed the work I have done for the Missouri beekeepers and will surely miss the many nice cards and letters showing the appreciation for what I have been doing. I have met many good people and hope to continue seeing them at the meetings. I will try to assist Mr. Martin in his task and encourage the continuation of an informative news letter going out to the members of the state association. Many of them are not as fortunate as we are to be able to attend local meetings, therefore all the news they receive is through such newsletters and bee journals.

Mr. James Martin, 6036 Highfield, St. Louis, Missouri will be the new editor, is ambitious and I am sure he would want to continue to give you as much news as he can possibly secure. If you have any incidents that might be of interest to beginners in beekeeping, drop Mr. Martin a note about the incident. (zip code 63109)

It is dues paying time again and we ask you to get your dues paid the secretary of your local association. If you are not a member of a local association, please mail \$3.00 to Mr. William Garesche, 451 N. Geyer Road, Kirkwood, Missouri 63122.

## The President's Corner

Now that the beekeeping season is over we can take a few minutes to sit by the fire in our comfortable old chair and think back about this last year and look ahead and make plans for next year. This past year we had the Bicentennial of our country, crop yield for our farmers was spotty (from very good to poor). We elected new government officials, and the honey crop in Missouri was below average for most of the state. In one sense, it was a good year as we think about the good times we had visiting our bee yards and watching our bees when the nectar flow started. Somehow the thrill never leaves a beekeeper when he sees the frenzied activity of a honeyflow, hears the steady hum of bees on wing, and peeps into the supers and sees the golden honey being stored.

Let's think about the new friends we made in our local and state organizations and, that a new club, the Southwest Beekeepers was formed bringing our state total to ten. This year presented some problems to some of us and as we sit and listen to the fire pop and make its own music, let us be thankful that a fellow beekeeper was there to help. It wasn't so bad after all when we weigh the close ness of friendship to our honey crop.

Time to add another log on the fire, watch the flames dancing, feel the warmth, and lazily think about the coming year. We should be ordering our packages to insure early delivery and we can start putting additional equipment together, if we are planning an increase. We should be going thru our honey super frames one at a time checking their condition, and replacing damaged comb and frames. To some of us these repairs can be fun when we think in anticipation of next year. In addition I hope each of you consider branding or marking your equipment this coming year as a means of proving ownership. We can take time now to read the bee magazines and books we laid aside this summer when we were too busy to read them. Now is the time of the year to help promote beekeeping in your area by volunteering to talk to schools, churches, garden clubs, etc. on the advantages of having bees around. You know you only get out of something as much as you put into it. So give of yourselves and watch it work for you.

We all enjoy our local association meetings and programs, but sometimes some of us can not remember when we last helped with a program or refreshments. Maybe some of us feel that we lack experience or knowledge, but I think that in the coming year we should all try a little harder to help, really help our local association in whatever way we can to make it more productive.

You know when the wind blows and the temperature is low it seems a lot colder than what it really is. That is when it is nice to add a couple of more logs, stir up the fire and snuggle a little more into your easy chair. We all know what study and science have told us about how the bees stay warm and active inside the hive on nights like this, but sometimes we wonder just how they are doing. So let's make a mental note to take time to check

them regularly on warm days and feed them if necessary. Not a frame by frame inspection, but just a lift of the back of the hive or lifting the cover and looking in at the frames or cluster of bees will tell the story. Please make sure they have enough food and they will repay you next summer.

You know, I was just sitting here thinking about our fall '76 meeting. Dr. Erickson's program was as always very informative as he introduced to those attending, new thoughts on "bee behavior". Re-newing old acquaintances and making new ones adds to the enjoyment of attending state meetings.

The biggest thrill I received at the meeting was watching the expressions on Mr. Maher, Mr. Kibbey, Mr. Magers and several other faces when the proposed bee law, after some changes, passed with a unanimous vote. These gentlemen have worked for many years for the good of beekeeping in our state and now they see that one of their dreams has the support of the people that attended the state meeting.

The proposed law has been filed in Jefferson City and is in the hands of Senator Tinnin, who will introduce it for us. The work on this legislation is far from over for us. Now is the time for each of us to take the time to write a letter to our state senator and one to our representative telling them about our proposed legislation and ask them for their support. Everyone should make every effort to attend the hearings in Jefferson City when they come up and voice their opinion. Don't leave it for someone else to do -- we need each and everyone of you. Believe me numbers count. I honestly feel that if everyone writes a letter and everyone that can, attends the hearings we can get our "Bee Law" this year.

I just looked outside and the snow is coming down and everything really is beautiful with its coat of white, but you know for some reason I keep thinking about spring. With that thought in mind, let me remind you to be sure to make plans to attend our spring state meeting in Columbia, Missouri, March 26th at the Missouri University Agriculture building, Room 216. The meeting will also give everyone, not at the fall meeting, a chance to meet Dr. Jones our new university extension entomologist.

Oh well, I guess it is time to do a few things (like shovel snow), but before I leave you may I thank each of you for re-electing me as your president. I hope I can continue to serve all of you and help our state beekeeping organization to become bigger and better. Very seriously, it is my prayer that I can become worthy of your trust.

May God bless each and everyone of you and your families during this Christmas season and may He keep you in his watchful care always.



DO SKUNKS AND O'POSSUMS EAT BEES?

In the American Bee Journal, December issue, there is an article about "SKUNKS, BEES AND HONEY CROPS". It states a family of skunks can wreak havoc on an apiary in just a short time with each skunk eating up to 1/2 lb. of bees in one evening snack. This beekeeper states he had 60 colonies of bees that were bothered with skunks, produced no honey, while another yard 3 miles away produced a bumper crop. Skunks scratch on the hive, get the bees riled, come out and are eaten, with bees getting into the hair of the skunk, it just backs away, picks the bees out of the hair and continue eating, dropping their feces on their path back to their den. The O'possum does the same method, scratching, getting the bees out, then chewing the bees, but they spit out the remains of the bees, then chew more. If you see something around the front of the hive which appears to be feces of an animal, which is about as large as your large finger, examine it, find the legs and wings of the bee in the dried cluster, then you have O'possum damage instead of skunks. Mr. Bill White of Kansas City, north trapped eleven O'possums last year and is again being bothered this year, is getting ready to do some more trapping. If one can get a strip of hardware cloth cut in strips about 8 inches wide and long enough to nail to each side of the hive and loop out in the front of the hive about 6 inches, the animals most likely leave the bees alone, not being able to scratch the front of the hive and catch the bees at the same time.

I HAVE SOME HUNGRY BEES, HOW SHOULD I FEED NOW?

Many beekeepers in this area have hungry bees and are having to feed. If you have some supers of honey that was not extracted, place immediately above the bees so they can readily get it, then later on in the spring if you want the supers cleaned of honey, remove the super and put between the hive body and bottom board. The bees will take the remaining honey up, will not leave it below the brood nest. If you have no honey in the supers, get some sugar and feed in some manner, either mix half sugar and water, feed from an inverted jar through the inner cover or get some dry sugar on the inner cover so the bees can get it. If your colony feels light by lifting the rear of the hive and you find bees right under the inner cover, most likely they need feed. Dry sugar or syrup is much better feed now instead of the hard candy type as the bees can move more into the brood nest for immediate use. The candy feed is better for stimulative feeding in the spring.

I FIND MANY DEAD BEES IN FRONT OF THE HIVE, SHOULD I BE ALARMED?

No. Many bees that are old will perish during the winter and will be carried out in front of the hive. As long as you have a large cluster of bees, plenty of feed, they will survive and come out good in the spring.

CAN I MOVE BEES DURING COLD WEATHER?

Yes. But be careful not to shake the bees down out of the cluster as they cannot recluster, will perish. Also, be careful not to break the combs. It is best to move on a cool morning when you believe the bees will be able to fly that day, then they can again form their cluster. When moving a few feet within range of their hive, do that when it is real cold and bees will relocate when taking their first cleansing flight.

SHOULD BEES BE ENCLOSED TO KEEP FROM FLYING AND DROPPING INTO THE SNOW?

No. Bees that are not free to fly when they want will become excited and die from exhaustion, trying to get out. If they have a slight opening, they will go to it, discover the winds are cold, return to the cluster.

SHOULD BEES BE MOVED TO A SHED FOR WINTER PROTECTION?

No. Bees need to have what sunshine is available during winter so they will warm and get a cleansing flight. If the shed is open to the south and the sun shines on the hive under the shed, that would be O. K.

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