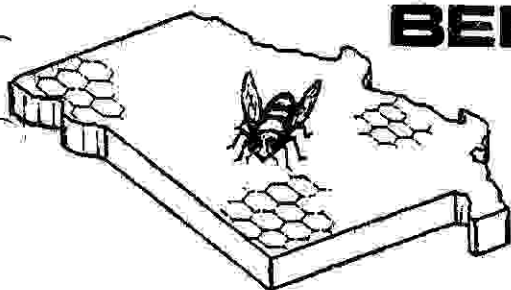


# MISSOURI STATE BEEKEEPERS ASSOCIATION



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4301 Walnut Tree  
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VOLUME # 18

QUARTERLY NEWSLETTER  
JUNE 1980

NUMBER 2

DEAR BEEKEEPING FRIENDS,

Hope this newsletter reaches you and yours in the midst of a strong honey flow. Have we all survived this year's swarming season? Despite anti-swarm measures, four of our nine colonies threw swarms! But we were lucky enough to notice them on their first trip around the bee yard. We captured and successfully hived all four. And since we don't want to increase the number of our colonies at this time, we combined each swarm with the weaker colony from which it came and gave them lots of room. Now we have dreams of overflowing honey tanks! The best laid plans of mice and men . . . .

The 110 members who attended the March State Meeting were treated to the expertise of Dr. Walter Rothenbuhler and Dr. Joseph Moffett and to the interesting hobby of Mr. Charles Wills. We wish to publicly thank these gentlemen for sharing with us their knowledge and time!

The Reverend Clarence Feeney who was scheduled to speak on Missouri Honey Plants was unable to attend due to a last minute church obligation. We hope to invite him to a future meeting.

Mr. Wills gave a very interesting presentation on his display of honey pots and comb honey dishes. He mentioned that this type of collection is growing in popularity and the prices and values are also steadily increasing. Among his collection is a honey container with sealed honey over 30 years old.

Dr. Walter Rothenbuhler from Ohio State University captivated his audience from his opening humorous anecdotes to his presentation of the background and details of ongoing research on "Disappearing Disease". Disappearing Disease, often referred to as Autumn Collapse, is a condition in which all or most of the adult bees are gone within a matter of few weeks. There are no dead bees anywhere in or around the hive. They just seem to disappear. And it is not confined to autumn either.

In the two and a half years of research at Ohio State, some 100,000 to 150,000 pieces of data on their 80 experimental colonies have been gathered. Dr. Rothenbuhler and his fellow researchers are in the midst of analyzing this data. For some background information on DD, refer to the March 1979 American Bee Journal article "Disappearing Disease of Honey Bees: A Survey of the United States" by William T. Wilson and Diana M. Menapace.

With the aid of slides, Dr. Rothenbuhler detailed the set up of the experiment with its 4 Disappearing Disease stock and 3 non-Disappearing Disease stock. Each set of stock contained 10 to 12 colonies. The non-DD stock had never been known to have DD in its history. The 4 DD stock had reported cases of the disease in its past. With only a portion of the data analyzed, some tentative conclusions which Dr. Rothenbuhler and his colleagues have reached are

"DD stock and non-DD stock appear to be alike in most of the ways in which they were tested. So far we have no evidence of DD in certain stock but not in others. We have no evidence of genetic deterioration in some stock and not in others. We think that we have seen individual colonies that showed DD. Exactly what caused these cases we can't say, but we think that pathogens, bee aging, and the nutrition of bees, individually or in combination, are involved to different extents in different cases of DD."

NOTICE: A recent paper by Dr. Rothenbuhler appeared in the April 1980 American Bee Journal entitled "Necessary Links in the Chain of Honey Bee Stock Improvement - Conclusion".

The featured afternoon speaker was Dr. Joseph O. Moffett from Oklahoma State University with his topic "The Reduction of Honeybee Losses From Insecticides". He stressed the damages caused by insecticides and the several types of experiments being done to attempt to diminish the bee kill. PennCap M still ranks as the number one problem.

Some methods by which the beekeeper can reduce his losses are

- 1) by covering colonies with burlap sacks but keeping the sacks wet and cool;
- 2) by locating bee yards away from fields that have a chronic spray problem;
- 3) by locating in an area of mixed flora so the bees aren't so concentrated on the same flowers;
- 4) by providing shade and internal watering;
- 5) by feeding pollen to bees after a loss in order to aid build-up;
- 6) by encouraging night spraying; low toxicity sprays; liquid sprays instead of dust; short-lived materials; ground spraying rather than aerial spraying; and the use of insecticides only when necessary and not on a routine basis;
- 7) by removing the bees from a spray area.

An excellent and thought-provoking article appeared in the February 1980 National Geographic entitled "The Pesticide Dilemma" by Allen

A. Boraiko. National Geographic states that this article "has taken more than a year . . . to produce. . . . Seldom has such a project been as thoroughly researched and checked with industry, government, medical, and academic experts." And it reechoes, but more alarmingly and urgently, the questions and warnings of Rachel Carson's Silent Spring published in 1962.

NOTICE: Recent articles by Dr. Moffett appeared in the American Bee Journal:

January 1980 "A Migratory Beekeeper's Nightmare" by Joseph O. Moffett.

April 1980 "Test Caging Materials for the Confinement of Honey Bee Colonies in the Hot, Dry Climate of the Southwestern United States" by Adair Stoner, Joseph O. Moffett, and Arthur L. Wardecker.

During the course of the day two films were shown "Flowers & Bees: A Springtime Story" from Syracuse University and "Mathematics of the Honeycomb" from the University of Missouri.

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INFORMATION FROM THE MINUTES OF THE SPRING BUSINESS MEETING  
MISSOURI STATE BEEKEEPER'S ASSOCIATION

MARCH 22, 1980

by

Marilyn Smith, Secretary

President Jim Robins opened the meeting with a short talk on his recent trip to Hawaii to attend the meetings of the American Honey Producers convention. He gave us some views that he heard while in Hawaii in respect to the Missouri State Beekeepers' Association. He stated that the MSBA on a national level is one of the most admired and patterned after in the United States. He is often stopped and questioned as to what we are doing now. They seem to be really interested in how we have national speakers they don't seem to have. . . .

A discussion at the executive meeting of 3/21/80 brought forth the motion that we raise the dues for the MSBA. Mr. Truman Hardin gave a financial report and explained the background for the need to increase dues for the first time in 40 years. From dues alone we have been operating in the red the last few years. Only the income from the State Fair Honey Booth has kept us in the black; and only because all the work is done on a voluntary basis. Mr. Robins stated that it was his feeling that a State Organization should be able to operate on dues alone and not try to run on the fact that once a year we have to make it up with the Fair income. The motion was made by Mr. Joe Maher that we raise the dues \$1.00 per year effective January 1, 1981. Mr. Magers seconded the motion. It was voted on and passed. Therefore, beginning January 1, 1981 dues for the Missouri State Beekeepers' Association if paid through a local association will be \$3.00 per year and if paid directly to the state it will be \$4.00 per year.

Mr. Hardin reminded members that a discount on subscription rates to the American Bee Journal and the Gleanings in Bee Culture is available to them through their local associations.. . .

Mr. Truman Hardin explained the proposed by-laws change in regard to the dues money and to whom it is to be sent. In the past the payment of dues caused a bit of confusion since it was first mailed to the Secretary of MSBA who made a list of members paying and then the check was mailed to the Treasurer of MSBA who made a list of who had paid. Then the Treasurer mailed the payment to the bank which was in another town. This check or payment was being mailed 3 or 4 times per deposit. A discussion followed. Mr. Magers moved that the following regulations and by-laws of the Missouri State Beekeepers' Association shall be suspended; Article VI - Duties of Officers, Section 4, line 2: "The secretary shall receive and receipt for all monies due the Association and remit the same to the Treasurer." Thereupon, the Treasurer shall receive all monies due the Association and keep accurate records of same. Mr. Jay Tohtz seconded the motion and after a discussion a vote was taken and was passed unanimously.

(Editor's Follow-up: Make dues checks payable to Missouri State Beekeepers' Association and send directly to Mr. Truman Hardin, Treasurer, 1829 W. Washita, Springfield, Mo. 65807. Also send the complete names and addresses with zip codes to Mr. Hardin for the persons whom the check covers. Mr. Hardin will send copies of these names and addresses to the Secretary and Editor for a membership roster and newsletter roster.)

Mr. Magers made a motion that the President appoint a committee of three members of the Association to review the by-laws of the Association and make suggested changes for consideration at the next regular meeting of the Association. Mr. Joe Maher seconded the motion. After a discussion a vote was taken and it passed unanimously.

(Editor's Follow-up: The members of this committee are Chairman A. W. Magers, Members J. F. Maher and Chester Crain. If you have any suggestions for by-law changes, please send them to Mr. A. W. Magers, 1814 New Jersey, Kansas City, Kansas 66102.)

President Robins brought to our attention the sale of "Adulterated Honey" within the state of Missouri. Missouri has a law against this and Mr. Robins will ask the state to enforce the removal of and prevent the sale of same within the State of Missouri. He will try to do this first as an individual or, if necessary, as the MSBA President. At present, the F.D.A. isn't involved, it is mostly on the state level, Missouri Department of Health, Food, and Drug.

(Editor's Follow-up: Mr. Robins called to say that he has spoken to Mr. Norris of the Mo. Dept. of Health, Food, and Drug. Most of this adulterated honey seems to be coming out of Mississippi. The honey sold by two individuals - Luther and DeWitt - has been embargoed. If you see these names on any jars of honey, please notify the Missouri Department of Health.)



Mr. Chester Crain made the motion to accept advertisement for a fee to be printed on the state newsletter; with a committee consisting of the President, Editor, and Treasurer to form guidelines for fees and space. Mr. Crain indicated that he had been contacted by several bee suppliers in the past willing to pay for a space and he mentioned Mr. Walter T. Kelley. Mr. Robins agreed to contact Mr. Kelley concerning their interest in this matter. Mr. Joe Maher seconded the motion. It was voted on and passed.

(Editor's Follow-up: Mr. Robins has contacted the Walter T. Kelley Company and was told that they already have more business than they can handle. They do not feel the need for further advertizing at this time. Mr. Robins, Mr. Hardin, and I have been discussing the guidelines and fees for advertizing in the newsletter. No decision has as yet been reached.)

The Nominating Committee for the Beekeeper of the Year award nominated Mr. Jim Robins for 1980. With no other nominations coming forth from the floor, Mr. Joe Maher moved the nominations cease and Mr. Magers seconded the motion. With a unanimous vote Mr. Jim Robins will be presented the Beekeeper of the Year plaque during the Fall Meeting in October.

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THANK YOU to Mr. Orville Cox of Cox Honey Farms, Inc., 456 South State, Shelley, Idaho 83274, for donating to us a 40 oz. pail of his creamed honey. It was sampled during our morning coffee break at the State Meeting and found to be quite delicious.

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Letter received from Joseph E. Francka, State Entomologist, on May 19, 1980.

"In the March 1980 Missouri State Beekeepers Association Newsletter, you listed Mr. Max Thiel as an apiary inspector. I am writing to let you know that Mr. Thiel is no longer an apiary inspector and has been replaced by Mr. Jay Tohtz, 113 Woodridge, Kirkwood, Missouri 63122."

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#### QUESTIONS POSED BY NEWCOMERS TO THE STATE ORGANIZATION:

- 1) Is the Missouri State Beekeepers' Assn. in any way connected to the government of the State of Missouri? NO. The association is called State to signify that it is inclusive of all beekeepers in Missouri as opposed to the local associations which cater to a particular portion of Missouri.
- 2) Does the Missouri State Beekeepers' Assn. provide any information concerning its membership to the IRS? Or does it have any connection with the Federal or State tax people? TO BOTH QUESTIONS THE ANSWER IS NO.

MISSOURI STATE BEEKEEPERS' ASSOCIATION  
Financial Report  
March 17, 1980

Balance on hand October 16, 1979

\$1875.29

INCOME

Dues - October 16 through December 31, 1979	\$122.00
- January 1 through March 17, 1980	470.00
Misc.- Books from Fair Account	31.17
Bee Journal subscription (Rob't Johnson)	12.38
Paper to Eastern Missouri Association	5.62
Interest - Bell Savings & Loan	<u>19.20</u>

660.37  
\$2535.66

EXPENDITURES by check

	1st NATIONAL BANK - Columbia	
#112	Truman Hardin	Tel. & Beekeeper award \$35.22
113	Joe Maher	Telephone 1.34
114	Graham Paper Co.	60 reams mimeo paper 146.15
115	Dr. Elbert Jaycox	Speaker expense-Cape 226.06
116	Chester Crain	Secretarial expense 6.31
117	Univ. Center Cape	Coffee & donuts-Fall meet 46.00
118	Reliable Stamp Co.	Deposit stamp 5.67
119	Bell Savings	Savings acct. 1,000.00
120	Mercantile Bank	To close acct. in Columbia and open acct. in Spring- field 408.43
	MERCANTILE BANK - Springfield	
#150	Maynard Curtis	Postage (printing cuts to Carol) 1.54
151	Truman Hardin	Treasurer's supplies and expenses 14.80
152	Carol Boeckmann	Assoc. stationary letter- head & newsletter expense 84.50
153	Dianna Risley	Running newsletter - Dec. 25.00
154	Joe Franka	Honey for Governors' conf. 13.50
155	Chester Crain	Postage - tapes to Carol 1.66
156	Voided	
157	Truman Hardin	Telephone - Oct. & Nov. 34.07
158	Am. Bee Journal	Subscription - shown in income 12.38
159	Marilyn Smith	Secretarial expense 5.02
160	Postmaster	Postal permit for 1980 40.00
161	Louis Smith	Refund - Duplicate dues 2.00
162	Carol Boeckmann	Dec. newsletter expense 15.76
163	Eastern Assoc.	Duplicate dues refund 2.00
164	Eastern Assoc.	Mailing fund transfer 49.89
165	Henry Boeckmann	Telephone for speakers 43.74
166	Dianna Risley	Running newsletter - March 25.00
167	Dadant & Sons	Postage for handouts <u>3.72</u>

BALANCE AS OF MARCH 17, 1980

841.44  
\$1694.22

Since October of last year, the State Association has received individual dues from 49 members @ \$3.00 each or \$147.00. From local associations we received 361 memberships @ \$2.00 each or \$722.00. Total of \$869.00 from 410 members for 1980 so far.

The Spring Meeting in Columbia in March had the following expenditures:

Dr. Moffett - travel ..	\$110.00
meals	19.19
motel	29.86
Dr. Jones - coffee & donuts	28.33
Film Rental	12.25
Dr. Rothenbuhler - meals	6.25
motel	29.86
parking	.50
Phone calls	6.90
Xerox copies and postage concerning Dr. Crain for Fall Meeting	7.30
	<u>\$250.44</u>

Dr. Rothenbuhler received an honorarium from the Warth Fund at the University of Missouri.

Truman C. Hardin  
Treasurer

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MISSOURI STATE FAIR --- Sedalia, Missouri

AUGUST 15 through AUGUST 24

Coordinators of the Beekeeping and Honey Exhibits:

Mr. Charles Wills	Mr. Truman Hardin	Mr. Mike Roling
630 S. Newton	1829 W. Washita	2012 S. Franklin
Springfield, Mo. 65806	Springfield, Mo. 65807	Springfield, Mo.
1-417-866-6002	1-417-866-2602	65807

The \$150 deposit for the honey booth has been made and the second \$150 payment is due July 2. Mr. Wills, Mr. Hardin, and Mr. Roling have been working out dates for the groups and individuals who have volunteered to help man the booths. You will be contacted in the near future. If anyone would like to volunteer his or her services, please call or write to one of the gentlemen listed above.

For a Fair book with all the categories including requirements, deadlines, and prize money, please write to MISSOURI STATE FAIR  
Box 111  
Sedalia, Missouri 65301

AND DON'T FORGET THE HONEY BAKING CATEGORIES!!!

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# MISSOURI STATE BEEKEEPERS' MEMBERSHIP

This June newsletter is being sent to 656 members. Of this total 406 are paid 1980 members with approximately 65 or 16% being new members since 1980. We are happy to report the existence of 4 new local associations.

- 1) The Laclede County Association  
 President Bill Wagner, Rt. 1, Stoutland, Mo. 65567  
 Vice President Gerry Mouser, Box 563, Lebanon, Mo. 65536  
 Sec.-Treas. Susan Carr, Brice Rt., Lebanon, Mo. 65536

Their membership totals approximately 18.

- 2) An association for Madison and adjoining counties.  
 President William Osborne (783-2778)  
 Sec.-Treas. Darlene Lerche, Rt. 3, Box 564, Fredericktown, Mo. 63645  
 Reporter Jean Yemm, Marquand, Mo. 63655

News Release sent to the Democrat News in Fredericktown and the Mountain Echo in Ironton

"Beekeepers from Iron and Madison Counties met on March 23, 1980, at the home of Bill and Velma Osborne for the purpose of forming an association. The association - at present unnamed - would meet 3 or 4 times a year to exchange information and experiences concerning raising bees and producing honey. . . Most of the members participated in the Beekeeping Short Course sponsored by the U. of Mo. Extension Service and held last September in Fredericktown. . . . The next meeting is planned for Sunday, July 13, 1980, at 2:30 p.m. in the Extension Office, Courthouse in Fredericktown. All area beekeepers are invited to attend.

- 3) An association is being formed in Howell county. Contact Sue Hubbell, Rt. 3, Box 319, Mountain View, Mo. 65548
- 4) An association is being formed in Dallas county around the area of Buffalo. For further information, contact Truman Hardin, 1829 W. Washita, Springfield, Mo. 65807.

WELCOME TO THE NEW ASSOCIATIONS AND THE NEW MEMBERS!!!

The following are the names of established associations and the officers of whom we have been notified.

- 5) Two Rivers Association  
 President W. C. Downing, R. 1, Box 167, Elsberry, Mo. 63343  
 Vice-Pres. D. I. Scott, Rt. 2, Box 144, O'Fallon, Mo. 63366  
 Sec.-Treas. Tracy Downing (same as above) (314) 327-6399



- 6) Boone County Regional Association  
 Pres. Norman Holman, 1202 Porter Street, Columbia, Mo. 65201  
 Vice-Pres. Wayne Atkins, 332 Proctor Place, Columbia, Mo. 65201  
 Sec. Susie Giles, Rt. 1, Box 145, Hallsville, Mo. 65255
- 7) Jefferson County Association  
 Pres. Bill Striebel, R. 5, 7405 October Hill, House Springs, Mo. 63051  
 Vice-Pres. William Weiss, P.O. Box 26, Morse Mill, Mo. 63066  
 Sec.-Treas. Mark Biscan, R. 2, Box 84, Cedar Hill, Mo. 63016
- 8) North Missouri Association  
 Sec.-Treas. Amos McHenry, R.R. 4, Unionville, Mo. 63565
- 9) Central Missouri Association  
 Vice-Pres. C. Craig Oliver, 907 W. Avenue, Fulton, Mo. 65251  
 Sec.-Treas. H. Doug Hartman, Rt. 1, Box 149, Holts Summit, Mo. 65043
- 10) Ozark Association  
 Pres. Clarence Feeney, Rt. 1, Box 1036, Springfield, Mo. 65803  
 Vice-Pres. Mike Roling, 2012 S. Franklin, Springfield, Mo. 65807  
 Sec.-Treas. Truman Hardin, 1829 W. Washita, Springfield, Mo. 65807
- 11) Eastern Missouri Association  
 Pres. Gene Kaufmann, 3743 Druso Drive, St. Louis, Mo. 63125  
 Vice-Pres. Henry Boeckmann, 619 Mendelsohn Drive, Kirkwood, Mo.  
 Sec. Carol Frentzel, 8727 Nyflot, Hazelwood, Mo. 63042  
 Treas. Larry Hensley, 13520 Old Jamestown Rd., Florissant, Mo. 63033  
 Corr. Sec. Jack Cantrell, 521 Meramec Station Road, Walley Park, Mo. 63088  
 Board Members  
 Bill Garesche, 451 N. Geyer Road, Kirkwood, Mo. 63122  
 Henry Vincent, 246 Rouen Drive, St. Louis, Mo. 63129  
 Walter Wright, 10929 Mugan Drive, St. Louis, Mo. 63123
- 12) Midwestern Association  
 Pres. Walter Bigelow, 110 E. Porta Cima Pas, Kansas City, Mo. 64114  
 1st Vice-Pres. Tom Baker, 303 N.E. 109 Street, Kansas City, Mo. 64155  
 2nd Vice-Pres. Paul Clegg, 8500 West Ridge, Raytown, Mo. 64138  
 3rd Vice-Pres. & Editor Harry Knowles, 10504 E. 59th, Raytown, Mo. 64133  
 Sec. Dolores Knowles (same as above)  
 Treas. Charles Perrin, R. 1, Pleasant Hill, Mo. 64080  
 Auditor Chester Crain, 1216 W. 38th, Kansas City, Mo. 64111  
 Librarian Walter Starcke, 5400 Bennington, Kansas City, Mo. 64129  
 Board Members  
 A. W. Magers, 1814 New Jersey, Kansas City, Ks. 66102  
 J. F. Maher, 9410 Eastern, Kansas City, Mo. 64138  
 John Fornelli, 13000 E. 38th, Independence, Mo. 64055

As stated previously, this newsletter is being sent to 656 members. Of this total 406 are members in good standing, 23 are complimentary copies, and the remaining 228 newsletters are being sent to 1979 members who have not as yet renewed for 1980. We urge these individuals to please remit their dues quickly. We cannot continue to carry you on the roster gratius. The March newsletter of 14 pages cost 1 cent per page or 14 cents per newsletter. This is not much but when you send the newsletter to 228 unpaid individuals, you spend \$31.92 of other members dues. Since this is the second newsletter sent to these individuals, the amount spent will be \$63.84. Please pay your dues immediately.

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Sorry that I got this out of order!!

13) Barry County Association

Pres. Gary Fields, 1st National Bank, Cassville, Mo. 65625  
Vice-Pres. Charles L Marrs, Rt. 2, Cassville, Mo. 65625  
Sec.-Treas. Judy Schlichtman, Rt. 3, Cassville, Mo. 65625

14) Mid-Missouri Association

Sec.-Treas. James Bailey, 500 Elm, Rolla, Mo. 65401

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The following section on Beekeeping Questions and Answers has been taken from Richard Taylor's The How-To-Do-It Book of beekeeping published by Linden Books, Interlaken, N.Y. 14847. Or you may purchase the book through the A. I. Root Co. of Iowa, 1028 Third Street, Council Bluffs, Iowa 51501 for \$5.95 plus 81¢ postage.

This book ranks among the very best in practical advise on how to handle the daily problems, manuevers, and technicalities of beekeeping. It contains eight major sections with 151 how-to subsections. It varies from how to . . . select the best strain of bee to find eggs in a brood comb to unite two colonies, to preserve the bee space to make a swarm catcher to shook swarm a colony to raise queens for yourself on a small scale to deal with cappings to mail honey to mold wax for show to dip candles to trap "wild" bees into a hive to keep records for income tax to figure rental fees, etc., etc.

Dr. Taylor's last subsection - How to Become Happy - summarizes his philosophy behind beekeeping.

" . . . for someone possessed of the right temperament, one whose spirit is attuned to nature, apiculture offers a way of life that is unique and totally fulfilling. It challenges both body and mind, rewarding the earthen element in us with the loveliest and most delectable of foods and rewarding the spirit with the sense of competence, skill, of challenge met and purpose achieved. Perhaps those philosophers and mystics are right who have described happiness as the absorption in something other than oneself."

## BEEKEEPING QUESTIONS AND ANSWERS

(Taken from The How-To-Do-It Book of Beekeeping by Richard Tayler)

1) How soon does honey tend to crystallize?

"Some, such as the heather honeys from Scotland, are almost of the consistency of jelly and cannot be spun from the combs. . . . Honey from trees, such as basswood, black locust and the many others, are slow to granulate, and one tree honey, tupelo, can sometimes be kept indefinitely without forming any crystals at all. The honey from other flowers show much variation in this respect, goldenrod and aster being notoriously quick to granulate, sometimes becoming quite solidified in less than two weeks."

2) How can I reliquefy granulated honey?

"The principles underlying the heating of honey are these. First, contrary to what one might suppose, dark honeys are generally more subject to deterioration by heating than light honeys. Clover honey can, if it is done properly, be heated to as much as 160 degrees F without damage. Buckwheat honey, on the other hand, which is very dark, should never be heated at all under any circumstances. Buckwheat honey should therefore not be packed in five-gallon cans, unless one is willing to remove the entire can top with a can opener after the honey has granulated.

Second, heat is never applied directly to a tank or other container of honey. It is instead applied to a water bath of some sort, so that the honey is heated by hot water, not by a flame. This principle must never be violated.

Third, honey should be heated as quickly as possible, then cooled as quickly as possible. The detrimental effect of heat on honey is a function of two things - the amount of heat, and its duration. Thus honey can be held at a temperature of 130 degrees F for several hours without harm, but not long at 160 degrees F.

Fourth, when granulated honey is heated to restore it to liquid, it is essential that every last crystal be dissolved. If residual crystals remain the honey will go right back to granular form, fairly quickly, and it will be coarse and unappealing."

3) What is one of the commonest mistakes in packing jars with honey?

". . . filling jars too full. A slight expansion of the contents then causes a minute seepage and the jar becomes a sticky mess. The jar should be filled to about a quarter of an inch from the top, . . . so that an air space is left at the top, but not one that is visible when the cap is on and the jar standing upright."

4) A tin for labelling jars.

"The easiest and fastest way to label jars and pails is by applying the labels to the paste, rather than applying paste to the labels. Spread paste on a wide board with a paint brush, lay the labels on it in neat rows, flatten them with a newspaper, then pick them off the board and onto the jars. After the first use the board will need to be wet thoroughly for subsequent uses, but the old paste need not be rinsed off."

5) How do I choose a label?

"The best way for a man to make the final selection of a honey label is to solicit the help of one or two women of good taste. What a male beekeeper likes is one thing, what appeals to a housewife is likely to be quite different. Beekeepers, for example, like labels that depict bees, but housewives seldom do. Again, men like garish colors, but women are less likely to. Red labels should be avoided. Softer greens and yellows are more tasteful.

There are many suppliers of labels, among them the I.T. Publishing Corp., Interlaken, N.Y.; A.I. Root Co., Medina, Ohio; Dadant and Sons, Hamilton, Illinois; and the Walter T. Kelley Co., Clarkson, Kentucky. Each will supply abundant samples on request.

Perhaps the best single criterion for choice is simplicity. A label need not depict a bee, a pancake, a hive, or anything, so long as the word "Honey" is very clear. . . ."

6) How do I prepare honey for show?

"Ideally, honey should be judged chiefly by the criterion of flavor but this is in fact seldom the main judging point, and often does not enter in at all, probably because it cannot be assessed objectively. Color, likewise, though often used as a commercial standard of quality, is seldom used as a criterion for honey shows, other than to establish the classification of type. What does count is clarity, or freedom from anything extraneous, as well as freedom from crystallization, together with thickness, that is, absence of excess moisture.

The way, therefore, to win blue ribbons and other premiums and prizes is, first, to enter only honey that is at least of normal thickness. You can determine that sufficiently by inverting a jar and watching how slowly the bubble rises. Second, wash the jars and dry them with warm air (not a towel) . . . And finally (this is the main secret) fill the sample jars "from the middle of the barrel," that is, do not use the first honey to be drawn from the settling tank, nor the last, but that in the middle. This is where the honey is least likely to have particles of wax, pollen, or any other particle that will show up under the polarized light, . . . ."



If you can locate the 1980 March-April edition of the Gardener published

LET IT BEE KNOWN . . .

If you can locate the 1980 March-April edition of the Gardener published by the Men's Garden Clubs of America, Inc., you can treat yourself to some splendid photography and an excellent four-page article on beekeeping. The front cover is a color photograph of a honeybee collecting pollen and nectar on a dandelion. This close-up was sent by Charles S. Hofmann, apiarist from Janesville, MN. In an acknowledgement at the conclusion of the article, the editor thanked Glen Stanley, Iowa State Apiarist, and Mr. Hofmann for the many tid-bits of information which they provided about bees.

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Article taken from the February 1980 Farm Journal sent in by Jean Yemm.

DO SOYBEANS NEED BEES?

"If you grow soybeans, you probably don't take bees too seriously. But a USDA research team has found yield gains when beans come in contact with the little honey-makers.

Yield increases of 6% to 17% have been noted in soybeans exposed to bees, compared with fields blocked off from bees.

"The soybean has been considered self-pollinating and self-fertile, and the general theory was that the bee didn't even visit the soybean," observes E. H. Erickson, an entomologist heading the project.

"We've rather clearly shown otherwise, though. They do visit, collect nectar and pollinate."

Erickson has made both open-field and field-cage tests, using different soybean varieties in fields in Wisconsin, Arkansas, and Missouri.

Erickson recorded a 15% average increase in field-cage tests he conducted in Arkansas and Missouri. Varieties were Forrest, Lee 68 and Pickett 71.

In similar Wisconsin trials, Erickson obtained 15% yield increases in caged plots with Corsey and Hark varieties. But Chippewa 64 showed no increase because a bee apparently cannot penetrate its flower, which never fully opens.

E. R. Jaycox, University of Illinois researcher, conducts field-cage tests to gather data on bee behavior in soybeans. Jaycox, whose work is funded by Illinois soybean growers, believes that bees will be the best cross-pollinator for seed production when hybrid soybeans are developed.

"Plant breeders are going to have to be careful when developing hybrids," asserts Jaycox. "They have to retain, or even improve, plant characteristics that draw bees to the soybean flower."

Erickson and Jaycox still face a swarm of questions concerning bee activity in soybeans.



Weather, soil type, the plant's nectar-reducing capacity, flower size and the flower's color are factors; different bee varieties also appear to have varying preferences for soybeans.

— Owen Taylor

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Article sent in by Mr. William Garesche from a local newspaper.

### THE DELICATE TASTE OF HONEY

by Joan Nathan

Until the end of the Middle Ages, honey was the sweetener par excellen. Today, with a return to natural foods, this pure sugar is once again gainin popularity as many people cut back on their use of refined sug

Although honey was not widely used during the last several centuries it has entered into everyday speaking and cooking language. A common name for a loved one is "honey". To those afflicted with a slight sore throat, honey is a soothing addition to hot tea. To Egyptians, a drop of honey a day will prolong life. Mead or honey ale was the Norsemen's favorite drink. To the Mormons of Utah (the beehive state) honey is the product of that industrious insect to which they compare themselves. And to Jews throughout the world, honey added to many foods at Rosh Hashonah augurs a "good and sweet new year" ahead.

Honey has been known in the Near East since prehistoric times. It is mentioned in Deuteronomy as one of the seven original foods along with wheat and barley, grapes, figs, pomegranates and olives.

Honey as used in the Bible referred to honey and jam extracted from honeycombs, dates, grapes, figs, and raisins. The only bees found in biblical Israel were a ferocious Syrian variety. Extracting honey from their honeycombs was never an easy task. The bees had to be smoked from their hives.

During the time of their empire, the Romans introduced the more docile Italian bees to the Middle East. Gradually the image of the bee changed to that of a gentler, tamer insect and honey became a more commonly used food, although both it and the comb were considered precious. They were eaten alone, added to drinks, used in cooking and valued for medicinal properties. . . . .

If a few basic rules are followed, most standard recipes calling for sugar can be altered successfully. The use of one cup of honey rather than sugar reduces the liquid by  $\frac{1}{4}$  cup. To add more body and weight to the baked item, one extra teaspoon of baking soda should be added per cup of honey. Baking temperatures in general should be 25 degrees lower than for normal baking because honey burns more rapidly than sugar. Since honey generally changes the flavor and texture slightly, it is a good idea to experiment, especially when baking. . . . .

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Article written and sent by Jean Yemm.

"Few beekeepers also produce maple syrup, but we are blessed with a small "sugar bush" along our creek that inspired us to try tapping the trees. On the few warm sunny days during February and March when the bees could fly, we noticed that they too appreciated the sweetness of the sap of the sugar maple tree. Around each tapping spout, where some of the sap oozed out, we observed several of our honeybees, greedily drinkin-. Since it takes over 40 gallons of this thin sap to boil down to one gallon of maple syrup, the bees must be quite perceptive of such a small concentration of sweetness. Of course, whatever they gathered would go to feed their brood, but can you image what maple-flavored honey would taste like?"

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Article taken from the January 15, 1980 edition of The Wall Street Journal sent in by Truman Hardin.

### BRAZIL IS ABUZZ IN HONEYED SOUND OF REFORMED BEES

by Everett G. Martin

Florianopolis, Brazil - It has been some time now since you were last filled with terror on the subject of bees. Killer bees. . . . Well, because of the birds and the bees we can now tell you to relax. Over the years these nasty bees have been busy mating with much nicer, more docile Brazilian bees. The result is one honey of a bee - or at least one that doesn't buzz around looking for people to attack. . . . There even a happy ending to this story, which I'll tell you about right at the beginning: Killer - or reformed killer bees - are prodigious workers and at least a fourth more productive than other bees. So the Brazilian honey industry, which once had been reduced to a trickle by the killer bees' nasty habits, is now in full flower. . . . The expert on the subject is Helmuth Wiese, President of the Brazilian Beekeeping Confederation, who is in charge of a government-sponsored effort to learn how to live with angry bees. . . . They developed heavy protective clothing with strong wire screening to protect the head. "Notice it's all white, even the boots", says Mr. Wiese. "The bees ignore white, but dark colors. . . ." He makes a grimace.

The investigators also developed a high-capacity smoker that looks like a large watering can with leather bellows. Hot charcoal is dropped into the water and thick clouds of smoke are pumped over the bees. "The first moment is critical. You have to surprise them," says Mr. Wiese. For that reason, the hives have to be kept far apart so that the bees next door won't catch on to what's happening. "You have to work quickly, and if the smoker fails, you have to run. It gives them time to organize and identify the enemy." He can't explain specifically why he has to run with all that impenetrable white clothing to protect him. "It's too uncomfortable to stay," he says.

It's going to be a while before the bees reach the U.S., but when they do, says Mr. Wiese, "please tell American beekeepers that they have nothing to worry about."

On Monday, March 3, 1980, the TV program "That's Incredible" showed Dr. Norman Gary of California with a young lady being covered with honey bees to form a "bee suit". The audience was amazed and somewhat concerned about the lady. But she didn't receive a sting from the approximately 8 pounds of bees on her. This segment was shown again the first part of May in the TV show "The Best of That's Incredible".

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The Honey Market News (a monthly report), US Department of Agriculture is available from Agricultural Marketing Service, 2503 South Ag. Building, Washington, DC 20250. This report is being paid for by your taxes so why not receive it.

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Color Code for Marking Queens (Taken from Beekeeping Questions and Answers)

Year End in 1 or 6	White or Gray	4 or 9	Green
2 or 7	Yellow	5 or 0	Blue
3 or 8	Red		

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MAY YOU HAVE A HONEY OF A SUMMER!!!

Carol Boeckmann, Editor

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