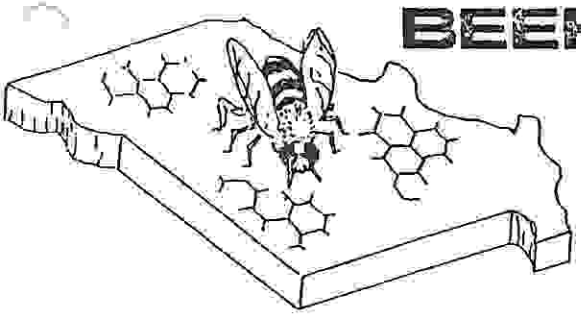

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VOLUME 28 QUARTERLY NEWSLETTER NUMBER 1
SPRING 1990

Dear Beekeepers:

I urge all of you to attend the spring meeting. Now, more than ever, we need your thoughts and ideas. For the second time, the spring meeting will not be held on the college campus. Other major changes are in the air. We need help with the state fair. Much of the responsibility was dumped on Jim Hausum. We must not take advantage of his "Nice-Guy" appearance. Jim's job is to coordinate the manpower and handle the funds. In the past,the work was divided up between the local organizations. Booth space rent keeps going higher every year.

Be prepared to have your picture taken. Twenty years ago was the last time a picture was taken of the organization. Please come and see if you can identify anyone of that time. Many of the names and faces have changed.

We'll catch ya later.

Your Beekeeping friend, Mike

As you receive this in the mail, the Spring Meeting in Columbia will have been concluded. I hope all of you attended the meeting and had a good time visiting with old friends and making new ones. Now it is time to think about getting your bees ready for the honey flow, so that you have something to enter in the honey contest at the Missouri State Fair.in August. We need you also thinking about donating your time to working at the honey booth at the fair.. Last year we had to spend money to hire a person to help work in the booth because we did not have enough volunteers. We always have enough workers on the last day of the fair; since many of us have to be there anyway. We desperately need help during the week. I know we have a few retired members who are beekeepers, and we would love to have you helping. Please call Jim Hausam at 816-668-3456, if you can help. This number is a new number, so please make a note of it.

Thanks to Joe Solt who served as our President for the past two years. He did a fine job representing beekeepers from Missouri.

I'm sorry to report that Louise Johnson has died. She was secretary for the Boone Regional Beekeepers Assn., and won many blue ribbons for her honey recipes in the honey baking contest at the State Fair. She will be missed.

FROM THE PAST PRESIDENT'S CORNER

I would like to take this opportunity to thank the members of the Association for allowing me to serve as your president for the last two years.

In my term as your president I was honored to officiate at three of our semi-annual State meetings. I found these to be rewarding experiences. I was able to get to know many of you much better than I had before and I feel that you are all my friends.

I was pleased to be present during the State Fair in both my term as president and vice-president. During the Fairs, I met the Governor, I was interviewed by several radio and television stations and was allowed to escort the Honey Princess during her visits to the Fair. In doing these things, I feel that I helped to promote our industry in this state.

I was able to attend the Governor's Conference on Agriculture as a representative of our Association. This was an experience that I would recommend to all of our members. I was amazed at the varied industries that our state supports.

I was able to attend the signing of the Beekeeping Proclamation which took place in Jefferson City as a representative of our Association. This was a real honor for me and something that I was proud to do.

I would like to thank the officers who served with me for supporting and helping me during my term of office. I could not have made it without your assistance.

Last, but not least, I would like to thank our Editor, Sharon Gibbons, for allowing me the space to publish this letter and for the excellent job that she has done during the past three years.

Sincerely,

J F Solt 2/27/90

Joseph F. Solt - President (retired)

LETTER FROM THE PRESIDENT

Many of you have suffered a few losses. It could be from disease, failing queens, starvation, pesticides, etc. Commercial operators lose 15 to 20% of their colonies due to these perils. Bees have a mortality rate just like any other living thing.

Bees reproduce by a process known as swarming. Proper beekeeping techniques do not allow this to happen. Not feeding your bees does not control this problem. Rather it causes another one. Bees swarm when a hive gets too strong too early too quick.

There are many methods that can be used to control swarming. Nucs, of course, are the most practical method. To make a Nuc requires removing the extra strength from the hive. The strength of the hive is not determined by how many bees are on the porch!! Strength is measured by how many frames of brood the hive contains. A Nuc can have from one to four frames of brood. In our area a three frame Nuc is the most practical, if you are considering honey production.Nucs made on the 3rd or 4th week of March usually have the best acceptance rates. The old hive is left with the old queen and four frames of brood.

Getting your Nucs to accept your purchased queens is the biggest challenge faced by any beekeeper. There are many ways to increase your success rate. Always use the hives that are morally sound. A hive that is found queenless or has laying workers will never accept a queen. Feed your Nucs immediately after seperation from the old hive. This keeps them in a positive state of mind. Use sealed brood. It reduces the chance of them setting cells.

The weather in the southern states has the greatest effect on the quality of the queen.Cold or windy conditions won't allow the queen to fly on enough mating trips. This is why a young queen will become a drone layer halfway through the production season.

Mites and African Bees have many of you running scared of buying queens. It is possible to let your Nucs raise their own queens. Remember thoough, that production will be greatly reduced. Be sure to include a frame of eggs to allow cells to be drawn. It will also be necessary to do this technique a few weeks later. Toward the end of apple blossom time is the best because the drone population is at its peak. Acceptance rates are completely unpredictable. I've seen from 10% to 100% success rates. Don't give up too soon though. It sometimes takes up to 3 weeks to determine if they are queen-right. The blow-outs or rejects can be shaken out in front of the queen-right Nucs.

I urge all of you to try new things. Catching swarms as a method of expanding or caring for your investment is not a proper beekeeping method. It is very rewarding to know that you can manipulate mother nature to your advantage.

Signed Mike Vanarsdall

LETTER FROM THE EDITOR:

This winter certainly has gone by quickly. So has the time since the last newsletter. I have gotten several articles from beekeepers this past month. If anyone wants to reprint them, please give them credit. Roger Creighton will be a regular columnist in this newsletter, and has volunteered to help me with the formatting of this publication. Included in this issue are two of his articles. I would like each local association to send him a report each quarter about what is going on in their associations. If you put out a newsletter, please send him a copy. Then he can put it into the proper format and we all can keep in touch with what is going on in different parts of Missouri. His address is: Rt. 1, Box 167; Rolla, Mo. 65401. Thanks Roger for volunteering to help.

Also included are articles from Craig Oliver, and Jim Stokes. I think it is wonderful that these people are interested enough to take the time to send these to me.

I also need a current list of officers of all local associations by May 1, 1990. We publish a list of officers to be used as handouts for people interested in beekeeping. And while I'm asking---I would like a history of the following local associations to be published this year in the Buzzin' Missouri column.
SEMO HONEY PRODUCERS ASSN.
TWO RIVERS BEEKEEPERS ASSN.
BOONE REGIONAL BEEKEEPERS ASSN.

FARMING CHOICES CONFERENCES were held recently, and beekeeping exhibits were a part of two of them. The conference in Springfield, Mo. was held Feb. 24th and 25th. Beekeepers Charles Wills, Truman Hardin, Norman Collison, Walter Atkinson, and Mary Jane Kelly spent time educating the public about bees and honey. The conference in Columbia was part of the Missouri Farm Festival which had about 5000 people in attendence on March 2-4th. Beekeepers who helped were Flernoy Jones, Wayne Atkins, Jim Thaxter, Barbara Schuette, Wayne Thomas, and Sharon Gibbons. We were able to bring an observation hive which, to the childrens' delight, had a small piece of newspaper in it. The bees tore the paper into many pieces and ran frantically around the hive trying to dispose of the paper.

"An Evening with AgriMissouri" was held Wednesday, March 7th, in Jefferson City, Missouri. A buffet of foods and beverages representative of Missouri's products was served for approximately 600 people, including members of theState legislature and their office staff. MSBA participated by serving a vegetable salad with honey dressing, and also a honey sauce with rabbit nuggets. Look for the recipes elsewhere in this newsletter. Thanks to Jim Thaxter and John Hartmann who helped me serve. The cost of the salad was greatly reduced by a donation of ingredients from beekeeper Bob Fink. A special thanks to a fine team of vegetable "choppers", namely Norman and Shirley Grosche, and Norma Nolting. The Department of Agriculture did a good job of decorating the room with red and white balloons, flowers, etc. .We tasted everything from chevron sausage, to herb salsa,to honey sauce, to blueberries over ice cream.

VEGETABLE SALAD WITH HONEY DRESSING

1 head broccoli
1 lb. carrots
1/2 cup lemon jc. or apple cider vinegar
1/8 tsp. tarragon
salt & pepper to taste
1/2 large head cauliflower
1/2 cup mayonnaise
1/3 cup honey
1/4 tsp prepared mustard
1 clove garlic, minced

Cut vegetables into bite size pieces. Mix remaining ingredients in blender or jar. Blend or shake well. Pour over the prepared vegetables. Marinade for 24 hours in refrigerator. Drain off excess marinade and reserve. Serve as salad.

RABBIT NUGGETS WITH HONEY SAUCE

1 whole rabbit cut into bite sized pieces
1 cup HONEY
4 tsp. Sherry wine
3 Tbsp. Dijon Mustard
3 Tbsp. Soy Sauce
1 tsp. chopped ginger root

Deep-fry pieces of rabbit. They can be breaded if desired. Mix together remaining ingred. Simmer 10 minutes. Serve sauce as a dip for the rabbit or pour over the rabbit.

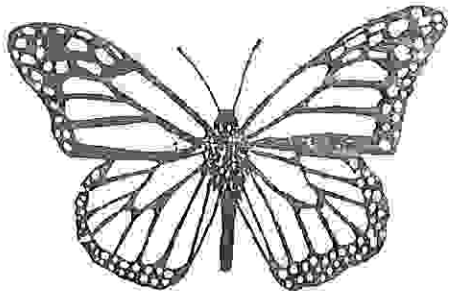
RECIPES ARE COMPLIMENTS OF THE MISSOURI STATE BEEKEEPERS AND THE COMMERCIAL RABBIT GROWERS OF MISSOURI.

This Article was published in Missouri Wildlife Check comments about "HoneyBees"! Then Let us start pushing our favorite insect.

February/March 1990

The Monarch — America's Favorite Bug

By Mark Mellusi



Knowledgeable folks may call it *Danaeus plexippus* (Linnaeus) and say it feeds on "Aesclepias," but when they see one in their backyards, the first words that still come to mind are "monarch butterfly."

The orange-and-black-winged monarch, most years, is a dependable summer sight throughout much of the United States, but its prosaicness obscures the uniqueness that the Latin name suggests. To prevent the monarch from going the way of the carrier pigeon, a movement has begun to secure this butterfly status as our "national insect."

Doug Sutherland, chairman of the Entomological Society of America's National Insect Subcommittee, cofounded the ESA's effort to coordinate support for the monarch's candidacy. According to Sutherland, the monarch is "a unique insect that represents our national heritage."

Unlike the honeybee, one of the competitors for the spot as America's "favorite bug," the monarch is a native species. Records of the monarch can be traced back to early Indian pictographs, whereas honeybees (such as the African killer and the common European varieties) are relative newcomers to the continent.

Promotions of the monarch and related activities are currently progressing in at least 18 states and the District of Columbia, says Sutherland. Methods range from education in the form of museum exhibits and youth programs to politicking. U.S. Representative Leon Panetta, whose district includes Pacific Grove, Calif. (a.k.a. Butterfly Town, USA), is an expected sponsor of forthcoming legislation necessary to install the monarch as the national insect.

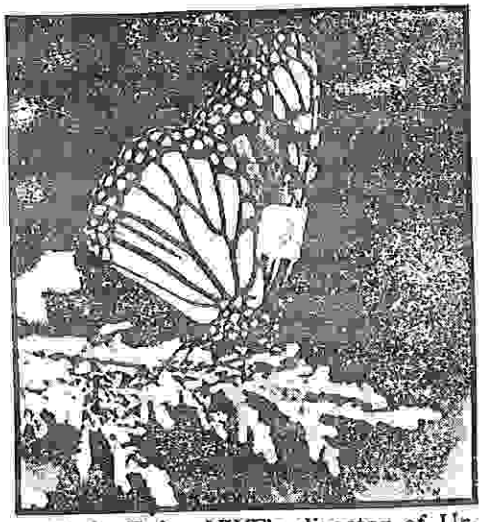
The case for the monarch is strong. About 25 states have official insects; Illinois and Alabama have already selected the monarch, and Vermont has named it the state butterfly. ESA has enlisted the support of many fans of the species' black-and-yellow-striped caterpillars (which feed only on milkweed), its sea green, gold-speckled crysalis and the brilliantly colored adult. Among the ranks supporting monarch designation are the Kentucky Academy of Sciences, the Florida Federation of Garden Clubs, the National Audubon Society and the National Wildlife Federation.

In addition, the Xerces Society, the international invertebrate conservation organization, has an ongoing "Monarch Project" which is dedicated to fostering scientific research and educating California landowners who are visited by droves of migrating monarchs each winter.

Besides popular support, the case for the monarch is based upon sound conservation principles. In general, almost all monarchs "overwinter" or hibernate, in only two places on the continent, Pacific Grove, Calif., and several tiny valleys high in the mountains west of Mexico City. Most of the monarchs west of the Rockies choose the California spot, while those in the East fly from as far north as Canada to reach the Mexican hideaway.

The fussiness about wintering habitat magnifies the effects of human encroachment. Thanks largely to the efforts of a Mexican association, MONARCA, A.C., the Mexican sites have been protected from logging. Although Pacific Grove passed an ordinance in 1938 declaring it unlawful to "molest or interfere with the peaceful occupancy of the monarch," development of many overwintering areas nearby proceed and destruction of milkweed — the monarch caterpillar's sole food source — threatens the population.

Monarchs are among the very few insects (there are millions of species) that take part in mass migrations each autumn to few locations. A very small number of Eastern monarchs overwinter on the gulf coast of Florida, south of Tallahassee, but most go the extra mile (or roughly 1,000 extra miles) to Mexico. Similarly, towns near Pacific Grove host hibernating monarchs, but



Craig Tufts, NWF's director of Urban Wildlife Programs and an ardent monarch supporter, points out that the destruction of either roost will probably mean extinction for those monarchs. Loss of the monarch would drastically reduce tourism in both overwintering areas.

Tufts also points out that the monarch, which pollinates milkweed and many other flowering plants, is one of the few things regularly crossing the U.S.-Mexican and U.S. Canadian borders that is welcome to all three governments for ecological reasons.

Designation as the national insect will require hearings before the House Post Office and Civil Service Committee. Such designation will "create a positive attitude and sensitize people" to the needs and aesthetic value of this American insect, sums up Sutherland.

Mark Mellusi is a former intern with NWF's Affiliate and Regional Programs

EAS 1990

Salisbury State University • Salisbury, Maryland
EAS Short Course in Beekeeping — July 30 - August 1, 1990
1990 Annual EAS Conference — August 1 - 3, 1990

LET'S GO TO THE BEACH!

Have you ever stood on a sandy beach with the Atlantic Ocean waves tickling your toes? NO? Here's your chance. Just come to EAS in 1990. Mark your calendar with the dates of the EAS Short Course in Beekeeping and Conference — July 30 through August 3, 1990, at Salisbury State University, Salisbury, Maryland.

Salisbury is a delightful small town on Maryland's eastern shore. That is the part of Maryland between the Chesapeake Bay and the Atlantic Ocean. In just 30 minutes you can be at the famous resort town of Ocean City with its public beach, wide and white sand. The boardwalk is three miles long. And restaurants feature local seafood, both from the ocean and from the Chesapeake Bay.

Want to try your hand at fishing? Both ocean and the Bay fishing boats are available. You don't want to fish? Take a boat cruse — either daytime or evening. Ocean City, and the Bay offer fun and relaxation for all ages.

Maryland isn't all water, however. The eastern shore area is a historic one. Early settlers arrived in the 1600's and found the climate agreeable, the land suitable for farming and the ocean and Bay a rich source of fish, oysters, clams and the famous Chesapeake Blue Crab. Today you can walk through the quaint fishing villages, visit beautiful old mansions and sample the catch of the day.

If all this sounds good, invest in a few postcards and write away for some free information to:

Office of Tourism Development
217 East Redwood Street
Baltimore, MD 21202

Ask for the **Maryland Calendar of Events** and the **Maryland Travel and Outdoor Guide.** These two publications are beautifully done and filled with all the answers to your questions. There are maps, camping information, phone numbers, what-where-when, addresses, times, restaurants, and so much more. Send for your copies now so you and your family can look through them and plan your summer vacation around EAS. Remember you are not far from all the famous attractions of Washington DC, historic Annapolis and the big city of Baltimore.

For the official **Maryland Highway Map and the Scenic Highway Map,** write to the Maryland Department of Transportation
State Highway Administration
Baltimore, MD 21203

Request copies of **PARKLINE** by writing to:
Maryland Department of Natural Resources
Forest, Park and Wildlife Service
Tawes State Office Building
580 Taylor Avenue
Annapolis, MD 21401

For information about boating and fishing, write to:
MARINE TOURS
Chesapeake Marine Tours
Slip 20, City Dock
Annapolis, MD 21403
request a copy of **Chart Your Course!**, a list of charter boats, fishing, etc.

For information about **FARM MARKETS,** write:
Request a free Market leaflet from
Maryland Department of Agriculture
Annapolis, MD 21401

Welcome to Salisbury State University and EAS 1990

Salisbury, Maryland, is a town of about 60,000 people, and sits 30 miles west of Ocean City, a popular Atlantic Ocean resort, and 20 miles east of the famous Chesapeake Bay. Surprisingly the town is the busiest port in Maryland, after Baltimore.

Salisbury State University, although located on Route 13 (a main north-south road on the peninsula), is nestled in a beautiful residential neighborhood. The campus is flat, but beautifully landscaped with trees, shrubs and beds of flowers. The red brick buildings reflect the colonial heritage of Maryland.

One pleasant aspect of the campus is its compact size — you can walk from one end to the other in five minutes. The University has undergone a massive building program over the past few years, resulting in new dormitories and a beautiful University Center.

One advantage of holding the EAS Conference at a small school is that no other large conference will be on campus at the time the beekeepers are there. We will have full use of the facilities.

The Georgian-style HOLLOWAY HALL, although the oldest building on campus, has a newly-refurbished 750-seat auditorium. This auditorium features 'ram-

ped seating' and has complete audio-visual facilities. The morning programs will be held here, as will the Wednesday evening Apiotherapy workshop with Mr. Charles Mraz.

The UNIVERSITY CENTER will house the Commercial Exhibits in a spacious and well-lit area, complete with excellent security. Meeting rooms have been set aside in the Center for the Honey Show.

The DEVILBISS SCIENCE CENTER will be a busy place with the Short Course, the Master Beekeeper Exams, and the afternoon workshops.

The BEE HIVES will be located in a lovely tree-shaded area near the dormitories. The DORMITORIES are new and feature a cluster of rooms with a spacious bathroom. With 2 per bedroom, each cluster have a maximum of 10 persons.

The DINING HALL with cafeteria is well equipped to serve a large number of people efficiently (after all, Salisbury State University has 5,000 students). The food is delicious — the Maryland State Beekeepers Association held a 1 1/2 day meeting there and thoroughly enjoyed its stay.

AIR CONDITIONING?? YES! Everywhere. Salisbury State University hosts many, many conferences each summer, some with small groups and others of 600 people or more. A good summer conference is a cool conference. Bring your bathing suit to wear at the ocean, then come on inside to be cool at EAS.

Sneak Previews — EAS 1990

- Everything at Salisbury State University is air conditioned.
- Eugene Killion, beekeeper, retired Illinois Apiary Inspector and Master comb honey producer, will be the keynote speaker for EAS-1990.
- Mark these dates on your calendar and plan to attend —

EAS Short Course in Beekeeping — July 30 through August 1st.

EAS Conference August 1st through August 3rd.

July 6, 1990 — Last registration date without incurring $10 late fee.

July 21, 1990 — Final deadline for conference registration — no exceptions!

- ***EAS 1990 will feature a new schedule. The Conference will officially begin on Wednesday, August 1st. The last function of the Conference will be the banquet on Friday, August 3rd. Conferees can spend Friday night at the University. Saturday morning they will be free to continue their vacation or begin the journey home. Mark your calendar accordingly.***

Call to All Beekeepers to Join EAS

The Eastern Apicultural Society of North America, Inc., invites beekeepers everwhere to join its ranks. There are no geographical restrictions for membership in the organization. EAS is in its fourth decade of providing top quality educational meetings at annual conferences, and it has published the *EAS Journal* for the past 17 years.

The EAS 'territory' consists of 17 eastern US states and Canadian provinces, but individual members also come from as far away as Europe, Asia, Africa, and South America. Whether you have one colony of bees or thousands, membership is open to you in EAS.

The current membership rates for EAS are as follows (payable in U.S.A. funds)

Individual/Family	$10.00 per year
State/Provincial Associations	$30.00/year
Commercial Membership	$30.00/year
Life Membership	$150.00 (Payable in 3 installments)

Dues for 1990 Are Now Payable

EAS memberships expired in June of 1989. However, they were extended by the Board of Directors for one year due to the cancellation of the 1989 Conference. That means that your dues are now payable! Please send your check and any change of address to the Treasurer:

Donald Chimside
201 Briarbrook Drive
North Kingstown, RI 02852.

Exhibitors Invited to EAS 1990

Again EAS is offering manufacturers and suppliers of bee-related products an opportunity to display and sell their products at the 35th Annual Conference at Salisbury State University, Salisbury Maryland. The exhibit area will feature 12' x 12' display areas in a secure exhibit hall, the University Center building. All conference attendees will be advised that the refreshment breaks will be provided to them courtesy of the exhibitors. University Center is air-conditioned, the exhibit hall is modern (built in 1988), spacious, and beautiful. Electrical outlets are plentiful for those who require them.

Space is available on a first-come, first-served basis to vendors who have bee related products to be shown. Products not related to beekeeping are not eligible for exhibit space. For full information, contact Ann W. Harman, EAS-1990 President, 6511 Griffith Road, Laytonsville, MD 20882. Phone 301 253-5313 (home, with 24-hour recorder).

FOR FURTHER INFORMATION ABOUT EAS-90, WRITE TO ANN HARMAN, PRESIDENT, 6511 GRIFFITH ROAD, LAYTONSVILLE, MARYLAND 20882. SAMPLE COPIES OF THE *EAS JOURNAL* SENT UPON REQUEST.

Confused by the facts? Reading *and* observation can help.

By Jim Thaxter

I'm trying a bee education program this year. Don't rush out to sign up for this program, though; it's not a beekeeper program, but an educational program for the bees themselves.

If you have read any literature on honey bees or beekeeping, including what is in this column, you may have noticed that statements are sometimes put forth as absolute truth. Yet when it comes time to observe these phenomena in the bee hive, they are conspicuously lacking or not as advertised. The reason for this "improper" behavior is that the bees haven't read the same books that we have. It is time we changed that and educated our bees as to the proper way to behave under all different circumstances.

Some differences in reported and observed behavior may be due to regional differences. What is true in California may not be true in Florida or Texas or Missouri. In fact, what is true in northern Missouri may not be true in southern Missouri. Moreover, what we observe in 1990 may be slightly different from what we saw in 1989.

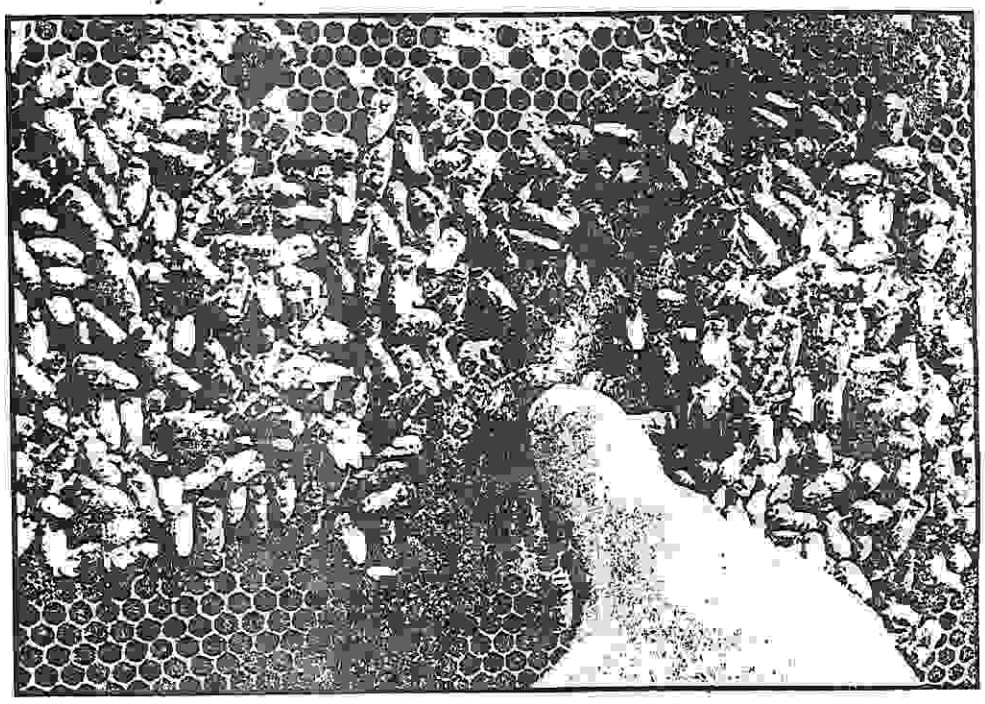
A new beekeeper recently said that he wanted to learn from experienced beekeepers so that he would do everything right the first time and not have to change bad habits once they became established. There were 10 other beekeepers present, and as the newcomer asked questions, he noticed that he was getting as many as 10 different answers to some of his questions.

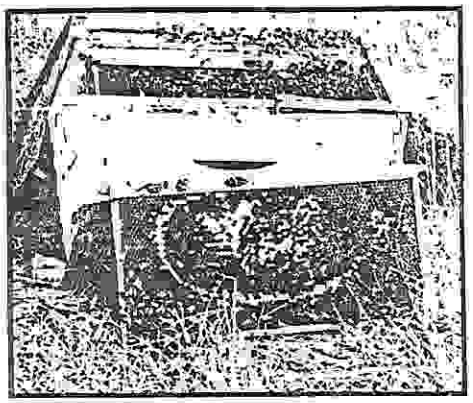
Just as there are regional differences affecting bee behavior, there are different management systems and styles. I think most beekeepers tailor their management to fit their own personalities and time schedules.

The bottom line is, be aware and beware of generalities in statements about bee behavior. Watch your bees for several years before trying to make any specific or even general statements about particular events. As you watch your bees and gather other types of information on the bee industry, here are some issues you may want to think about.

Requeening

At least one book I have states that hives should be requeened annually. Others say every other year, and some say every third year. Each has its own theories as to why its system is best. Who is right?





Should the 2-year-old queen (at tip of thumb, above) be replaced, even though the colony is strong? Is this a spotty brood pattern or a normal concentric pattern (at right)? Observing your bees can help you answer questions like these.

The basic theory behind each of these requeening systems is that as the queen gets older, she and the other bees will be more likely to swarm. Also, the queen loses some of her vigor each year as her fertility declines. The price of a new queen is supposed to be much less than the increase in income that comes from having a vigorous, young queen heading up a strong hive that makes lots of honey.

This theory is probably true, but which requeening timetable is right? It depends on your management system. Due to other commitments that take time away from my beekeeping duties, my system has been to let the bees mostly do their own requeening. They know their needs better than I do. Uncertainty of queen quality has also contributed to my reliance on the bees' judgement. My bees may not always raise top quality queens, but their record in probably as good as some of the queen breeders, and the success rate of the bees' own new queen introduction has to be better than mine. My honey production has perhaps declined some by letting queens live to a ripe old age, but I haven't noticed a dramatic decrease.

The source recommending annual requeening states that without this practice, the colonies will deteriorate, production will fall off, and wax moths will move into the hive — and ruination follows. Sometimes these events do happen, but they can even happen with a new queen in a colony. Replacing a productive 2-year-old queen with a poorly mated new queen may be a step backwards in honey production. Most commercial queens are of

good quality, but some clinkers do slip through the inspection process.

Brood

Observing brood in the spring can be confusing for new beekeepers. A general warning is to watch for spotty brood patterns, punctured cappings on pupal cells and other irregularities in the brood pattern. Without experience in what each of these indications means, they may be difficult to interpret.

Generally, sunken and punctured cappings indicate disease, usually American foulbrood. Spotty brood may indicate a failing queen, so this may be a good time to consider requeening or uniting with another colony. If the unusual cells are around the outside of the brood area and nights have been cold, brood may have been chilled and died.

According to at least one expert, brood can withstand cooler temperatures than we would expect from such a small organism, but survival probably depends on an optimum level of temperature and humidity. The brood seems to be more sensitive to cool, dry weather than to cool, moist weather. Analysis of the brood may also require an analysis of the weather for a correct diagnosis.

Drones

What good are drones? They don't make honey, but they do eat it. Some people recommend removing all drone comb (easily recognized by its larger-sized cells) and replacing it with new foundation. That is the beekeeper's point of view, but has anyone ever asked the bees for their opinion? I talk to my bees a lot when I work with them, but they have never answered verbally, and I haven't made sense of their answers to my questions about the usefulness of drones.

The drones get pushed out of the hive in the fall, but I'm sure they must serve a purpose in the hive during the summer. Cutting drone comb is probably a waste of time, the bees' and yours, and the bees will just build it back anyway, so why bother? If it is in old, black comb, there is no harm in replacing that, but I feel that trying to remove drones from the hive is a wasted effort. Even though they eat some honey, they may increase the morale of the workers. These happy bees may work hard enough to offset the drones' consumption.

There are new research results coming out frequently. What we routinely take for fact today may be changed by tomorrow's news, so keep an open mind. I have only scratched the surface of bee mythology with these three topics. I may have even added to the confusion. The point is, read as much as you can about your bees, but also observe them all you can and make your own judgments abou what is true for you and your bees, rather than depending only on generalized information.

Packer $$$ for Honey Board Favored by Producer Groups

Resolutions calling for major changes in National Honey Board funding were approved by both the American Honey Producers Association and the American Beekeeping Federation at their January meetings.

Both organizations have expressed support for having the honey packers share in the financial support of the program.

The Honey Producers approved two resolutions, which involve the packers differently. One resolution would have the packers share the funding responsibility equally with the producers and importers who are currently providing all the NHB funding. The second AHPA resolution would have the Honey Board fully funded by packer assessments.

The Federation adopted a resolution calling for a 1/2-cent per pound assessment on honey handled by packers. Although the resolution did not specifically address the producer assessment, the resolution's backers said they intended the packer assessment to be an addition to the one-cent per pound producer/importer assessment.

The National Honey Packers and Dealers Association developed and presented the resolution to the Federation. The original NHPDA resolution asked for an increase in the packer representation on the Honey Board. However, this portion was removed from the resolution when it was presented to the ABF business meeting for action.

The ABF resolution also called for an end to the Honey Board refunds, as did separate ABF resolutions.

The Honey Producers opposed ending refunds prior to the 1990 Honey Board renewal referendum in one resolution, and, in the resolution which would turn funding responsibility over to the honey packers, the Honey Producers asked for an end to refunds.

The National Honey Board program is scheduled to come up for a renewal referendum before July 1991. Unless changes are made to the enabling legislation prior to the referendum, a "yes" vote would continue the program with the current refund provisions.

Legislation has passed the Senate which would make several changes in the Honey Board legislation, but these would take effect immediately and would not require referendum approval. The most important of those changes would limit importer refunds to a percentage of the importer's own assessments equal to the domestic refund rate.

SLIDE AND TAPE LIBRARY UPDATE

SPECIAL NOTES ABOUT USING OUR LIBRARY:

1. Order from: John J. Hartman
   Rt. 5, Box 714
   3353 Frog Hollow Road
   Jefferson City, Mo. 65109
   (314) 636-6753--Please do not call after 10 P.M.

2. Use the order number included in the description of the tape.

3. Order at least one week in advance (allow more time , if possible.)

4. You must be a member of the Missouri State Beekeepers Assn. to use the library.

5. Please try to use UPS to return the material, if possible. If you must use the postal system, be sure to insure slide sets for a minimum of $1.00 per slide and video cassets for a minimum of $75.00.

6. PULL OUT THIS SECTION FROM THE NEWSLETTER TO KEEP FOR FUTURE REFERENCE.

SLIDES BY THE A. I. ROOT COMPANY

Set 1 - HONEYBEES - (67 slides). An introduction to the honeybee; showing the development and describing the behavior and activities which is basic to the understanding of this amazing animal. For beginning beekeepers or anyone interested in learning more about the honeybee.

Set 2 - BEGINNING BEEKEEPING - (75 slides). This set of slides illustrates and describes the various steps necessary in beginning beekeeping. Every other phase of beekeeping during the season is explained that will interest both beekeeper and non-beekeeper alike.

Set 3 - THE HONEY HARVEST - (73 slides). Covers fully the various steps of honey removal, extraction, and processing. Shows you the basic steps that can make the honey harvest easier by illustration and description.

Set 4 - NECTAR AND POLLEN PLANTS - (80 slides). Aset of unique slides with a written script and a tape recording describing the honey plants commonly found east of the Mississippi River. Your sources of pollen and nectar become less of a mystery with this slide set. Excellent for instruction and enjoyment at meetings and in the classroom.

Set 5 - BEE MANAGEMENT - (71 slides) - A thorough coverage of bee management from spring management through the honey flow to fall and winter management. An excellent instruction set for bee classes and use at bee meetings.

Slide Programs

— Larry Connor, Ph.D.

BEEKEEPING ACTIVITIES

The Last Apple:
Beekeeping in the 1980's

Dr. Larry Connor, BES — 1985

Under-pollination occurs when there are too few bees to pollinate agricultural crops and flowers which become food for wildlife. Now, you can use this set to tell your audience about the problems and threats facing the U.S. beekeeping industry, and how — if certain problems are not solved — the result may be wide-spread under-pollination.

[No. 1] - 60 Slides/script/cassette tape, suitable for older youth, all adults, $75.00

Very popular set

Introductory Beekeeping

Dr. Larry Connor, BES, 1975 — Revised 1982

This set shows the queen, drone and worker honey bee, queen cell, beeswax, honey, colony manipulations, American foulbrood, standard hive equipment, smoker, hive tool, and flower pollination. *Use for both beekeeping and non-beekeeping groups, classroom situations, and as 'filler slides' for your other talks.*

[No. 2] - 20 Slides/Notes, ideal for someone who need slides for a presentation which must include a variety of beekeeping subjects, $20.00

Popular with students and non-beekeeper groups!

The Honey Bee and Pollination

Charles Divelbiss, Retired Elementary School principal and hobby beekeeper, Mansfield Ohio — 1974

The Honey Bee and Pollination program uses pollination as an underlying thread to stress the value of honey bees in modern life while showing basic beekeeping activities. See how bees produce honey, gather pollen, and reproduce by swarming. There are many excellent close-up photographs. Don't miss this set. It is a tremendous value.

[No. 6] - 81 slides/ script/ and pre-recorded standard cassette tape, $75.00

Clearly illustrated steps

Extracting Honey

Ray Williamson, photographer, Kent, England — 1977

Developed for the training of new and hobby beekeepers, this set shows how to use a simple tangential extractor, knife uncapper, settling tank and how to bottle liquid honey. Problems with honey crystalization are covered, and a few simple comments are made about making crystalized honey. Developed for hobby beekeepers everywhere. *Extracting Honey very highly for use with new and hobby beekeeping groups.*

[No. 13] - 35 slides/notes, $34.00

Swarm!

Ray Williamson, photographer-beekeeper, England — 1986

A real swarm is discovered, and the beekeepers place it into a hive. A review of the activities used in hiving the swarm is made. This swarm has three queens, a fact scientists now think is rather frequent. Use this for your beginner courses or in the classroom for students of all ages.

[No. 11] - 28 Slides and Notes, $30.00

Queen Production, Mating and Management

Larry Connor, Beekeeping Education Service - 1982

There are several ways to produce honey bee queens, and watching this set of slides will provide the viewer with an enormous amount of detail into the queen rearing and mating process. Seven years of careful photography — on site in many commercial operations in both the north and south — resulted in this comprehensive 80-slide set showing several methods of grafting, cell starting, cell finishing, queen holding, and mating. Dr. Connor operated a commercial queen-rearing, mass instrumental insemination program in Florida for a number of years. These methods are the distillation of his extensive experience with queen rearing and using queens.

Added are comments on queen use which make this the most comprehensive program of its sort available on queen rearing outside of our book collection.

[No. 19] - 80 Slides/Script/Cassette tape, $75.00

An extremely useful set for bee schools

Increasing Colony Numbers

Dr. Larry Connor, Beekeeping Education Service — 1983

This program reviews standard methods of using swarms, package bees, spilts (divisions) and nuclei hives. It also shows how to use a double screen and other special equipment.

[No. 21] - 80 Slides/Script/Cassette Tape, $75.00

Step-by step instructions

Feeding Honey Bee Colonies

Dr Clarence Collison, Extension Entomologist, The Pennsylvania State University and Dr Larry Connor, Beekeeping Education Service — 1983

This set clearly shows how to feed liquid and dry sugar using a wide variety of popular methods and styles of feeders.

[No. 22] - 42 Slides/Detailed Script, $45.00

Hive Types and Other Equipment

Dr. John Free and I. H. Williams — 1977

There are many pieces of beekeeping equipment to learn for the new beekeeper. Added to this confusion is the difference found in various parts of the world. This set shows popular beekeeping equipment from various parts of the world as shown in clear photographs. *This set contains international hives of several types.*

[No. 28] - 18 Slide/Notes, $18.00

BEES AND SCIENCE

The Bee Tree:
The Natural Home of the Honey Bee

Dr. Thomas Seeley, Cornell University — 1984

The results of years of research and careful analysis of natural bee trees in Northeastern United States, Dr. Seeley presents a composite picture of the home of the European honey bee — the bee tree. Learn how bees utilize their comb with drone comb, differences in comb size, propolis, and many other fascinating facts.

Many beekeepers have found that the study of the natural home of the honey bee has been extremely useful in understanding the biology of the bees they keep. Use in coordination with Dr. Seeley's *Honeybee Ecology* ($15.50(s), $40.50(h))

[No. 101] - 20 Slides and Notes, $20.00

The Africanized Bee Situation in the Americas

Dr. Dewey M. Caron, University of Delaware — 1984

This set reviews the introduction, spread, and changes to beekeeping in areas of Central America as the Africanized honey bees has moved into them. Beekeeping continues in a modified form, with isolated locations, separate hive stands, and other changes. Africanized bees are expected to reach the US border as a wide-spread invasion as early as 1989. There are many questions, and few answers to this vitally important subject.

[No. 102] - 30 Slides and Notes, $30.00

Coping with the Africanized Bee — Updated status from Panama

Dr. Dewey M. Caron, University of Delaware — 1988

In this companion set to 102, Dr Caron summarizes the major changes which have taken place in Panama since the Africanization process has been completed. Beekeeping has changed, but has not disappeared.

[No. 103] — about 36 Slides and Notes, $45.00

Release set for October 1988.

BEE PROBLEMS

Strongly advised for all instructors and clubs

Honey Bee Diseases and Pests

Dr. Larry Connor, Beekeeping Education Service — 1982

Diseases and pests are a reality of beekeeping, and every beekeeper must be able to recongize the common brood diseases and the varroa mite! This shows the classic diseases: American foulbrood, European foulbrood, chalk brood, sacbrood, plus nosema, wax moths and more. It also stresses *Varroa jacobsoni* and *Acarapis woodi*.

Every bee club or association should obtain this set and use it to train new and hobby beekeepers. *This is my best selling set among beekeeping associations. After seeing this set one foreign beekeeping organization purchased 50 sets — one for each of its bee clubs.*

[No. 7] - 60 slides/script/cassette tape, $50.00

Honey Bees and Pesticides

Dr. Carl Johanson, Washington State University — 1978

Every year, thousands of bee colonies are killed by insecticides, and many more are weakened. This seriously threatens the pollination security of our country. The federal Environmental Protection Agency funded the development of this comprehensive slide set to educate growers, pesticide applicators, beekeepers, and the general public.

This is the ideal companion set for the soon-to-be-published book on *Pollinator Protection* — write for information.

[No. 18] - 80 Slides and Detailed Notes, $75.00

BEE BIOLOGY AND BEHAVIOR

Life History and Activities of the Honey Bee

Ray Williamson, photographer-beekeeper, England — 1978

The ideal starter set if you offer classes in schools, nature centers, or at the local bee club. It shows the castes (queen, queen cells, workers, worker development, drone, drone cells), the activities of the queen, drone development, worker duties; honey, pollen, and propolis handling and much more. This set is a marvel in microphotography, and I use it extensively in my own teaching.

(No. 15) — 42 slides and Notes, $45.00

The Amazing World of the Honey Bee

Ray Williamson, photographer-beekeeper, England — 1984

Here is a superior set of slides showing the most intimate aspects of bee behavior: wax secretion, comb building, honey processing, pollen packing, propolis handling, queen and worker development and more. Beekeeper-photographer Williams likened this set to shrinking to the size of a bee and watching the most private activities of the colony.

Combined with set No. 15 — Life History and Activities of the Honey Bee, you will have the most complete set of bee biology and behavior slides possible. But this set may be used by itself with great satisfaction.

(No. 17) - 46 Slides and Notes, $50.00

1/2" VHS Video Tapes

Queen Rearing - by Dr. James E. Tew	75 min.
An Introduction to Beekeeping - Ed Weiss	58 min.
Africanized Bees	15 min.
Varroa Jacobsoni - A new parasite in the Bee Population	46 min.
Varroa Jacobsoni - Biology, Research, Control	32 min.
The Monk and the Honey Bee - Story of Brother Adam	90 min.
National Honey Board - "A Golden Opportunity"	12 min.
A Year with the Bees	2 hrs.
Varroa Mite Detection - Dr. Tom Sanford and USDA	16 min.
What's Buzzin' - National Honey Board - School children ages 6 to 16 - delightful!	10.5 min.

16 MM FILMS

Bee Management in two reels:		
Large Reel:	Fall and Winter	10 min
	Late Winter	10 min.
Small Reel:	Honey Handling	17 min.

Editor's Note: This is information received about a new apitherapy society. It is intended for your information and does not necessarily reflect the views of this newsletter.or MSBA.

The American Apitherapy Society, Inc.
Introductory Letter for Membership Application.

Dear Applicant:

Thank you for your intention to join this Society, which we would like to consider a continuation of the "North American Apitherapy Society" that was founded in Washington, DC in 1978, but was never incorporated and has ceased to function. Allow us to take this opportunity to point out our Goals, Membership Categories and Dues.

Our Society is legally incorporated under the Internal Revenue Service (IRS) Code 501(c)(3) as a not-for-profit society. That means, among others, any memberships dues and donations are fully tax deductible. The Constitution of this Society is on file with the IRS. our current slate of Officers is shown on page 2.

The Goals of our Society, as included in its Constitution, are to advance the investigation of apitherapy (healing with honey bee venom) by encouraging research, elevating the standards, and informing the medical profession as well as the general public. To achieve these goals, we will be holding meetings, also we will participate in meetings of other societies, we will publish a newsletter and other publications as appropriate, we will get in touch with researchers and obtain sponsorship of research.

Our Constitution provides six membership categories, an abbreviated description follows.

Active Member - a person who is either a founding member or who, during Associate Membership of at least one year, has demonstrated an interest and willingness to participate in the affairs of the Society. Dues $ 80 annually.

Associate Member - a person who is interested in the affairs of the Society. Dues $ 30 annually. An Associate Member may apply for Active membership after the first anniversary of Associate Member.

Corresponding Member - a person who is interested in receiving information concerning the Societies' activities, also organizations. Dues are not yet established.

Honorary Member - Any person who has made a noteworthy contribution to the field of Apitherapy. Dues: none.

Life Member - An Active member may request this status, it will be decided by the Society's Board of Trustees. Dues: none.

Emeritus Member - This status is granted to any person who has reached the age of 70 and has been a member for at least 5 years, or who has reached the age of 65 and has been a member for at least 15 years. Dues: none.

In most cases it will be clear, which membership category you would like to join, you may have discussed this already with members of the Society. "Associate Member" will probably apply to most new members. If there are doubts, please make a note on your Application.

After we have accepted your Membership Application with the dues, we will send you a copy of the Application as acknowledgment. In the following years, your cancelled check or money order will be acknowledgment of dues paid, unless your membership status has changed. In that case, you will get the appropriate notification.

Your Social Security Number is required pursuant to the Internal Revenue Service Code for not-for-profit societies such as ours.

Please send your completed form with payment as check or money order to:

Harold G. Lenz, AAS Secretary and Treasurer,
34 Heron Road,
Middletown, NJ 0 7 7 4 8 - 2 9 3 6.

If you wish to make a donation in addition to your dues, may we suggest to write a separate check for that donation ? This would make our accounting towards the IRS much easier.

Thanks again for your interest and we are looking forward to working with you.

PRESIDENT, Christopher M. Kim, MD, .
Medical Director, Monmouth Pain Institute, Red Bank, NJ. - Dr. Kim has been using Charles Mraz's bee venom for five years in his Institute, giving over 250,000 injections. Dr. Kim practiced surgery before going into Pain Management in 1983.

VICE-PRESIDENT, James Belliveau, Ph.D.
Professor of Chemistry, Providence College, Providence, RI.
Dr. Belliveau has been investigating bee venom since the late 1970s.

SECRETARY & TREASURER, Harold G. Lenz, D.Sc.
Clinical Researcher, Middletown, NJ. - Harold Lenz has been treated by Charles Mraz and Dr. Kim since the early 1980s and he has treated himself. Professionally, as an electronics system engineer, Harold is familiar with scientific methods, he has analyzed and described large communication systems.

DIRECTORS AT LARGE

Charles Mraz, Apitherapist, Champlain Valley Apiaries, Middlebury, VT.
Charles hardly needs an introduction. For fifty years he has pioneered the scientific gathering of bee venom and its use in treating thousands of people afflicted with arthritis.

Bradford Weeks, MD, N. Hartland, VT. - Dr. Weeks, a general practitioner, has treated with bee venom for three years.

(form 2-version 2/1990)

BROOD CHAMBERS / CELL BLOCKS

by Roger Creighton, COII, ACC

(The following article is being published in "Gleanings of Bee Culture" magazine, a publication for apiarists.)

Probably the most bothersome phrase that a veteran beekeeper can read at the top of an article in a professional beekeeping publication is the opening , " I am new to Beekeeping". Well I know better than to admit the truth, so I will just get on to the methods that I use to make my beekeeping more enjoyable to me.

I am a Corrections Officer by profession, working in a prison in the Midwest. I have for many years heard that bee colonies have personalities of their own and now I must completely agree with what before was hearsay. I have set up one of my hives, under conditions that are more compatible with my normal work. Instead of Brood Chambers, I have Cell Blocks. Each individual bee/convict, is assigned to a cell (or one is provided for them). Instead of comb, I have cells. I have worker bees that produce honey instead of license plates. Because the majority of my inmate bees deviate from the prison norm of being drones, I have a disproportionate number of workers. Like normal inmates, my bee/con's make a special effort to hide food and cover it up.

I have bee/cons that are serving time in stir for a variety of crimes against nature. Those that are in for violent crimes are assigned as entrance guards, to protect the prison from intruders. I have parole and probation bees on foraging details, among these, I have a percentage that are robbers and try to lighten the workload by stealing honey and pollen from the next hive, rather than go out and find them in the fields. I have the occasional parole violator or absconder that will just not return.

Then I have the con/bees that just take what they want by use of the strong arm/leg method. For instance, I watched a foraging con/bee return to the entrance with a full load of ill gotten gain. The wind buffeted the young flier and a perfect landing was not accomplished. My young bee/con held on to the front edge of the board while one of the guard bees came over and checked out the intruder. All being well, the guard went over the side and attempted to push the stalled and overloaded aviator up and over the edge to safety. This was not to be, so the faithful guard went back on the base board and attempted to pull up the endangered bee and her load. This too was a failed attempt. The guard, not to be beaten, went inside and returned with two assistants. Between the three of them, they were able to pull the overloaded bee to relative safety. Following the rescue, the three con/bee/heros circled the victim in an apparent interest of well being. I was proud of my con/bees, thinking that they had exhibited the traits of good behavior until I realized that they were now taking the pollen away from the rescued Bee, and the two assistants, ran into the lower cell block with the pollen while the first con/bee beat up the poor flier and pushed her off the landing board. I had whitenessed the first mugging of my beekeeping career.

There have been some problems with some of the arrangements; I am still having trouble finding small handcuffs, and there doesn't appear to be anyone producing uniforms in a small enough size. Without the proper uniforms, I will continue to have difficulty identifying them at evening line count. Visitors present a problem, they keep getting thrown off the entrance by the con/bee guards.

There have been a few death penalties carried out in the recent past, and these have been for major assault violations on the person of the resident warden. Drones make up a large portion of my prison/hive and like the drones of real life institutions, they just wander around aimlessly awaiting the fulfillment of life.

My supersedure problem is intensified in this small institution as there appears to be a rather large segment of the population that wish to be Queens

Honey bee is a misunderstood "little lady"

By R.L. Creighton
Mid-Missouri
Beekeeper Association

ROLLA — The honey bee is a misunderstood and often wrongly blamed little lady. She is frequently accused of being aggressive when, in fact, it is the yellow jacket that deserves the blame. People see a flying insect, see that it has black and yellow markings, and swat it.

What they may have just swatted might have been one of the 60,000 daughters of a queen honey bee. The bee in question was in all probability enroute to forage for nectar or pollen. She had no harmful intent, and was performing the task of the day for her worker group.

A foraging honey bee will travel in a five mile radius of her hive. As a spin-off of her shopping for food products of life for her home, she propogates the plants she visits. This is not, of course, by intention, but the movement from flower to flower, of fruit and vegetable plants, results in her leaving behind small particles of pollen moved from stamen to pestile and a more even and complete pollination is accomplished.

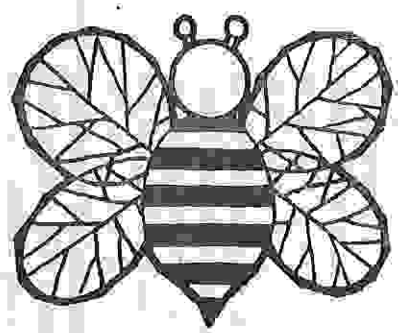
Back at the hive, many sisters are taking their active role in life of the hive. Newborn bees will exit their cell, and within five or six minutes start to clean the cell they left to prepare it for the next egg that will bring forward another worker. The newly emerged bee will continue the cleaning of cells until she is promoted to the next phase of her work life. There is a natural progression in the hive, from cell cleaner to wax maker and cell builder, or to nurse bee, attendant to the queen, guard bee, cell packer/honey maker and finally to the exalted position of forager.

Each hive of honey bees contains (depending on the time of year and health of the hive) between 40,000-60,000 bees. Most of these are worker bees — all of the workers in a hive are female — and are occupied with the care and feeding of the other members of the hive.

These little ladies provide to the world's population, through their pollination, an estimaed two-thirds of the edible fruits and vegetables we consume. The number of these social and dedicated insects would be mind bending if placed into print. There are an estimated 3,205,000 hives in the United States, about 30,000 of the hives are here in Missouri and about 500 hives are here in the Rolla area.

The benefits to farming are known to most farmers. Many crop producers invite beekeepers to place hives in their orchards, fields of strawberries, blueberries, etc. to enhance pollination. The hives are placed during the nectar flow (when the flowers are in abundance) and the ladies go to work as soon as the weather conditions permit. When the flowering has ended, the hives are removed and the plants produce fruit and vegetables in direct proportion to the increased pollination.

In areas of intense growing of fruits and vegetables, there are migratory beekeepers that have tractor trailer loads of beehives and they move with the flow of different crop flowering times. It is not uncommon to see ads in the



Beekeeping journals for 10,000 bee hives to be made available in California to pollinate the almond crop. Florida uses and needs bees to pollinate the extensive orange crop. Tomatoes, cucumbers and squash benefit greatly from the increase of pollination, as do most crops with rare exception. The pepper plant family and the corn family are examples of self-pollinators. Many of my neighbors have commented on the increase of their crop production since my acquiring the little ladies. The fruit trees seem to have received the greatest benefit.

The overall concern is that there are not enough people that have an interest in the little bees to keep them safe. They do not have any intention to cause harm or pain. The sting reaction is a response to a threat. Honey bees will sting agressively in defense of their hive or well being. If neither of these are in danger, then there is little chance of the defense being used. The sting is a form of suicide for a honey bee, because the barbed stinger, when inserted, will not come out. When the bee flies away, the stinger and the pulsating bladder of histamine will be pulled, along with the intestines, from the heroic bee. She will die shortly as a result of the loss of the vital organs.

If you are stung by a honey bee, the worst thing that you can do is to rub the area, as there is the strong possibility that the poison sack will be rubbed and more poison injected. To properly treat your sing (which you are most likely the cause of) take your fingernail and scratch the stinger and the sack away.

The best protection is to avoid the sting in the first place. My preferred method of preventing a sting is to remain immobile (like a tree) while a suspect flying insect is giving me the once over. A bee or wasp can land on you, walk around and then fly off leaving neither of you the worse for the experience. If, however, you insist on making startling movements, you might just trigger the defense system of the weary traveler, who had just stopped for a rest. The insect dies an unnecessary death and you go off nursing a sting site that could have been avoided. Remember, there is no recorded evidence to suggest that a stinging equipped flying insect has ever stung a tree.

Beekeepers have pen pals, too.

by Jim Stokes
Two Rivers

Last spring I received a letter from Hungary, signed Hegyi Istvan. The writer stated that he was coming to America and desired to work with American beekeepers, studying our beekeeping ways. I didn't have enough hives to keep him occupied but contacted Don Tobey and a 400 hiver, Vernon Reynolds. All of us offered free room and board and Vernon felt George Van Arsdale might welcome him. No further word was heard but I received a Christmas card from him saying he had stayed on the east coast. And just this week another letter came from Hungary.

"Dear Jim!

I received your letter and thank you.

In the August of 1989 I had the chance of visiting several apiaries on the east coast of the USA. The purpose of my visit was to be are the working methods and technics of USA apiaries and after coming back to Hungary apply the opthered information and knowledge to improve the level of Hungarian apiaries in whole. Unfortunately the few weeks I've spent there was not far enough for me to have the general view of the methods applied in the US apiaries.

For this reason I disturb you unknown and ask your help in the following.

I would like to apply for a temporary work permission with a duration of one year for which period I would move with my family to the States and take a job in an apiary.

I know that to achive this there is an offical US Government permission is requested. I would appreciate if there would be a possibility of informing the members of your Apiary Association in the hope that someone will help me to get the permission by employing me in his apiary for the one years period. In case there is a potential sponser which I hope there will be I'm willing to fly to the USA on my own expense of course to introduce myself to the person prior my employment. Through this introduction I would prove my capabilities.

Now in Hungary I'm involved with honey and pollen production and with queen rearing as well. I have a great experience in the prevention and in the protection against the Varroa jacobsoni mite which is present for many years in Hungarian apiaries and which is according in US apiaries.

I ask you again for your support to achive my plans and your notice wether the results are favorable or not.

Thanking you in advance.

Hegyi Istvan

address: Istvan Hegyi
8482 Doba
Somlovar 1
HUNGARY

"(end of letter.)

This sequence seems unusual for a beekeeper living in downtown Weldon Spring (pop 609) whose only interest in bees a few years ago was to pollinate his fruit trees. I don't have enough hives to need help. But is anyone else interested? Or even two of you going together? Wouldn't he make a wonderful speaker on how to handle the Varroa mite?

LOOKING BACK . . . AND AHEAD

An overview of the last five years' hot gardening trends.
By Greg and Pat Williams

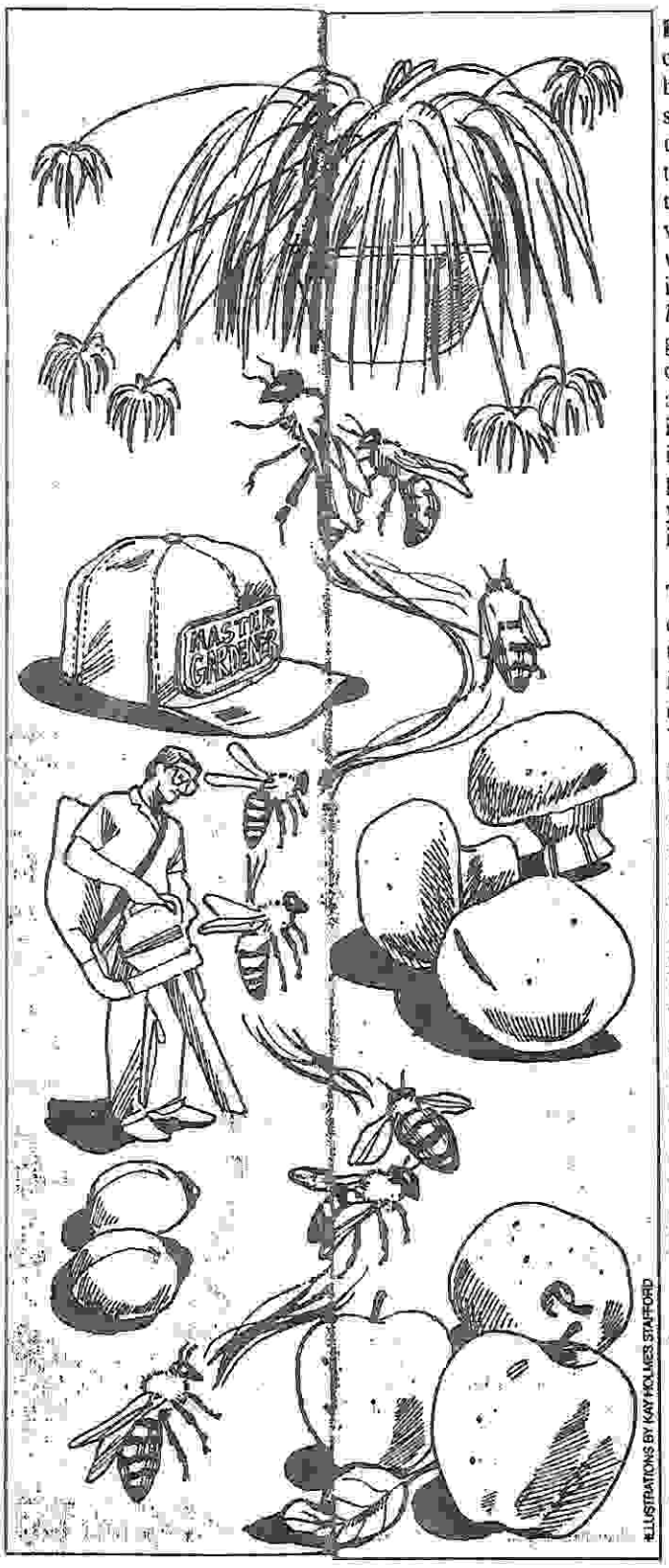
SINCE 1984, WHEN WE STARTED publishing our gardening newsletter, *HortIdeas*, we've watched many new horticultural developments take root and grow (or wither away). Some of these are turning into definite trends that—for better or for worse—will most likely influence *your* gardening in the coming years.

The amazing neem! The insecticide of the future is neem, a biological pesticide derived from a tropical fruit tree. Its active ingredient, azadirachtin, has been found to slow or stop the feeding of more than 150 pest insects and mites, including Japanese beetles, aphids, whiteflies, and thrips. Yet it appears to have little adverse effect on mammals, adult honeybees, or earthworms. Because neem acts *systemically* (translocating throughout plants after being added to the soil), the EPA currently is cautious about approving its use. **Trend:** Neem may largely replace conventional insecticides in home and market gardens.

The killer bees are (still) coming. For years, U.S. officials have been worrying about the impending—and apparently inevitable—invasion of South America's Africanized bees. But the "killer" bees aren't all bad. Latin American beekeepers are already learning how to join what they can't lick. They use larger smokers and better protective clothing and locate hives away from the public. Since the bees are aggressive foragers that can thrive in areas where traditional honeybees do not, some countries even have higher honey yields than before. **Trend:** Africanized bees may well form the basis for a new American apiculture.

A low-spray apple a day. Thanks to the dedication and persistence of a few orchardists and researchers, we know much more about growing apples with minimal pesticides than we did five years ago. Better disease-resistant varieties and innovative trapping techniques are also helping. **Trend:** Amateur and commercial low-spray apple growing is here to stay.

Here come the bug suckers! Oversized vacuum cleaners for sucking pest insects off crops are now routinely replacing chemical insecticides on New York, Massachusetts, and California farms. Smaller vacuum devices have been developed for use indoors. **Trend:** Hand-held "garden vacs" for home use are likely to appear in the near future.



ILLUSTRATIONS BY KAY HOLMES STAFFORD

Booming bio-control. More and more commercial greenhouse growers are using beneficial insects to control pests. In turn, supply houses for bio-controls are springing up from coast to coast. **Trend:** Bio-control techniques will become the rule, rather than the exception, in both commercial and private greenhouses. Eventually these methods will even be used in homes and offices with indoor plants.

Mushrooming mushrooms. Interest in growing unusual types of mushrooms (especially shiitakes) is burgeoning. There are now a number of companies dedicated to providing spawn for exotic mushrooms, and there is much research on highly intensive indoor production techniques. **Trend:** Do-it-yourself mushroom growing has developed into big business!

A few "quick takes":

Trend: Fabric ("floating") row covers, created to extend the growing season, have turned out to be so effective at screening out insect pests that they're becoming almost indispensable for pesticide-free gardening.

Trend: Volunteers in the Master Gardener program will continue to become more numerous and proficient, helping budget-strapped Extension Services provide top-notch aid to home gardeners in more and more states.

Trend: Sadly, practical, grower-oriented horticultural research at land-grant universities is being largely replaced by high-tech, industry-oriented biotechnology research.

Trend: The discovery that some temperate-zone plants flourish indoors just as well as the standby tropical species do has the potential to "redecorate" homes and offices.

Trend: Now that it's been shown that pesticidal mineral oils *don't* damage most ornamental plants when used during the growing season, these effective insect controls will be enthusiastically adopted. ⊖

Greg and Pat Williams raise most of their food on a small farm and publish HortIdeas, *a fine newsletter on gardening research and products ($15 a year from G. & P. Williams, Rte. 1, Box 302, Gravel Switch, KY 40328). If you'd like a copy of their complete retrospective analysis of gardening trends, send $1.50 to the above address and ask for "Five Years of* HortIdeas."

Janet Whittington

News 105-1

October 27, 1989

Personality Profile

This article was submitted by Craig Oliver, who was interviewed by Janet Whittington. At the time she was a student at the University of Missouri,Columbia

Craig Oliver, 66, stands between the tailgate of his black pickup truck, which is currently recovering from a misunderstanding with a skunk, and a table displaying jars of various shapes and sizes that are filled with honey and honeycomb.

Honey bears stand next to honey cookbooks and five-pound jars filled with honey as dark as rich earth are shoulder to shoulder with one-pound jars, their sweet contents the color of champagne.

It is Saturday morning, and like most Saturday mornings this time of year, Oliver is at the Columbia Farmer's Market where he sells some of the thousands of pounds of honey he produces single-handedly each year. Single-handedly, that is, if you don't count the bees. And Oliver most definitely counts the bees.

He pushes his bright yellow baseball cap, which advertises a beekeepers' supply house in Kentucky, back from his forehead and explains about the skunk, his bright blue eyes smiling with the information he's about to share.

"Skunks eat bees, did you know that?" he asks, grinning and knowing darn well you don't.

"They come up to the hive at night and scratch, and that makes the bees come out, and when they do, he eats them." Oliver enjoys your amazement.

"They can only sting him on his belly. So what you have to do is fix up some chicken wire so that the skunk has to stand on the wire to get to the bees. If you go out to look at your hive and you have a rubbed place in the dirt, you'll know you have a skunk, 'cause that's where he's rubbed his belly trying to get the bees off."

And that's how Oliver happened to be in the same vicinity as the skunk that made his truck untouchable for a week.

But skunks are one of the more manageable problems that can plague beekeepers. Oliver, with his 300 or so hives, keeps abreast of developments in the field and is well aware of the many potential problems, like the two varieties of mites that can destroy a hive, and the vicious African bees that are, at this very moment, making their way north from Mexico.

And then there's modern life and the pollution that goes with it. One summer Oliver took 2,000 pounds of honey from a bee yard that produced nothing the next year, because a farmer spraying his nearby field with pesticides accidently contaminated it. Bees will not use hives that have been contaminated, even if they're thoroughly cleaned and aired out.

Which is good news for honey lovers like Elaine Amromin, who needs some honey for a honey cake she's baking for her son

who is visiting from California. Amromin, who has been one of Oliver's regular customers for about five years, prefers the dark honeys, one of which she is now tasting. Oliver squeezes a dollop of thick, sweet No.12 from a plastic honey bear onto his customer's index finger. There are 17 bears, each filled with a different honey. She tastes as Oliver takes out honey bear No.7, which contains a light-colored honey with its own distinct flavor, and Amromin holds out another finger. She decides on a five-pound jar of the dark honey, but Oliver only has one-pound jars of No.12. He sells her five one-pound jars for the price of a five-pound jar and asks her to just return the glass containers to him when she has eaten the honey. It's business as usual at Mar-Ken-Sue Honey, named after Craig and Bernice Oliver's three grown children.

Headquarters for Oliver's operation is the Honey House, two yellow, corrugated metal buildings high on a rise in the countryside near Fulton. The afternoon sun is warm on this perfect Indian Summer day. Spread out in the valley below are cultivated fields and uncleared land; the colors of the autumn leaves are subdued this year. Close by is a huge old shade tree, and under it stand four faded, blue bee hives. From six feet away the bees look like black spots zipping through the air, and are almost silent as they work.

The Honey House is where Oliver processes his prize winning honey, which he gathers from hives spread all over this area of the state. Here he spins out, heats, filters, bottles and labels thousands of pounds of it each year, doing all the work himself, sometimes laboring into the early morning. Both buildings are filled with equipment, honey and honeycomb ready for processing.

Bernice Oliver enjoys most aspects of her husband's hobby. She particularly likes going to the flea market in Wentzville to sell honey, and she's glad that her husband has kept busy since retiring from the Post Office, where he worked from 1949 until 1980. She made him a quilt, a bee against a yellow honeycomb background, all done painstakingly by hand. They have a collection of about a hundred honey pots, which are scarce now, and she enjoys canning and cooking with her husband's honey.

"I have to, or I think he'd divorce me," she says with a soft laugh.

But she does not like him coming back from the Honey House at 4 a.m., which he did recently two nights in a row.

"She told me not to come in at four any more so I came in at three the next night," Oliver says, chuckling.

Their sweet harmony shows through the gentle ribbing.

Spring Preparation

By Ralph T. Vale

With the bees in cluster and
er snows and winds still about,
ime to "Prepare for Spring".
l weather is the ideal time to
n and repair equipment.
Extraction supers and frames
ld be cleaned of propolis and
. One of the best tools for this
"Red Devil" paint scraper,
oked blade model) one and one-
inch blade. This tool is readily
pened with a hand file. Frames
n easily in the cold weather
e the propolis and wax are very
le.

Damaged frames should be
ired or replaced and damaged
- placed with new founda-
. Exercise great care handling
ndation as it is very brittle at
time of year.

Supers need a good cleaning.
pect for loose nails etc. and
int if necessary. If you have
changed over to a nine-frame
tem, now is an opportune time
to so, by installing Stoller
me spacers. But remember, you
st use nine frames of drawn
mb, NOT foundation.

Now too, is the time to prepare
spring inspection. One or more
re bottom boards should be
ned, and at least one spare
od box cleaned and painted.
e again is the opportunity to
ke the change to nine-frame
ts by installing Stoller frame
s. If your overwintered
ony is housed in two brood
mbers, then two nine frame
ts should be prepared. it is also
dent to have on hand two spare
mes with comb or foundation for *each* brood chamber to replace damaged or malformed units, but again, *no foundation* in nine-frame units.

Swarm Preparation

No. I have not flipped my wig — several things can be done at this time to prepare for swarming. First, swarm prevention. Obtain a slat rack for installation at spring inspection; while not 100 percent effective in preventing swarms, experience has shown that hives so equipped produce fewer swarms. Second, requeening. By whatever method you accomplish this spring, it often reduces the probability of a swarm occurring. One technique involves use of a double screen. (In essence, creating a NUC and then combining it with the de-queened colony.) More on this technique in later articles.

Swarm Collecting

Every beekeeper has his own pet technique for this job and each situation calls for a different approach. One must be prepared to house (hive) the swarm, once collected. So a complete unit must be on hand for this purpose, i.e. bottom board, hive box with frames and comb or foundation and inner and outer covers.

Several RIBA members have had the misfortune this past season to have one or more colonies develop American foul brood. Unfortunately, once a hive is infected, there is little that can be done, treatment-wise, to save the colony and destruction of the bees and ALL equipment must be done by burning and burying the residue. However, there is a highly recommended prevention technique

(Continued on the next page)

Spring Preparation

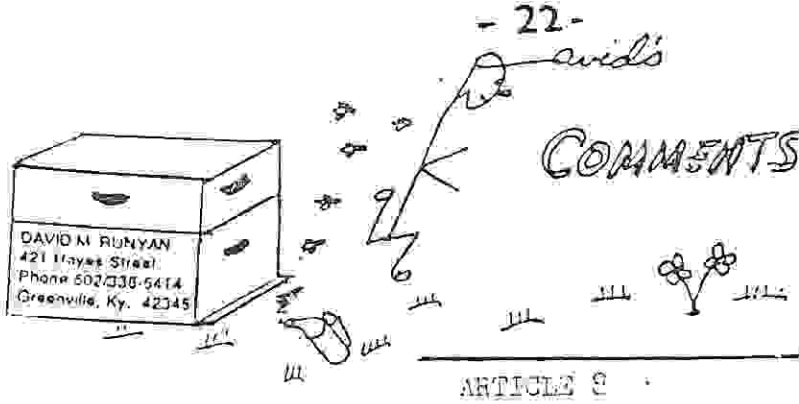
(Continued from the previous page)

which will tend to discourage AFB from gaining a foothold in the colony. Mix one level teaspoon of Terramycin powder with three tablespoons of 10X powdered sugar and sprinkle this mixture on the perimeter of the frames. This should be done in the fall and in the early spring when extracting supers are *not* in place. The above mix will treat one colony.

Spring feeding

Yes, now is the time to feed medicated syrup, whether stores are adequate or not. Entrance feeders are practically useless for this procedure as the bees are clustered in the top brood chamber, are not flying in numbers and will not descent to get syrup at the entrance feeder. Top feeders are effieient at this time. Feeders which center access to syrup in the center of the hive are the most successful. Feed a minimum of one gallon of medicated (Fumadil) syrup per colony. If you suspect stores are low in a hive, feed two gallons per colony. The second gallon can be without Fumadil. A second gallon of syrup can also be fed even if stores seem adequate if you wish to push early brood production. If you *do* push production of brood, be on your toes to detect swarming signs early on.

In the March *RIBA Newsletter*, a refresher on spring inspection and requeening techniques will be covered.



David's COMMENTS

44. To clarify honey and avoid honey scum when bottling let the honey set overnight or longer. During this time air bubbles and residual scum will have risen to surface and bottling can be done from the bottom of the tank.

45. Honey granulates fastest at 57 degrees, less rapidly at temperatures above or below that.

46. When there is fear of fermentation the only treatment measure is to heat the honey as rapidly as possible to 160 degrees, then cool it as quickly as possible and seal tightly.

47. The commonest mistake of beekeepers who pack their own honey is filling jars to full. Jars should be filled to about a quarter of an inch from the top, or to the fill line on the jar, so that air space is left at the top but not one that is visible when the cap is on and the jar standing upright.

48. Beeswax has the highest melting point of any wax known, between 143 F and 145 F.

49. Generally speaking, and contrary to what beginning beekeepers are apt to imagine, beekeeping areas usually improve as one goes north. As one goes north, the alkalinity of the soil imcreases, and so, accordingly, does the abundance of clovers and related plants. In the United States the greatest honey yields per colony are obtained in the Dakotas, Wisconsin, Minnesota and Montana.

50. To keep bees from stuffing pollen into some of the cells of comb honey is to set comb honey supers on hives <u>over</u> honey. Bees normally store pollen in combs over brood, but under honey.

51. In producing comb honey it is better to crowd the colony just a bit than to give it super room too far in advance. One serious mistake made by many beekeepers is to give comb honey supers too fast or too many at one time.

52. Make your splits or divides with one frame of eggs, fresh brood and adhering bees; one frame of capped and just-emerging bees and adhering bees; one heavy pollen frame with adhering bees; one full honey frame with adhering bees and one final frame as is available to round out the nuc. Then, shake young nurse bees from an open larvae frame into the split, too. It is advisable to add a queen to the split at this time to avoid lost production time unless of course one just wanted to raise a queen from this nuc. If raising own queen move to another yard for mating purposes.

53. Keep 10 frames per super in the brood nest, BUT ABOVE THE BROOD NEST space 9 or even 8 drawn combs for honey production.

News Release -23-

January 31, 1990
FOR IMMEDIATE RELEASE

For more information,
contact Mary Humann
(303) 776-2337

IT'S TIME FOR A HONEY OF A RECIPE!

Womar's Day magazine announced the "it's time for Honey" recipe contest in its Feb. 6 issue. Entries for the contest, sponsored by the National Honey Board and Woman's Day, must be postmarked by March 30, 1990. "We expect to receive thousands of entries," said Mary Humann, public relations director for the Honey Board. All recipes submitted for the contest must use at least 1/4 cup of honey.

A cash prize of $5,000 will be awarded for the winning recipe, $3,000 for second place, and $2,000 for third. In addition, 50 "Honey I Love You" bears will be awarded. The winning recipes will be published in Woman's Day to be seen by the magazine's 25 million readers.

Beekeepers and their family members are invited to enter their favorite original honey recipes in the contest as well. For an entry form and complete contest rules, see the Feb. 6 Woman's Day or contact the National Honey Board (303) 776-2337.

#mrh#

TO MEMBERS

We are interested in each and every one of our members, and although we cannot give each one the individual attention we would like, we try to make your membership meaningful and trust it adds zest, pleasure and profit to your beekeeping endeavor. You may not even have bees, but your interest in bees and what the bees contribute to our nation's economy will lead to prosperity for all.

If you have a few minutes, I would appreciate having a few lines from you, and you may be sure it will make the job of being editor more pleasurable. If you know of any beekeeper who does not belong to Missouri State Beekeepers Association, please pass this newsletter on to them and encourage them to join.

Dues are $4.00 per year. Make check payable to "Missouri State Beekeepers Association". If you belong to a local association, pay $3.00 state dues through your local treasurer.

ENCLOSED IS $_____for_____YEARS OF MEMBERSHIP.

NAME_____

ADDRESS_____

CITY_____STATE_____ZIP_____

PHONE_____

Mail to: JIM HAUSAM
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