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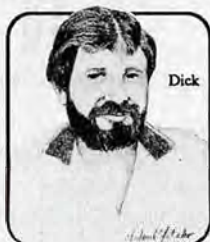
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COVER . . . Autumn Flowers — Winter Honey. This excellent photo was taken by Sherron M. Bull, La Palma, CA.

The answer to the July Photo Contest will be published next month — Stay tuned, there hasn't been a correct answer yet! Remember, it isn't *quite* what it seems.

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THE INNER COVER

I think the most difficult public speaking ordeal I've ever had was about five years ago while working at the Madison Bee Lab. We had just finished the first year of a sweet corn / honey bee / pesticide study that had partially been funded by the Wisconsin Canners and Freezers Association. This is a loose knit group of commercial vegetable growers, whose primary objective is to advance the science of vegetable production and make this information available to its members.

Pesticide conflicts and confrontations between sweet corn producers and beekeepers were fairly serious then and they were occurring often enough that the vegetable people decided to fund a project looking for solutions both beekeepers and growers could live with.

You may think this a perfect opportunity to take some well aimed shots at those folks causing all the grief. And, I suppose in the back of my mind that thought did occur. But remember, these were the folks paying for answers. Further, they controlled the purse strings for next years' study. At best it was a delicate situation — at worst a nightmare.

Being both a beekeeper and a grower I understood both sides of the question. But I was working for a USDA Honey Bee Research Lab while our funding was from the growers.

Needless to say, I anticipated a hostile audience, or at best, indifferent. It was my job, according to my boss, to get them excited about this project. We wanted a good response to our study which would not only provide continued funding, but advance basic honey bee biology information at the same time. "Keep everybody happy," were his words I think.

Boy, did I practice that talk. For two weeks I bugged everybody I could think of. After my daughter (age 7) had heard the third rewrite she asked "If I clean my room, do I have to hear this again?"

By the big day I thought I had it down. My slides were perfect. I had it timed to the second, and I knew it forwards, backwards and inside out — or so I thought.

As I sat in the audience waiting my turn I looked around at the

crowd. There were nearly 400 farmers, pesticide applicators, supervisors, managers, owners and other interested people, along with many Research people like myself, getting ready to talk.

I turned to a friend and asked "What if they don't like what I have to say?" He replied, "That hardly ever happens, and besides, they won't hurt you anyway."

"Won't hurt me — they won't hurt me! What do you mean — they won't hurt me?", I nearly screamed.

He was kidding of course, but had chosen a particularly bad time to do so — I was up next.

I heard my name announced, my position and the title of my talk. I sort of steered myself towards the podium, opened my notebook, summoned every ounce of will power I had, took 2 deep breaths and said "Could I have my *pides slease*?"

Obviously the person running the slide projector didn't understand me. So I cleared my throat and said — ! Nothing came out! My vocal cords were welded in place. Try as I might, nothing happened. PANIC CITY!!

I looked over at my boss, who had a smile on his face, bordering on a belly-laugh roar. So much for credibility, I thought.

So I took 2 more deep breaths, looked straight at my notebook and again asked for my slides. It came out so natural and smooth I thought someone else had said it. The first slide came up and I was off and running. A (nearly) perfect presentation.

Many years ago, Gallup or Harris (I forget which) conducted a poll asking what one thing people were most afraid of. Many nasty events were mentioned — burning to death, disease, heights, car accidents — like I said, some really terrible stuff. But number one, far and away — was public speaking! I can understand that. I don't know why it is, but if there's one thing in life that can tie my innards in knots, make me sweat in February or make an instant trip to Antarctica look interesting — its the 5 minutes spent before I get up to give a talk. It doesn't make any difference who the group is — 400 vegetable farmers or 20 beekeepers at a county meeting — the feeling is the same.

But since that first experience I've learned a few tricks to help me through those 5 minutes, and even a few for when you ask for your '*pides slease*'.

The first is — PRACTICE, PRACTICE, PRACTICE! This will probably put a totally new strain on your marriage, make even your best friends avoid you, and have your co-workers take enough sick time to rival the plague. But don't give up. A well-rehearsed talk can get you through even the most incredible events. Upside-down slides, the projector lamp blowing, a particularly nasty heckler, a baby suddenly announcing its presence — all can shake up or dismantle a talk. But if it's been well-rehearsed you can pick up right where you left off, without missing a beat.

If you have the equipment, video tape yourself and watch your delivery. If not, at least tape record your talk. Be critical, and listen to your criticism. You know what sounds good to you, so strive to please yourself. Chances are good that you are far harsher than any audience will be.

Another thing to keep in mind is that those folks out there invited you to speak to *them*. They must have some faith in you, either as a speaker or as an acknowledged expert in your field. Think of an invitation as a vote of confidence in you as a person, and as a speaker.

In the same vein, remember the words a friend of mine once said, "They can't shoot you and they won't eat you!" At first, these may not be comforting words, but on the other hand, no matter how badly you perform, you'll live through it. You may not *want* to live through it, but if you've done your homework it won't be that bad in the first place.

When you finally get up there, there are 2 or 3 things to remember that should be picked up during practice. First, don't talk too fast. Second, don't talk too fast, and finally, don't talk too fast. Along with this — remember to breathe, you know, in, out, in, out...

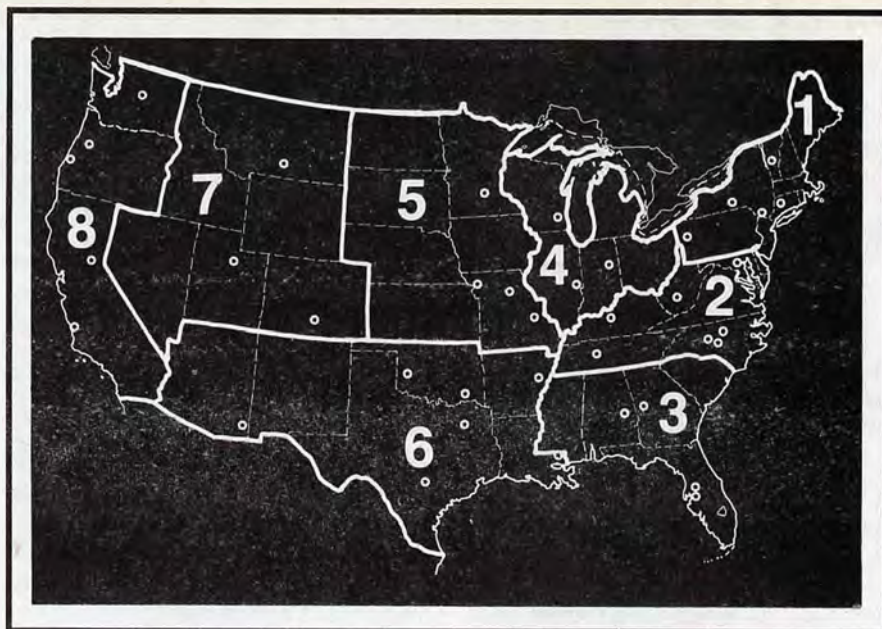
Eye contact with your audience is important. Pick out 2 or 3 people in the audience and talk TO them, not AT them. A good

Continued on Page 491

Monthly Honey Report

August 1, 1987

The following figures represent current prices reported by our contributors. They are based on reports from many states averaged out for each region. Where insufficient information is received, no price is shown. The retail prices represent the price of each size jar.



Wholesale Extracted		Reporting Regions									
Sales of extracted, unprocessed honey to Packers, F.O.B. Producer.											
Containers	Exchanged	1	2	3	4	5	6	7	8	R	A
60 lbs. (per can) White		44.50	38.35	36.00	31.80	39.00	36.10	38.63	39.00	31.80-44.00	38.40
60 lbs. (per can) Amber		42.50	35.95	32.40	25.80	36.00	32.93	36.00	36.00	25.80-45.00	35.32
55 gal. drum/lb. White		.57	.45	.60	.53	.65	.60	.58	.52	.45-.65	.57
55 gal. drum/lb. Amber		.53	.44	.54	.43	.60	.46	.53	.44	.36-.60	.50
Case lots -- Wholesale											
1 lb. jar (case of 24)		27.70	24.08	28.00	25.56	21.36	24.71	25.00	25.20	19.20-29.00	25.20
2 lb. jar (case of 12)		25.75	22.41	25.20	22.75	21.12	2.33	28.13	--	17.40-31.15	23.94
5 lb. jar (case of 6)		30.00	25.83	--	24.95	26.12	24.03	25.40	25.50	22.10-30.00	25.92
Retail Honey Prices											
1/2 lb.		.90	.88	--	.75	.69	.90	.88	.90	.75-1.01	.87
12 oz. Squeeze Bottle		1.45	1.48	1.50	1.29	.87	1.33	1.33	1.29	.87-1.79	1.32
1 lb.		1.56	1.66	1.69	1.50	1.25	1.58	1.60	1.45	1.25-1.95	1.57
2 lb.		2.73	2.83	2.99	2.75	2.19	2.58	2.65	--	2.37-3.55	2.72
2-1/2 lb.		3.35	4.03	3.97	--	2.79	3.10	3.15	--	2.79-4.60	3.54
3 lb.		3.97	4.35	3.50	3.25	3.29	3.79	3.85	3.50	3.25-4.98	3.83
4 lb.		5.00	4.83	5.89	4.25	4.19	4.44	4.41	--	4.25-5.89	4.69
5 lb.		6.25	5.60	6.50	5.75	5.15	5.47	5.47	5.39	5.21-6.50	5.70
1 lb. Creamed		1.75	1.20	1.71	1.55	1.69	1.70	1.57	1.40	1.40-1.84	1.60
1 lb. Comb		2.37	1.94	2.52	2.25	1.89	1.95	1.75	2.25	1.75-2.52	2.08
Round Plastic Comb		2.50	2.13	2.50	1.85	--	1.87	2.32	1.65	1.65-3.00	2.02
Beeswax (Light)		1.05	1.01	1.00	.85	.92	.88	.80	.75	.65-1.25	.81
Beeswax (Dark)		.97	.84	.85	.75	.88	.81	.70	.60	.60-1.10	.79
Pollination (Avg/Colony)		27.50	15.00	20.00	29.25	--	20.00	23.00	25.00	15.00-30.00	19.96

Honey Report Graph Features

On the far right hand side you will see two different columns. The first, labeled "R", is the price range of prices reported from all contributors -- lowest to highest. The second column, labeled "A", is the average price of a particular commodity across all regions. Example: the range in price of a 1 pound jar of honey sold retail is \$1.25 - \$1.95 and the average price across the country is \$1.57.

In the comments section you will see a figure called the "Price Index". This figure is only a descriptive statistic that compares ALL regions to the highest region of the month.

Example: Region 2 has a price index of 1.00 this month and remaining regions are compared to that index.

•Region 1.

Price Index .98. Sales and prices steady to slightly improving. Excellent honey crops reported from all regions and bees generally in good shape everywhere. Few reports of diseases or other problems (excluding bears).

•Region 2.

Price Index 1.00. Sales steady, prices up slightly. Good early and mid-season honey flows reported. Moisture adequate, if not abundant. Tulip Poplar and clovers producing well generally, with minor crops filling in in some areas.

•Region 3.

Price Index .66. Sales slow, prices down. Colonies in excellent condition

with excellent flows to date. Quality of product so far is superior, with beekeepers expecting excellent year in most areas, but FL production reduced somewhat due to recent rain.

•Region 4.

Price Index .79. Sales steady, with prices gradually increasing. Excellent crop so far. Mild weather in most areas, but rain in some has reduced yields. Pollination requirements up this year, even with increased prices.

•Region 5.

Price Index .85. Sales slow to steady, prices steady. Dry spell over in southern areas, has helped produce excellent quality crop. Northern areas experiencing early flows and good honey. Clover doing well in ND and expect bumper crop.

•Region 6.

Price Index .82. Sales strong, prices steady. Rainy weather in many areas has reduced expected crop, but production still above previous years. colonies in good condition and ample soil moisture may help late in season.

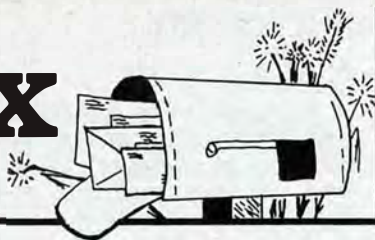
•Region 7.

Price index .94. Sales and prices strong. Mixed review this month. Low soil moisture, grasshoppers and pesticides, along with high temps being experienced in eastern areas, but still good crops being produced. CO reports slow flows but bees are in good condition.

•Region 8.

Price Index .89. Sales strong and tourist demand increasing. Colonies strong for excellent honey flows. Pesticides are a problem in some areas. Weather normal so rest of season should provide good crop.

Mailbox



A COMMON MYTH?

Dear Editor:

I quit taking *Gleanings* because of your editorial position attempting to convince the reader that women have played a major role in the art of beekeeping. The facts show that women have played an insignificant role in the history of beekeeping except, of course, in the kitchen. Your feminist attitude is a sleazy attempt to undermine the beekeeping tradition. I don't know one woman who could even *lift* a super, let alone work an entire bee yard.

Richard Blanchard
13456 Memorial Dr.
Collinsville, OK 74021

Dear Mr. Blanchard:

Since you have declined to renew your subscription, I trust a friend will show you this reply.

If you have interpreted my remarks over the past year or so as an argument that women have played a major role in the art of beekeeping you are sadly mistaken. Mr. Blanchard, women don't need *anyone* to come to their defense, in beekeeping or any other occupation.

As far as your 'beekeeping tradition' is concerned, it's not at all clear as to what 'tradition' you are referring to. Perhaps you refer to the myth that only men are strong enough to take stings; only men are wise enough to produce honey; or only men are smart enough to 'do beekeeping business'.

I also suggest you take care in voicing your attitudes regarding women lifting and working in a bee yard. I wouldn't make too much noise in that direction, you might be very surprised.

Mr. Blanchard, I don't think the beekeeping community can afford to discriminate against anyone — male, female, short, tall, blond, brunette or red head. If we want to find solutions to the many problems we are confronted with we cannot exclude anyone willing to help.

In fact, I find *your* attitude not only non-productive, but counter-productive. If you had taken this time

instead to write a letter to the Editor of your local newspaper regarding the benefits of honey bee pollination you would have not only accomplished something for the 'art' of beekeeping — but saved me the time it took to answer your letter.

The Editor

A SCALE COLONY

Dear Editor:

We are sideline beekeepers managing 150 colonies in northeast Arkansas for the production of comb and extracted honey from soybeans. Our bees are permanently located in an area of intense cultivation and the lack of trees makes it difficult for swarms to find a home. So it is not unusual to find combs built in unusual places.

On April 4th, 1987 a fellow beekeeper, Aaron Newcomb, and I were in the process

of checking a yard of twenty hives.

They are in a single row under a treeline and facing a parallel fenceline 30 feet away. The fenceline is covered with honeysuckle and other vegetation and I noticed two sets of combs about 20 feet apart. Due to the vegetation I had not seen them last fall and as usual the winter had killed all the bees. We trimmed around each and took several pictures then cut each one down to take back and show our club, The Cleburne County Beekeepers. I looked each over after it had been cut off and then placed them on a bed of pine needles in the truck for the hundred mile trip home. Doing this exposed a side of one that I hadn't seen and something looked odd about it. I picked it back up and could see two coils of a snake inside

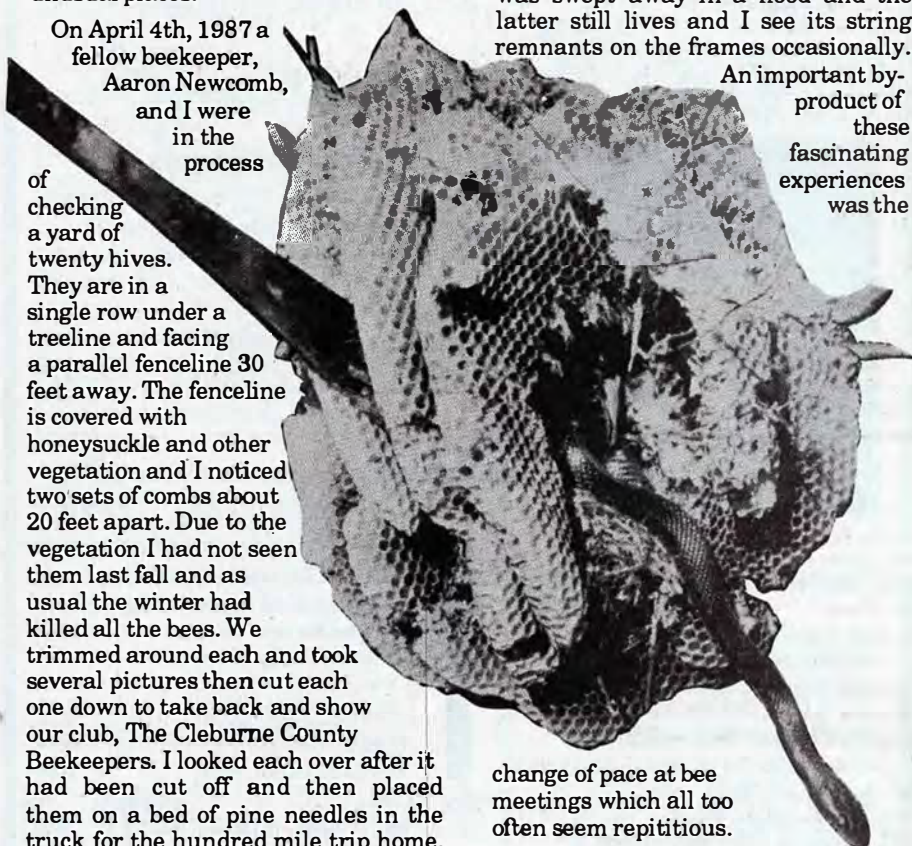
the comb.

We carefully placed it on the ground and got ready to get as many pictures as we could. It was poked gently with a hive tool between sheets of comb and at first it came out slowly giving us some very good pictures. Once it was half way out it made greater haste for new quarters. It was a non-poisonous black snake about three feet long, very slender and occupied a cavity that was very small.

Examination of the cavity revealed it to be lined with grass and mouse hairs. It seems apparent that after the cold and rain destroyed the bees a 'colony' of mice moved in and made a nest. With the advent of warm weather the serpent evicted the rodents and made himself at home.

This was our third interesting experience with outside hives including one discovered on a cold October day on a limb and placed in a TV shipping box to be warmed, fed and successfully transferred to a hive in the spring. Another was discovered in the corner of a huge picture window of a lakefront vacation home that was cut down one comb at a time and placed in empty frames by the traditional string method. The former was swept away in a flood and the latter still lives and I see its string remnants on the frames occasionally.

An important by-product of these fascinating experiences was the



change of pace at bee meetings which all too often seem repetitious.

Boyd Murdock, B & B Apiaries
Wilburn Rt., Box 320
Heber Springs, AR 72543

Continued on Next Page

MORE ON FOUNDATION AT HOME

Dear Editor:

Mr. Iannuzzi has an excellent article "Making Foundation at Home" in the September, 1986 issue and Mr. William Anderson writes in November '86 about the high cost of washing machine rollers to be put to that use.

Haack Products, P. O. Box 210, Franklin, MI 48025 advertises in Trailer Life magazine a hand wringer for \$39.95. No size is given. It is called "Mr. Wringer" and they offer a free brochure.

Bruce W. Burney
P. O. Box 82
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WINTERING INDOORS CONTINUED

Dear Editor:

Since publishing my article entitled "Wintering Indoors" in the June 1987 issue of *Gleanings* I have received inquiries regarding specific details about this method of wintering. I do not have the technical facilities to research many important aspects of this possibly innovative concept, but would like to offer ideas not mentioned in the article and should be considered when planning a similar structure.

1. The opening of the ventilating pipe should be high enough above the roof so that snow does not drift and block the opening, causing suffocation. Six feet above ground level seems to be about right. It is preferable to use white plastic rather than black as the latter tends to heat up under the warm spring sun, and it is cold dry air that should go into the

cabin. The top of the entrance opening should also have an extension of 1/4" wire mesh about four inches long covered by an inverted empty gallon can which will prevent the entrance of rodents and snow.

2. I have found that two 4" ventilating openings are about right for a cabin approximately 7-1/2' x 15-1/2' x 42" high. It is better to build larger than anticipated because winter losses will be reduced and expansion of the number of colonies will probably result. Also, if only forty or fifty colonies are available, one ventilator can be sealed. The ideal situation is to have enough ventilation to remove the moisture generated but small enough so that the bees use the minimum of honey.

3. Have the shortest side facing south, giving the least exposure to the spring sun.

4. The side, preferably north or east, where the hives are put in and removed, should not be bermed higher than 24", reducing bending when lifting in or out, and the top of the berm and wall should be flat so that several hives can be rested there so as not to be obliged to climb in and out for each hive.

5. The used utility poles I had for my cabin had been out of the ground for twenty years and there was no residual smell of creosote, which I consider highly toxic to bees in an enclosed space. However, the railroad ties for my second cabin smelled strongly of creosote, so before placing the earth berm I draped four mil polyethylene film over the sides, inside and out, and after sealing the bottoms with earth there was no more smell of creosote.

6. The site should be well drained so that water will not leak into the cabin.

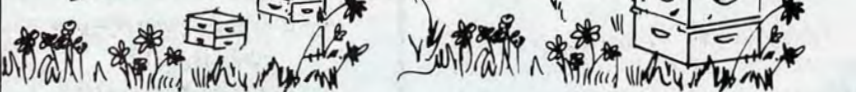
7. 42" is the optimum height of the walls. This allows three tiers of single brood chamber hives without covers and is a reasonable height to build the earth berm and to allow lifting over. This height also allows sufficient height to separate the tiers from the ground, and from each other, with used 1" boards to permit air circulation.

8. This building maintains a winter temperature permitting bees to leave the hive and die, and prevents masses of dead wet bees on bottom boards and between frames often found in springtime.

9. Depending on the type of removable roofing you can find, be sure that it does not cave in with the weight of snow, allowing spring rains to flood the cabin. My location is quite windy, which seems to keep the roof

Continued on Next Page

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MAILBOX... Cont. from Page 446

almost clear of snow. Have a slight slope of 1" in 12" for the roofing.

George Coombes
R. R. #1, Vankleek Hill,
Ontario, KOB IRO

NAKED OR MARKED?

Dear Editor:

Most of us humans are "marked" by hair color, height, weight and age, identifiable by name and social security number. None of us enjoys or expects to be addressed as "Hey, you", but much preferring an identity such as Bill or Mary.

A colony of bees revolves about just one "critter" — the queen. Unlike humans, they cannot be identified by cosmetic or structural differences. In fact, can you identify a new queen as a result of supercedure?

Since the queen is the total focal point of success or failure of a colony, why not have the facility of knowing each queen by an identifying color and/or thorax number, in contrast to reporting that colony A was better than colony B?

We humans, via recorded history, have knowledge of those "super-queens" of the past: Cleopatra, Maria Theresa, Mary Queen of Scots, Elizabeth I and Queen Victoria. Each of them had a dramatic effect on our present lives.

I will not own a colony without a queen marked by both color and number. My records of beekeeping experimentation are kept not by Colony A, B or C, but by queen. I do not use the International Color Code since I find blue and green difficult to see. I use the 3 colors I see best: white, yellow and bright red. I use a specific color for each year, paint the thorax, then affix a similar colored metallic numbered disc over the wet paint. The paint quickly dries and "viola!", we have an identified queen.

Your beekeeping skills and knowledge of each colony will be materially improved using such a system.

George Imerie, Jr.

TO PLASTIC OR NOT TO PLASTIC

Dear Editor:

I would like to comment on an article written by Mr. Charles Koover in your June, 1986 issue. I feel Mr. Koover was in error regarding his statement, "You can't fix a broken plastic frame".

Apparently, Mr. Koover is not aware of all the types of plastic now in use, and the various cements and techniques used to repair them. To

name a few: common plexiglass, the acrylic cements and numerous vinyl products. Also, heat melting and re-joining works well for some types of plastic.

Perma-Comb, a fully drawn plastic comb, can be easily repaired using the Kelley ear replacer fastened with four sheet metal screws. This is advisable with wood too, as splitting may occur otherwise.

I don't think there is any method that can repair a rotten piece of wood, except replacement. The technique of "using a nail" can also be used with Perma-Comb. However, a more satisfactory method would be to use a screw — it lasts longer.

Dr. Herb Drapkin
Perma-Comb Systems

Mr. Koover Replies:

I still feel that broken plastic repaired with glue lacks the strength of the initial product. Walter Kelley's Lug replacer is excellent, as is another, similar product made in Canada.

I write from my own experience, and my comments are drawn solely from these experiences. Cheerio!

Charlie Koover
Honolulu, HI

INDIANA MYSTERY

I would like to mention a weird situation here. Last year's honey crop was a disaster. I extracted some honey on Christmas eve — the latest ever — and got less than 100 lbs from some 15 hives.

Since I had checked them late and left plenty of stores they came through the winter in good shape. Currently, for the last 8 days my scale hive has been gaining about 5 lbs. a day. Some hives have 70 or 80 lbs. of honey already. If I extract in a couple of weeks it would be about the earliest time ever.

The honey crop has been declining here from 2,800 lbs. (record) about 20 years ago (from the same number of hives) to a low of 400 lbs. a couple of years ago. Lately, I have averaged around 1,000 lbs.

Don Wardell
Box 325

Winona Lake, IN 46590

An Open Letter To ...

Honey Industry Council of
America

Dear Sir,

I am a commercial beekeeper and, in addition to being a producer, I

Continued on Next Page

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MAILBOX... Cont. from page 447

am also extensively involved in the administrative side of industry affairs.

I am well aware of the potential threat to the US beekeeping industry from the Africanized bee and, of course, the wider implications for crop pollination.

Recently, a small article in a local rural newspaper made mention of \$20 billion in crops being in jeopardy from the Africanized bee. It also stated that swarms are expected to reach Texas by 1989.

I understand your Department of Agriculture has prepared a number of reports on this subject covering both the effect on your beekeeping industry and on agriculture in general through pollination.

If at all possible, I would appreciate copies of the reports and any other information you may have on this subject.

Still in the same industry but on a different aspect, I understand there are a number of futures markets in honey in some US cities and I am anxious to learn how they function.

I appreciate this request may not be in your province, however, perhaps you could advise me as to whom to contact and where.

Finally, I would be grateful if you

could also forward the address of the newly created US Honey Board.

K. G. McMenemy
189 Leake Street
Belmont

Western Australia 6104

An Open Letter To...

Mr. Harry Fulton
State Apiarist
State of Mississippi
P. O. Box 5207
Mississippi State, MS 39667

Dear Harry,

I received a copy of the proposed changes in the Mississippi bee regulations today. I am very disturbed by this approach to solving our problems with the mite. The new regulations divide the state into two zones. The north one half of the state, zone A, would receive protection from the mite by prohibiting entry of live bees, including packages, queens, drones or bees on comb, while the south one half of the state, zone B, would operate under the present inadequate regulations.

For too long we Mississippi beekeepers have allowed the migratory beekeeper to establish our regulations. We even allow non-resident

beekeepers to vote in our association. When the mite problem was first discovered you enlisted a large out-of-state migratory beekeeper to help write our regulations! We deserve having the mite. We have not tried to prevent it. Now you propose to divide our beekeepers into two groups.

Our present regulations call for a certificate of inspection from the shipping state. Four of the eight beekeepers found with infected bees moved the bees into Mississippi under such a certificate. These inadequate regulations are destroying the Package-Nuc-Queen industry in Mississippi. The existing regulations call for the depopulation of infested hives or treating with approved chemicals. I know of no approved chemical, yet when the mite was first discovered in Mississippi you ignored this regulation. (The find was in a large migratory beekeepers yard.) I have to wonder what would have happened if mites had been found in my small operation. I believe you would have destroyed my bees.

Why not address the problem, while we still can? The fact is, under our present regulations the Package-Nuc-Queen industry is doomed. I suggest to you that we decide who is more important, the migratory

Continued on Next Page

BOOK REVIEW

By ROGER MORSE

The Sacred Bee in Ancient Times and Folklore

by Hilda M. Ransome, 1937.

Reprinted by Bee Books New and Old,
Burrowbridge, Nr Bridgewater,
Somerset, UK.

308 pages. Price 19.75 British pounds
(exchange rate for
American dollars varies)

Hilda Ransome's *The Sacred Bee* is one of those classic books to which we all run when faced with a question about bees and beekeeping in history. We can trace the beginnings of beekeeping to the prehistoric era, but we have only a few cave paintings to tell us what the bee hunting people did; the techniques appear to be little different from those of primitive peoples today. Ancient Egypt is where civilization started, or at least where we have good records of what was taking place. Egypt is said to have been a land of milk and honey. The honey bee was the symbol of Lower Egypt, both before and after its union with Upper Egypt; a reed symbolized Upper Egypt. Curiously, although hieroglyphics of bees are seen in many places in this context, the Egyptian tombs contain little information about beekeeping techniques. What is known is carefully reported by Ransome.

Other chapters treat the ancient cultures and their beekeeping in Sumeria, Babylonia and Assyria, civilizations that were contemporary with the later Egyptian cultures, and in my opinion probably had their roots there. The art of beekeeping, along with other arts, spread slowly to Greece, Italy and, eventually, the rest of Europe. Ransome takes each of these cultures one at a time and

deals with facts, not fancy, as she develops her history.

Honey bees are indigenous to almost all of Europe and honey was an important ingredient in early diets. Sugar cane and sugar beets were not introduced until much later. When we come to the Middle Ages we find a wealth of literature and especially illustrations that tell us clearly how beekeepers managed their colonies. Some of the prints in Ransome's book are especially revealing. The final chapters deal with folklore, the use of honey in rituals, beekeeping in the New World tropics with bees other than honey bees and the use of bees by some of the primitive peoples on earth today.

This reprint of the 1937 text is of excellent quality. The reproductions are as clear as in the original. Bee Books New and Old have done a real service to the industry in bringing this classic work back to life and making it available.\$

MAILBOX... Cont. from Page 448

beekeeper who comes to enjoy our early spring, taking with him a spring crop and a strong hive or the resident beekeeper who is attached to this state by citizenship and taxes. Let's adopt your regulations with one change. Apply it to the entire state. It is not too late to enforce our existing regulations; to remove the infected hives from the state or depopulate them. The migratory beekeeper can establish permanent yards here. He can make his increase in the form of packages from these hives or, better yet, he can buy them from the resident producers who support our state. A source of mite free bees and queens is important to the entire nation. If the migratory beekeeper cannot adapt to this, then let him go to Florida or Texas where the package and queen industry is past reviving. Count me against self-destruction!

Joe Dowe
Sweetwater Apiaries
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Tylertown, MS 39667

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Products of the Hive and Other Uses

After carefully reviewing the essays submitted by 32 states, the judging panel selected the entry from Mississippi as the 1st Place Prize winner. The writer, Allison Elizabeth Rose, a fifth grader at Hope Sullivan Elementary School in Southaven, MS, showed a real knowledge about bees and that a colony of bees does much more than just produce honey.

The 2nd Place prize winner is Calvin Harrold from Nampa, ID. Twelve years old, Calvin is a sixth grader at East Elementary School

in Nampa and a very active 4-H member. Not satisfied with just "book knowledge", Calvin captured a swarm from his yard and was able to observe many of the things he has been reading about.

The 3rd Place prize goes to Kirsten Ilg, a ninth grader from Powell, Wyoming. Accounting for the long and healthy life of a mythical Arizona couple, Kirsten showed a lot of originality in discussing the many valuable products produced by honey bees.

We continue to be surprised by

the writing skills demonstrated by those entering this essay contest but even if some do little more than copy a few paragraphs from a book they are all made more aware of the value of honey bees to us all. If your state isn't included in the list in the 1987 contest, make it a point to contact your state 4-H office and make sure they distribute the information about the 1988 contest. The title for the 1988 essay is THE TALKING BEES, and we would like to have an entry from EVERY state in 1988.

Have you ever seen a honey bee darting about in the sunshine, collecting nectar and pollen from plants? Did you wonder what she did with what she collected? Let's follow this fascinating insect as she makes a beeline back to the hive, and find out something about the hive, its products and their uses.

As the worker bee flies home, she carries pollen and nectar. The nectar is already being changed into honey by chemicals in her body. When she arrives at the hive, the honey is processed by other bees and stored in cells.

Honey is the main food of the honey bees and it is stored for the cold months. Also, honey is the fuel that keeps the honey bee's furnace going all winter. It is used by the bees to make heat for the hive.¹

The major part of the honey is used by the bees; beekeepers harvest only the surplus. Beekeepers in the United States sell about 208 million pounds of honey annually.² Honey is the most well-known product of the hive. It is sold as a liquid, sometimes sold in the comb, or crystal form as creamed honey, or honey butter. It is delicious as a sweet spread.

Honey is a healthy food containing minerals and proteins. It is an excellent energy food because it contains simple sugars that can be used quickly by the body. It is the only form of sugar food that does not need to be refined.³

Bakers frequently use it in place of sugar for their products. Honey is an ideal sweetener for many baked

goods because of its ability to absorb moisture from the air.⁴ This quality is what helps keep honey-sweetened baked goods fresh and soft. Honey also gives flavor and texture to baked goods.

Honey is considered a blood builder. It is mildly laxative and is noted for its soothing effect in cough medicines.

Cosmetics sometimes contain honey.

Honey was valued by the ancients for its medicinal benefits. It was used to make mead and mixed with wine. In Egypt it was used as an embalming material.⁵

After eating large quantities of honey, the bees form a waxy substance on their bodies. From this wax they make honey comb for storing honey and bee eggs. People get beeswax from the honey comb after they have extracted the honey. About 4 million pounds of beeswax is produced and sold in the United States every year.⁶

Beeswax is a product of the hive with unusual properties that have

made it useful in many different ways.

This wax is used in lubricants, handcreams, ointments, records, crayons, sealing wax, furniture polish and some types of varnishes.

Beeswax is also used in many art forms, including batik, lost wax and carving. But probably the most popular use is in making candles. Beeswax candles burn longer than those made out of paraffin, and they also produce a pleasant scent.⁷

The greatest use for beeswax, however is in the cosmetic industry, which uses more than one million pounds annually.⁸ Another important use of beeswax is in the manufacture of sheets of artificial foundation used in beehives.

Another product of the hive used by bees in building is called propolis, or bee glue. This is a resinous substance obtained from a number of sources such as sticky poplar buds, and resin from pine trees. It is used for sealing cracks and smoothing over rough places in the wall. Propolis is of value to man as a base

Continued on Next Page



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PRODUCTS...Cont. from Page 450

in paint products, turpentine and varnishes. It also has many medicinal uses.

The next product of the hive is pollen brought back on the hind legs of the worker bee. The pollen is packed into open cells for storage. Most of the pollen is used to feed the young developing bees. It provides the protein, vitamins, fats and minerals that they need for nourishment. It also contains amino acids which are important in the human diet.

Pollen is dried, cleaned and stored in a refrigerator or freezer for human consumption. Commercially gathered pollen is also processed into tablets and capsules for human use. Bee pollen is also used in cosmetics.

Pollen is used by the nurse bees to produce the next product of the hive, a nutritionally rich brood food called royal jelly, which is fed to the queen. It is also fed to the young grubs during the first 48 hours of their existence.

Beekeepers remove royal jelly from queen cells. Professional queen raisers often store royal jelly and when it is needed weeks later, moisten it and feed it to the immature queens.⁹ Royal jelly is also used in such cosmetics as facial creams and skin conditioners. Finally, the bees themselves are the main product of the hive. Bee venom has some therapeutic use for arthritic patients.¹⁰

In some countries, the entire contents of the hive — honey, pollen, bees and brood — are eaten.¹¹

Many beekeepers sell package bees and queens through the mail. The bees are used to strengthen weak colonies. They are used for starting new honey producing apiaries and for pollinating fruit blossoms in large orchards.

The honey bees' value to man is measured not only by the honey, wax and other products of the hive, but also by the much greater value of her pollination services during the gathering of nectar and pollen. One-third of the nation's food supply requires honey bee pollination.¹² Many bees

are transported to different states, like migrant workers, to help improve the yield of crops.

Now that we have followed the honey bee into the hive and studied the many valuable products and their uses, it is time for the busy bee to be on her way again. She must continue carrying out her purpose in the scheme of nature. §

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WINNERS LIST

First Place Winner

1. Allison Elizabeth Rose
8133 Charleston Drive
Southaven, MS 38671

Second Place Winner

2. Calvin Harrold
Rt. 2, Box 2185
Nampa, ID 83651

Third Place Winner

3. Kirsten Ilg
720 Rd. 7, Rt. 1
Powell, WY 82435

4. Barry Burton, 9970 Camp Oliver Rd., Adger, AL 35006
5. Steven L. Massey, 629 N. Street, Camden, AR 71701
6. John French, 922 La Huerta Way, San Diego, CA 92154
7. Matthew Winston Beasley, 306 E. Bolton St., Glennville, GA 30427
8. Annabelle Reed, P. O. Box 267, Howey-in-the-Hills, FL 32737
9. Joyce E. Flood, Rt. #1, Box 28, Jewett, IL 62436
10. Ron Swenson, R. R. 3, Ackley, IA 50601
11. Keith Landgraf, Imperial Route, Garden City, KS 67846
12. Jennifer G. Hays, P. O. Box 113, Annville, KY 40402
13. Jennifer Taylor, 305 E. Martial Avenue, Lafayette, LA 70508
14. Mary McGuirk, RD 5, Box 410, Hagerstown, MD 21740
15. Karen Krawczyk, 5549 Folkstone, Troy, MI 48098
16. Melissa Hamman, 940 Victoria Street, Fairmont, MN 56031
17. Richelle Mayo, RR 2, Box 315, Huntsville, MO 65259
18. Nadelle Forseth, Rt. 2, Box 34, Fairfield, MT 59436
19. Sharon Dobesh, 3925 - 8th Street East, Columbus, NE 68601
20. Carolyn K. Maddison, 5 Galley Hill Lane, Fairport, NY 14450
21. Daniel Desautels, Rt. 7, Box 173, Fayetteville, NC 28306
22. Mark Barrett, Rt. 1, Box 5, Egeland, ND 58331
23. Heather Anne Martin, 454 Deerfield Rd., Lebanon, OH 45036
24. Dan Shenk, 3151 N. W. Valley View Dr., Albany, OR 97321
25. Stephanie Laubach, 91 N. Main Street, Hughesville, PA 17737
26. Chad Blackston, Star Rt., Pickens, SC 29671
27. Susan Schlaffman, R. R. 5, Box 46189, Greeneville, TN 37743
29. Gilda Garcia, P. O. Box 325, Premont, TX 78375
30. Jody F. Hensley, Rt. 1, Box 495, McGaheysville, VA 22840
31. Eric Lamb, Rt. #2, Box 108-A, New England, WV 26181
32. Tim Lentz, 14303 Point Creek Rd., Newton, WI 53063

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QUESTIONS?

Q. How do you clean the frames for round section comb honey supers to make them ready for use the following season?

Giltner H. York
Vincennes, IN

A. I never clean them, other than scraping any excess burr comb off with my hive tool. If they are sticky you can set them near your apiary and let the bees lick them dry. Wax and propolis on the frames is harmless.

Q. Sometimes my bees are so thick at the landing board that they obstruct the entire entrance and I am reluctant to open the hives with bees covering the entire front. Is this because the bees have nothing to do?

Guy Bolt
Chattanooga, TN

A. That is essentially correct. When the weather is very hot and there is little or no nectar in the fields, the bees accumulate on the outside of the hive, sometimes forming huge 'beards' there. This is not a sign that there is anything wrong with the colony, nor is it, as beginners sometimes think, a portent of swarming.

Q. Is there a medication for 'mummies'?

Harvey B. Moats
Canton, IL

A. You are probably referring to chalkbrood, the clear symptom of which is the appearance of white 'mummified' pupae at the hive entrance. It is a fungus disease which has a negative but not disastrous effect on a colony. I know of no medication, but culling out dark combs in which such pupae appear is thought to be effective, though this is not as easy as it sounds.

Q. What's the difference between the Italian, three-banded Italian, golden Italian and ultra golden

Italian queens that I read about?

John C. Farley
Columbus, OH

A. I do not think there is any difference, so far as productivity is concerned, and queens should be purchased for productivity, not looks.

Q. How do commercial packers prevent crystallization of the honey you see in super markets?

Rich Fleming
West Chester, PA

A. Usually the honey has been heated to about 150°F., filtered and cooled quickly. Individual beekeepers should not try this, as there is danger of degrading the honey. Warm it to no more than 130°F., in a water bath, or preferably, in a flash warmer. Or better, explain to your customers, with a label or otherwise, that crystallized honey is perfectly good and natural.

Q. Last year three of our hives had supers that were not capped over so I left them on the hives. In the spring the queen went up and laid in them, but when the brood hatched out the bees filled them with honey and pollen. Was it alright to extract them with pollen in them? Or should we have extracted them last fall?

Albert L. Milty
Bowling Green, MO

A. There is nothing wrong with spinning honey out of combs containing pollen. The pollen usually stays in the combs, and any that does not should be strained out. Combs

that are not entirely capped over can be extracted *provided* the honey in them is not thin. To check this, hold the comb horizontally and see whether you can shake the honey out. If it is thin and watery, then it is nectar and not honey and you should give it back to the bees.

Q. What is the best way to clean beeswax?

S. R. McEwen
Great Falls, MT

A. Put a few inches of water in a tub or topless 5-gallon can, get this boiling, then slowly add wax scraps, thus melting them over water. Most of the dirt settles down into the water. Be careful it does not boil over. Beeswax is highly flammable.

Q. What can you do with frames of crystallized honey that won't extract?

Walter Prah
Muro, SD

A. Put them in the bottom story of a hive of bees, the bees will clean out the honey and use it.

Q. I have some honey that has been in storage about five years and has become very dark and somewhat bland. What can be done with it?

Oliver H. Reeder
Towson, MD

A. Honey is not as stable as many beekeepers think. It darkens over time, especially if stored in a warm place. Some of the elements in honey that contribute to fine flavor are very unstable and withstand almost no heating. Contact with metal, as in sixty-pound cans, also has a negative effect over time. Honey that has suffered from storage should be offered to customers at a reduced price and described as 'baking grade' honey, not recommended for table use.

Continued on Next Page

& ANSWERS!

by Richard Taylor

Q. What is the best way to store extracted combs?

John Schildhauer
Homestead, FL

A. I believe the best way in your warm climate is to let the bees lick them dry and then stack them with paradichlorobenzene crystals. Spread the crystals on pieces of newspaper and lay these over the frames and cover them up. Before exposing the combs to the bees outdoors you should check with any other beekeepers having bees nearby to make sure they have no objection. There should be no problem if your bees are free from disease. §

Questions are welcomed. Send to: Dr. Richard Taylor, R. D. 3, Trumansburg, NY, 14886 and enclose a stamped self-addressed envelope for a prompt reply.

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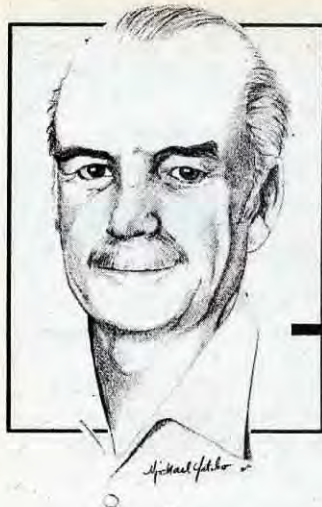
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THE BEE SPECIALIST

By ELBERT R. JAYCOX • 5775 Jornada Road North • Las Cruces, NM 88001

"Harvesting honey — some prefer early harvesting while others wait — it's a matter of quality and economics"

Harvesting Honey

When considering the right time to harvest honey, beekeepers usually assess the degree to which the combs are sealed. Fully capped combs are the ideal, and one-half to three-fourths capped are usually acceptable. Many beekeeping texts, especially those from Europe and including a new one from the USSR, emphasize the importance of taking only fully "ripe" honey from the hives. According to authors V. V. Rodionov and I. A. Shabarshov, the "wonderful set of most precious elements (enzymes, vitamins, etc.) is typical only of ripe honey which is seasoned in the bee nest where the humidity does not exceed 18%." They state also that nectar turns into "natural honey" only after the bees have actively worked on it for at least seven days. Also, that it should not be taken from the hives until the end of the honey harvest, after the last honey flow, because the honey must be seasoned in the nest for at least two weeks.

I have always had a similar feeling about the importance of honey ripening, but often found in Illinois that there was fermenting honey and bubbles of gas beneath the full cappings on the combs. Glen Stanley, Iowa State Apiarist, recently commented that honey with high moisture is *never* top quality, and once it is extracted and left to stand, it develops a sour taste that cannot be removed. The Swiss even include ripeness in their definition of honey: it is the *ripe*, sweet material, which the bees collect from nectar of flowers or other natural plant secretions, process, and store in the cells of the comb.

Some beekeepers, notably Dr. Don Peer of Saskatchewan, Canada, have considered all the extra time and labor the bees spend in driving

off the surplus moisture and capping the cells, and recommended taking honey off earlier, while it has considerably higher moisture content than the usual 18.6% or thereabouts. Don is not the first to suggest this approach. Langstroth, in his fourth edition in 1899 of *The Hive and the Honey Bee*, said that some apiarists extract the honey as fast as it is harvested by the bees, and afterwards ripen it artificially by exposing it to heat in open vessels. Langstroth did not approve of the idea; he preferred to extract the whole crop at once.

We know that bees add enzymes to nectar and that these break down the sucrose and play a role in the



formation of acid in the honey. Much of the European emphasis on ripe honey stems from the belief that honey enzymes have nutritional value for humans who eat honey. It seemed possible to me that unripe honey might not end up with the same constituents as fully ripened honey.

To get an expert opinion on the subject, I asked Dr. Jonathan W. White, Jr., whether honey extracted early and honey extracted only when fully ripened would be different in makeup after being brought to the same moisture content. Dr. White is the former Chief of the Plant Products Laboratory of the U.S. Department of Agriculture. He spent

much of his professional career studying the properties and composition of honeys and is known worldwide for his work. He said that honeys extracted with high moisture (and water removed) and those ripened by the bees should be equal in all respects except, possibly, for a higher sucrose content in those extracted early. Sucrose content usually averages around five percent but varies widely among honeys.

Well, there goes my idea about the importance of natural ripening of honey. But I believe there are cautions about taking high moisture honey that go along with Glen Stanley's statement. Whether in the hive or in the honey house, the level of moisture of the honey must be lowered quickly or off-flavors and other damage may occur. Our fully capped honey in Illinois certainly did not taste good when it was fermenting beneath the cappings. The moisture removal process must be effective over time and at temperatures that do not alter the flavor and color of the honey.

If a system of early extraction and moisture removal can increase honey yields without lowering quality, more beekeepers should consider it. However, an economic study is also needed to determine whether the greater effort and more labor are offset by the returns. In some years, our honey crop at the University of Illinois averaged 20% moisture or more, and this can happen in any humid area. Obviously, there is a need for "drying" such honey, which we took off well capped and which we assumed to be completely ripened. A. H. Meyer and Sons in Winfred, South Dakota now offer a drying service. They advertise that their low-heat system will not damage the honey.

Continued on Next Page

More Honey From New Combs?

There are many reasons to replace old, dark combs, including disease reduction, prevention of swarming, and larger bees. A recent Polish study by Andrzej Pidek gives yet another reason for replacing those combs you inherited from your grandfather.

Pidek investigated the results of extracting rape, wild buckwheat and red clover honeys in relation to the revolutions per minute of the extractor, duration of extraction, percent of the combs sealed, and the color of the combs. There was some honey left in every kind of comb, graded as light-brown, brown, and dark brown. However, the dark combs had from 0.6 to 5.9 times more remaining honey than light combs. The study was reported in *Bee Research Copies*, 1982.

A Tasty Honey Blend

The February issue of *Western Fruit Grower* included an interesting article about some New York grape growers, the Brahm brothers, who have been exploring new markets for their grape juice. When the wineries cut back on their grape purchases, these growers looked for new outlets for their grapes, especially to home winemakers. They now do 75% of their business with people who make their own wine. The Brahms offer 14 varieties of juice during September and October.

In addition to the grapes and juice, the Brahm family produces a fancy wine sauce that comes in two flavors, claret and sherry. The sauce dates back to the prohibition era when grape growers could not sell their grapes for wine. The Widmer Winery, in New York's Finger Lakes region, developed the sauce but stopped production in the 1960's.

John Brahm borrowed Widmer's recipe, modified it, and now sells the wine sauce to roadside markets and by direct mail. What caught my attention in the article was the list of ingredients for the sauce: sugar, wine and honey. I wrote to the Brahms for additional information about their product and received a nice letter in return. They use only New York State wine and New York State honey in the wine sauce. The honey is Finger Lakes wildflower, produced by a beekeeper in Naples, New York.

According to Mr. Brahm, the honey is an essential ingredient because its high viscosity serves as a

natural thickener. In addition, the sauce is an all-natural product and the honey listed on the label helps to sell the product because consumers like it. Lastly, the flavors of honey and wine complement one another.

I purchased a two-bottle gift pack and have been enjoying it primarily as a topping for ice cream. The sauces also go well over fruit, pancakes, waffles and as a glaze on baked meats. They are a high class product with lovely colors and a beautiful label. Each bottle is topped with gold foil.

Not everyone can enjoy wine or wine products, but he/she would surely approve of the appealing package for a quality product containing honey. We need many more such outlets to strengthen the demand and usage of honey. For more information contact Brahm's Wine Sauce, 6259 Hawks Road, Naples, NY 14512.

Spilled The Honey? Call The Bees

One of the hazards of extracting is a major honey spill. Even a small one can produce problems, and nearly every beekeeper has had his share. We once had a high storage tank close to the ceiling so that it was difficult to monitor the honey level. As a result, we produced a "honey rug" as the tank overflowed unattended. At the time, it never occurred to me that there were conventional and unconventional ways to clean up the mess. I. W. Chick explained one unconventional system in the newsletter of The Mole Apiary Club, Surrey, England, March/April, 1987.

A friend of Mr. Chick had been extracting one Friday and had about 200 pounds of honey in a tank in the kitchen. One of his children opened the valve to get a taste and left it running after being frightened when the valve turned. About 100 pounds of honey glazed the floor and covered two or three feet of the dining room carpet.

Chick's friend beekeeper, David, was almost in tears, with no idea of how to clean up the mess. He readily accepted Chick's proposed solution and packed up his family to leave for the weekend. They locked the kitchen door but left the window open. He and Chick collected two bottles of bees from the hives in the garden and released them into the kitchen. The bees quickly found the honey, and their number increased rapidly. The family left to enjoy their weekend.

On Saturday morning, "the kitchen was a real hive of industry,"

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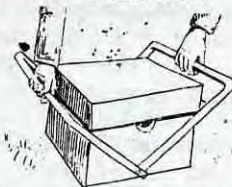
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with bees everywhere. Even the neighbors' bees were getting in on the action. When David and his family arrived back on Sunday evening, the kitchen floor was so free of honey it wasn't even sticky. The carpet was as near dry as it could be. After a light rinse it was back to normal. The family kept all vents, doors and windows closed for a day or two to get the bees switched back to normal foraging.

I read a similar story about a car whose seats and carpeting were covered with honey when a sudden stop released it from the container. The owner took the car to the apiary, opened all the doors and soon had everything cleaned up by an unpaid work force. Not every spill can be handled in this manner, but it is worth considering, particularly if the application of a lot of water would further complicate the problem.

Problems — Laying Workers or Queen?

At the end of the season there are usually a few colonies with evident problems in their combs; there are drone cappings on worker cells. Their presence requires a decision on the part of the beekeeper: are they from laying workers or a drone-laying queen? You can usually make a diagnosis quite easily. Laying workers place multiple eggs in the cells, often on the sides of the cells. The pattern of occupied cells is usually haphazard, with eggs and larvae in a scattered arrangement. In contrast, a drone-laying queen continues to lay in a normal pattern, one egg to the cell and a fairly compact area,

without large gaps. This, of course, depends on the age and ability of the queen — an old one may be producing a pattern little better than that of the laying workers. The primary diagnostic point is then the single egg per cell.

Your action in correcting the problem depends first on whether the colony is worth saving and second, on whether you are dealing with a failing queen or laying workers. A colony not worth saving should be shaken out in front of a nearby colony after removing and killing any queen present. Put the hive and combs into storage.

If the colony has sufficient bees and stores to carry it through the winter, remove the drone-layer and replace her with a young, breeder-reared queen. Late in the season you would probably be wise instead to dequeen such a colony and unite it with a strong colony.

A colony with laying workers can be reclaimed by adding *unsealed* brood and young bees, followed by a new queen. The pheromones from the brood inhibit laying by the workers with developed ovaries. Together with some new young bees, the treatment produces acceptance of a new queen provided she is released only after three or more days in the introducing cage.

The myths about laying workers never die — they just get bigger and more complex. You will never get rid of these bees by shaking out a colony because all laying workers can fly well and are not discriminated against or killed in a queenright colony. They just cease to lay. The latest story has them being barred by the guards from reentering the hive. While interesting, the story has no

basis in fact.

Insect Resistance to Pesticides

Work at Queen's University in Kingston, Ontario, Canada, may eventually lead to resistance-proof insecticides and insecticide resistance in beneficial insects such as honey bees. Three research workers there have discovered that mosquitoes resistant to the insecticide malathion produce above-normal quantities of the enzyme carboxylesterase, a chemical which breaks down the insecticide before it can kill the insect.

The Canadian group is attempting to identify the gene that controls production of the enzyme. It may be possible to transfer that bit of DNA into the larvae of non-resistant beneficial insects and give them the ability to detoxify the insecticide. The discovery could lead also to resistance-proof insecticides, which would include "hormone antagonists" and thus have the ability to block production of carboxylesterase in many species of presently-resistant insects. They would once again become vulnerable to insecticides that were previously ineffective.

The story was included in Tom Arthur's Tech Talk in *Ag Consultant*, April, 1987. §

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The Honey Judge

"A honey judge does not need to be a specialist, but they do need extensive knowledge and expertise"

J. T. W. Scruby • Surrey, England

The judge at a honey show is only one of the show officials, but an integral part of the show process. They have a special job to do, in the same way as the Show Secretary and the Stewards. Because of the nature of their work, they must have specialized experience and training, but, that said, they are just one among the other officials.

A judge must have a knowledge of standards in the classes which they will judge, because they ought to have the ability to withhold placings if they are not worthy of entering. The fact that an exhibit is the best in its class does not confer on it the right to a first- or even second- prize. It has to be of a certain standard and the judge has to assess this. To do this a judge will rely on their personal experience and observation at other shows where they may have been a judge or a steward.

But their first work, before assessing standards, is to compare exhibits, and place them in an order of merit.

Although every effort is made to reduce a judge's personal opinion in this process, there is no way one can eliminate the personal element entirely.

Many judges are approved by the British Beekeepers Association (BBKA), having passed stringent examinations. But honey show judges do not have to have this qualification and there is no reason why someone without it should not be a good honey show judge.

It might be argued that, because a BBKA approved judge has been trained to pass a specific examination, there is an element of narrowness in their training as it is channelled along lines defined by the BBKA. Following this argument through, it could be maintained that this narrow outlook — if it exists — could affect the quality of the judging

by people with the BBKA qualification.

Against this it is argued that a candidate is examined to ensure that they know all things to look for. The examiners do not seem to be dogmatic about the finer judgements drawn from this information, but they are interested in the conclusions the candidate draws and his or her reasoning. So one finds, in practice, that the qualified judges each tend to have their own approach to their work.

There also seems to be a broad measure of agreement between the decisions made by different judges at different shows. An exhibit which is very good will, depending on the competition, have a more than probable chance of getting an award at several shows under several judges.

One point must be made, that it is the existence of such an examination which enables the BBKA to exert some degree of control over the quality of exhibits at honey shows. If there were no authority insisting that qualified judges are trained to recognize good quality and reject poor, then the general standards of honey presentation could be reduced because there would not be a force insisting that they be high. Honours could go to honey producers who did not maintain high standards of quality and cleanliness.

Judging is a lonely job

Judging is a lonely job. Usually there is no one to consult. In the last resort, they can discuss with the Show Secretary and his Steward (if neither of them are exhibitors), but it is the judge's function to make the final decision, and this should never be made lightly.

Whatever the show — grand or small — every decision should be made reasonably and carefully. It

should be possible to explain how it was made to officials and exhibitors afterwards if they ask. The judge should be available after finishing their work to answer questions by interested parties, and they should stay around for a time before leaving to give those concerned time to look at awards and discuss them if they want.

Usually a judge doesn't have time to make written comments. This is unfortunate, because there are many cases where this information would be valuable to both experienced and inexperienced exhibitors.

The judge should be firm about decisions. This should not be difficult provided they have made them for good reasons. This will have been part of the training, and examiners will have tested them thoroughly on reasoned decision-making. Toward this end a judge should never display blind obstinacy.

Of course nobody is perfect, and mistakes are occasionally made. "Think it possible that you may be mistaken" Oliver Cromwell wrote to the General Assembly of the Church of Scotland. This thought needs to be with a judge at all times. Not in the sense that they think it likely to be mistaken, or to pass entries which ought to have been rejected, but if one went around a show thinking that, it would be a fearful experience. This cannot be the way to judge.

With experience, and making mistakes, the possibility of mistaken judgements is reduced, but it will always exist. So it pays to listen to all that is said and discussed about any decision, and to consider — perhaps quietly after the show — whether there was something to be learned.

A honey judge does not need to be a specialist or an expert in the production or showing of the various

Continued on Next Page

Although British in origin and flavor, the author's comments are fairly universal and should be considered by both entrants and judges at every honey show.

This article was reviewed by Mrs. R. E. Clark, past president of the BBKA and former National Honey Show Judge.

JUDGE... Cont. from Page 457

classes judged, but they must have fairly extensive knowledge and experience. After all, they are concerned with comparisons and standards of the presented items, and this is not the same thing as being a specialist.

Nevertheless, to be a specialist has its advantages, because of the depth of knowledge one would have about that specialty. Probably it is the specialist himself who might have the greater difficulty in judging, in that with specialization goes the risk and danger of a narrowing outlook which has to be guarded against. Whereas, the function of judging calls for — among other things — breadth of vision.

Whatever the size or grade of show, it is imperative that the judge gives their best. Work at every show should have the same degree of preparation, and the same care should be used. The quality of judging given at a village show should be the same as at a county or National show.

The judge may judge to a lower standard at a village show than, say, at a county show, but the quality of work should always be the best.

The honey judge has the responsibility to arrive, on time. They have been paid the compliment of being invited to judge the produce of a group of beekeepers, and it is the height of discourteousness not to arrive after accepting the invitation. What happens if one's car breaks down? The obligation is to get to the show if possible, and to contact someone connected with it at once and let them know what has happened. Probably the Show Committee would be helpful and sympathetic, but getting to the show is always the first worry of a judging assignment.

While a judge cannot guarantee to be in good health on the day of a show, there is an obligation to warn the Show Secretary if something is building up. Clearly serious illness is a bar to attending, and the Show Committee would cope with the matter. But they ought to be warned without delay.

Probably the worst trouble is a common cold developing a day or so before the show, resulting in the judge losing the ability to taste.

The trials of a honey judge.\$



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"Any hive which is placed off the ground more than a few inches should have an alighting board"

Some 45 years ago Mr. C. H. Pirkey of Charlottesville, VA sent me as a gift an alighting board like the one shown in the picture. I have used it ever since and it has saved many a bee, if not from death, at least from a cold night spent on the ground.



spring months, weary chilled field bees are apt to perish in those last few feet to safety with their load. Those tired fielders relax too soon when approaching the entrance; consequently any number can be observed panting on the ground in front of the hive. If the weather is favorable they soon take off again and try another approach, but towards evening on a cold day they often can't make it and will chill and die right there. It's during these early spring months that every single bee counts in building up colony strength.

The construction of these alighting boards is so simple and easy that anyone can make a dozen from scrap lumber in only an hour. Mr. Pirkey used asphalt singles supported by wires. Personally I found that scrap pieces of Masonite board were ideal, as it does not warp and it is practically indestructible. Nailed onto a piece of wood and fitted with four hangers cut from a tin can, it converts a perilous entrance into a safe landing field.

Four thumb tacks are all that are needed to keep it attached to the bottom board, and it can be quickly removed if necessary.

When painted in different "bee favorite" colors it will help to prevent

drifting and may save a virgin queen from entering the wrong hive on her return from a mating flight. This holds especially true where colonies are placed on benches in close proximity to one another. Re-



turning bees will land six inches from the entrance, rest a bit when tired out and then walk in. These alighting boards are ideally suited to provide a brood chamber placed on top of a colony with a safe landing board. The clips on top of the board are slipped between the upper and lower body which is all that is necessary to hold it. A virgin going out to mate is more apt to return to safety than when just an opening is provided.

All in all it's one of the best investments a beekeeper can make. It only takes a minimum of effort, and no cost at all but some idle time on a rainy day. §

Any hive which is placed off the ground more than a few inches should have an alighting board, and hives on benches should not be without them, which will become quickly apparent if the owners of those hives would observe incoming field bees.

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RESEARCH REVIEW

By DR. ROGER A. MORSE • Cornell University • Ithaca, NY 14853

"Nearly 10,000 colonies have been "depopulated" because of Acarine mite quarantines. And this is only in CA, TX and LA"

Cost of Acarine Mite Quarantines

California lifted its quarantine against *Acarapis woodi* in late 1986. During the time the quarantine was in effect, 6,881 colonies in 11 counties in the state were killed ("depopulated" is the popular buzzword that is preferred by the regulators). The report cited¹ states that "California beekeepers are divided over the quarantine with those apiarists concerned with honey production opposed to the regulations and producers of package and queen bees in favor." ... "However, several counties are now conducting their own detection, identification and abatement programs." I have not seen any figures detailing what has happened in these counties as a result.

When the numbers of colonies killed by California are added to those killed by the Animal, Plant Health Inspection Service of the USDA (2,687 in Texas and 188 in Louisiana), we have a total of 9,756 colonies. This of course does not include the anxiety, concern and perhaps more serious consequences brought about by these government actions. It also does not include the plans that were changed and the programs that were disrupted. I am aware, for example, that one New York beekeeper removed all the honey from several colonies in the fall because he thought State authorities would follow through on a threat they had made and kill his colonies. Instead the State rescinded its quarantine. The result, of course, was that the bees starved; the number of colonies with similar stories has never been officially recorded anywhere.

I feel it is important to continue to discuss this situation, as more problems that could include colony destruction by government agencies are very much in the works.

The Curious African Bees

Bess and Bill Clarke of Pennsylvania (he is the retired Extension Apiculturist) spent three weeks in Bolivia recently. Bess wrote a very interesting account of their travels and work with local beekeepers² (Bill doesn't write much).

Bolivia is west of Brazil and Africanized bees were reported from parts of the country many years ago. However, at 9,000 feet elevation where the Clarke's lived they found no Africanized bees; still, this is a warm part of the country where there is rarely a frost and one can find oranges, bananas and other tropical fruits.

The Clarkes visited an apiary 20 miles away at 4,500 feet elevation that they were told would be Africanized but Bill's opinion was the bees were European. There is certainly a great deal about these Africanized bees and their living habits that we don't know. I had presumed it was temperature that limited their distribution but it appears elevation may be an independent factor.

Blueberry Production in New Jersey

The estimated annual value of

New Jersey's highbush blueberry crop is 20 million dollars. The per acre return is between 3 and 4 thousand dollars. As a result of this rate of return, New Jersey blueberry acreage is expanding and other states are looking at the crop. Blueberries are now grown in 23 states.

According to the researcher cited below³, pollination is an area that has been "ignored" recently. There are two problems: populations of native bees have been reduced and growers are not renting an adequate number of colonies. Pollination of blueberries is hampered by the fact that the plants flower early in the spring, at a time when weather conditions are often not good for bee flight.

Blueberry varieties vary greatly in the attractiveness of their flowers to bees. For some varieties one hive per two acres is adequate; certain varieties demand the use of two or more colonies per acre. §

References

- 1 Gill, R. *Acarine mite*. California Plant Pest and Disease Report 5:228. 1986.
- 2 Clarke, B. *Beekeeping in Bolivia*. The Pennsylvania State Beekeeper's Association Newsletter 5:4-6. May, 1987.
- 3 *Blueberry culture on lowland soil*. Proceedings of the New York State Horticultural Society 132: 89-93. 1987.

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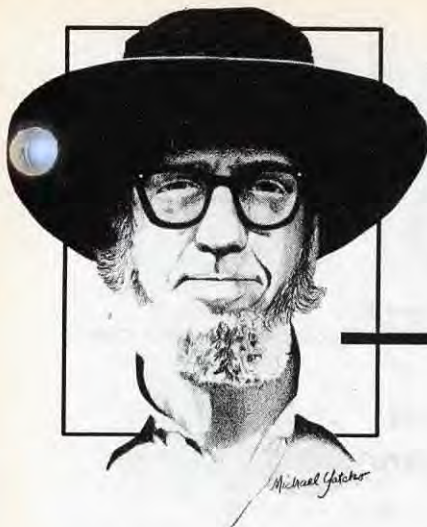
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BEE TALK

By RICHARD TAYLOR • R. D. 3 • Trumansburg, NY 14886

"Colony inspection (and inspectors) is improving..."

Not long ago I had a telephone call from a beekeeper in Ohio who was disturbed by the expectation that his bees were going to be examined by the bee inspector in another day or two. What bothered him was not the fear that disease would be found. He thought the inspector might have a personal animosity towards him and that he might express this by needlessly burning some of his valuable colonies. I gathered, from the quality of his telephone conversation, that this beekeeper was a man of considerable intelligence and education, and it was apparent that his anxiety was genuine.

There was a time, not long ago, when fear of this kind was, in some parts of the country, not always groundless. The laws themselves and the way they were administered were partly to blame, for they virtually invited abuse. And, while the vast majority of bee inspectors have always been persons of integrity and civilized manners, there have always been a few who have been arrogant and quite bereft of a sense of what it means to be a public servant. Of course there is not much anyone can do about people's characters, but laws and administrative policies can be changed and, in just the past few years, great improvements have been wrought, especially through litigation and judicial review, sometimes on a rather sweeping scale.

Until quite recently a bee inspector could, in some jurisdictions, walk right into someone's apiary with no prior notification, take bee hives apart even in the owner's absence and, in some places, actually destroy equipment without the owner's knowledge or consent. Such property abuses have, obviously, no proper place in our country, where we live under a constitutional guarantee of due process with respect to property

rights and protection from warrantless invasions of our buildings and lands. The worst of these abuses were, I believe, effectively brought to an end in 1985 by a decision in a federal court, later upheld on appeal, resulting from litigation initiated by a group of Ohio beekeepers.

There are, of course, always problems in the state's exercise of its policing power and no amount of vigilance can entirely overcome them. Who for example, inspects the inspectors? This question was driven home to me by an inspector I knew well, who was absolutely obligated to burn, with prior notification, any colony he found infected with American foul brood. He told me he routinely treated his own such diseased colonies with drugs, although he knew this was in violation of law. Another inspector assured me with a straight face that he saw nothing wrong in collecting pay for a full day's work, even though he had in fact worked only half a day, provided he then worked twice as hard as usual. The fact that, in some states, the bee inspectors are often themselves commercial beekeepers raises obvious problems of conflict of interest that are highly vulnerable to a court test. Such inspectors are sometimes, for example, entitled under law to in-

spect, and condemn to destruction, the equipment of their competitors, and I know of one very serious case of such conflict involving beekeepers who competed for pollination contracts. It is almost certain that a court would uphold any beekeeper who brought a challenge on this ground. In some places the sheer zeal of certain bee inspectors has created intense friction. A beekeeper I know of, for example, received permission from the bee inspector to try to clear up with Terramycin a minute infection of American foul brood in one of his hives, which he in fact succeeded in doing. The inspector returned some weeks later to find no trace of disease in the hive, but burned it anyway. This, in my view, was sheer vandalism.

Accounts of this sort could be added to without end, of course, but the bright side of the picture is that they are, I think, largely of the past. Bee inspectors no longer have, as lawyers call it, unbridled discretion in dealing with personal property or entering upon lands and building, and can be called to account if they overstep.

What, then, are your rights as a beekeeper against intrusions by agents of the state? I believe they can be summed up as follows:

First, you are entitled, if you wish, to be notified in advance of any planned inspection of your apiary, and to be present if you so choose, though you may not stand on this right as a means of preventing any inspection at all. Second, you can, if you think you have good reason, require the inspector to obtain a warrant, as a means of protecting yourself against needless and disruptive intrusions, though this is a right that should be exercised only reluctantly, if ever, for obvious reasons.

Continued on Page 480

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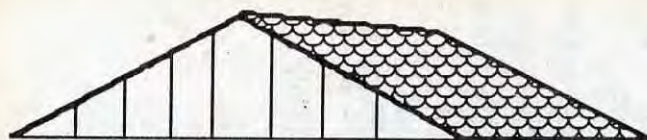
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HOME HARMONY

By ANN HARMAN
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We are living in a very complex era. Our automobiles audibly thank us for putting in gasoline but it takes a roomful of specialized equipment to tell us a spark plug is gummed up. Our household appliances blink green and blue lights at us and bleep alarmingly if we won't behave and push the right buttons just to get medium brown toast. However there is a bit of hope for those of us who love ice creams and sherbets. I received a gift of an ice cream maker that is truly remarkable in its simplicity. But what is even more wondrous — it works!

This gadget has an aluminum container that you put in a freezer until this liner is completely cold (mine lives in the freezer). You take it out, dump in your mixture, put the 'dasher' in and crank **ONLY** every few minutes. It is necessary to follow instructions carefully as to timing. In 15 to 20 minutes — really — you have heavenly ice cream, sherbets, ices and other frozen delights.

Are you having a birthday soon? If so, ask for one of these ice cream makers so you can enjoy a hot August afternoon.

Do you remember I suggested you turn some of your surplus berry and fruit crop into juice and save it? Here is what you can do with some of that juice — and the ice cream maker.

FRUIT JUICE FREEZE (Another of my "Non-Recipes")

2-4 cups juice (depending on size of maker)
Honey — to suit your taste

Combine the two and pour into ice cream maker. Follow instructions for cranking and crank until the consistency you want — from a slushy drink to a firmly frozen-ice. Serve and eat immediately. It is refreshing!

If the fruit juice is very sour and you think you will have to add more than a few tablespoons of honey, the

mixture may turn out gummy. To prevent this, use some honey and some sugar. Serving Suggestion: Serve in a cantaloupe half, garnish with slice of orange or sprig of mint.

In spite of exotic flavors of ice cream such as Rocky Road, Peach Melba and even Bubble Gum, vanilla ice cream remains America's favorite. Certainly homemade vanilla must top the list of 'Great Foods of the World'. One precaution should be taken with ice creams made with honey: Do not store in a freezer for more than a couple of weeks — the ice cream gets tough! That's right — that's the best word to describe the consistency. In reality, I have never found *anyone* who had any vanilla ice cream left over until the next day — much less a week.

VANILLA ICE CREAM

1 cup honey
1/4 teaspoon salt
6 egg yolks
2 quarts whole milk
2 tablespoons vanilla
6 egg whites

Combine 1/2 cup honey, salt and egg yolks. Blend well. Heat 1 quart milk to scalding. Add to yolk mixture while stirring. Cool to room temperature. Beat whites until frothy and add remaining 1/2 cup honey, beating until stiff peaks form. Fold this into yolk mixture and blend well. Add

remaining 1 quart of milk and vanilla. Blend. Freeze in ice cream freezer or by your favorite method.

The ice cream recipe takes care of dessert. Now for the main course. Barbeque sauces so often have a tomato sauce base that when I first saw this recipe, I new it was going to be different. It is so delicious! I have used it with beef, chicken, pork, venison and hot dogs.

BARBEQUE SAUCE

2 tablespoons finely minced onion
1 tablespoon ground coriander
2 tablespoons honey
1 teaspoon salt
1/4 teaspoon pepper
1/4 teaspoon garlic powder
1/8 teaspoon ground red pepper
3 tablespoons fresh lemon juice
1/4 cup soy sauce

Combine all ingredients. This sauce can be used as a marinade, also. For a marinade, add meat and chill covered mixture overnight in refrigerator. The meat, especially thick pieces such as chicken breasts, can be partially precooked in microwave or conventional oven. Add the barbeque sauce after grilling is half done to prevent burning.

The peach harvest should be in full swing now. Honey, especially orange blossom honey, enhances the peach flavor. Although a simple dessert can be fresh peaches with honey drizzled over, you might wish to prepare this dessert with your flavorful honey.

PEACHES CELESTIAL

6 large, ripe peaches
3 tablespoons water
1 to 3 tablespoons honey, to taste
1/8 teaspoon ground ginger
1 cup yogurt, sour cream, or whipped cream
1/3 cup chopped nuts

Continued on Page 475

ICE CREAM
BAR-B-QUES
DESSERTS



One of Life's L-O-N-G-E-S-T Moments

By DR. JAMES TEW • The Agricultural Technical Institute • Wooster, OH 44691

*"Or:
What should you be thinking as you
walk to the podium"*

As a natural part of life, we are all required to face those episodes when our palms sweat, our hearts race and our breath becomes shallow. Any of many events can bring on such symptoms — sitting in a dentist's office, waiting for the highway patrolman to make the short trip from his cruiser to your car door, or sitting in your banker's lobby, could all be examples that initiate the phenomenon.

Various beekeeping organizations have honored me by asking that I present discussions on common bee topics in recent years. I can emphatically report that the little time slot that personifies one of life's longest moments for me begins with the statement, "We are happy to have with us tonight . . .". That's the cue — it's time. There will be no more preparation for this talk. The slides are as good as they're going to be and the notes are finished. If all is on schedule, my stomach is knotted, my mouth is dry, my heart is pounding and my mind is racing with sentence fragments, figures and other disjointed thoughts. For the next few minutes, I will earn my salary. Afterwards, it will be several hours before my metabolism will return to anything approaching normal.

I understand from my peers that most speakers become accustomed to the stress and learn to cope. I have learned to accept the stress, but I'm not convinced that I've learned to cope with the pressure. In fact, if I don't feel heavy pressure, I worry that something is not right. I don't think I will ever learn to be at ease before a group — any group.

Somewhere about 10 years ago, I came across the following outline that I have kept all this time. I can't cite the author, but it's still worth presenting. It has always helped me greatly.

BASIC RULES OF PUBLIC SPEAKING

- I. GREET YOUR AUDIENCE
- II. HAVE SOMETHING TO SAY
- III. TELL THE AUDIENCE
WHAT YOU ARE GOING TO
SAY
- IV. SAY IT
- V. TELL THE AUDIENCE
WHAT YOU'VE SAID
- VI. SIT DOWN

As I read this outline, I felt that this was one of those "finds" that one can place on their list of things to live by. In a little more detail, I have added thoughts and comments through the years. Again, not all are mine, but the outline has served me well. If during this recital it sounds that I consider myself an authority on public speaking, dash that thought. I struggle with each speaking effort mightily and would be the last to give advice to another on this subject.

GREET THE AUDIENCE.
This is just common courtesy. It has been said that one should not

apologize for anything during the introduction. The initial impression will follow you throughout the presentation. "Boy, I could have been much better prepared if the snow hadn't come." "Sorry, I'm having trouble seeing my notes." Comments like that simply aren't positive and are perceived that way.

Never ask, "Can you people hear me okay?" unless there is a definite reason to think they can't (i.e. equipment malfunction).

HAVE SOMETHING TO SAY. In my opinion, this is the hard part. You have agreed to a topic, now what can you say that will be worth the audience's time. This section may require study and preparation. Normally, listing 3 or 4 points that justify why the topic is worth the talk helps get off to a good start. Most people use notes. I can't. I may have a 5 or 6 point written outline, but most of the time I speak from a memorized outline, and I fill the spaces as I go. I think this technique is needlessly stressful, but I have never been able to follow notes. **DON'T READ FROM THE NOTES.**

SAY IT. Look and speak directly to the audience. Not infrequently, speakers look just over the audience's heads. This is obviously less threatening to the speaker than direct eye contact, but it's very noticeable by the audience. However, when the speaker maintains eye contact, non-verbal communication patterns become established. Some members of the audience respond better to your comments than others. Certainly the speaker can gain confidence from those participants that offer "positive feedback", but don't begin to direct your talk to a select few. Naturally, the remainder of the group begins to feel left out if it appears that you are having a conversation with only a few of the members of the audience.

Continued on Page 467

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Testing Your Beekeeping Knowledge

By CLARENCE H. COLLISON
Extension Entomologist
The Pennsylvania State University
University Park, PA 16802

Beekeeping equipment needs vary with the size of the operation and the type of honey being produced. Basic needs include the parts of the hive, protective gear, ancillary gear and equipment for handling the honey crop. In addition, numerous chemicals and miscellaneous pieces of equipment (gadgets and gizmos) are commonly used to assist beekeepers in managing their hives.

Please take a few minutes and answer the following questions to find out how familiar you are with beekeeping equipment and supplies used by the beekeeping industry. The first two questions are true and false. Place a "T" in front of the statement if entirely true and an "F" if any part of the statement is incorrect. (Each question is worth 1 point.)

1. ___ Certan is a biological insecticide used to control wax moth in stored equipment and is composed of a naturally occurring bacterium, *Bacillus thuringiensis* (BT).
2. ___ The inner cover on a beehive assists the bees in maintaining a suitable hive temperature.

Multiple Choice (1 point each)

3. ___ Fume boards are used to: A) protect stored combs from wax moth; B) treat colonies with varroa mites; C) kill diseased colonies; D) remove bees from honey supers; E) prevent chalkbrood
4. ___ Wooden comb honey sections are normally made of: A) Cypress; B) Basswood; C) Pine; D) Maple; E) Spruce

Hardware (wire) cloth comes in various sizes and is used in many different pieces of beekeeping equipment. Please indicate what size (mesh) of hardware cloth you would use for the following items.

- A) 8 mesh; B) 7 mesh; C) 6 mesh;
D) 5 mesh; E) 4 mesh

5. ___ Pollen trap grid
6. ___ Pollen trap drawer
7. ___ Double screen

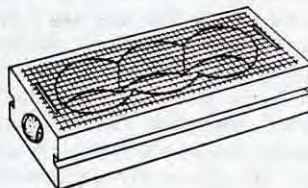
8. ___ Push-in queen cage
9. What are the recommended uses of Bee-Go (butyric anhydride) and Tetra-Bee Mix? (2 points)

10. Name two ways in which hives are fastened together so that they can be moved from one location to another. (2 points)

Pictured below are several pieces of beekeeping equipment. Please give the name and function of each. (Each question is worth 2 points.)



11. Name _____
Function _____



12. Name _____
Function _____



13. Name _____
Function _____



14. Name _____
Function _____

Answers on Page 487.

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By STEVE TABER of Honey Bee Genetics • P. O. Box 1672 • Vacaville, CA 95688

"Remember, honey on the hive is perfection personified — don't mess it up"

Wonderful! The bees didn't swarm, the weather wasn't perfect, but there were enough good days so that now there is honey to remove and take home. Wonderful! You just can't say it often enough during the day. But hold the phone a minute and think about some things.

FIRST, as always, think about your bees. Are they going to have enough to live on the rest of the warm season? And, enough to get through winter too? Do you know how much it takes for bees to overwinter in your area?

SECOND, if you keep bees in the humid East, don't take any honey off unless it's *completely* sealed over by the bees. And when you do take it off, extract it right away. Or, if it's comb honey take care of it immediately. Fresh honey from the hive is rather warm and will flow from the combs quickly. Also, in humid areas even sealed honey will pick up moisture from the air; so don't scatter a lot of water around your extracting room until the honey has been extracted and placed in a covered tank. If you get into one of those jams (that happen more often than not) where the crop is on the hive and you have to do the job now, and it's raining and the weather man says it will never quit, you will have to fix a drying room for the removed honey.

A drying room is a place you can stack your supers of honey, open at the bottom with supers criss-crossed to provide maximum ventilation. Near the center of all those stacks of supers, place an electric heater equipped with a thermostat and fan. Set the thermostat for *no warmer* than 115°F. Surround and cover with black plastic sheets and duct tape. There, you have your drying room.

That was the situation when I was keeping bees in Baton Rouge,

LA, at the USDA bee lab. The honey flow was strong in April, May and into June. May and June were usually pretty dry but toward the end of June and during the month of July the dew never left the grass. If it did, it would rain. Solid capped honey in the hive would ferment because the bees could not control the moisture.

Let's talk about moisture a bit. Moisture in honey is determined by a refractometer. This device uses a small drop of honey and measures the degree that light rays are bent as they pass through it. The bending of the light rays is changed by a number of factors, most noticeably ambient temperature. For this reason, instructions are furnished for accurately calibrating a refractometer. They cost roughly \$200 and are sold by many bee supply companies. It would be a good investment for any bee club.

There is *always* yeast present in your honey. When honey moisture is high the yeast will begin to grow. This produces alcohol, which in nature is almost always converted to acetic acid by other microorganisms. When very dilute honey is left unattended you will be able to smell and taste what has happened in less than 24 hours. If the honey has a 20 to 22% moisture content, bubbles will be evident in a week or less the result of

fermentation. Honey that has a 18% moisture content or less, will not ferment even when yeasts are present. Honey produced at the Tucson, AZ bee lab had about a 14% moisture content and was so thick it was difficult to pour from a jar.

THIRD, have your metal, plastic or glass containers clean and dry — beforehand. Be sure your honey containers have been approved for food use. This includes extractors, honey tanks and barrels. I worked for a beekeeper in upstate New York that sold honey to the New York City Jewish community packed in wooden barrels, each weighing about 175 pounds. A Rabbi came to inspect the barrels to determine if they were Kosher, or had ever been used to pack pork products. Do not use iron or steel or galvanized steel because honey will react with these metals.

FOURTH, *keep the honey clean*. This starts in the bee yard when taking supers off. Don't let smoke from the smoker or dirt or anything get on the honey. When stacked in your car or truck, cover the bottom and top of each stack to keep out dirt and insects. Keep your extracting room clean and neat. It should be a show-off area that would enhance honey sales, not scare

Continued on Next Page

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customers away. My preference is honey that has been strained and given a chance to settle for several days before being bottled.

If you are going to heat your honey because last year it either fermented or granulated in the jars, or because somebody suggested it, **watch out.** Any kind of heat damages honey; the higher the heat, the more rapidly the honey is damaged. At 160°F, only one minute will cause noticeable darkening; at 140°F an hour will cause darkening; at 100°F, three months will do the trick. In fact, try this experiment: Take two identical samples of freshly extracted honey and put them in clear glass. Place one in the warmest part of your house, shop or garage, but not in the sun. Place the other in the freezer. Now put them both on the table for Thanksgiving dinner. Smell, taste and see the difference.

WHAT IS THE BEST WAY?

What is the best way to take honey off the hive? Most comb honey is taken off by using bee escapes, but there are several problems using certain types of bee escapes. Sometimes the escape holes plug with drones and the bees can't get out; or, if there is a little brood in one of the sections the bees won't leave. Or, it rains and the honey is sitting out there in the rain not being protected by the bees. Or, the supers have a hole big enough to allow robbing bees in. I have never used one, but I would expect that one of the blowers in use to remove bees from extraction supers would be the best way to remove bees from comb honey.

I have taken off tons of honey using chemical repellents because I was told and paid to do so; but, if it was my honey I wouldn't let any

chemical get close to it. Two very good beekeepers I worked with removed their entire honey crop by brushing the bees off the supers. Mr. Elton Lane, in upstate New York, brushed bees using bunches of rough-leaved goldenrod. He said that was superior to any man-made brush because the rough leaves sort of picked the bees up from the combs instead of swatting or pushing them away. Dr. C. L. Farrar in Wisconsin used commercial brushes.

Little has been said about comb honey because there are not many ways you can ruin it. Don't store it where it's hot and dry for more than a few days because it will probably begin to show wax moth damage. And, don't treat with chemical fumigants to kill wax moths either. My preference is to wrap sections in sealed plastic bags and place in the freezer until it won't hold any more, then remove and store in a cool, dark room if you have one.

But let's go back to the beginning for a moment — how much honey should you leave for the bees? If you are new at beekeeping ask your friends if there will be a fall flow, and, is it dependable? At Madison, WI, Dr. Farrar recommended that beekeepers leave a *minimum* of 60 pounds on the hive when they were taking their honey off. But, you know that he made sure that at least 90 pounds of honey was on each hive that was put to bed in the fall. In Louisiana, 90 pounds was not too much to leave on the hive either. The bees won't eat the honey just to have something to do; they eat it only if they need it; It's far better to have 20 to 30 pounds of last year's honey left rather than have a colony die of starvation. It's simple economics.

So that you can estimate how much honey you have, figure that one full-depth comb, sealed top to bottom and side to side has between 4-1/2 and 5 pounds of honey. A super of these will hold about 50 pounds. If you weigh the box with the 9 or 10 empty combs, they weigh about 30 pounds. Therefore, the gross weight of box, frames, combs and honey will rarely exceed 80 pounds. Farrar wintered in three, full-depth Langstroth standard boxes. The top box was solid full of honey, the second was about half honey and the bottom box held about 1/3 honey. Farrar rarely lost colonies to starvation during the winter.

Remember — honey on the hive is perfection personified. Don't mess it up. §

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Don't dwell on the members of the audience that are asleep. People sleep for a number of reasons during talks; only one of which is boredom. However, if most of the audience is asleep, you might want to consider going straight to the "Sit Down" section of your presentation.

If noisy children (or adults) are present, all you can do is hope the parents (or officers) can get things under control. Otherwise, you have to get louder than they are. If that's not possible, I would suggest politely go to the "Sit Down" section.

Visual aids are a great thing if they are appropriate for the room and the topic. I have read that a slide should not be left on the screen longer than a minute or so after you have finished discussing it. If the slide is of low quality or if the figures are small, don't use it. "This slide is dark, but...", "I'm sorry that you folks in the back can't see this but..." are comments we've all heard.

Visuals can make or destroy a talk. Always have spare parts for the projectors and take your own extension cord. Be prepared to talk without them or without the lectern light.

Humor is dangerous. Nothing can destroy one's confidence and concentration more quickly than a busted joke. But on the other hand, a little bit of humor handled correctly (or luckily) can accomplish more than all the education you could pack into the same session. You have to decide if the risk is worth it or not.

TELL THE AUDIENCE WHAT YOU'VE SAID. The quick review will do two things: it will put all your comments into perspective and make sense of things; and, it will alert the group that you are closing down. End confidently. Statements like, "Well I guess that's about all I have to say" or "I can't think of anything else" aren't necessary.

Take questions only if the time was prearranged or if the presiding officer suggests it.

SIT DOWN. Stay on time. If you were given the speaker slot late,

try to catch up, but not so much that the group feels that you rushed. Try to leave the group wanting "one more verse" rather than, "I thought he would never shut up".

Nothing is guaranteed when you are before a group. Sometimes things go wrong that can't be helped. Shake it off and begin preparing for another day.

PLEASE HELP. *Bee Culture* readers who saw the satellite video that the Ohio State University produced on Africanized Bees and Bee Mites on March 30, 1987 could do us a great service by dropping me (NOT THE EDITOR) a note telling what you thought of the production. Since the production went across the continental US, we have practically no way of knowing who saw the effort. Such productions are expensive to produce and are greatly aided by viewer feedback. We need to know if you thought it was worth the effort.

If you didn't see the live transmission, but have seen the video tape of the session, we need to hear from you too, for the same reasons.

You may comment as you wish, but please address the quality of the presentation, the subject matter, the availability of the live presentation and the subsequent video tape. If you could, would you address your feelings toward beekeeping video tapes in general — are they useful, do you learn from them, do they promote beekeeping?

The decision to produce TV quality video tapes is not made whimsically. Expense and demand are constant considerations. We NEED to know your opinions if we are to produce video tapes on other beekeeping topics. Your comments are needed before September 15, 1987. A SINCERE thank you is in order.

Please address your comments to James E. Tew, ATI/The Ohio State University, Wooster, OH 44691.

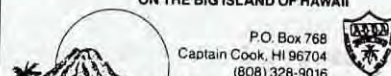
HINT OF THE MONTH

To have your honey 'ready to use' in the kitchen, keep it in several types of containers. I have 3 squeeze bottles: one with orange blossom, one with my own flavorful tulip poplar/blackberry honey and one with a slightly milder wildflower honey. The squeeze containers are perfect for recipes calling for '2 tablespoons' or other small amounts of honey. For large quantities, such as '1/2 cup' or so, I have honey in quart jars that I can easily grip. Then, it is always handy to have some 1 pound jars since they hold 1-1/4 cups of honey. With the different jars handy, I find that using honey in the kitchen is as quick and easy to use as sugar.

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A Terrific Teaching Tool: The Observation Hive

HOW TO MAKE AND USE THIS HIVE

Michael S. Ferracane • Office of Apiculture • Dept. of Entom. • Cornell University • Ithaca, NY 14853

Uses of an Observation Hive

An observation hive offers a view into the inner workings of the honey bee society that is otherwise impossible to obtain. Much of our current understanding of honey bee behavior stems from its use as a research tool. However, one need not be a scientist to appreciate and make use of an observation hive. An observation hive offers many hours of entertainment to both young and old alike and is at the same time a valuable teaching aid. It can be easily transported to schools, fairs or other suitable places and used to educate the public about honey bees. Such opportunities allow a beekeeper to allay many of the misgivings and misconceptions surrounding honey bees and to explain their value to man and the environment. With the imminent arrival of the Africanized honey bee it has become more critical than ever to have an enlightened public that appreciates the importance of honey bees. Efforts that help to achieve this goal could do much to minimize public hysteria and over-reaction by legislators.

An observation hive can also be used as a highly effective marketing tool by attracting potential customers to a roadside stand or a booth at a fair. After viewing an observation hive and hearing about honey bees people are often receptive to a beekeeper's sales pitch and in many cases purchase some of the beekeeper's wares.

Construction

While an observation hive can be very elaborate and relatively expensive, this need not be so. A well-constructed observation hive can be built using scrap lumber and other materials at hand for only a few dollars. Only minimal skills in carpentry or woodworking are necessary. The design that is provided (Figure 1) is for a two-frame observation hive that is simple in construction but quite functional. All of the lumber used is 3/4" actual thickness. Although

dimensions need not be strictly adhered to it is important to maintain a 1/4"- 3/8" bee space between the frames and the sides of the observation hive to allow the passage of bees. The only exception is at the bottom of the hive where a larger space of approximately 1" should be provided. This design may be easily modified to accommodate different numbers or sizes of frames by shortening or lengthening the end pieces (A). Grooves 1/2" wide and 3/8" deep need to be cut into the end pieces to support the lugs of the frames. These can be made with a router or with a wood chisel. Because observation hives tend to be slightly top-heavy it is important to provide a wide base (C) to increase stability. As a general rule, the taller the hive, the wider the base should be.

An important consideration is whether to use acrylic plastic or glass for the sides of the hive. Each material has its advantages and disadvantages. Glass has been the traditional material of use because of its clarity and ease of cleaning but it is more difficult to cut and is prone to break. Plastic is easier to work with and is resistant to breakage but is prone to scratching and is difficult to clean. It is relatively cheap, however, and could be periodically replaced. Although there are several ways to attach the glass or plastic sides to the hive, the easiest method is to tape them to the end pieces with duct tape. The bees will soon glue the glass or plastic down with propolis and some

of the tape can then be removed. If plastic is used it can be attached with screws instead of tape.

While the observation hive can be nailed together, wood screws are preferable because they are less prone to loosening. In either case, carpenter's glue should be applied to all joints to strengthen them. At least one hole 3/4"-1" in diameter should be drilled in each of the end pieces (A) and covered with a piece of window screening or 1/8" hardware cloth to provide ventilation. An additional hole should be drilled in the top piece (B) to allow the insertion of a feeder. I prefer to use a plastic 12 oz. cylindrical squeeze bottle with a conical spout since it is approximately the same width as the observation hive and requires only a small hole. When not in use, the feeding hole may be sealed with a cork or a piece of tape. An entrance hole approximately 1-1 1/2" in diameter is needed near the bottom of one of the end pieces (A). A length of plastic tubing or pipe is inserted into this and the other end is connected to the outside via a window or hole in the wall. Bees will travel several feet through tubing, if necessary, but it's best to use as short a length as possible to make things easier for the bees. If the tubing is new it helps to roughen up the inner surface slightly with a bit of sandpaper wrapped around a stick to give the bees better traction. The observation hive should be placed on some type of sturdy stand or table near eye-level to facilitate observation. You may want to be able to fasten it to your stand for additional stability.

Setting Up the Hive

The best time to set up an observation hive is during late spring or early summer when there is plenty of available forage. The hive may be set up inside any building or shelter that is not subject to extremes of temperature. A location for the hive should be selected that minimizes the possibility of passersby encountering

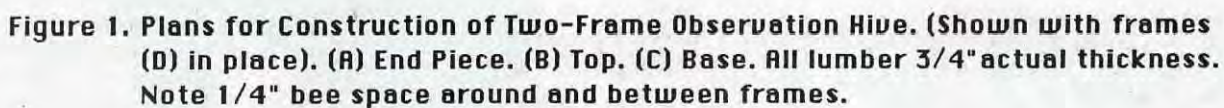
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Continued on Page 474





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SIFTINGS

By CHARLES MRAZ • Box 127 • Middlebury, VT 05753-0127

"During my 65 years of keeping bees it has been interesting to note the periodic changes in honey plants"

Recently there was an interesting program for beekeepers on "Discovery Channel TV". The program was about the work of Brother Adam, Devon, England and his more than 60 years of effort to breed a superior "Buckfast Bee". Brother Adam has also had more than 60 years of experience with Acarine Disease which wiped out the native "British Brown Bees". From his experience the only satisfactory solution is to breed strains of bees resistant to the effects of Acarine Disease. The fact that Acarine Disease is not a problem today in England is good testimony of its success. It is unfortunate the lifetime of queen breeding Brother Adam spent testing bees from almost all over the world is not appreciated in the US. If Acarine Disease *does* cause serious problems here then we will have to learn from his experience to prevent disaster from this disease.

After last years honey crop failure this years season is making a good start and all conditions look good in early June. But it won't be until August that we know if we get a crop.

It is interesting, thru my 65 years of experience in beekeeping, to see the changes that go on with honey plants. In the early days, pasture clover was the main honey plant in many areas of the Northern U.S. Then Alsike clover came along followed years later by sweet clover, alfalfa and then Birdsfoot, Trefoil, the latest introduction.

Our most serious problem has been the reduction in clover for dairy hay and forage that is being replaced a great deal by large areas of field corn. Hopefully, this is now changing back to more clover again.

In addition, many "wild plants" seem to come and go that are excellent honey plants. Basswood trees were once a good source of honey, but they have been logged off in many areas and are no longer a source of honey. In some areas Black Locust has been spreading to produce one of the most fragrant types of honey that bees can produce. For a brief period we had enough blue thistle to produce some honey, but this plant has practically disappeared. Wild thyme is another good honey plant that is disappearing—as well as many others. Recently some types of woody brush plants have been spreading in the Champlain area that appear to be good honey plants, blooming about the time of clover. In the Lake George area another type of brushy plant with small, honey suckle type blossoms is spreading in empty land, and blooms about the same time as dandelion. During its short bloom periods bees will cover the blossoms. As the years come and go, so no doubt will honey plants come and go. No doubt there are many good honey plants in many parts of the world that could adapt themselves to parts of the US. The problem with any willful introduction of these is that they may become serious pests in farming areas.

With so many changes coming in beekeeping today, only time will tell what it will be like 50 years from now.

The bee barrier at the "Isthmus of Mexico" still seems to be in the news. The latest is that a scaled down, "modified" barrier will be established, or attempted. The reason apparently is that there are a lot of people who feel "something should be done" to stop the advance of the Africanized bees into the U.S. thru Mexico.

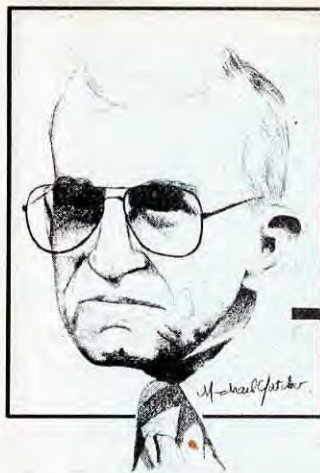
Personally, from my more than 20 years of beekeeping in many parts of Mexico, any such barrier, even with unlimited funds is absolutely useless. It will not stop the advance of these bees the slightest. The big problem is the lack of roads in much of Mexico. The main roads are good, but when you get into the "country roads", you find there is no such thing. When we established outyards in Mexico the only way to go by car or truck was on cow paths, river beds or open fields—nothing that could be called a road. Travel into many country areas is still largely by horse or on foot, on trails, with miles and miles of jungle between. Jungle travel is impossible even on foot, except by cutting a path with a machete.

Swarming bees have no such problem however. They can travel 300 miles a year. To find and kill all swarms going through any area would be impossible, even with a million men experienced in killing bees.

However, I do believe such a modified program is an excellent idea. It will give the backers of this idea first-hand experience of what such a program entails. It will be a great experience. More than that, it will teach those interested how Africanized bees behave. This information will be of value when they arrive across our border. The only solution to this problem is to learn to live with them, as those countries already invaded have learned to do.

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WASHINGTON SCENE

By GLENN GIBSON • Minco, Oklahoma 73059

"... Quayle and others have vowed to kill our program on the first opportunity"

On June 2, 1987 the U.S. Senate passed H.R. 1827, the Supplemental appropriations bill for fiscal 1987. Our amendment to remove the loan cap on honey was a part of this legislation. The next step is to persuade the House conferees to agree with the Senate version. The Senate action climaxed several weeks of hard work with more than 90 Senators.

Congressman Glenn English outlined a part of our position in a brief letter to Congressman Jamie Whitten, Chairman, House Appropriations Committee urging him to support the Senate provision to eliminate the loan cap. The pertinent paragraphs of that letter follow:

"I am writing to urge your support for a provision contained in the Senate-passed supplemental appropriations bill. This provision eliminates the honey price-support loan cap that was imposed by Congress last year.

I support his provision for several reasons. First, the Congressional Budget Office has determined that a removal of the loan cap will not result in additional expenditures this fiscal year, and has therefore, scored this provision budget neutral. Furthermore, removal of this cap will make it easier for the Department to administer the program and for honey producers to participate in the price-support program. Finally, removing this cap will put this loan program back on the same footing with other price-support loan programs which are currently not subject to caps."

In addition to the English points, we stoutly contend that the loan cap will result in more forfeitures and the excess honey (above loan cap) will be sold at fire sale prices thereby reducing the market on honey which in turn may mean a lower buy-back figure. Also, please bear in mind that

the producers must have a sale before they can redeem. Granted it is possible to move approximately 900,000 pounds and stay under the loan cap if:

- You have time to make a minimum of 92 contacts with ASCS.
- You have customers waiting (unlikely for the 1987 crop).

In the Senate

One would conclude that our loan cap amendment would sail through congress with flying colors!! Not so. Our perennial opponents, Senator Dan Quayle, Indiana, and Senator Phil Gramm, Texas, opposed our amendment on the Senate floor. Earlier Senator Patrick Leahy, Vermont, gave us some opposition in the Senate Appropriations Committee. At the last minute the Department of Agriculture opposed our amendment (earlier they expressed sympathy and promised not to oppose).

In the House

After winning in the Senate, we spent time with the members of the House Appropriations Committee urging them to agree with the Senate and approve our amendment to eliminate the loan cap. As this is written (June 15) before the conference committee has had a chance to meet, I

have no information on the final outcome.

Our 20 year opponent, The Honorable Silvio Conte, Massachusetts, sent word that he was going to do everything in his power to kill not only this amendment but the price support for honey as well. We have also been advised that Congressmen Barney Frank (MA) and Hank Brown (CO) will assist him. It is our feeling that a majority in the House will vote to terminate our program if given an opportunity on the floor (which means that we must do everything in our power to deny that opportunity for the likes of Conte).

Between the Lines

If we can continue our close contact with members of the Senate, we have been told by several influential Senators that we are not likely to be singled out for an unfair amendment in the future. Senator Quayle decided not to fight us on the floor after learning that we had the troops to win. This does not mean that we will be ignored when the Farm Bill is reviewed — on the contrary, Quayle and others vowed to kill our program on the first opportunity.

The Administration's \$50,000 recommendation may not go anywhere this year, but there is good evidence that it is not dead. Some "Save the Family Farm" bills are pending in the House and Senate. All of this seems to chant — "little is lovely, big is bad". Result — a part-time and hobby farm program (requiring more personnel).

The Federation Comment

Frank Robinson, Secretary-Treasurer of the American Beekeeping Federation, comments on

Continued on Next Page

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WASHINGTON... Cont. from Page 472
our efforts to get the loan cap eliminated in the March-April issue of the Federation News Letter. Subject discussion appears under the caption of "Don't Kill The Golden Goose". Mr. Robinson comments on an article I had written asking beekeepers to support our efforts to eliminate the loan cap. I would guess his reference to the Golden Goose is the price support program, and that our activities might do the killing.

Our amendment offers no opportunity for changing the basic honey program. If our amendment is lost in the Conference, all we will lose is the amendment. Mr. Robinson expresses concern about tampering with the program:

"... every one of our contacts in Washington has cautioned against asking for changes..."

We certainly share his concern and agree with the advice of mutual friends in the Congress. However, this counsel relates to free-standing legislation which opponents can amend.

What You Can Do

Write one of your Senators and ask for copies of Congressional Record pages S 6287 and S 6288 dated May 12, 1987 and copies of pages S 7353 and S 7354. The discussions by Senators Gramm and Quayle are ridiculous. Also, write both of your Senators and express your pleasure with the Senate action on our amendment to eliminate the loan cap. Last, but not least, if you or your Association Members have questions about our policies in Washington, please contact us, we'd be most happy to respond!§

Footnote:

One June 26, 1987 the Conference Committee on Supplemental Appropriations approved an amendment to the loan on Honey Cap.

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OBSERVATION... Cont. from Page 468
flying bees. The upper story of a building is an ideal location. If the hive must be set up at ground level then the entrance to the hive should be in a location where there is little human activity. Many people set up their hives inside their homes or offices in some out-of-the-way location. This provides the opportunity of observing the hive at any time. If the hive is to be left in one location for an extended time, or if small children or pets frequent the area, it pays to fasten it down with several wood screws. It is best not to place the hive where it will receive too much direct sunlight since this may cause it to overheat. Bees may abscond if the hive is consistently exposed to too much sunlight. When the hive is not being viewed it is a good idea to cover it, especially in the evening. This helps to retard heat loss. Suitable covers can be made from plywood or cardboard and taped in place over the glass sides or a heavy piece of dark cloth may be draped over the entire hive instead. During especially cool weather, additional insulation may be provided by covering the hive with a heavy blanket or a piece of insulated quilting.

Obtaining the Bees

The easiest way to stock an observation hive is to obtain a frame of sealed brood with adhering bees and a queen from an established colony. Sealed brood is chosen because it requires little care from the bees and will soon add additional bees to the new colony. The frame should be inserted into the lower part of the observation hive. Enough bees should be present to cover the brood.

If the observation hive will be established less than two miles from the apiary site, additional bees should be shaken into the observation hive to compensate for the bees that will return to their own hive. While any colony may be used to supply the bees and queen for the observation hive, one with an old or mediocre queen is probably best. Although such a queen is undesirable in a honey-producing colony, and would need to be replaced anyway, she will usually prove adequate for an observation hive. Her reduced fertility should insure that the observation hive does not become rapidly overcrowded. Alternatives to using an established colony are to purchase a small package of bees with a queen, sold for this purpose by several package bee suppliers, or to install a newly captured swarm.

It is helpful to mark the queen on her thorax with a dot of fingernail

polish or paint as this makes her easier to see, especially for untrained eyes. Likewise, a certain number of young worker bees may be marked (using different colors of paint) so that the daily activities of individual bees can be monitored.

A second frame should be installed at the same time as the one containing sealed brood. This serves to give the queen additional room to lay eggs and to provide storage space for nectar and pollen. The frame containing the brood is installed in the bottom of the hive and the empty frame is installed above it. A fully drawn comb may be used as the second frame but it is much more interesting to use a sheet of wax foundation or an empty frame with only a starter strip of beeswax so that you can observe the bees as they build new honeycomb.

Care and Maintenance

Because observation hives contain a relatively small number of bees and the number and arrangement of combs is somewhat unnatural, colonies in observation hives are under a great deal of environmental stress. Special care must therefore be taken to ensure that the colony prospers. As previously mentioned, colonies in observation hives have a more difficult time regulating the internal hive temperature. To help the colony to thermoregulate their hive select a sheltered location that is not subject to extremes of temperature and keep the hive covered when not in use. During hot weather, bees evaporate water to cool the hive. In addition, bees require water to dilute the honey that they feed to larvae. The beekeeper can help the bees to accomplish these things by providing a shallow pan of water near the colony entrance during hot weather. Several sticks should be placed in the pan to prevent bees that fall in from drowning.

Due to their small foraging force it is often difficult for colonies in observation hives to gather enough food for their needs except during strong nectar flows. For this reason it is important to keep an eye on the level of honey stored in the combs and to feed the colony before it gets too low. It is a good idea to feed the

colony sugar syrup until they have stored and capped the equivalent of at least a half a deep frame. In most areas of the country pollen is available throughout the summer months and observation colonies will gather all that they need. In a few areas it might be necessary to feed pollen supplement if there are extended periods in which pollen is not available.

Eventually most observation hives will become overcrowded and swarm. This is a fascinating process to watch. The resulting swarm, however, has almost no chance of surviving the winter. In addition, the new queen that is raised by the hive is apt to be of very poor quality. For these reasons some may wish to prevent the colony from swarming.

This may be accomplished by removing a frame of brood and bees (without the queen) and replacing it with an empty comb. This procedure obviously requires the removal of one or both glass sides and should be done outdoors after first sealing off both the hive entrance and the outside entrance. A veil should be worn and a smoker should be kept handy. The removal of the frame may require a certain amount of prying and scraping and care should be taken to injure as few bees as possible, being especially careful not to injure the queen. If necessary, she may be picked up by her wings and moved to another frame or placed in a queen cage for safe keeping. The removed frame of brood and bees should be used to boost the strength of another colony. Most of the older bees will return to the observation hive but the young bees will be left behind. This will curtail swarming for several weeks. This procedure may need to be repeated several times during the season, depending upon the size of the observation hive, the fertility of the queen, and environmental factors.

In early fall the observation hive should be dismantled, the queen removed, and the bees united with a full-size hive. Although the temptation to try to overwinter an observation hive is sometimes great, the attempt is seldom successful. However, if the colony is extremely populous with a good queen, it may be possible, with the provision of a large amount of food, to overwinter it above a strong two-story hive. The frames of bees should be transferred to a deep super, the bulk of the space being filled with drawn combs, and the super placed above the two-story hive over a double screen or an inner cover with the bee escape hole screened. §

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HOME... Cont. from Page 462

Peel peaches, cut into halves and remove pit. In a wide, shallow saucepan, combine water, honey and ginger. Heat and stir until well mixed, then add peaches and poach gently for about 5 minutes, or until peaches are soft but not mushy. Cool the fruit then chill. When ready to serve, arrange two peach halves on each dessert plate, spoon a tablespoon of juice over each half, then fill the centers with yogurt, sour cream or whipped cream. Sprinkle nuts over each portion. 6 servings.

*Rodale's Naturally Delicious
Desserts and Snacks
by Faye Martin*

Other fresh fruits are abundant at this time of year. This cheese dip served with a platter of banana slices, melon cubes, grapes, strawberries and peach or nectarine slices makes an excellent light summer dessert or snack.

CALIFORNIA CHEESE DIP WITH FRESH FRUITS

- 1-8 ounce package cream cheese at room temperature
- 1/4 cup milk
- 2 tablespoons honey
- 1-1/2 teaspoons vanilla

- 1/8 teaspoon nutmeg or mace
- 1/8 teaspoon cinnamon
- 2 tablespoons fresh lemon juice

Blend together all ingredients. Chill. Remove from refrigerator and let soften at room temperature for awhile before serving.

*Honey... Any Time
California Honey Board*

Although the next recipe is called a 'breakfast drink', I find it very satisfying as a mid-afternoon snack.

STRAWBERRY BREAKFAST DRINK

- 1 pint of strawberries OR
- 2 cups fresh fruit

- 1 egg
- 2 teaspoons lemon juice
- 5 teaspoons honey, to taste
- 1 tablespoon milk
- 4 ice cubes

Cut up berries or fruits. Put into blender, add egg, add lemon juice, honey and milk. Blend until liquified and add ice cubes. Blend until ice is crushed. For strawberries, let seeds settle, then drink.

*Honey Recipes from 1981
Honey Queen*

American Beekeeping Federation

Enjoy the fresh fruit season — with honey! — and save some fruit in the freezer for the dreary days of winter. §



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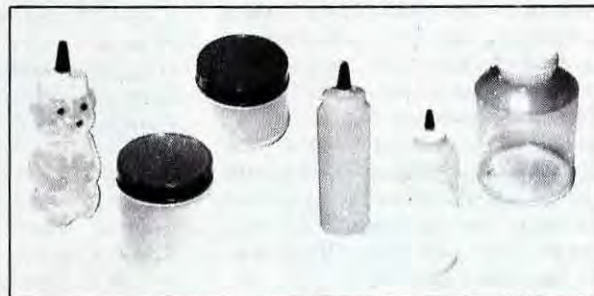
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10

Commandments of Classroom Demonstrations

By KEN OLSON • 87417 Halderson Road • Eugene, OR 97492

"We have left undone the things which we ought to have done." Few people who speak about bees before a group are ever satisfied with their performance. Looking back we almost always see some little or major change that would have improved the presentation. We recognize the deficiencies, but now the talk has been delivered. It is too late to do what we know ought to have been done.

These reflections never can be eliminated, but they can be minimized by a firm adherence to some of the fundamental rules of public appearance. All of us know what we ought to be doing.

I Be organized and methodical about your presentation. When you are the invited guest, sheer courtesy suggests you have something definite to share. Have all of the props you intend to speak about at your finger tips. You need frames, wire, the foundation boxes — clean and in good repair. Progress steadily from one subject to the next, like an ocean liner heading for port, not pausing with long delays nor meandering from one off-beat topic to another. If you discuss swarms, say all you're going to say, then not return to it. If you discuss removing bees from buildings, finish that subject then not return to it after discussing another, unrelated topic. Always be prepared, methodical and organized.

II Have clean products. Remember, we are dealing with food for human consumption. Adults who are bordering on skepticism and reluctantly listen with only one ear will quickly notice surplus propolis on the woodenware or a bee carcass smashed against the lid of the hive. Take a few moments to clean off the wood and your metal tools, shining them with steel wool and removing dirt and stains with soap and water. This will entice a fascinated audience to sample your honey. If the bottles sparkle and the labels are bright and clean, the temptation to taste and purchase the honey follows naturally.

III Dress as professionally as your pastime allows. When you are in clean, fresh clothes and your gloves, hat and veil are free from holes and patches, your message will have greater impact. You'll make far more mileage from your discussions in public when you act, speak and DRESS like you respect yourself. This same regard transfers to your products and eventually to your customers.

IV If talking at a school, always announce your intentions to the administrators of the school. Individual teachers face so many demands on their attention and are interrupted so often they sometimes don't inform the principal of a guest speaker invited to their classroom. Imagine the surprise the principal faces when a guest appears at the front door bearing smoker, excluder, bee suit, hat, gloves and hive tool! A brief, simple phone call to inform the office of your arrival and your intentions will make relations smooth and help your program succeed.

V Always regard your audience as intelligent, curious and eager for valuable information. You can easily insult your listeners by assuming they don't know anything about bees. You can also insult yourself by trying to "pull something over on them". To tell horror stories that are untrue or entertaining, pointless stories that don't 'go anywhere' will frustrate your listeners. Everyone has a good bee story — the question, when and where is the appropriate time to tell it.

VI Never lie! It's easy to exaggerate and it's tempting to entertain eager listeners on fascinating subjects. But be mature and responsible, discipline your remarks with truth. The facts are, messing around with bees can be dangerous. The truth is, aggressive and hostile bees can kill. Present an accurate picture — just anyone with a crow-bar and claw hammer cannot remove bees from the wall of a kitchen. Procedures have been established and routines

are known for shaking bees from bushes, branches or building. Always advise students of the risks and hazards involved.

VII Describe the work involved in caring for bees. Bee care can be compared to rabbit care, horse care or dog care. Each creature requires regular, systematic attention to maintain good health and productivity. Beginning beekeepers may not realize bees may need to be fed or watered or given medicine. They need to know 'reversing' and 'supering' techniques and the consequences of neglecting these procedures. Similarly, since some beekeepers migrate to distant areas of the country for pollination or honey production, the expense and extra work involved in this often captures the interest of many audiences.

VIII Remind your audience that honey bees are critical to the food chain. Bees pollinate cherries, apples, peaches, plums, apricots and more. We would not have many vegetables without the pollination services of the bee. Most people recognize a honey bee on a dandelion or notice her on a marigold, but they fail to appreciate the value of the bee for producing food for humans. When speaking about bees and honey, also mention that bees pollinate flowers that produce fruit, vegetables and animal food.

IX Encourage good relations with our neighbors. We can offer them samples of honey and discuss the various duties of the worker bee. You can describe the swarming phenomenon and the remarkable communication system bees use. Our neighbors do not need to consider bees pests or nuisances, and when deliberately educated, they will understand and tolerate them better. When you speak before an interested group, you can educate them, too, about these remarkable insects which have taken so much of our time and attention.

X Emphasize the need for reading.

Continued on Page 478

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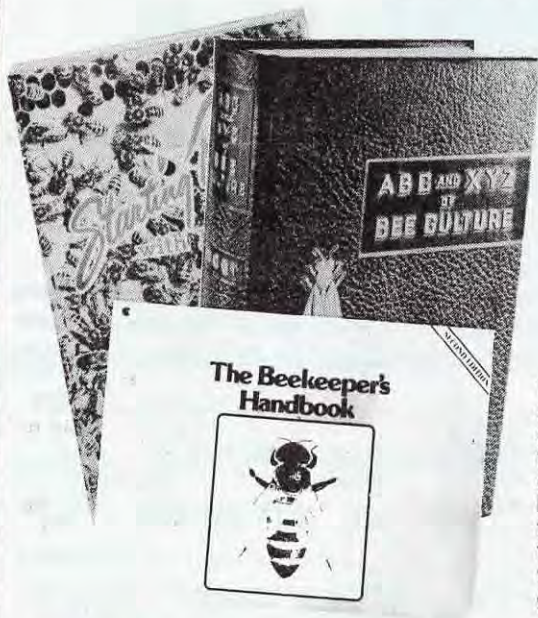
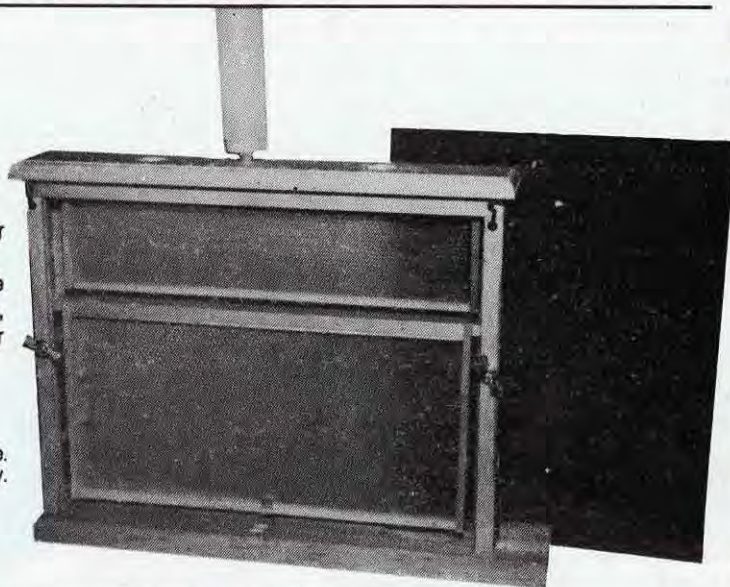
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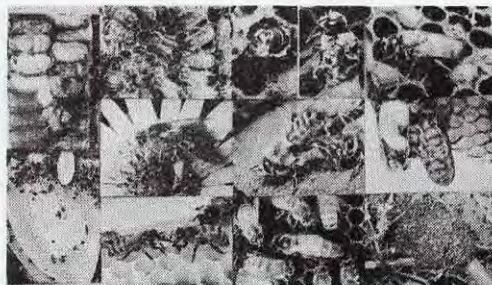


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I am speaking, of course, of the famous fictional sleuth, Sherlock Holmes, whose 100th birthday is celebrated this year.

Sherlock Holmes made his first appearance in "A Study in Scarlet" published in Beeton's *Christmas Annual of 1887*. With his loyal friend and companion, Dr. Watson, Holmes led a brilliant career outwitting devious criminals and malevolent villains. At last, however, Holmes retired to Sussex where he led a reclusive life enthusiastically devoted to a hobby of beekeeping and to the composing of a treatise upon the subject of queen bees. Although his fans have searched the world for the treatise, alas, it has never been found.

Holmes, however, continues to receive at least 40 letters per week, many of them requesting his aid in solving real crimes, addressed to him at his fictitious address of 221-B Baker Street in London. These letters are forwarded to the Abbey National Building Society which now stands on the Baker Street site. All inquiries receive a reply stating that Holmes has retired and has taken up beekeeping.

Wouldn't such a testimonial to the joys of beekeeping, when handsomely framed and displayed, be a welcome addition to your collection or to that of a beekeeping friend? If that appears to be a brilliant deduction, you can write to Sherlock Holmes, 221-B Baker Street, London, England, and you will have a unique acquisition for the price of air mail postage. §

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CLASSROOM... Cont. from Page 476

Beekeepers who want to succeed and who want to enjoy greater profits from their hobby or business must read the journals, books, the literature on beekeeping. New techniques and new products reduce labor and streamline the process. New markets spring up occasionally and new demands for various types of honey appear, while new materials make the equipment more durable. The beekeeper, just like a farmer or livestock rancher, must keep abreast of these developments if they intend to remain competitive. The students and the public may not appreciate the need for reading. When speaking before any group, stress how important reading is to our survival.

We always leave a few things undone which we ought to have done. It seems unavoidable, and it is always regrettable afterward. But, by making a plan and sticking to it, we can reduce these omissions and attendant regrets to a liveable minimum. §

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A College Classroom ... Outside

By Laura Frith • Debbie Dreger • Steve Bagley
Dept. English, LeHigh Univ. Maginnes Hall #9, Bethlehem, PA 18015

Learning to communicate is something we all need to practice.

In the carpentry shop:

"O.K., Jen, hold the frame while I dab some glue on it. O.K. Good. Now let me push these joints together and hold them while you nail it."

"Weren't we supposed to make sure this was square before we nailed it?"

"Yeah. Hey, Lane, you guys through with the square?"

Later, at the apiary:

"Bob, you look scared. You O.K.?"

"I guess so. I sure hope these little buggers can't crawl up under this net. I've always been scared of bees."

"It'll be cool. We are all wearing the right clothes, and Cliff smoked the bees before he opened the hive. Here, we're supposed to pass this frame around. See that one in there, that's called a larva."

Later, in the extraction house:

"Evan, I think there is a bee on my neck! Anyhow, something fuzzy. Can you do like Cliff said and squeeze it?"

"Hold still. I'll flick it off. Oops."

"Ow. He nailed me."

"Sorry, Pete. I guess I was nervous. Hold still again. I see the stinger. Let me scape it out. There. Does it hurt much?"

"Well... I'll be O.K."

In September, 1986, our freshman English class, under the direction of Professor Pete Beidler and his apprentice teacher, Kimberly Denise, embarked on a weekend trip unlike any a freshman class has gone on before. Our destination was a nearby bee farm. Called Bear Honey Farms, and located a half hour north of Lehigh University in the foothills of the Appalachians, this farm was to be our home and our classroom for the next two days. We were to sleep in sleeping bags on the floor of a barn. We were to tangle with bees.

Why were we doing this, when all the other 1,000 freshmen at Lehigh would be going to parties and sleeping late in real beds and going to the football game? We were not sure,



because Pete had never fully explained the purpose of this trip. He seemed to want us to figure out for ourselves what the purpose was — if there was one.

The first-hand experiences we had while at the bee farm helped with our class writing projects in a very basic way: they gave us something

interesting to write about. Often freshman English students are forced to write about silly topics like the food in the dining room, or the trouble with fraternity parties, or what I did with my summer vacation. Sometimes students are asked to write about philosophical topics, like why Thoreau went to Walden Pond, or why Dimmesdale climbed the scaffold in the *Scarlet Letter*.

At Bear Honey Farms we found a lot to write about. At the farm we actually lived and worked like farmers. By the end of the weekend we all had personally experienced, instead of merely read about, the life of a beekeeper.

Our duties began the first night we arrived. Before beekeepers can do anything at all they must first provide a place for the bees to raise their young and store their honey. So we began by building supers and frames for the hives. After about two hours of work we knew a feeling of accomplishment.

But the work had just begun. The next day Cliff and Lois hosted a Brownie troop at the farm, and we all helped prepare for the busy day. Each of us was given a specific task as we worked together to set up the barn for Cliff's show and Lois's

Continued on Next Page

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When the Brownie troop came, Cliff put on a show of creative dramatics which had each of us involved by playing the roles of bees. Some of us were members of the queen's "court", some were busy feeding the baby bees, some were guard bees, some were field bees, some of us buzzed around being typical drones and some were even flowers.

Later, when it came time to "work the bees" and "go into the hives", we all donned our light-colored, long-sleeved clothing and head nets and went down to the hives with Cliff. He showed us how to squeeze the smoker bellows. Each of us had a chance to hold the frames and to experience what it was like to be a beekeeper.

Then Lois showed us how she does her beeswax crafts. We all got a chance to make our own beeswax candle and paint our own beeswax honey bear. And finally, when it came time to spin out and bottle the honey we took turns so that each of us had a chance to perform specific parts of the task.

With all of this personal experience our minds were nearly overflowing with thoughts and details to write about. There were lots of opportunities — before and after meals, waiting for the group to gather — to write down our thoughts and feelings in our journals.

In addition to making it possible for us to write more interesting and detailed themes, this weekend also provided a closeness which allowed each of us to become more open in our communications with others. Writing, of course, is simply one of many forms of communication. Another kind is spoken communication. Others are eye contact, a smile of encouragement, or even a touch on the shoulder. Only people who know each other well can take part in these

other forms of communication.

One of the main emphases of this weekend, for which the bees were merely a vehicle, was on communicating with and working with others. Everything we did, from building supers to helping with the Brownies to extracting honey was done as a group. This group interaction, in its own subtle way, forced each of us to communicate effectively. Had we not found ways to communicate — some ways obvious, some subtle — we would have accomplished little. We found that by making use of our verbal and non-verbal communication skills we could do almost anything.

Despite the tight schedule and the many tasks we had to perform, the atmosphere at the farm was open and relaxed. We spent the nights "roughing it" on a barn floor and during the day we went around in old clothes doing strange new tasks. We talked about these experiences with our fellow students and with Pete, Kimberly, Lois, Cliff and their four small children.

The relaxed atmosphere at the farm also gave each of us an opportunity to do something which most college freshman never get a chance to do: see their English teacher as a person rather than some omnipotent figure whose only pleasure is in failing students. Out at the farm we saw Pete unshaven, unshowered and wearing a ragged sweater. We saw that he needs to eat, sleep, laugh and relax just like any other person. Once we saw that Pete was indeed a real person and not just another "grade giver" we were able to talk to him more freely.

Now, when we write our themes for class we no longer are writing for that stranger who lives by his grammar book, but for our classmates and for a real person named Pete, a person who eats and sleeps and even gets stung!§

Third, and perhaps most important of all, you can properly insist that your equipment is handled with care, that any damage to it is repaired, that your bees are not needlessly and carelessly killed by rough handling, and that the combs are returned to the hive in the same order in which they were removed in case this is important to you. And fourth, in case a diagnosis of American foulbrood is made, and you doubt the validity of the diagnosis, you can insist that a specimen of comb be sent to the bee laboratory in Beltsville, Maryland, for independent confirmation. These are, of course, simply applications of the property rights that we have under our constitution. They are absolutely basic to our way of life, for the power to deprive anyone of his property, by force, is the power to deprive him of virtually every other right that he has.

And what does one then do when, rightly or wrongly, one of these rights to is endangered? Well, it has been my experience that courtesy and respect for others usually engenders the same in response. In case it does not, and you find yourself up against a truly stubborn bureaucracy, then a letter or, as a last resort, a summons, from an attorney, will usually put things back on track quickly.§

Questions and comments are invited. Use Trumansburg address above, and please enclose a stamped self-addressed envelope.

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But sometimes these occasions arise unexpectedly and you have to think on your feet. It pays to have done a little homework beforehand and to be prepared for the unexpected.

Following are three stories about dealing with the unexpected, and how the authors reacted to their respective 'think fast' situations.

Impromptu Classroom

By JOHN F. SEETS
2203 Bellevue
Catonsville, MD 21228

Around 8 in the morning, I was peacefully enjoying the final cleansing stages of REM sleep. That is, until such dreams were immolated by the bone-jarring clamor of the phone. My initial murderous thoughts gave way to a minor degree of curiosity when I realized that anyone who knew me was committing a capital crime by calling before noon. Since I work 'till around midnight, this code of silence has been SOP for sometime now. Nevertheless, in my semiconscious state, I accidentally/on purpose knocked the phone to the floor in an effort to answer the thing. (This tactic works wonders in reminding those who knew the SOP and forgot, and in indoctrinating the unaware, potential repeat callers. This and a bleary sounding 'hello' usually does the trick.)

"HHHEELLLOO?", I said, hardly having to fake it.

"Mr. Seets?"

"Yes?"

"This is The Fire Department."

Since 'alarm' and 'fire department' are synonymous, I need not describe the remaining transition from half asleep to a crisp, bright-eyed, military alert state. I didn't think he was calling to tell me that my house was on fire. So I said;

"Yes sir, What can I do for you?"

"According to our records, you live in the Catonsville area, are a beekeeper, and have indicated that you are available to take care of bee swarms."

"Yes, sir. That's D, all the above. However, are you sure that they are honey bees?"

"I can't say for certain. We just

Continued On Next Page

A 'Hive Alarm' Fire

By ROLAND B. JARRY

I was sitting at my utility desk, sorting out my papers for the coming Hampden County Beekeepers' Association meeting this last February. My utility desk, which serves nearly every purpose I have, is a favorite corner of the house where most of my time is spent.

On the shelves are all my bee paraphernalia and artifacts. The clutter on the desk is sorted out once a month before each meeting. One thing about the location is that I am able to see out of the four sides of the house. My attention was distracted by a large, bright red object. My second look brought into focus the City Fire Truck and six of its occupants — Firemen. They were outside the truck in their full dress garb, pointing and gesturing to the south side of my yard where the apiary is. During the past week, New England had been in the path of three severe snow storms, making up for the past two years. The firemen were going up and down the streets and digging out the snow around the fire hydrants.

Knowing there were no fire hydrants in front of my house, curiosity got the best of me. I had to find out what their interest was on the south side of my house. Going to the front door I asked them if I could be of help. Their concern was how my honey bees were surviving in the deep snow through winter. My quick reply was 'very well', and 'if and when they had more time they were all welcome to come in and I would give them a few facts on honey bees'.

No one was more surprised than I when their answer was 'how about

Continued On Next Page

At The Flea Market

By GERHARD K. GUTH
P. O. Box 4
Micanopy, FL 32667

I spent last winter as a snowbird in the sunny south and I had some time to go to the flea market to try and sell honey and beeswax.

I found that many people understand very little about bees and honey.

A lady came to my booth and said, "I see you have clover honey and orange blossom honey, but I would like to have honey made by bees." I tried to explain things to her but I didn't make a sale.

Another lady looked at the square plastic boxes with comb honey and asked, "What comes in those boxes?" Puzzled, I told her that was comb honey, but she asked the same question again. Dumbfounded, I finally coaxed it out of her. Her son buys ammunition in boxes exactly like that, and she felt that I was going around scrounging ammo boxes to put comb honey in.

Other customers, including beekeepers, turned honey bottles upside down to watch the bubble of air rise. I asked a beekeeper just why he did that. "Oh," he said, "that is how you can tell the moisture content of honey." Personally, with temperatures ranging from 35°F to sometimes 80°F, I don't believe anyone can tell moisture content by watching the bubble rise. Then there are the customers who look at the bottles with the "Pure Honey" label and ask for raw honey. When you tell them that it is raw honey, they give you the argument that since pure honey would have all particles of wax and pollen filtered out, it couldn't be raw honey. For these folks I have granulated honey for sale. Since raw

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IMPROMPTU... Cont. from Page 481

got a call from a lady in the Irvington area. She was pretty upset and said something about swarms of bees taking over her back yard and how she can't hang her wash on her clothesline. You'd better call her."

And that I did. With some difficulty, I managed to calm her down and obtain some facts. It seems that a swarm *had* settled in an apple tree next to her clothesline in her back yard. From her description it sounded like a 'go' situation.

I've got to hand it to the CMBA, (Central Maryland Beekeeper's Association). They really have their act together and are active in many aspects of beekeeping. For instance: promoting the trade by displays, shows and exhibitions; educational programs at schools for kids; mediating disputes between neighbors; attractive, versatile and interesting meetings WITH a door prize; The State Fair; Agriculture Week; I could go on. A few months ago, they sent out a questionnaire asking us our opinions on a variety of subjects — committees, activities and other things to help out with. One question concerned our willingness to retrieve bee swarms in our home area. Come to find out, if we answered 'yes' to this question, our names, addresses and phone numbers were placed on a list distributed to the police department, fire department, pestcontrol, etc., in that person's area. Since Baltimore Country virtually surrounds the city, we'd have the whole place covered. That's how this came about.

I banged on my brother's door.

"Hey, Mike! Wake up!" (silence.)

"YO, Mike!!"

"(Deleted!) he replied.

"Bee swarm. Just got a call on the phone. Let's go get it."

(More silence — I could hear the gears grinding, albeit slowly.)

"How high up is it?"

"I don't know. Not high, hopefully. Let's check it out."

Soon preparations were under way. White coveralls and socks, veil, bee brush, a jar of sugar syrup with holes punched in the lid, gloves, a pair of pruners, a pair of extension tree limb clippers, a hacksaw, (we didn't know how high or how thick the tree limb the bees were on was, so we brought all three), a step ladder, a full extension ladder and the honey extracting drum. We have an old Root, two frame honey extractor. When the frame cage is taken out, it makes a great receptacle for swarms. For a top, we use a beauty rim from a wheel with screen secured across it. It neatly fits the top of the drum and tape will hold it on. The drum also

easily fits on the seat of a car. However, we threw all the stuff in the back of the truck and after a pick-me-up stop at the local 7-11, we were off!

We didn't have far to go. As we approached the vicinity of the given address, I noticed that these homes were all row houses and the trees in the area were smallish, generally less than 30 feet high. This made me feel better. It was a reasonably warm day, 80 to 85 degrees and there seemed to be all the usual suburban activities going on; lots of kids on bikes and skateboards, lawn cutting, and people just hanging out and relaxing on their porches.

When we pulled up to the address, a man walked out of his house and up to the truck.

"Are you the exterminators? The fire department said somebody'd be comin' to git rid of them bees."

"Ah, no sir. I'm John Seets and this is my brother, Mike (hand shake). We're beekeepers and we raise bees to make honey. I'm hoping that it is honeybees that you do have."

"Well now I don't rightly know. You'll have to take a look for yourself. I'm Cholley and that there at the window is my wife, Martha."

We looked up at the window and waved. She had a wide-eyed, worried look, didn't seem at all happy, and gave us kind of a semi-wave back. Cholley led us around the side of his house, through the gate into his back yard. The back yard was reasonably small. The only two features were a clothesline and an apple tree. The apple tree was situated at the far end of the yard next to the fence and it was only about 20 feet high. At first, I saw no sign of bees and was a little worried that they may have lit off for greener pastures, so to speak. However, as we neared the back fence, the other side of the apple tree which was hanging out over the back alley, came into view.

And there it was! A medium sized swarm of about two to three pounds. I was hoping for a larger one because I figured that it was a first swarm which is usually larger than after-swarms. Subsequently, I found out from other beekeepers and from my own experiences that most of the swarms that season were small to medium in size. Anyway, this swarm was situated about ten feet up on an outside branch, about an inch and a half thick. No problem.

So, since the swarm was smaller than I had hoped, I pulled out the portable flame thrower and to everyone's shock and horror, singed them to a crisp...

Just kidding.

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HIVE ALARM... Cont. from Page 481

right now? Never expecting a positive reply, I wasn't about to back off on my hasty invitation. Because of their interest, I took the opportunity to discuss my favorite hobby. This generally happens in spring, when all nature seems to come alive and continues through the swarming months.

My wife heard the reply and was already spreading newspapers on the living room floor to absorb the melting snow from the boots of six firemen. They all apologized about the floor but I assured them it was alright.

Already I pictured the neighbors peeking through their window, wondering how bad the fire was, or who was ill. Now I was either going to get a barrage of questions or they just wanted to absorb some of my heat. However, no sooner were they in the house than they started firing questions at me, and I was feeling the heat.

Starting with how honey bees survive winter, one question after another, each fireman was anxiously waiting his turn to ask a question 'like school kids'.

Of course, the regular questions about 'killer bees' came up. I explained that killer bees are an African species, that they are defensive and abscond a lot.

Then they told me a story about their encounter with bees in a wall while putting out a fire in a house. By this time all the snow had melted off the boots onto the newspaper, and we made our way toward my favorite spot in the house.

One of the firemen's roving eye stopped and stared, his eyes fixed on a golden crystal clear bottle of mead sitting on my glass shelf. The mead seemed to glow even more than usual because the sun's rays were piercing through the liquid in the bottle at just the right angle. Our questions and answers became centered on the first alcoholic beverage of man. After a brief history about mead, meth, the different names it was given, it wouldn't be polite not to ask if they would like a sample. I assumed that like any officer of the law on duty, they were not allowed to imbibe. I got my second surprise when they were eager to sample the nectar of the Gods.

Out came the glasses and I commenced to pour out the golden liquid. They reminded me of judges at a wine show. I just looked at each face to tell me the results of my work. This was also a good time for me to

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HIVE ALARM... Cont. from Page 482

test the fruit of my labor. I might add that it had mellowed just beautifully. It didn't take long for a warm glow to start, slowly spreading from the stomach and through the rest of the body. If I felt it, I know they must have felt it too. It was a fire I started and they didn't want to put it out. Pushing their empty glasses to the half-full bottle was a sign for a refill.

When they asked if I had any to sell, it was the answer to the question I had wanted to ask. "Did you like it?" The expression on their faces told me that they did.

It was very disappointing to them as well as to me, to say that I didn't have enough to sell and that what I had left was to be entered in a honey show.

IMPROMPTU... Cont. from Page 482

Actually, when I see the first swarm of the season, especially when it was as easily accessible as this one, I get a nice, warm, easy feeling inside. Kind of like seeing a full, golden apple, ripe for the plucking, ready to pick and make my own. Plus, realizing that a three pound package of bees with queen these days goes for about \$25 helped reinforce this feeling.

Mike said, "If I pull the truck around here and stop with the bed right under them, this should be child's play."

I agreed and off he went for the truck. It was then I realized that something was strange. My bump that something wasn't right had been nagging at me before, but I didn't pay attention to it 'til now. The bustle of outdoor activity in which people were engaged in on the main street and on the way here was absent. It was quiet, almost too quiet. I looked down the alley and at the far end, I saw a man digging in his back yard. As I looked, he glanced up and seeing me looking, returned his attention to the digging. Looking up the other end of the alley, I saw one lone child, about nine or ten, riding his bike in circles. Elsewhere, nothing. No kids, no nothing.

It seemed strange and I couldn't figure it out until I looked at the houses. Up and down the alley, in most windows, I could see people's faces peering out. They all seemed to be looking at us. Then it dawned on me that the bees were the reason for the gross outdoor absenteeism. I saw one woman with a parcel of kids around her, standing behind a glass storm door, all of them looking out. The woman looked very worried. She noticed the kids around her and

Running out of questions about honey bees and with the heat building up under the heavy rubber garments, they politely thanked me for my hospitality and the brief lecture on honey bees. Going with them is a lesson I'm sure will stay with them for quite a while. No sooner were they out of sight than our telephone started to ring off the wall, with neighbors wanting to find out how serious the fire was. I explained the situation to my concerned neighbors, because staying friendly with your neighbors is wise, and very important to any beekeeper. In fact, I'm particularly proud of my neighbors and the community altogether, but that's another story I would like to tell at some other time. §

proceeded to hustle them away from the door as if to shield them from impending, monstrous horror. I had to chuckle. This was truly a classic.

I turned and looked at Cholley. He was watching me and proclaimed,

"Them bees kinda raised a stir 'round here. Can't say the neighbors like 'em much. To them, bees means gittin' bit. Ain't you afraid of 'em?"

At the time, I was wearing only cut-offs and shoes. I walked over directly beneath the swarm and looked up.

"No Cholley, I can't say that I am. I was as a kid, but as I grew older and started raising them, I learned more about them. They aren't mean creatures like a lot of people think. As you to handle them, you don't get stung at all. I wear a veil to keep them from getting tangled in my hair and sometimes gloves when I'm in a hive. When a swarm leaves the hive to look for a new place to live they gorge themselves with honey. Like you or me after a big meal, we feel fat and happy. And so do these guys."

Suddenly, I felt a WHOOSH right behind me and almost jumped out of my skin. That kid on the bike at the top of the alley had decided to play Kamakazee. Cholley yelled,

"TYRONE! YOU CUT THAT OUT OR I'M GITTIN' YOUR FATHER AFTER YOU!!"

Just about then, Mike pulled up with the truck and parked it in position under the swarm. We donned cover-alls and veils. Cholley, seeing us gird ourselves for the ordeal, decided to beat a hasty retreat about thirty feet back up his yard. I glanced at some of the nearby houses and noticed a few people leaning out of their doors with cameras. I pointed

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FLEAMARKET... Cont. from Page 481

honey isn't heated, it will obviously granulate. And, you can't liquify it again, because then it wouldn't be raw honey anymore. That turns most of them off since they don't want spoiled (*spell granulated*) honey.

One lady looked at the Orange Blossom Honey and huffed, "Orange Blossom, where would they find Orange Blossoms in December." I pointed out that the booth across was selling apples, which are hard to find in December, too. I try to be diplomatic, and suggest to people that they get bees themselves and raise their own honey.

A good idea is to take other items to the flea market besides honey. I take beeswax in various shapes, skep candles, poured candles, candles rolled from foundation, foundation itself, wick, wax cakes that I make by pouring wax into muffin pans, and molded wax balls — with a sign "The whole ball of wax" which is good for a laugh. I also have wax to sell in chunks of 1 to 5 pounds.

Naturally I take my plastic bees, too. I also bring some empty bears to sell, for the people who bought bulk orange blossom honey from the competition. They can fill them up from the gallon bottles. They can also be used for other things, like maple syrup or salad dressing.

I take a straw skep along for a conversation piece and I keep a handful of plastic bees under it for the children who ask: "Are there any bees in it?" I say yes, and then I lift up the skep to show them the bees.

I always take an incense smoker that has been used for years, the one that represents a beekeeper. This interests the children when they see smoke coming from the mouth of the figure, and they want to see how it is done. When I show them the inside, I also point out that is what lungs look like after years of smoking — a little public education thrown in.

So even if I don't sell much, I get to talk to beekeepers from all over the U.S., the people from my home state talk to me when they see honey from their state, and since I have a sign near the skep that says "Vorsicht Bienen" which is German and means "Caution, Honey bees", the German visitors talk to me too.

What more can you want for a \$7.00 registration fee? §

The Australasian Beekeeper

The senior beekeeping journal of the Southern hemisphere provides a complete cover of all beekeeping topics in one of the world's largest honey producing countries. Published monthly by Pender Beekeeping Supplies Pty. Ltd., 19 Gardiner St. Rutherford, N.S.W. 2320 Australia. Subscription \$US 13.00 per annum (in advance). Payment by Bank Draft. Sample copy free on request.

them out to Mike, he just laughed. I hopped up into the truck bed and placed the drum against the left side of the tailgate under the swarm.

"How 'bout I clip the branch with the limb clippers and you put them in the drum" Mike suggested.

"Sounds good to me. Just go easy when you're just about to cut through the limb so it doesn't jerk and break up the swarm."

Here's where the fun started. I had hold of the branch just above the swarm. As careful as Mike was, when he did clip through the limb, it jerked. Frankly, I think it was impossible to avoid. The lower third of the swarm separated from the main portion and landed none other than directly on Mike's head. I hadn't thought he was right under them but sure enough, he was. Some bees were flying around but the majority seemed content to stay right where they were. I had to laugh.

"I'd give anything for a picture of you, now."

All Mike said was, "Great."

Just then, I heard Cholley yell, "TYR-R-R-O-O-N-E!!!"

I looked up to where Cholley had been standing. He was nowhere in sight. A split second later, Tyrone came roaring through again on another Kamakazee run. However, this time it was almost for real. As he went by, I heard him yell. He slammed on his brakes and before it had stopped, he was off his bike running down the alley, yelling and beating on his chest. Obviously, he caught a few bees on his courageous sojourn. I looked at Mike,

"Tis the difference between courage and foolhardiness."

Mike looked worried. "I don't know. Could be trouble."

Holding the branch close to it's original position with one hand, I proceeded to brush the bees off him with the other in order to get as many of them into the air as possible. Mike blew on any that were on the ground which encouraged them to take flight. Once accomplished, they returned quickly to the branch in my left hand to join the others. I then gently placed them into the drum and put the screen lid on. Mike doused them with the sugar syrup which gave them something to do in their temporary new home.

I would like to suggest that if you ever find a swarm and it is too high to reach, don't just shrug your shoulders and leave. It might be a good idea to find a long pole or at the very least, something to throw and try to dislodge the swarm from it's perch.

In the worst case, it will fly off and you'll lose it. Or, if you're lucky, it will find a place lower and within reach.

As we began removing veils and cover-alls, Cholley came down from the house and joined us. He carefully leaned over the drum.

"They don't seem to be in any hurry to git outta there now, do they?"

I moved to his side and looked at my new work force. Listening to their low hum of contentment, they indeed seemed satisfied to be where they were.

"Mike just gave them some sugar syrup and since the queen's in there too, they're happy where they are for now."

Presently, Martha, deciding that the danger was past, joined us. She looked in the drum and stated that she was glad this was over. She asked us how much money we wanted for taking the bees away. We told her that it was our pleasure and that we didn't charge. She said at least she could get us something cold to drink and we accepted.

Glancing up and down the alley, I noticed that some of the neighbors were standing next to their back fences. A few came over to look into the drum and listen to us talk to Cholley about bees. Listening to us generated questions of their own. Questions like — How do you get the honey? How long do bees live? How many do you have? Where do they go in the winter? and so on. The next thing I knew, there was a virtual crowd around us and the questions were coming faster than we could answer them. It was interesting to see that the kids were much more enthusiastic about the bees than were the grown-ups who tended to be more standoffish — wary, if you will.

This question and answer period went on for about five or ten more minutes. Some would leave and others would take their places. I was suggesting to one fellow ways to keep bees in a small back yard when suddenly a hush descended over the crowd. Mike nudged my arm and I followed his look. The group had parted and standing there, looking none to happy, was this BIG, 6'4" fellow. He looked like he could have played the line on any of the major league football teams.

Next to him stood Tyrone. He'd obviously been crying and you could see where he'd been stung several times on his chest and neck. Tyrone pointed at Mike and me and admonished that "we were the ones". Tyrone's father looked hard at us. No

one said a word. Mike and I glanced at each other with raised eyebrows.

About then, Cholley kind of sidled over next to Tyrone's father and hurriedly told him what happened — during which his furrowed brow remained furrowed and his hard stare didn't waver from us at all.

It did look like trouble.

When Cholley finished recounting the episode, a few people murmured agreement which was somewhat reassuring. Still, the air was pretty thick.

After a few more seconds of silence, Tyrone's father stepped towards us. I instantly felt myself go tense and didn't dare tear my gaze away long enough to look at Mike.

Still holding our eyes with his own, he walked up to us and stopped. Then, he slowly leaned over and looked down into the drum. After a few seconds, he slowly leaned back up to face me.

"Are those your bees?"

"Well, they are now since we took them out of the apple tree."

He looked up at the tree. There were a few bees flying around the spot where the swarm branch had been.

"What are you going to do with them?"

"Take the home and put them in a hive in my back yard."

He simply nodded in agreement. He seemed to be thinking. Then I saw a smile creep slowly over his face and he stuck out a hand. I returned his hand shake.

"I'm Jim and I guess you already kind of met my boy, Tyrone."

Of course, immediately the tension dissipated and everyone relaxed. We introduced ourselves. As it turned out, Jim was actually a really nice guy. We talked for a little while and Jim apologized for any trouble Tyrone might have caused. I told him that it seemed to be more trouble for Tyrone than for either of us. I suggested that some wet salt or baking powder applied to the stings should help reduce the problem.

About a week later, I stopped back and dropped off a couple pounds of honey at Jim's house. He was pleased and appreciated the gift.

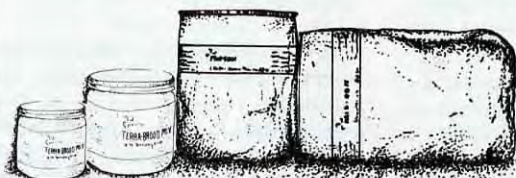
All in all, an interesting experience. Especially since we had the opportunity to tell others about the trade and, in the process, avoid any unnecessary stinging remarks!§



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HOW TO EXTRACT IN YOUR KITCHEN

The goal of most beekeepers is to, at some point during the season, harvest some honey. No matter where the final product is to go — the home table, friends and relatives, retail or wholesale sales (or even to the government) — it must be removed from the comb into a container of some type.

Most beginning and small scale beekeepers don't have access to multi-frame extractors, holding tanks, bottling tanks, heaters, filters — nor do they need them. But nevertheless, the honey must get from the comb to a jar.

So where do you start?

Well, we're not going to start quite at the beginning. We're going to start at the point where you have your honey supers mostly free of bees and ready to go.

FIRST. Where do you put your supers? If it's warm enough, maybe the garage. No garage? Maybe the basement? Is it damp? Cool? Or are you lucky enough to have it dry? Warm (room temp. or a bit above) honey extracts easier than cool honey, so pre-extraction storage is important.

Of course, remember that a warm room will keep any adhering bees active. Unless you have them ALL removed, you'll have a few keeping watch at your windows. How does the rest of the family deal with company — all the time?

SECOND. Uncapping. The next step, removing those beautiful white cappings to expose the honey can be done several ways. But first you must decide *where* you're going to do it. Using an uncapping tub and support board is probably the easiest, but

tends to be messy. Any way you look at it, this job tends to be messy. Honey and wax on the floor and nearly everything else in the room. Be careful.

The tool you use to remove the cappings will determine, somewhat, how messy this job will be. Using a regular table fork as a scraper does work. A cappings scratcher is better and a knife of some type is better yet. A regular serrated bread knife works well, as do the commercially available knives for this purpose. An electric knife is good, as long as you have a place to plug it in. Likewise, a steam-heated unit is good, but again, you need a heat source.

THIRD. Where do you put the uncapped frames? Directly in the extractor? On a draining surface if you don't have an extractor? Once uncapped, a frame of honey will drip, drip, drip! Have a *clean* container of some sort readily available for this mess. Honey and wax on a kitchen floor is not fun to clean up. Towels or newspapers between your uncapper and storage make life easier when you're done.

FOURTH. The actual extraction. How are you going to actually get the honey out of the cells? Do you have an extractor? If not, how can it be done? Once uncapped, the honey needs to go someplace where it can be further handled. This is easy if you have an extractor of some sort. Maybe you can borrow one, rent one or even build your own — but if not, there are ways to make this work.

One method is to lay uncapped frames over a tub of some type, supported on hardware cloth and let them drain. Remember, the warmer

the honey the easier it flows. Eighty degree frames will drain in 20 minutes or less (both sides). Sixty degree frames may never drain. Don't forget to drain both sides. Other methods exist too — crushing, hand powered, single frame extractors (homemade), and so on. You have to access your situation and capabilities.

If you do use an extractor, there are a couple of things to consider. Where will you set it up? They take up a fair amount of room and they need to be secured to a solid surface. They also need to be placed so you can drain honey from the outlet gate into some sort of receiving container (floors are not considered containers!). Running-water near by is certainly a plus but not absolutely necessary.

Finally, where are you going to keep all this honey? Five gallon pails are ideal, with or without a spout. But don't forget to strain the honey somewhere between the extractor and the sale.

Remember, this is food. It **MUST** be treated as such. Also, remember you must live and work in your extraction area. You may not finish in one afternoon — can you leave your assembled equipment up without it getting dirty, bumped or moved?

Harvesting, extracting and packaging is as much as part of keeping bees as swarm control, requeening or overwintering management. It takes forethought, practice, the right equipment and patience. But it is certainly a rewarding activity. As you prepare, keep this in mind. Also, remember the joy of the harvest when you're cleaning up — **AND ALWAYS HAVE FUN!**

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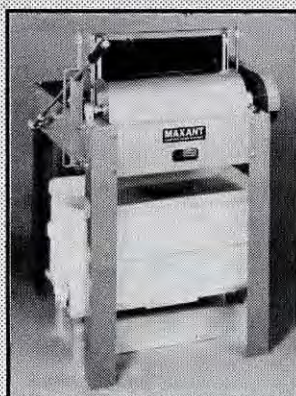
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3. D) Remove bees from honey supers.
4. B) Basswood
5. D) 5 mesh
6. A) 8 mesh or B) 7 mesh
7. A) 8 mesh
8. A) 8 mesh
9. Bee-Go (butyric anhydride) is a chemical repellent that is used to remove bees from honey supers. Tetra-Bee Mix is a ready-to-feed mixture containing terramycin. It can be fed as an aid in the prevention of American and European foulbrood.
10. Hive bodies are typically banded together with metal or plastic bands or are stapled together with 2" x 3/4" hive staples to hold the various sections of the hive together for moving.
11. Wax Tube Fastener. Used to fasten thin surplus or cut-comb foundation into frames for the production of chunk or comb honey. The metal cylinder is filled with liquid beeswax. The wax is released from a hole in the bottom of the tube in a small constant stream by removing your finger from the air hole.
12. Benton Mailing Cage. This cage is used to ship queen honey bees all over the world and is often used to introduce new queens into a colony.

13. Boardman or Entrance Feeder. These syrup feeders slip directly into the colony entrance and allow the beekeeper to determine how much syrup is left without opening the colony. The feeders, however, do not work well in cool weather. The syrup gets too cold and the bees do not come down to get it unless the weather is very warm. Colonies that need to be fed usually require larger volumes of syrup than this type of feeder can provide.
14. Honey Gate. A faucet used for drawing honey from drums, cans or extractors.

There were a possible 20 points in the test this month. Check the table below to determine how well you did. If you scored less than 12 points, do not be discouraged. Keep reading and studying — you will do better in the future.

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 20-18 Excellent
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Hobbyist and Part-Time Beekeepers: Introducing You to Your National Honey Board

By DWIGHT STOLLER • Secretary/Treasurer, NHB

Members of the honey industry have, for years, seen the need for a national honey promotion program. Finally, by working in conjunction with the U.S. Department of Agriculture the groundwork was laid and Congress passed the Honey Research, Promotion and Consumer Information Act in 1984. With the enabling legislation in place, honey producers approved the program by a wide majority in a referendum conducted in mid-1986. Since then, the industry has nominated candidates for the Honey Board to administer the program. The program has a single purpose . . . to increase the demand for and consumption of honey.

Seven of the 13 members of the National Honey Board are honey producers, each representing different regions of the country. As a producer/Board member, I represent sections of the Midwest, the Northeast and East Central states. My father and late grandfather were lifetime beekeepers and I have worked with nothing but bees and honey since I can remember. Many of you may be familiar with the Stoller name through the frame spacers my grandfather developed.

I presently serve as the Secretary/Treasurer of the National Honey Board, as well as the chairperson of the compliance committee. The compliance committee is concerned with developing the policies and procedures to help you comply with the National Honey Research, Promotion and Consumer Information Order. These positions are challenging, especially working on the compliance committee. The challenge results from the magnitude and diversity of the honey industry itself. To develop compliance policies and procedures, we have attempted to view things from all perspectives and to benefit everyone. You can be assured that the members of the Board are individuals who have faced, and still face, many of the same problems and opportunities you face today.

We need your input to continue to tailor the program to meet your various operations and needs as much as possible.

National Honey Board Benefits to Hobbyist and Part-time Beekeepers

Since this is an industry program, the National Honey Board is designed to benefit the entire industry — from the largest to the smallest beekeeper. How can we benefit you?

The purpose of the entire program is to improve the demand for honey. That increased demand will help the small as well as the large producer. From my conversations with industry people, most beekeepers do not find customers beating down their doors for the fruit of their labors. In addition, through research, advertising and public relations work, the Board intends to funnel practical information back to everyone to help us all better market and sell our product.

The National Honey Board promotion program can also help us all by improving the image of our products, the honey bee and our profession. The public image of honey bees has suffered in the past few years due to several issues. This presents a problem to all of us in finding and keeping bee locations and maintaining good relations with our neighbors. By increasing public appreciation of and demand for honey, you can expect a growth in appreciation of the honey bee itself and of the beekeeping profession.

Your Role in the National Honey Board

The success of our honey promotion program depends on a unified effort of all segments of the industry. The hobbyist and part-time beekeepers have especially awesome potential to help shape our industry's future. Commercial beekeepers are small in number when compared

with this group. It is the smaller beekeepers who have the numbers to "reach out and touch" the American population. We need your support and involvement.

My experience has shown that the most enthusiastic and knowledgeable beekeepers have been from the hobbyist and part-time arenas. I have seen many ingenious promotion ideas come from such small operations. The Board office needs those same ideas. Also, you are often questioned by individuals and companies for information concerning bees and honey. You can, when you desire, refer these parties to the National Honey Board office in Longmont, CO, for further information. You can also help the Honey Board by being part of the voice of the industry and spreading the promotional and other types of information gathered or developed through the program.

Collection System Overview

To understand where you fit into the compliance picture, I will give you a brief overview of the collection system and funding process. In the next issue, sample NHB compliance forms will be printed with detailed information on how to complete them.

There is no doubt that the system is complex. As we have developed forms and procedures we have attempted to make information relevant and easily understood. However, the system is complex due to the multitude of ways that honey is handled and marketed. Furthermore, the Board has to track information to make the program fair and to ensure that everyone complies equally. We want to make sure that some do not willfully ignore the program while others pay their share. Much of the system is to protect you and your investment. With the magnitude of record keeping, the Board needs a good computer system. An IBM

Continued on Next Page

HONEY BOARD... Cont. from Page 488

System 36 has only recently been installed in the Board office.

With this introduction, let me review the basics of the Honey Board's funding system. Again, this is only an overview.

Honey Board Funding

The program is funded through an assessment of one cent per pound on all honey produced and sold in or imported into the United States — all honey which "enters the channels of commerce". The assessment is generally collected by the first party that handles the honey. If you sell to a handler (packer), they are the first handler and collect the assessment. If you package your own honey for sale, you are the handler and must collect the assessment yourself. Also, if you purchase honey from another producer, you are the first handler and must collect the assessment on the honey that your purchase.

The legislation provides that the Agricultural Stabilization and Conservation Service (the honey loan program) shall collect the assessment on all honey that enters the loan program. Basically, whatever honey ASCS will be handling, the packer and producer-packer need not collect the assessment but must file the necessary reports.

The Exemption Certificate for Part-Time Beekeepers

Besides collection by ASCS, there is another time when the assessment will not be collected — if the producer has a certificate of exemption. *You qualify for this exemption if you produce less than 6,000 pounds of honey during a given year.* To be exempt, you must write to the National Honey Board office and request an *Exemption Application*. Return the completed form along with some type of documentation which verifies that your production was below the 6,000 pound level

during the previous year. *The Board will then send you an Exemption Certificate.* When you receive the certificate, you can use it when you sell to a handler or when you deal with ASCS. Both parties will record the certificate number on their forms and will not collect the assessment. *Remember, if you do not have the numbered exemption certificate, they are obligated to collect the assessment.*

The Hobbyist Exemption Application

The National Honey Board and I were bothered by asking thousands of small operators to write to the Board and to submit evidence in order to legally comply with the National Honey Research, Promotion and Consumer Information Order. As a remedy, we have developed what we are calling our "hobbyist exemption application". This form will be published in periodicals such as *Bee Culture* and will be simple to complete. *You qualify for using this form if you have 25 hives or less.* These forms will be readily available but will not be numbered. Therefore, ASCS and handlers will not recognize nor honor this form. If you are selling to a handler or dealing with ASCS, you will have to apply for the numbered exemption certificate if you do not want to invest in the promotion program. The beneficiaries of this form are those who have a few hives and sell all of their honey direct to consumers. This procedure allows you to comply with the Order, but in a simplified manner.

Transaction Form

If you buy any honey, you will need to become familiar with the Transaction Form (TR) — a 3-part form which is used anytime honey is handled. You keep a copy, the seller gets a copy and a copy is sent to the NHB office. To avoid having to report to the NHB office with every

transaction, the Board has allowed for a reporting schedule where you can accumulate collections on your own sales, plus what you purchase, until you reach \$30. You need to send in copies of the TR forms when you reach the \$30 level, plus at the end of semiannual periods in which you bought or sold honey. The semi-annual report is necessary for us to track collections accurately and provide for verification if someone requests a refund of their assessment.

Refunds

Refunds are available to those who do not wish to invest in the promotional efforts. To be eligible for a refund, you must first pay your assessment and then file a refund application *within 90 days of the date the assessment became payable.*

With the referendum passing by a 87% margin, I felt that the industry was highly supportive of the program. To date, this support has been reinforced with refund requests being only 6% during the first processing period.

Please give your National Honey Board a chance to show you what can be done to promote our product. It will not happen overnight — be realistic. However, I am very excited about what I feel is the beginning of a program that has tremendous potential! My fellow National Honey Board members and I see a great future for the honey industry. That is why we are volunteering our time and effort. And, that is why we need your support.

Donations

Remember that anyone who is not subject to the promotion assessment can donate to the National Honey Board. Beekeepers who can qualify for an exemption from the Program, therefore, can donate. The National Honey Board is your investment in the future.

Next Issue

In the next issue, detailed information and sample forms will be printed to help you more completely understand the NHB assessment collection system. For now, please contact the NHB office with your questions and comment: The National Honey Board, 9595 Nelson Road, Box C, Longmont, Colorado 80501, (303) 776-2337. §

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News & Events

We encourage organizations to publish meeting notices and other events in this section. Publicity is the key to gaining new members and reminding others in your area that would be interested in attending your event.

But to do this there are a few guidelines we ask you to follow:

1. We **MUST** receive your notice by the **FIRST** of the month preceding publication. For example, for your announcement to appear in the October issue, we must receive your notice by **SEPTEMBER FIRST**. To meet printing deadlines, there are NO exceptions.

2. Meeting schedules are okay and sometimes can't be avoided. However, a list of speakers and events is usually just as informational, takes less space, and is more likely to get read by prospective attendees.

3. **ALWAYS** include: A contact person for more information (address mandatory, phone number suggested) date, time and location of the meeting.

4. We recommend that you publish your meeting date for 2 consecutive months. Although you may not have your speakers lined up this far in advance, you probably know when and where you will meet. For the first month, publish the date, time, place and contact person. For the second month you can amend your notice to include the speaker list.

5. We don't know every schedule. You have to let us know **EVERY YEAR** that you're having your Annual Meeting.

6. Don't forget to publish this same information in **OTHER** news outlets.

7. Thanks for the help!

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☆ FLASH ☆

USDA-APHIS and Mexican Government Finalize Plans for First Segment of Sequential Bee Regulated Zone

July 2, 1987. The USDA-APHIS and SAR (Mexican counterpart to USDA) have nearly finished plans for establishing the first segment of a sequential Bee Regulated Zone in the Isthmus of Tehuantepec. This was confirmed during a conversation with Mr. Don Husnik, Associate Deputy Administrator with the Plant Protection and Quarantine Program of APHIS.

This initial segment will be set up on the Pacific side of the Isthmus, with central and Gulf segments planned for the future. The entire zone should be in place in 2-3 years, depending on the success of the initial project.

The plan is in the final stages of negotiations, with US State Department approval the final hurdle. Funding has been tentatively set at Fiscal year (FY) 1987 (July-September), \$1.75 million; FY 1988, \$3.1 million; and FY 1989, \$3.9 million. These monies are to be divided between USDA-APHIS and SAR.

USDA-APHIS currently has contingency funds to cover 1987, with 1988 and 1989 funds pending approval in Congress. These have yet to be approved and as yet are uncertain.

The project will be co-directed by both APHIS and SAR. SAR has already named their Director. The APHIS Director will be determined as a competitive position, said Husnik. Husnik went on to say that all plans should be final and the zone underway about Mid-August.

Mexico has already started an ambitious program of beekeeper education and training, including finding and removing feral swarms, queening and AHB movement monitoring. They also are instituting extensive public health education programs for the general public.

Husnik also stated that repeated attempts by APHIS to get US Public Health officials involved, or even

interested in this program, have so far failed.

We will update this information as it becomes available, and inform you of the latest developments in this project.

☆ IMPORT PRICES ☆

Prices paid to importers for bulk honey, duty paid, containers included, cents per pound ex-dock or point of entry unless otherwise stated.

East Coast Ports, Argentina
Clover, white, 46 1/2¢
Clover, ela, 44 1/2¢
East Coast Ports, China
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Mixed Flowers, la, 40¢
Gulf Ports, Argentina
Floral Source Unkn, wh, 46 1/2¢
Laredo, Texas, Mexico
Wild Flowers, la, 37 1/4¢
West Coast Ports, Argentina
Clover, white, 46 1/4¢
Calexico, CA, Mexico
Mixed Flowers, la, 34-35¢
Los Angeles, CA, China
Mixed Flowers, ela, 40¢

☆ FOREIGN ☆

INTERNATIONAL BEEKEEPING WORKSHOP

This is to inform you that the International Beekeeping Workshop scheduled for July 5-11, 1987 at the University of Science and Technology, Kumasi, has had to be postponed because of the extension of the University term into July.

The new dates for the workshop are September 13-19, 1987. Written applications should be sent to the Director, Technology Consultancy Centre, University Post Office, Kumasi, Ghana, West Africa by August 9th. The venue and all other details remain unchanged.

APIMONDIA

The 31st International Apicultural Congress will be held August 19-25, 1987 in Warsaw, Poland. The meetings will be held in Congress Hall in the Palace of Culture and Science. Available languages include English, French, Spanish, German, Russian and Polish.

A wide variety of subjects will be covered during this convention including: Beekeeping Economics, Honey Bee Biology, Pathology, Honey Plants and Pollination,

Continued on Next Page

NEWS... Cont. from Page 490

Technology and Equipment, Apitherapy and Beekeeping in Developing Countries.

Many sightseeing opportunities exist in the area surrounding Warsaw and participants are encouraged to partake of as many as possible.

For registration or other information contact: National Tourist Enterprise "Orbis", Congress Boulevard, P. O. Box 146, 00-950 Warsaw, Poland.

★ ALABAMA ★

Alabama Bee Shipment

One hundred queen bees from the Bolling Bee Company in Greenville, AL were shipped to Scotland in June, according to industry officials with the Alabama Department of Agriculture and Industries. Currently, Alabama is one of only two states authorized to ship bees into Canada.

The bees, owned by W. Z. Gafford, went through a series of five tests that checked for diseases and pests. The testing and resulting certification by the Department of Agriculture helps prevent the introduction of new diseases or pests into other countries.

The annual meeting of the **Alabama Beekeepers Association** will be held on August 7-8 in Birmingham at the Hotel Sheraton Perimeter Park South at the intersection of highways I-459 and US 280.

A good program with outstanding speakers is being lined up, including coffee breaks, noon lunch, prime rib banquet and door prizes. Business meeting on Saturday morning.

If you need hotel accommodations, you should write or call the hotel at (205) 967-2700 and identify yourself as an Alabama Beekeeper for special rates on excellent accommodations.

Pre-registration by July 22 will be \$32.00 per person. After that date it will be \$35.00 to cover the above expenses. Make check to Jefferson County Beekeepers Association and mail to Mr. Robert M. Simpson, 3312 Stoneridge Dr., Mountain Brook, AL 35223. (205) 251-5225 office or 967-5081 home.

Space is available for exhibitors at a very modest cost.

★ FLORIDA ★

The annual **Florida Beekeepers Institute** will be held August 14-16,

1987 at 4-H Camp Ocala in the Ocala National Forest. This is two days of intensive educational programming about bees and beekeeping. Registration fee is \$50.00 per person (late fee is \$70.00 after August 1) which includes lodging and meals.

The Institute is oriented toward both beginning and experienced beekeepers. Programming efforts this year include an informal beekeeping fair for idea exchange and presentations on a variety of topics. The role of the queen and her biology will be a focal point of this year's program. Also included will be a popular beginning television course on beekeeping and open hive demonstrations.

August 14

- 1:00 Check in
- 2:00 Open Hive Demonstration oriented toward the beginner
- 5:00 Dinner, Cafeteria
- 7:30 Beekeeping fair, an informal exchange of ideas on various topics. Bring your gadgets and ideas!

OR

"Bees and Honey" the first three of six half-hour video tape programs on beginning beekeeping

August 15

- 7:30 Breakfast
- 8:50 Welcome, Terry Courneya, Lake County
- 8:55 Introduction, Dr. Tom Sanford
- 9:05 Open-hive demonstrations
Topics to include:
Opening and examining a colony; Swarming; Requeening; Making Splits; Uniting Colonies; Moving Bees; Diagnosing Diseases; and Feeding Colonies

Noon Lunch

- 1:00 FL Beekeeping Regulations, Laurence Cutts, FL Chief Apiarist
- 1:15 Activities of FL St. Beekeepers Assn., Hank Will, Pres.
- 1:30 Bee Research at the Univ. of FL, Dr. Jim Davidson, Dr. Glenn Hall
- 3:00 Beekeeping and the Future, Dr. Jim Tew, Wooster, OH
- 3:40 The Beekeeper as Manager, Dr. Tom Sanford, Univ. FL
- 4:10 Panel Discussion
The Future of Beekeeping
- 5:00 Dinner
- 7:30 Focus on the Queen Honey Bee; Her Role and Genetics

OR

"Bees and Honey", concluding set of half-hour programs on beginning beekeeping

Continued on Next Page

INNER COVER... Cont. from Page 443

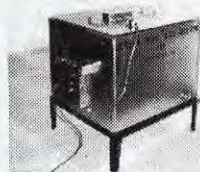
delivery means that you communicate your information TO your audience. Don't 'give' it and hope somebody picks it up.

Finally, have a very good friend critique your talk afterwards. I say very good, because many people won't want to hurt your feelings with negative comments. But you learn from your mistakes (and yes, failures) not from praise.

Anybody can give a talk. It doesn't take special skills, athletic ability or a diploma from Yale. It only takes practice and a high tolerance for stomach acid.

Remember, public speakers are made, not born — just like beekeepers.\$

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August 16

7:30 Breakfast

9:00 Inside activity to be announced
Session outside for those with
questions

12:00 Adjourn

For more information, contact
Dr. Tom Sanford, Extension Apicul-
turist, 202 Newell Hall, Gainesville, FL
32611, phone (904) 392-1801.

★ LOUISIANA ★

AAPA, BEE RESEARCHERS TO MEET OCTOBER 5-7 AT BATON ROUGE

The 1987 meeting of the **American Bee Research Conference** will be held on October 6th and 7th in the New Agricultural Building on the Louisiana State University campus at Baton Rouge. Everyone interested in apicultural research is invited to attend and all research scientists are encouraged to present scientific papers related to the genus *Apis*.

Abstracts are required of all papers given. The cost is \$50 per paper plus \$10 registration fee. For more details concerning this conference, write to John Harbo,

Honey Bee Breeding, Genetics and Physiology Laboratory, 1157 Ben Hur Road, Baton Rouge, LA 70820 or Joseph O. Moffett, Honey Bee Research, 509 West Fourth St., Weslaco, TX 78596.

The AAPA (American Association of Professional Apiculturists) will meet all day Monday, October 5, immediately preceding the research conference. The AAPA discusses and acts on matters relating to all phases of apiculture. All professional apiculturists are invited to attend this meeting and air their views.

LABKA HONEY FESTIVAL

The LABKA's second annual Mini-Convention was held in Alexandria, LA, Saturday, June 13. Speakers were Dr. Tom Rinderer, Craig Brown and Craig Russel. Sessions included swarm removal, hive registration and the AHB.

The LA Honey Festival will be held in Lafayette, LA, August 29-30 in Beaver Park. The 'Bayou Bee Honey Cookbook' will be available too. For more information on the Honey Festival or the Cookbook contact LABKA, Dr. Dale Pallet, Knapp Hall, L. S. U., Baton Rouge, LA 70803

★ NEW YORK ★

The Western New York Honey Producers Association will hold their annual picnic and business meeting on Saturday, August 1st at Akron Falls Park, Shelter #11. Registration begins at 10:00 a.m.

We will have an experienced beekeeper tell his favorite beekeeping story and a report from the Apiary Inspection Unit on the AFB in WNY. Mr. Steve Zimmerman, Dawes Hill Honey Co., will talk to us about ways to pack, distribute and sell honey. Also planned is the business meeting, election of officers, drawings for door prizes and reports on our activities of this past year.

Lunch will be family-style so please bring a dish to pass (main course or salad). Coffee, tea, lemonade and ice cream will be provided. Bring your own plates, cups, glasses, utensils and napkins. Bring your kids and your friends.

Continued on Next Page

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*Journal of Apicultural Research 23:209-12, 1984

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★ OHIO ★

ATI/OHIO STATE UNIV. Summer Sessions Schedule, 1987

•August 17-30, 1987 — **Honey Bee Diseases**, Covering all aspects of honey bee diseases and pests. Will identify all common bee diseases and pests and be familiar with current treatment techniques.

All classes have enrollment deadlines and limited available space. **Early contact is strongly advised.** For registration information, contact Dr. James E. Tew, Program Coordinator, ATI, Wooster, Ohio 44691, USA, (216) 264-3911, Cable: ATI-WOOSTER.

★ TEXAS ★

The **Houston Beekeepers Association** will hold a seminar for both beginning and experienced beekeepers on Saturday, August 15, 1987 from 1 - 5 p.m. at West Road and FM 1960.

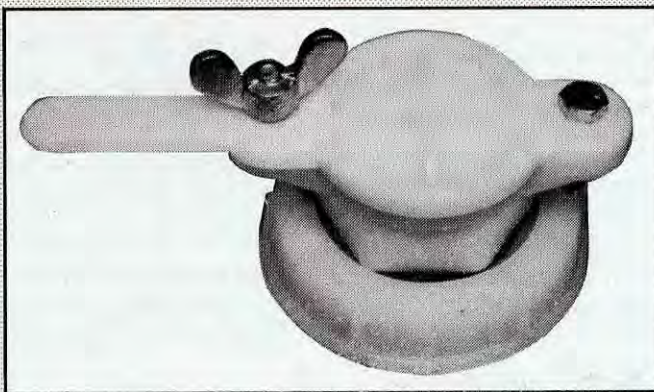
There will be lectures, hands-on experience, qualified instructors, commercial exhibits, refreshments and door prizes.

Advance paid registration is \$10.00 per person or \$15.00 for 2 people. There will be an additional charge of \$5.00 at the door for late registration. For more information contact Sal Fontana, 11231 Hazen Road, Houston, TX 77072. (713) 498-2376.

★ WEST VIRGINIA ★

The annual meeting of the **West Virginia Beekeepers Association** will be held at the Bishop Joseph H. Hodges Pastoral Center near Huttonsville, WV on August 28 and 29. There will be honey, wax and honey baking shows as well as a photography show and Junior Beekeeper contest and, of course, interesting and informative speakers.

For further information contact the secretary, Ruth Cahn, High View, WV 26808, Phone (304) 856-2747.



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☆ Classified Corner ☆

Classified rates: 55¢ per word, (effective August 1, 1987) each insertion payable in cash in advance. Each initial, each word in names and addresses, the shortest word such as "a" and the longest word possible for the advertiser to use, as well as any number (regardless of how many figures in it) counts as one word. Copy or cancellation orders **MUST** be in by the 1st of the month preceding publication (Example: January 1 for February publication). If your order has missed the cut-off date, your ad will appear in the following issue. Proof sheets available on request for an additional 2-word charge. Send classified ads to: The A.I. Root Co., Attention: Cyndi Stephens, Class. Ad. Mgr., P. O. Box 706, Medina, Ohio 44258-0706. For more information call (216) 725-6677, ext. 213.

MAGAZINES

THE SCOTTISH BEEKEEPER Magazine of The Scottish Beekeepers' Association, International in appeal. Scottish in character. Membership terms from A. J. Davidson, 19 Drumblair Crescent, Inverness, Scotland. Sample copy sent, price 20 pence or equivalent.

What do you know about the **INTERNATIONAL BEE RESEARCH ASSOCIATION**? The many books and other publications available from IBRA will deepen your understanding of bees and beekeeping: an IBRA membership subscription — inclusive of *Bee World*, a truly international magazine published quarterly in the English language — will broaden your beekeeping horizons. Details from IBRA voluntary representative H. Kolb, P. O. Box 183, 737 West Main, Edmond, OK 73034 (phone 405-341-90984); or from IBRA, 18 North Road, Cardiff CF1 3DY, UK.

DAIRY GOATS — For milk, pleasure and profit. Excellent for children, women and family! Monthly magazine \$18.00 per year (\$25.00 Foreign). Sample Copy \$3.00. **DAIRY GOAT JOURNAL**, Suite 226, 401 N. Broad St., Philadelphia, PA 19108.

SCOTTISH BEE JOURNAL. Packed with practical beekeeping. Sample copy from Robert NH Skilling, FRSA, 34 Rennie St., Kilmarnock, Scotland. Published Monthly, \$4.00 per annum.

BEEKEEPING. A West Country Journal — written by beekeepers — for beekeepers. 1.50p inland or 1.80p (\$4.00 Overseas). 10 issues yearly. Editor, R. H. Brown, 20 Parkhurst Rd., Torquay, Devon, UK. Advertising Secretary, C. J. T. Willoughby, Henderbarrow House, Halwill, Beaworthy, Devon, UK.

BEE CRAFT — Official (monthly) magazine of the British Beekeepers Association. Contains interesting and informative articles. Annual Subscription \$5.10 (Surface mail) and \$7.10 (Airmail). The Secretary, 15 West Way, Copthorne Bank, Crawley, Sussex, RH10 3DS.

THE AMERICAN BEEKEEPING FEDERATION needs your support! Join in supporting efforts to stop adulteration, to improve marketing conditions and to encourage the continued research on African Bees and Varroa and Acarine Mites. Please send for information, membership application and sample copy of bi-monthly News Letter! Write To: **THE AMERICAN BEEKEEPING FEDERATION, INC.**, 13637 N. W. 39th Avenue, Gainesville, FL 32606.

INDIAN BEE JOURNAL. Official organ of the All India Beekeepers' Association, 817, Sadashiv Peth, Poona 411030. The only bee journal of India published in English, issued quarterly. Furnishes information on Indian bees and articles of interest to beekeepers and bee scientists. Annual subscription postpaid in foreign countries: For individuals US \$7.00; for institutions, companies and corporate bodies US \$10.00 or it's equivalent, to be received in advance by **IMO** or bank draft, payable in Poona (India).

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POSITION AVAILABLE. Private development/assistance agency seeks applicants for 2 year position involving development and administration of beekeeping programs in Sudan (Africa). Experience in agriculture or community development also helpful. Competitive salary and good fringe benefits. Will consider applicants from a broad range of education and/or experience. Send resume to William Lord, Near East Foundation, Rt. 2, Box 36, Louisburg, NC 27549. (8/87)

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Continued on Next Page

MISCELLANEOUS

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**CLEAN FRESH FROZEN AMERICAN
BEE POLLEN**, give us your needs and we
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**PURE, CLEAN LOW MOISTURE
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cannot guarantee honey buyer's
financial responsibility and advise all
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For more than forty years **Prairie View**
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BEST FRESH PURE ROYAL JELLY - 2
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**CLOVER, ALFALFA, Buckwheat, Tulip
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720 two story, 10-frame colonies, 1800
KTB Feeders, 1,000 Double Screen Split
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Hydrometer 15-21%. \$21.95 airmailed.
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Extracting Equipment: Cowan mini
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HONEY STRAINER 8th year. Easy,
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*WE USE ALL POSSIBLE CARE in
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be held responsible in case disease occurs
among bees sold or if dissatisfaction
occurs. We suggest that prospective
buyers ask for a certificate of inspection
as a matter of precaution.*

GOOD QUEENS PAY! For quality and
service all season long, call **ALLEN'S
BEE RANCH** in Northern California!
(916) 221-1458. (TF)

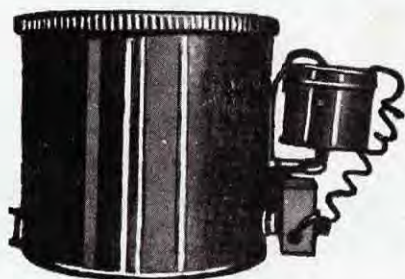
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RADIAL HONEY EXTRACTORS,
stainless, 5 and 10 frames, patented. Also
complete line of equipment. Write or
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Co., (919) 299-3973** after 5 PM weekdays,
anytime Sat., P. O. Box 7997, Greensboro,
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KELLEY'S GROCERS TANK STAINLESS STEEL

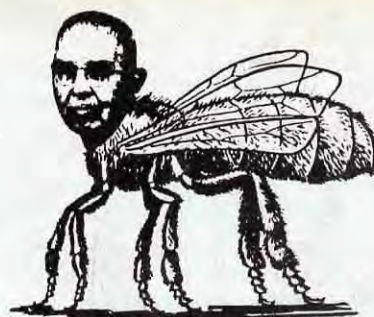


This is a small double boiler, similar to the larger sizes but only about 16" in height and 19" in diameter. This tank holds about 15 gallons of honey, comes equipped with 1" flange or with adjustable flow gate on special order, and supplied with a cover, an electric 115 volt immersion heater, water reservoir and etc. Adjustable thermostat (50° to 250°) should be set about 100° and taped in position. This will keep honey warm so it will flow freely and retard granulation.

CAT. NO. 201 GROCERS TANK.

Ship. Wt. 46 lbs. UPS-PP \$146.50

THE WALTER T. KELLEY CO.
Clarkson, Kentucky 42726
(502) 242-2012



"Kelley The Bee Man"

YOUNG 1987

3 BANDED ITALIAN QUEENS
SHIPPED FROM CLARKSON, KY

1 to 9 — prepaid — \$3.50 each
10 - 24 — prepaid — \$3.25 each
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THE WALTER T. KELLEY CO.
Clarkson, Kentucky 42726
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Please note the following Catalog Number changes in the A. I. Root Co. advertisement on the following page:

X70 - Set I, Honey Bees
X71 - Set II, Beginning
X72 - Set III, Management
X73 - Set IV, Harvest
X74 - Set V, Honey Plants

When ordering PLEASE refer to THESE Catalog Numbers rather than those in the ad.

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The hexagon, the shape the bees use. Perfect! A natural for beeswax candles. ELEGANT—UNIQUE—INTERESTING

Other vital statistics:

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X70 — SET IV, THE HONEY HARVEST. (80 slides)

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. . . FOR THEMSELVES!!

Cat. No. 163PS

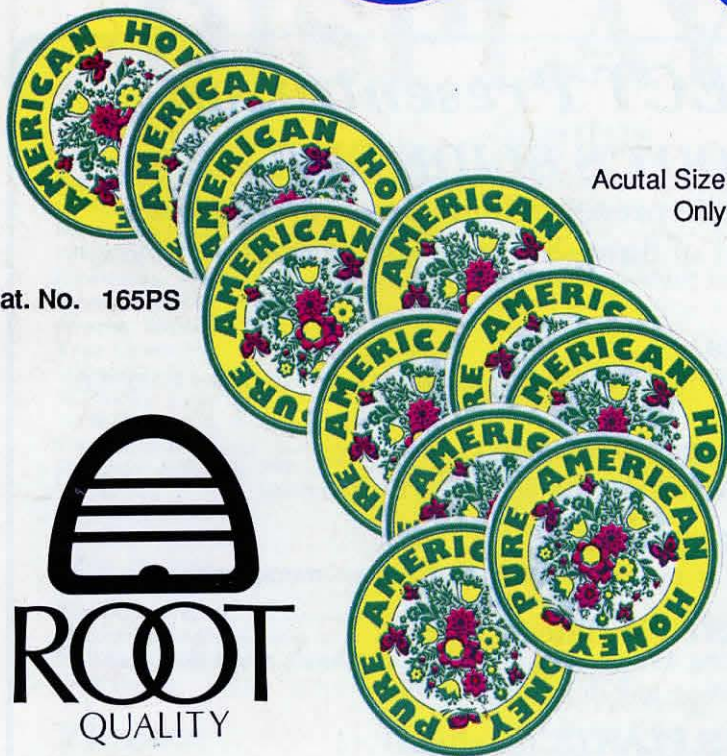


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Only \$4.95 per 250 roll

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