GLEANINGS IN BEE CULTURE NOV '88

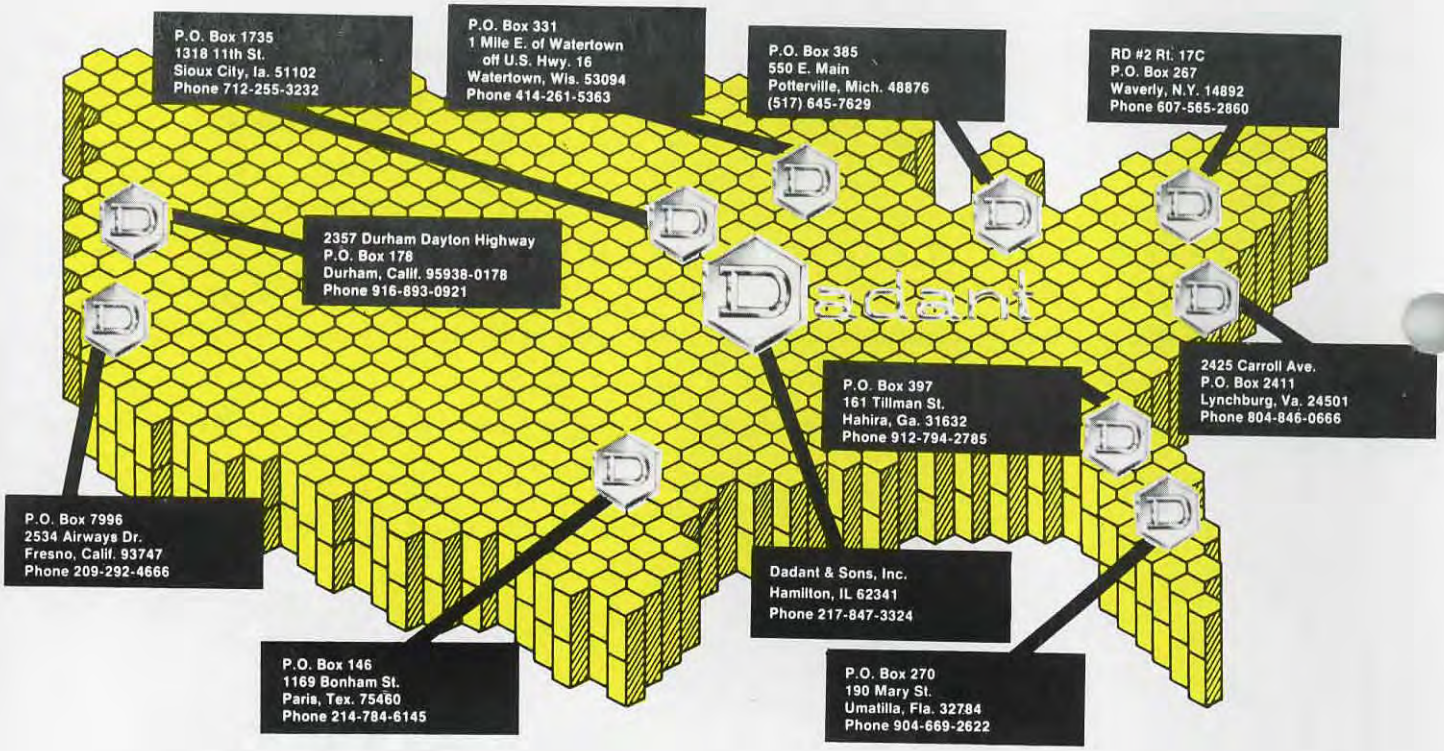
# BUILD YOUR BEEKEEPING ON A SOLID DADANT FOUNDATION

## DURAGILT

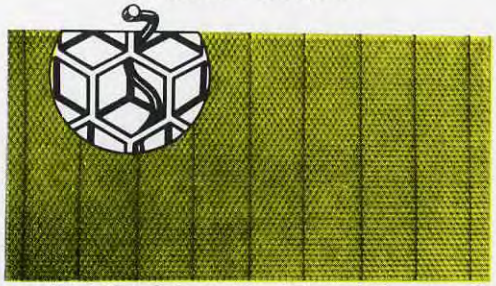
Duragilt has the same tough inner core of plastic as Duracomb, but is further reinforced with metal edges that extend up into the top bar of the frame as well as down into the slot of the bottom bar. Communication holes are provided along the lower edge of the foundation.

## PLASTICELL

Plasticell is the newest member of the Dadant Quality foundations. It's an all-plastic foundation made with extended sidewalls to give your bees a headstart on the season. We think it's the best all-plastic foundation on the market today! Please try some. We know you will agree. (available with or without beeswax coating.)



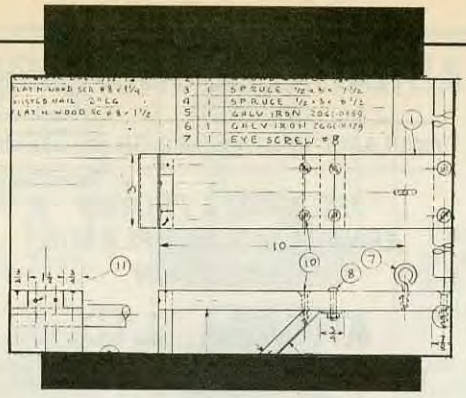

## CRIMP-WIRED



Introduced in 1921, Crimp-wired Foundation was the first reinforced foundation to ever be offered to beekeepers. The steel wire is crimped to make shoulders that radiate strength in all directions through the foundation. Sturdy steel hooks at the top of each crimp wire anchor foundation securely into the wedge top bar frame.

## DURACOMB

Duracomb Foundation introduced a new concept in the art of foundation making. An inner core of tough plastic is coated with pure beeswax on both sides and then milled with perfect cells of worker size. Duracomb completely eliminates the need for cross-wiring and embedding.



NOVEMBER '88

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(ISSN 0017-114X) Vol. 116, No. 11

*115 Years Continuous Publication by the Same Organization*

## Features



## Articles



## Columns



## Departments

# NEXT MONTH

DECEMBER — the Christmas and Hanukkah time of the year — when children are the center of the world, it seems. And so it should be.

But December is also year-end, the wrap-up of another time — and a chance to reflect, a bit, on the past. So you don't become too complacent in your dreaming, next month we offer a real challenge — a triple-sized review of 'Testing Your Beekeeping Knowledge'. Gleaned from the past few years, Dr. Collison has picked the best and brightest to test your mettle, and patience. This should keep you busy during the slow and quiet winter nights ahead.

The season just wouldn't be right without those traditional (and certainly some new) recipes to try at each feast. In keeping with *our* tradition, Ann Harmon offers some of the best holiday eating available. Tune in and try some of Ann's special treats.

There's certainly more, though. Part two of Jim Tew's series on conducting beekeeping workshops will be here, with a stocking full of information on how-to-teach the right stuff to make *your* workshop work.

Everybody has heard of Honeystix™ by now, but next month we have the behind-the-scenes story of how they got started, and why they have been so successful. This is an industry success story that will warm even Scrooge's heart!

More? Starting to look toward next year, we have an excellent piece on making and using nucs — "A versatile Beekeeping Tool". With more and more of us considering queen rearing and selling bees each spring — nucs are going to be more and more important.

All this, our regular columnists and a few surprises — Next Month, during the Holiday.



## ADDRESS CHANGE

If you are moving, please fill in the form below so we can process the change without undue delay. Also, if you have 2 addresses during the year (i.e., winters in Florida and summers in Connecticut), let us know which months you spend where and we can pre-program your address change so you will find us waiting when you move — No Delays, No Fuss!

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# THE INNER COVER

## The Only Green . . .

The drought came, and then went this past season — blown away like the dried leaves it created. But it left behind other tales, other stories — unborn garden seeds, broken promises in rows and rows; dead and dried seedlings still at attention, like tiny brown sentinels guarding the wasteland; and certainly less from even our gray-watered crops.

During the worst there was only a handful of weeds, returning perennials, or a hardy few that started early and survived. But laying in ambush were hundreds, maybe thousands — battalions of sun worshippers awaiting the command to charge.

Unlike their unwanted cousins, garden seeds require tender pampering, careful planting, balanced nutrients and moisture, and protection from the ravages of pest and predator. Weeds, by comparison, need little of these to start, and even less to grow.

After the two-inch Labor Day deluge the once powder-gray garden was suddenly covered with a beautiful green haze — an overnight emerald uprising. The command had been given, the battle was called.

Weed wars are really two-fold. The first hurdle is to eliminate those that are competing with corn and beans for space in the sun and life from the soil. Choked by weeds is a reality, a constant threat to the continued success of the chosen. Removing tiny weeds is easy though, like scattering mere pebbles; plucking juveniles is harder, more like picking stone; and the adults are hardest of all, not unlike Sisyphus and his boulder.

But the second hurdle is the highest, the hardest, and certainly the most important. Removing mature adults, bearers of millions of more of the same is crucial to stop the cycle. Imagine — no weedy ambush, no emerald uprising, no crop competitors, and a reign of peace, drought or no. Yes, make sure you remove the seeds of future problems — even if they start in September, and even if they are the only green of the year.

•

*You and the Media* is a series of articles published to assist individuals in the beekeeping industry in forming positive relationships with local and regional media representatives; carry out meaningful exchanges with these representatives; and at the same time, maintain a high degree of control over what is ultimately done with this information.

We do not subscribe to the belief that all, or even most individuals in the commercial media are dishonest, unethical or incompetent. In fact, it is our express belief that most media officials you will encounter are exceptional in their efforts to report the news accurately, fairly and in accordance with a professional code of ethics.

However, the frequency of misquotes, outright errors and blatant sensationalism in the press regarding such volatile topics as killer bees, blood sucking mites, and the like, has increased dramatically in the past few years.

It is our hope that the information presented here, when used correctly and in the spirit intended, will reduce the problems caused by this minority and strengthen the bonds already in place with the rest of the fourth estate.

The Editor

## *YOU AND THE MEDIA*

Last time we talked about some of the basics when dealing with the media. Things like preparation before, and style during, an interview. Also, how to get things set up so that you are, if not in control, at least not at the mercy of any media type that knocks on your door.

But there is a lot more to this relationship than glib chatter and a great smile — much more!

*Continued on Page 647*

COVER . . . DO-IT-YOURSELF is a big part of most beekeepers' lives. If you can't buy it — make it — and if you need it fixed, you do it yourself. We have several items to 'DO-IT-YOURSELF' this month. Enjoy.

# NOVEMBER Honey Report

November 1, 1988

These figures represent current prices from our contributors. They are based on reports from many states and averaged for each region. Where insufficient information is received, no price is shown.


| Wholesale Extracted | Reporting Regions | | | | | | | | Summary | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sales of extracted, unprocessed honey to Packers, F.O.B. Producer. Containers Exchanged | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | R | A | L |
| 60 lbs. (per can) White | 46.00 | 42.06 | 40.00 | 36.00 | 50.00 | 36.33 | 40.00 | 39.13 | 36.00-50.00 | 40.86 | 37.11 |
| 60 lbs. (per can) Amber | 43.50 | 36.18 | 37.00 | 31.19 | 47.50 | 32.08 | 35.00 | 35.50 | 30.00-47.50 | 36.55 | 34.30 |
| 55 gal. drum/lb. White | .53 | .42 | .41 | .40 | .60 | .60 | .60 | .60 | .40-.65 | .53 | .53 |
| 55 gal. drum/lb. Amber | .50 | .37 | .38 | .38 | .55 | .53 | .50 | .53 | .35-.60 | .48 | .47 |
| Case lots — Wholesale | | | | | | | | | | | |
| 1 lb. jar (case of 24) | 29.80 | 30.76 | 23.04 | 23.00 | 24.00 | 24.83 | 28.90 | 27.39 | 23.04-34.80 | 26.55 | 25.77 |
| 2 lb. jar (case of 12) | 27.60 | 27.06 | 24.00 | 18.00 | 24.50 | 23.75 | 26.25 | 27.32 | 18.00-30.00 | 25.58 | 25.66 |
| 5 lb. jar (case of 6) | 31.30 | 26.75 | 22.15 | 22.50 | 27.75 | 25.33 | 27.95 | 25.50 | 22.50-32.00 | 26.58 | 25.65 |
| Retail Honey Prices | | | | | | | | | | | |
| 1/2 lb. | .88 | 1.11 | .79 | 1.50 | — | .85 | .95 | .89 | .79-1.50 | .99 | .97 |
| 12 oz. Squeeze Bottle | 1.50 | 1.58 | 1.19 | 1.25 | 1.35 | 1.21 | 1.45 | 1.30 | 1.19-1.89 | 1.36 | 1.35 |
| 1 lb. | 1.55 | 1.71 | 1.29 | 2.00 | 1.50 | 1.43 | 1.68 | 1.43 | 1.29-1.95 | 1.58 | 1.50 |
| 2 lb. | 2.80 | 2.92 | 2.99 | 3.89 | 2.75 | 2.63 | 2.89 | 2.25 | 2.20-3.79 | 2.81 | 2.85 |
| 2-1/2 lb. | 3.60 | 4.00 | 4.15 | 3.90 | 3.50 | 3.25 | 3.89 | — | 3.25-4.85 | 3.60 | 3.44 |
| 3 lb. | 4.18 | 4.20 | 3.49 | 3.85 | 3.85 | 3.95 | 3.99 | 3.46 | 3.13-4.60 | 3.91 | 3.80 |
| 4 lb. | 5.28 | 4.75 | — | 4.29 | — | 4.58 | 4.91 | — | 4.29-5.40 | 4.78 | 4.66 |
| 5 lb. | 6.50 | 5.58 | 5.49 | 6.25 | 6.25 | 5.20 | 5.77 | 5.40 | 5.00-6.50 | 5.69 | 5.93 |
| 1 lb. Creamed | 2.00 | 1.58 | 1.35 | 1.55 | 1.75 | 1.45 | 1.85 | 1.88 | 1.35-2.00 | 1.73 | 1.70 |
| 1 lb. Comb | 2.37 | 1.78 | 3.00 | 1.75 | 2.00 | 2.00 | — | 4.08 | 1.75-5.00 | 2.51 | 2.21 |
| Round Plastic Comb | 2.00 | 2.23 | 2.00 | 1.50 | 1.75 | 1.85 | — | 3.40 | 1.50-5.00 | 2.24 | 1.88 |
| Beeswax (Light) | 1.13 | 1.05 | .95 | .90 | 1.50 | .80 | .95 | 1.00 | .80-1.50 | 1.05 | 1.04 |
| Beeswax (Dark) | .97 | .96 | .80 | .80 | 1.40 | .72 | .80 | .90 | .72-1.40 | .94 | .88 |
| Pollination (Avg/Col) | 28.50 | 16.00 | — | 25.00 | — | 19.50 | — | 19.00 | 12.00-32.00 | 22.21 | 24.50 |

### Honey Report *Features*

**Summary Column:** There are 3 parts. **R** — Range of *all* prices reported for the month, lowest and highest. **A** — Average price for each commodity across all regions. **L** — Average price of each commodity listed *last* month.

**Comments Section.** Price Index — A descriptive statistic that takes into consideration *all* commodity prices, and compares each region to the others. The region with 1.00 has the highest overall prices for the month. A region with Price Index .90 has prices, overall, at 90% those of the region with 1.00.

### *Region 1.*

Price Index .94. Sales decreasing as are prices just a bit, especially in larger size retail containers. Crop appears good to excellent, with color lighter than normal. Supply prices rising, forcing honey prices up. Fall crop good.

### *Region 2.*

Price Index .87. Sales steady to decreasing a bit, with prices dropping accordingly. Seasonal specialty crops about gone or claimed. Crops average to a bit low, dry in some areas.

### *Region 3.*

Price Index .81. Sales steady to increasing, but prices tending to low. Fall crop excellent in most areas, recent rains helped get colonies into good shape for winter.

### *Region 4.*

Price Index .73. Sales brisk but prices steady to lower. Excellent crop creating surplus, keeping prices at buy-back. Some areas still dry but helping late alfalfa crop some for flow.

### *Region 5.*

Price Index 1.00. Sales great and prices increasing across the board. Early crop bringing high prices but fall flows questionable.

### *Region 6.*

Price Index .77. Sales steady to slow due to warm weather and prices steady to low. Crop average to low in most areas with drought causing poor fall crops. Areas with adequate moisture doing well and outlook good.

### *Region 7.*

Price Index .93. Sales strong to increasing with prices steady. Increasing demand helping with both sales and prices. Crop greatly improved due to late rains. Outlook good for wintering.

### *Region 8.*

Price Index .90. Prices steady to dropping a bit with sales steady to slowing. Drought causing short crops in most northern areas but some good, early crops harvested. Southern areas generally doing well with cut comb sales picking up. Cotton crop good but sprays a problem.

**Anyone interested in becoming a "Honey Reporter" should contact the Editor.**


# MAILBOX

## Multiple Eggs Explained

In the June '88 issue of *Bee Culture*, you published an article on Africanized honey bees that mentioned the presence of fertile eggs in a hive that was queenless. The author had no explanation, but Ormond Aebi, in his book 'Mastering the Art of Beekeeping' tells us that Caucasians (but not Italians) have been known to 'borrow' eggs from other hives.

So, why not AHB?

Name Withheld
Santa Cruz, CA

## A Plastic Pox

Please enter another two year subscription for me. I would like to comment that I find the articles by your contributing editors both useful and enjoyable reading. I also note the similarities between American and Australian beekeeping, keeping in mind, of course, the six month calendar difference.

Occasionally, the envelope my magazine arrives in is torn — probably by the postal authorities. I wonder if you have considered the polybags one sees about to send your book in?

Robert Shackleton
18 Coven Ave.
Bayswater, Victoria Australia

**Editor's Comment:** Personally, we have never liked the polybags some magazines arrive in because it is just another slice of non-biodegradable stuff that must be dealt with. Recently, however, a company has released a plastic wrap that does break down *if left in the sun*. This, of course, is better than the hundreds of years required for most plastics but are most magazine wrappers left out to decompose?

Another factor is that there is considerable expense associated with this technology. So, coupled with the environmental hazards of plastic, we'll probably be sticking with the 'occasionally torn' paper envelope. It's far easier to justify another piece of (soon to be degraded) paper than plastic.

## Thanks . . .

Thank you for your supportive comments and article in the recent issue of *Bee Culture*.

The National Honey Board is committed to keeping producers, packers and importers informed about its activities. Your support makes our job much easier.

Mary R. Humann
Public Relations Director, NHB
9595 Nelson Road, Box C
Longmont, CO 80501

## Farm Bureau and Beekeepers Meet

On August 30, 1988, the American Farm Bureau hosted a Conference at the Embassy Suites Hotel, Denver, CO in which 14 states had representation present.



The meeting was coordinated by Ken Nye, Director A.F.B.F. Horticulture Department, Commodity Division, 225 Touky Avenue, Park Ridge, IL 60068.

The purpose of this meeting was to find out how much interest there is nation-wide for the honey bee industry to be recognized by the American Farm Bureau in establishing a Commodity Division Board for the honey bee industry. Currently, the American Farm Bureau has some 20 boards recognizing other agricultural interests. Honey bees are now under the Fine Arts Board, which probably understands little of our industries current problems and future needs. This is where you, the American beekeepers and honey producers can get involved. If you are a Farm Bureau member, then contact your county or state Policy Development Representative and indicate to those people we need a Honey Bee Commodity Board to be established by the American Farm Bureau.

With the mites we currently have and the Africanized honey bees near our Texas border, we need help from the American Farm Bureau to deal with these matters. Contact your local or state Farm Bureau offices today. Nothing is going to happen or work unless you get involved. Your help can make a real difference.

Edward Doan
N.Y.S. Honey Producers
Farm Bureau Member

## CA Treats

In response to the efforts of the California Bee Breeders Association, the California Department of Food and Agriculture has made new rules to allow treatment of bees with Acarine and Varroa mites.

Bees found to have varroa or acarine mites may now be treated under EPA Section 18 exemptions made to CDFA for beekeepers wishing to treat both mites to locate their bees in the 16 county control area of Northern California. Out of state beekeepers may now rent their bees for almond pollination in Northern California, and at the same


# MAILBOX


time treat their bees for mites so they will be mite free when they move out of California.

Beekeepers interested in renting their bees for pollination in Northern California should contact almond growers or bee breeders in that area for rental information. Beekeepers interested in knowing the requirements to bring bees into California and having them tested and treated for acarine or varroa mites should contact: Isa A. Siddiqui, Assistant Director, Division of Plant Industry, 1220 N. Street, Sacramento, CA 94271-1-0001

The Northern California counties that are involved in this program are: Butt, Colusa, Glenn, Lake, Lassen, Modoc, Nevada, Sacramento, Shasta, Siskiyou, Solano, Syutter, Tehama, Yolo and Yuba.

Anton J. Nachbaur, Jr.
member, Apiary Protection Ass'n.

## Import AHB?

**Editor's Comment:** In a recent column, Dr. Jaycox (one of our contributing editors) suggested importing genetically improved strains of Africanized honey bees to use as mating stock when the migration of the 'other' AHB arrives in the U.S. This column generated significant response, both pro and con, to this office. Dr. Jaycox responds:

Our inordinate fear of bee importations from the standpoint of *genetics* is not justified. In the past, every imaginable race of honey bee was brought into the United States, even ill-tempered ones that had dispositions much like those we are now worried about.

As explained in my column *this* month, the U. S. Department of Agriculture extols the virtues of importing breeds of nearly every other animal used by man, yet balks when it comes to getting better bees when we need them. Now that the Mexican control plan has failed in its goal of diluting the genetic make-up of the bees heading north, we know for sure we will be dealing with an undesirable stock of Africanized bees in this country.

Roy Thurber's and others' idea that "disappearing disease" was related to African blood was common for awhile. Not it is becoming clear that the probable cause is a lack of protein in late summer and fall, a nutritional and management problem, rather than heredity of the bees. Experiments in Florida should soon give us the right answer. No difficulties of this nature have been reported in countries such as Argentina where Africanized bees have penetrated into areas with a climate much like ours.

It is clear that we will not control the African bee by quarantines and programs of identifying and killing swarms. We need to do it with selection and breeding using selected European and African stocks. The result will be better, more productive bees with resistance to Varroa mites and some diseases.

To sit and wait for the arrival of the Africans through Mexico without the right countermeasures is like failing to turn the wheel to avoid a head-on crash. I prefer to take defensive measures now by selecting and importing good African stock or African hybrids. We will have Africanized bees in this country. The only question is whether it will be on our terms or theirs.

Elbert R. Jaycox

## Looking for Work

I would like to offer my services as beekeeper to any commercial apiarist who might be needing a full-time Filipino beekeeper for a year-round operation.

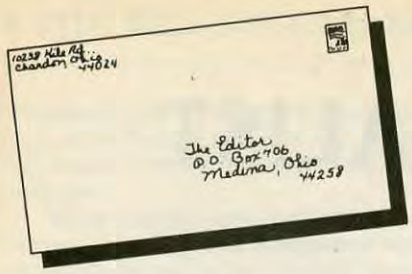
For years I have been keeping hundreds of colonies in RJ Farm where I am working as Technical Farm Supervisor.

If interested, I will send my resume on request. Thank you.

Mario L. Maguad
La Granja, La Carlota City
Negros Occidental
Philippines, 6030

## Equality Questioned, Again

I am referring to Kay Nathanson's letter in the October 1988 issue who is




# MAILBOX


delighted with her status as a beekeeping equal, yet wants special treatment for being a female. Hefting a full deep super is a problem for senior citizens, and for people who have had strokes or arthritis or a similar illness that impairs their physical ability. Does she have two hives or two thousand? Is she using shallow supers? Has she tried the Langstroth handle on supers? If her hives are not on level ground, can she remove one frame at a time and carry it to level ground? We advertise two wheeled carts for sale, and hydraulic lifts, or why not hire a high school student? Does she belong to a local bee club?

With so little information provided about her problem, can we solve it on a national level or is it better handled locally?

Jim Stokes
5617 Independence Road
St. Charles, MO 63303

# New Product

**Cap•M•Quik** is the most reliable and easiest to use capsule filler on the market. This gadget is designed for either 00 or 0 capsules. It is made of F.D.A. approved sturdy plastic and fills 50 capsules in minutes. It can be used for herbs, powders, vitamins, minerals or other products.

For more information contact:
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Berry Creek,
CA 95916
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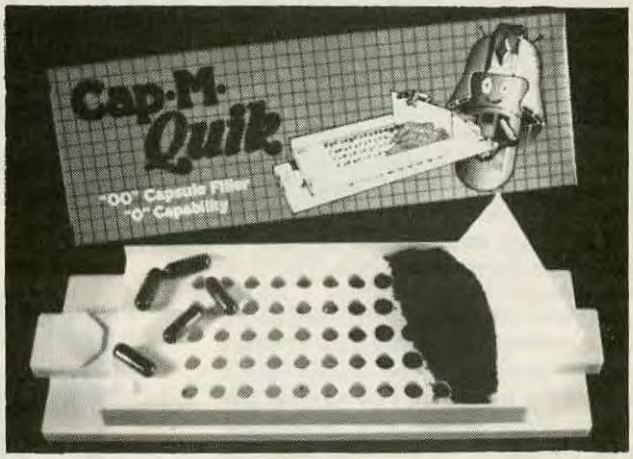
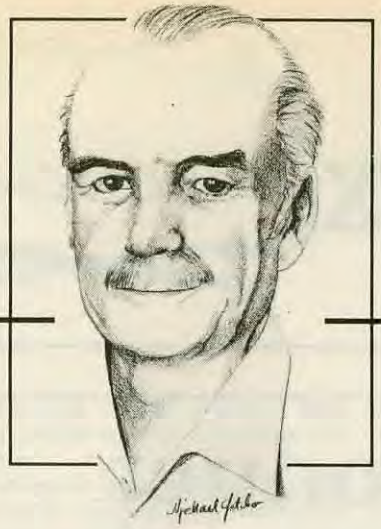




# THE BEE SPECIALIST

ELBERT R. JAYCOX

5775 Jornada Road North • Las Cruces, NM 88001

## *"Animal imports into the U.S."*

As the Africanized bees move inexorably through Mexico, time is growing short for us to respond as we should: with far better African stock or improved African hybrids from wherever they are available. We know that the approaching African bees do not represent the full gene pool found in the bees of Africa. In fact, they are a poor representation, yet pure Africans and their crosses are being used with great success in many countries of Africa and South and Central America. The U.S. Department of Agriculture (USDA) appears unwilling to test and introduce better African stock because of fears that the public would be against such a move. Why would they be against our having more gentle and productive stock, resistant to Varroa mites, instead of waiting for the invasion of much less acceptable bees? Obviously, we need to import stock that has been subject to selective pressure, but not just any bee from the mountains of Africa and elsewhere.

Consider how the USDA looks at the importation of other animal breeds as detailed in *Agricultural Research,* June/July, 1988. This is a publication of the Agricultural Research Service (ARS) of the USDA and certainly must represent official policy. In the section called "Forum," Regina A. Wiggen talks about "Gene Stock: Locating the Best." She begins, "With more genetic boosts from *foreign animal breeds* (emphasis added), U. S. farm animals could be more productive and disease resistant, yield leaner meat, and supply higher quality wool, leather, and other products." She continues, ". . .animal breeders need to pick and choose from the widest possible selection of genes if they are to develop the best livestock." Editor Wiggen points out the spectacular gains in milk production and how the use of valuable genes from farm animals worldwide can help us in food production and disease resistance.

The USDA is interested in, or has imported, pigs from China that produce bigger litters, cattle from Africa, Pakistan, and India tolerant to heat and nutritional stress, sheep from Finland, Australia, and Russia with genes for multiple births, and better Angora goats from Turkey and the Republic of South Africa.

There are serious diseases and pests of all these animals in their native lands including hoof and mouth disease and many different ticks that we do not have in the U.S. Yet some of these exotic breeds have already been introduced, through quarantine, into this country. Some may be brought in by transporting frozen embryos, just as we could bring in honey bee semen and eggs. You can be sure that importation of other animals will be made because the benefits so far outweigh the risks. Then why is there so much opposition to importing honey bee stock with similar advantages?

Opponents of the idea cite the occurrence of damaging mites such as *Euvarroa* and *Tropilaelaps* species in other countries. However, an adequate quarantine facility and introduction system like that used in Australia can effectively prevent unwanted introductions of pests of bees just as other animal quarantine facilities and procedures have kept out pests of sheep, swine, cattle, and poultry. Bees in quarantine can be taken through several generations in a short time. Use of eggs and semen can reduce the contact between the generations.

If the USDA is in favor of finding and using the best genetic stock from around the world, why should they exclude honey bees at a time when better stock is so crucial? I could understand the situation more easily if there were good practical research being carried out on how best to manage the soon-to-be-arriving African bees to reduce their absconding and swarming. But I cannot understand it when major emphasis is placed on catching swarms and determining whether they are Africanized. What will that do for the producers of honey, package bees and queens?

If you feel as I do, write to the Secretary of Agriculture, Richard E. Lyng, and contact your congressional representatives. Time is running short.

## Making Bee Equipment

We are lucky in this country to have basically only one style of hive and few different sizes. E. H. Thorne, Ltd., bee supply manufacturer in the United Kingdom, makes 240 different sizes or types of frames as well as making special ones for Athole Kirkwood and Brother Adam. Thornes also have 80 different sizes/types of queen excluders, and wax foundation in "many many sizes" including both worker and drone bases.

The common styles of lids and bottoms used here are costly to make and do not hold up well in the field. They require extensive use of a dado blade, with many cuts that require more power and labor than simple saw cuts.

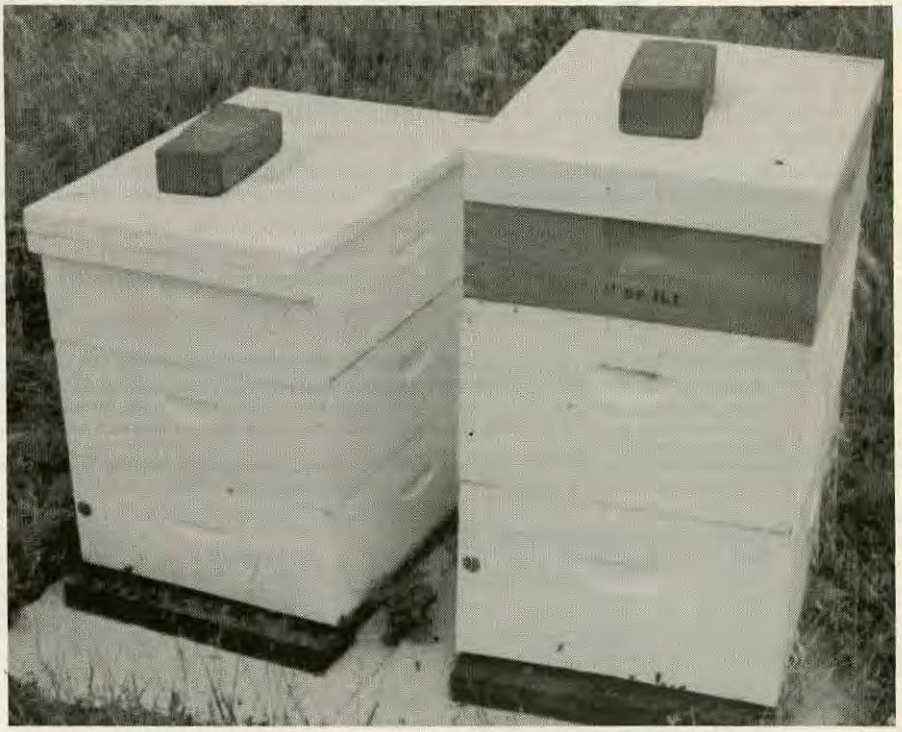
"Standard" hive bottoms, the reversible ones, have dadoed side and end pieces that weaken them. Lids have similar problems.

When I began keeping bees at the University of Illinois I bought tops and bottoms referred to as "4-cleat" ones. These have two cleats at each end that fit onto the "flat", or main expanse of wood. After they are assembled, these tops and bottoms have a vertical joint, or seam, between the cleats that is ideal for catching water and rotting out. In fact, in spite of being glued, painted, and nailed carefully, all these lids and bottoms split, warped, and rotted very quickly. At that point we began to make our own tops and bottoms or had them made to our specifications. With a coat of pentachlorophenol and boiled linseed oil, this simple equipment survived being placed on the ground all year in the Illinois climate, and most of it was still in use after more than 15 years. Now, I would use copper naphthenate in place of the penta, which is no longer recommended.

It is easy to make long-lasting lids and bottoms in your own shop. Cut the wood for the lids either the same size as the top of a hive body or about two inches longer. With the former, use 1" x 2" - 1" x 4" cleats across each end — no dadoing, no loss of wood and power. With the longer lid, run it across the dado blade at each end so that you can cross-nail cleats into each cut giving a flat lid with an overhang at each end but no seam to catch water (see illustration). These are ideal for hives that have to be moved. If you like a metal cover, add it as on the hive at left in the illustration. Both styles resist rotting and warping when properly treated.

Bottoms are made in a similar manner. Decide how big (wide) you want the landing board, usually 1-1/2" to 2", and cut the main part of the bottom accordingly. Then cut cleats (riser strips) to provide the entrance you want, from 3/8" to 3/4" high to fit beneath a hive body (brood chamber). You have another choice with the cleats beneath the bottom. I usually use 3/4" stock as in the figure; many people prefer a bigger cleat of nominal 2" thickness. Assemble bottoms with galvanized nails, treat with copper naphthenate and then a coat or two of boiled linseed oil. Every time empty equipment comes back into your shop, scrape, brush, and recoat the bottoms.

The bees don't know anything about "standard" equipment. All they need is food, shelter, and sufficient room. From your standpoint you need uniform, long-lasting equipment that does not cost an arm and a leg. It is easy to make it if you follow a simple pattern.



*Customized equipment will be stronger, last longer, and fit your exact needs.*

The New Zealand beekeepers have made a worthwhile change in the width of the end bars on their frames. By reducing the width from 35 to 33 mm, they have gained extra room to manipulate frames without any detrimental effects on the bees. Even with 10 frames in a hive body there is extra space to move them. If you make your own frames with self-spacing end bars, try this new width.

Speaking of equipment, "Conical bee escapes" was the title of an article in the English magazine, *Beecraft*. Malcolm Clarke of the Surrey Beekeepers' Association had to reassure a fellow commuter who saw the headline that this did not refer to the escape of another fearsome insect like the Africanized honey bee.Δ

**Correction:**

In the September column, the technique for making formic acid plates was incorrectly printed. The correct technique is: They are made from fiberboard, 200x150x15mm. These are soaked with 25ml of 60% formic acid and sealed in a foil packet for a week so the acid will penetrate the entire board.

We regret the printing error.

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# RESEARCH REVIEW

DR. ROGER A. MORSE

Cornell University • Ithaca, NY 14853

*"Commercial and migratory beekeepers are not having serious problems with varroa."*

## Varroa and Pesticides

We had planned to conduct research on the biology of *Varroa jacobsoni* mites this past summer, but when we searched for infested colonies, most of which were owned by migratory beekeepers, we could not find enough colonies on which to undertake our studies. Those beekeepers who had moved their bees to Florida and back had cleaned up the mites so thoroughly that their colonies were almost mite-free.

*Varroa jacobsoni* was first found in the United States in September 1987. The mites have now been found in 16 states, and are probably present in at least twice that number. I have studied and observed this mite for over 22 years. Few parasites of which I am aware can hide themselves so well. The belief that the spread of this mite can be halted through rules and regulations and the destruction of colonies is unreasonable. I will stand by my prediction that we will lose at least one million colonies of honey bees in the United States because of varroa mites. Most of these colonies will be feral colonies in trees and buildings and man-made hives that are neglected. The loss of these bees will have a negative impact on our pollination needs.

The good news is that at least two chemical treatments appear to control varroa effectively. Although I reported on this subject only a few months ago, it is important to re-emphasize that none of the commercial and/or migratory beekeepers are having any serious problems with mites killing colonies. These beekeepers must apply the chemical carefully and the treatment is costly. Some beekeepers in New England have reported heavily infested colonies. Information on control methods had not yet reached them. The New England states have no extension apiculturist or scientist conducting research on honey bees at one of their state colleges.

Beekeepers use several different pesticides. Wood preservatives are necessary to protect wooden hive stands. Drugs are sometimes used to control American foulbrood and nosema. Repellents are often used to harvest honey. Now we must consider the control of varroa and tracheal mites. There are ways around the use of most of these materials, and many beekeepers are working hard to implement alternative methods. Coping with varroa, however, poses special problems.

At Cornell we are considering the preparation of a manual that would describe all of the chemical methods of controlling bee diseases and their alternatives. We would like to produce a manual that could be used nationwide and that would be recognized by all of the state agencies that regulate pesticide use and certify pesticide applicators. Laws become stricter in this area each year.

This is a subject we cannot ignore. Three new honey bee diseases (chalkbrood, tracheal mites and varroa mite) have been introduced into the U.S. in the past 16 years. This is all part of the rapidly changing agricultural picture in our country. As international trade increases and we move more and more agricultural products around the world, we can expect more of the same.



## For Those Interested In Evolution

One key to the history of life on earth is pieces of fossilized tree resin in which insects may have become entrapped. Ancient trees, like many of those living today, produced gums and resins, especially at wound sites. Interestingly, while deposits of fossilized resin, called amber, are found in many places around the world, the state of New Jersey has some especially old and rich deposits. In the U.S., amber may also be found on Staten Island and Long Island in New York, Cape Cod in Massachusetts and Maryland. This amber is from the Cretaceous age, which ranges from 65 to 95 million years ago.

Dr. David Grimaldi of the American Museum of Natural History in New York City has been digging for amber, just across the Hudson River from the American Museum. Also he has found an especially interesting, ancient bee in amber from New Jersey that was already in the Museum collection. It is a stingless bee. It is a fairly close relative of stingless bee species now living in South and Central America. Its age is estimated at 80 million years. The next youngest bee previously known from amber is only half that age.

What is of special interest is that finding this bee apparently pushes back the date when flowering plants first appeared on earth. Since all known bees, solitary and social, depend solely on flowers for food, we presume this early bee did too. All this will create some lively debates among the evolutionists.Δ

### References

Grimaldi, D., *Still life with flowers.* Natural History 97:86-88. 1988.

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2462-20

# Building A Better Beekeeper

DR. JAMES TEW

## PART 1: Preparation

What is the best kind of beekeeper? Ideally, *the best* beekeeper is one who is aware of all of the rules and regulations that must be adherred to; one who knows when bees are in trouble and what to do; one who knows when bees are causing trouble and what to do about it; one who willingly gives time and money to assist the local associaton; one who knows the basics of honey harvesting, marketing and storage; and finally, one who is willing to learn all of the above. In essence, a good beekeeper is a good citizen.

Where do you find good beekeepers? Like most skilled professions, good beekeepers are made, not born. And to *make* a good beekeeper requires training.

Most associations at one time or another have sponsored beekeeping schools or workshops. The degree of success always depends on the amount of preparation that goes before-hand, the actual content of the material taught, and the follow-through afterwards.

A few are excellent, most are good, but many are less than ideal. But even the best can always be improved on — better promotion, organization, equipment, or . . .

This three part series is a guide to prepare for, present, and finish a bee school or workshop. It is presented in a universal mode so whether you have three or 300 participants, the preparations are included. We urge you to copy and save these articles as a handy reference for this years' and future preparations. By placing these three articles, plus the records of each school you give in a notebook, a permanent record of what works, and more importantly what doesn't, can be kept and used by future teachers.

### Concept

The idea, or concept for a workshop usually comes from an energetic club member whose ideas come from many sources. For example, one may attend a session and be favorably impressed with the educational results. Or, there may be a need for a specific session or workshop. Examples of specific needs would be educational functions (for club members), social functions (field demonstrations, picnics), or publicity functions (mall displays, farm and garden shows, nature exhibits).

Whatever the idea, someone must be given the responsibility and take charge of concept development. The group, for the most part, must support the concept of the project. Too many times, great responsibility falls on a few people to do most of the work. To help energize the group, the person presenting the idea should have an organized written draft of the plan before presenting it to the group. Expect some group dissention. Not all members are going to be interested, but the majority m*ust agree with the general concept. No doubt, the idea will go through several revisions* before the majority consents to support the project. The development procedure may take many paths, depending on the organization, but assuming the group has idea people and group energy, a functional, written plan will finally evolve, regardless of the path taken.

### Target Audience

For what kind of group is the workshop designed? Most of these questions should have been answered when the plan was first presented to the group. Other questions that should have been addressed in the original plan are: 1) is this for the furtherance of beekeeping in general; 2) is this function to develop new club members; 3) is this function to update current members; or 4) any combination of 1 - 3. The predicted audience and the workshop topic will determine the meeting facility requirements.

### Facilities

An ideal meeting facility should meet the following criteria:

1. Easy to find with lots of parking

2. Respectable appearance and location
3. Clean rest room facilities
4. Meeting room that will comfortably seat the group
5. Auxiliary rooms for displays, satellite sessions or concomitant sessions.
6. Acceptable areas for outdoor sessions (if scheduled)
7. Appropriate dining and food preparation areas (depending on plan)
8. Audio-visual equipment available (if required)
9. Convenient phone facilities
10. Facility personnel on duty (preferred, but not required)

The meeting room is especially important. The room should fit the group. Don't have a small group in a large room or vice versa. If the session involves several days of lectures, consider changing the main meeting room for part of the meeting. *The individual responsible for the meeting site should know where things are.* Drop by a few days in advance and ask to be shown around. Specifically know:

1. Where the light switches are and how they work
2. How to lower the projection screen
3. Where supplies are stored such as extension cords, spare bulbs, extra chairs, and other meeting requirements
4. Who to contact in case of major problems during the meeting
5. Where a phone is located
6. That all reserved rooms are unlocked and are prepared for the meeting
7. How the public address system works
8. The location of sinks, mops, and other cleaning materials
9. The location of the nearest hardware store

School complexes have been used successfully by many beekeeping groups. In most cases, school buildings meet the requirements for a good meeting site. Police and fire academy facilities are good choices, as are extension facilities, church basements, town halls, local hotels or other service group halls.

## Dates

Frequently as difficult as budget and facility selections, meeting dates are critical to the success of the session. No matter which dates are selected, some people will not be able to attend. Additionally, no matter what date is selected, something is always going on somewhere else. The group can only select the best date for all.

## Topics

Topics for the workshop should have been selected at the time the meeting facilities were selected. The topics, and the type of outdoor presentations planned, will have a great bearing on what kind of meeting facilities are required.

In general, there are two types of workshops: beginning beekeeping or advanced beekeeping. For a new or inexperienced beekeeping class, basic topics could include:

1. Equipment purchase/assembly
2. Getting started in beekeeping
3. Sources of information
4. Protective gear
5. Location for bee yards
6. Using a smoker
7. Seasonal management
8. Swarm control
9. Making increase
10. The honey crop — production and processing
11. Basic disease and pest recognition
12. Common nectar producing plants
13. Observation hives
14. Small scale queen production
15. Good neighbor relations

Suggested topics for a workshop for more advanced students could be:

1. Africanized honey bees
2. Predacious mites
3. Comb honey production
4. Advanced queen production
5. Artificial insemination of queens
6. Good neighbor relations
7. Stinging behavior
8. Diagnosis of common bee diseases
9. State and Federal beekeeping programs
10. Pollen collection and storage
11. Specialty products (venom, royal jelly, propolis)
12. Pollination principles and techniques
13. Marketing, packaging, government programs
14. Sources of specific information (State extension, Federal publications, international publications)

## Budget

The amount of money a group has to spend is certainly a consideration. The budget is always difficult to predict, especially if the group has limited operating funds.

One possibility is the procedure of taking no chances, spending only what the group currently has in the club account. Any surplus funds made on the workshop would go for the next workshop or other group functions.

Another technique is to predict the number of participants and base the workshop expenses on that number. Once the number is met, the workshop begins to generate surplus funds that, again, could be used toward the next workshop or for group functions. Fiscal decisions should be conservative until the group has some operating capital, in case enrollment does not meet the minimum.

If the group does have some monetary reserves, the predicted enrollment, the meeting site, and the date should be selected at approximately the same time. With this information, an idea of how much to spend on speakers should be clearer.

## Speakers/Teachers

The speaker category can be as trying as the budget category. The following criteria should be considered when selecting speakers:

1. Expertise
2. Travel expenses
3. The draw factor*
4. Availability
5. Topic appropriateness (don't expect a pollination specialist to discuss genetics)

Visiting speakers should be contacted well in advance of the workshop. For popular presenters a year would not be too far ahead. If the workshop is to be an annual event, the speakers should be treated well during the meeting. Expecting presenters to talk for several hours for a small honorarium, if one is given at all, will immediately and certainly give the groups' workshop a dubious reputation, making it more difficult to get future quality speakers. An important consideration is to have all agreements with speakers in writing. Details, such as travel dates, arrangements, expenses and honorarium, along with topics, should be in writing. Verbal agreement via phone is risky and difficult to verify.

*The draw factor: Is paying a well-known speaker a significant amount of money a wise investment? Sometimes having a famous beekeeping personality teach a lecture will entice more beekeepers to attend — sometimes not. It depends on the subjects they will discuss relative to the anticipated audience. For instance, having a well-known bee breeder attend a meeting of new beekeepers probably isn't a good choice. However, this same breeder, attending a session on advanced beekeeping and queen rearing would be excellent. Know your audience, and your speakers' 'draw' on that audience.

# BEEKEEPING WORKSHOP

Many times, local members are capable of presenting certain topics. *Club members should be used where ever possible.* Their costs are lower and they may be able to make new beekeepers feel that they are a part of the group. On the other hand, it is difficult to be a "prophet in your own village". The workshop coordinator should be certain the member is qualified to make the presentation.

## Feeding

Providing meals is probably the most difficult of all responsibilities. One option, if practical, is to give time for "lunch on your own". If that is not possible, local catering services can usually provide appropriate meals at modest costs. Another option is to make a large order of fast food for resale at meal time. No matter how food is provided, expect complaints.

## Promotion

After the meeting topics, date, place and speakers have been selected, the meeting should be promoted ***aggressively***. Every successful session in which I have ever been involved has been *extensively* promoted. Use the local extension service to assist when possible. In addition, consider the following:

1. Local and regional newspapers
2. Radio spots
3. Bee publications
4. Community bulletin boards
5. Other groups (eg. Outdoor groups, nature groups, garden clubs, service clubs)

Meeting promotion cannot be overdone. I am convinced that prior notice is a major key to the success of a workshop (see sample News Release, this article).

## Handouts

If materials are to be given out at the workshop, get the copy and collation work done well in advance. Workshop participants always appreciate getting good, timely handouts. The visiting speakers should be asked to send outlines, if not actual copies, of the presentations they will be giving during the session. Having something to take home also gives the participants a feeling of getting something for their money. A folder, tablet and pencil are good ideas and inexpensive to provide.Δ

## A Checklist for Developing a Beekeeping Workshop

**8-12 Months Prior To Meeting**

a. Develop concept and present to local group
b. Select meeting dates
c. Establish budget
d. Make committee assignments

**6-12**

a. Reserve facilities
b. Select topics
c. Begin to contact speakers
d. Coordinate with local extension office
e. Continue to communicate with speakers
f. Confirm facility reservations
g. Hold coordinators committee meeting
h. Develop registration material including forms and contact person in group (should include registration, meals, etc.)

**4-6**

a. Begin coordination with bee journals for promotion
b. Write industry organizations for door prizes
c. Confirm speakers (in writing)
d. Make motel reservations for speakers
e. Begin to respond to pre-registration requests
f. Finalize program
g. Hold coordinator's meeting

**1-2**

a. Get handouts printed and collated
b. Review facilities (light switches, phones, etc.)
c. Coordinate with catering service ( if used)
d. Get local promotion out
e. Continue to respond to pre-registration requests

**7 days prior**

a. Prepare demonstration colonies for transport (if used)
b. Make final food preparations (if used)
c. Continue local promotion
d. Review facilities (light switches, phones, etc.)
e. Get door prizes and handouts together
f. Get pre-registrations organized and prepare for registration at meeting
g. Coordinate speaker and participant arrivals
h. Finalize audio-visual equipment procurement

*This is the first in a series of releases you should be using to aggressively promote your workshop. If you find that local/regional papers will not use your release, seriously consider 'buying an ad'. This information must get out, at all costs, but these costs must be considered in the budget.*

# NEWS RELEASE

### Want to learn more about bees and beekeeping?

The (group name here) will be holding a (length) day workshop on (topics: beginning beekeeping, advanced beekeeping, etc.). This will be an exceptional opportunity for anyone interested in bees or beekeeping, including beekeepers, teachers, extension agents, farmers, or anyone interested in this fascinating insect. The dates for this meeting are (date) from (time), and will be held at (location). For more information, contact (person) at (address AND phone number).

*This release is not very specific because it is a teaser. It should be issued 4-6 months prior to the workshop. As the date approaches, more specific releases will be offered.*

# THE FEDERAL H

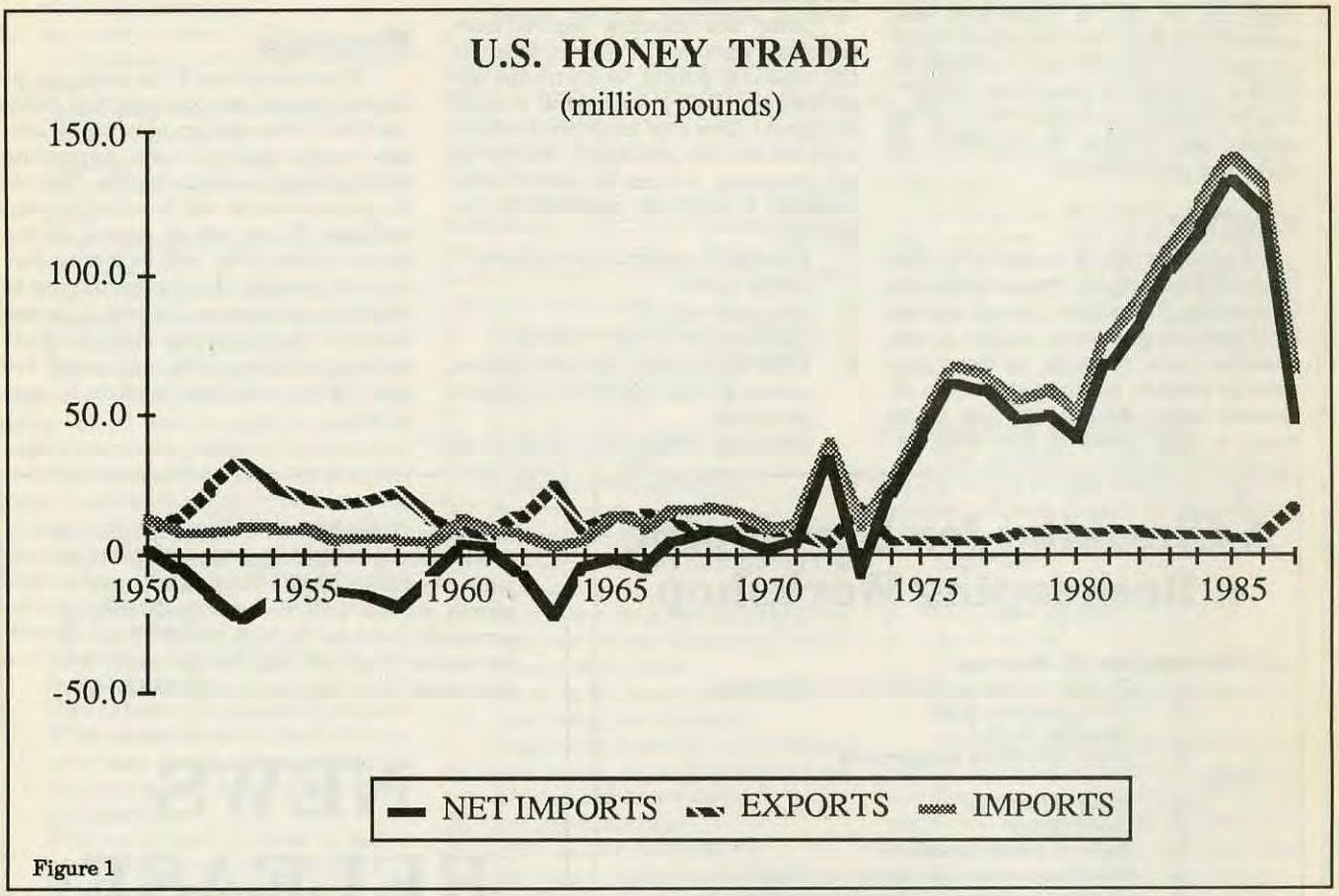


Figure 1

# U. S. HONEY TRADE

LOIS SCHERTZ WILLETT

The honey industry has changed more in the last few years than ever before in the twentieth century. These changes have come from such factors as the threat of the Africanized honey bee, the discovery of the varroa mite in the United States and the influence of government policy. Of interest to beekeepers, honey producers, processors, importers and taxpayers is the role federal honey programs play in the industry. The purpose of this article is to discuss that role and how honey policies established by the federal government might influence you.

The federal government has supported the honey industry since the early 1950's when the federal honey support program was established by the Agricultural Act of 1949. As stated by the act the purpose of the honey support program is to provide for the maintenance of adequate honey bee colonies for pollination of the nation's important seed, fruit, nut and vegetable crops. Until 1980, most of the activity of the honey price support program was in loans to beekeepers. Beekeepers could take a loan based on the applicable price support rate for farm-stored or warehouse-stored extracted honey on any or all of the extracted honey produced during that crop year. The availability of the loan gives the farmer cash for the crop without the beekeeper having to sell the crop immediately. The beekeeper can continue to store the crop until he/she perceives a correct market for the supply. Beekeepers have the option of cancelling their loans should the market price not rise above the support price. Upon cancellation, the beekeeper is required to deliver to the Commodity Credit Corporation (CCC) honey of value equal to the value of the loan at the end of the year.

This program appeared to work successfully until 1981 when the support price was above the domestic honey price for the first time in several years. In 1981 the average support price of honey was 57.4 cents/pound while the average price received by domestic beekeepers was only 56.5 cents/pound. Due to this discrepancy in prices domestic beekeepers forfeited on their loans with the CCC. The CCC

# ONEY PROGRAM

received the beekeepers' production and held the honey in storage until it could be distributed through government sponsored programs. Additional stocks were held by beekeepers after 1981 because of the falling domestic price of honey and the speculation of higher prices in the future. In 1981 the average price of imported honey was 41.6 cents/pound, considerably less than the support rate and the price received by domestic producers. Hence, U.S. honey packers found it more profitable to purchase the lower priced imported honey rather than honey from domestic producers. These price differences contributed to the expansion of honey imports in the early 1980's as seen in Figure 1.

Due to large imports of honey and the large stocks held by the CCC in the 1980's, the Reagan administration had considerable interest in phasing out the federal price support program. Their position was that the program was not necessary to guarantee an adequate supply of honey bees for crop pollination purposes. There was considerable debate during the preparation of the 1985 farm bill, known as the 1985 Food Security Act, about elimination of the support program. However, the act kept the honey support program intact but scaled back the level of federal support. The average support rate was 65.3 cents/pound, 64.0 cents/pound and 63.0 cents/pound in 1985, 1986 and 1987 respectively. The support price will continue to decrease by five percent until 1990 when a new farm bill will be under consideration by Congress.

In addition to the decreasing level of honey support rates, the 1985 Food Security Act included a buy back option. This program allows you, a honey producer, to turn the honey in under the loan and then buy back the honey at the price support rate or a lower rate as determined by the secretary of agriculture. In fact, these buy back rates are set to reflect world market conditions. In practice, the rates have been far lower than the average honey support price. Hence, beekeepers who participate in the program are able to market the honey they buy back and the CCC is able to reduce its stock level. The CCC does not incur the costs of storage, processing and transporting the honey crops and the honey goes back into the market without the CCC giving it away.

The first buy back rates were announced in the summer of 1986. These rates were 52.0 cents/pound for white honey, 46.0 cents/pound for extra light amber honey, 40.0 cents/pound for light amber honey and 37.5 cents/pound for amber honey. Note that these rates were considerably less than the average 1986 support price of 64.0 cents/pound but still above the 1986 average imported honey price of 35.5 cents/pound. Because it appeared the buy back rates did not reflect the current world market conditions the rates were changed several times during 1986 and 1987. The buy back rates announced in October 1987 for the 1987 crop were 40.0 cents/pound for white honey, 37.0 cents/pound for extra light amber honey, 36.0 cents/pound for light amber honey and 34.0 cents/pound for amber honey. Once again these buy back rates are considerably less than the 63.0 cents/pound honey support rate.

It is fairly easy to understand the impacts of implementing the honey buy back program on the U.S. honey industry. It has been quite profitable for beekeepers to turn the honey in under loan, buy back the honey at the lower buy back rate and market their honey through conventional channels. The result has been a reduction in the acquisitions of honey by the CCC from 115 million pounds in 1983, 119 million pounds in 1984 and 116 million pounds in 1985 to only 40 million pounds in 1986. In addition, as seen in Figure 1, the level of U.S. honey imports has dropped dramatically as domestic packers and processors purchase domestic honey rather than the imported honey. In 1984 the U.S. imported 124 million pounds of honey, 141 million pounds in 1985, 130 million pounds in 1986 and only 65 million pounds in 1987. As U.S. honey becomes more competitive on the world market there has been an increase in the quantity of honey exported. The 18 million pounds of honey exported in 1987 were more than twice the 7.4 million pounds of honey exported in 1986.

The honey buy back program has been and continues to be attractive because it allows for a transition period in the honey support program. The changes the buy back program have brought to the honey industry are quite evident. Several beekeepers still participate in the federal honey program but beekeepers are buying back their honey and marketing it themselves. Hence, the acquisitions of honey by the CCC have fallen and the stocks held by the CCC have decreased. United States' processors and packers have found domestic honey to be more competitive. As a result the demand for imported honey has decreased so much that honey imports are near the levels of the 1970's. U.S. exports of honey have expanded as our competitiveness on the world market has increased. If the federal buy back program continues the honey industry will be in much better shape in the future than it has been in several years.Δ

***"With the buy back program, both our competitiveness and profitability have increased."***

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# PRICE SUPPORT PRIMER

KIM FLOTTUM

There is a scene from the Walt Disney movie "Fantasia" entitled the Sourcerer's Apprentice that merits attention this year. As I recall, the scene goes something like this:

Our hero, Mickey, is ordered by the Sourcerer to fill a container with water. It's a big container, and soon he grows tired. Spying the magician's Book Of Spells, Mickey finds the command to make an ordinary broom come to life and do the work. Wasting no time he orders the nearby sweeper to help with the water duties. But one isn't enough, so he finds another spell that duplicates the broom — and the water carried. But here's the catch, it is an ongoing curse — it keeps repeating itself. First there are two brooms, then four, eight ...16...32...64... And they keep carrying water, dumping it into the container, which soon spills to overflowing, and there is no stopping them ... 256 ... 512 ... 1024 ... More water, more brooms, more water ...

Our hero is saved, of course, when the sourcerer returns, but the overflowing honey crop of many this year will not be saved by a magician. It still remains flowing into pails and drums, or still in supers with no where to go. What to do? What to do?

One distraught beekeeper, a hobbyist with little inclination or time to become a retailer was overheard recently, "If I gave *everyone* I know ten pounds I'd still have more left than I've ever been able to produce."

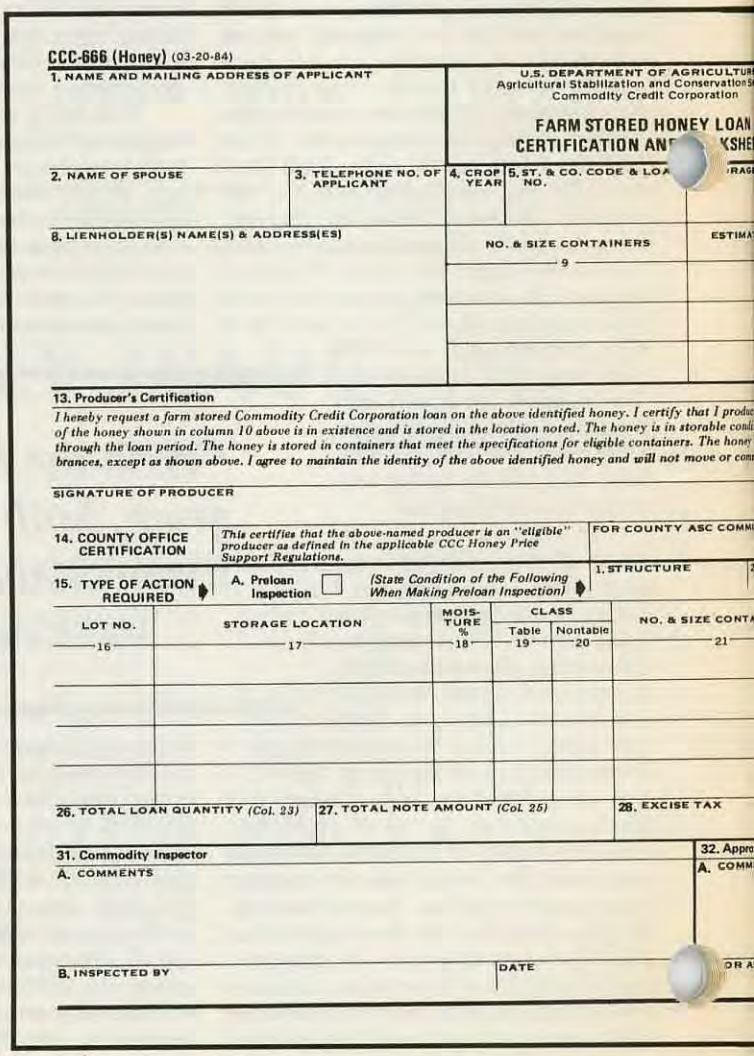
The reality of the situation is that when most backlotters, hobbyists or "bee-havers" have a bumper crop, they just can't handle it. Their bees, like those magic brooms, just overdid it and the pails and drums are overflowing. Selling may take care of most of it in normal years, but for many, neither selling nor giving will put a dent in the harvest this time.

There are several ways to deal with this, other than feeding it back or just leaving it on. For most hobbyists the thought of using the government programs never entered their minds. It wasn't necessary, and besides all the fuss and bother required for a few pounds wasn't worth the effort. At least not until this year.

For others, selling the crop to a packer wasn't an alternative either. Distance, price and 'the unknown' were obstacles that weren't worth overcoming, again, until this year.

We have two articles here examining these alternatives — "A Price Support Primer" and "Picking A Packer"; two ideas that should be considered, before you need a magician to save you, and your honey.

*ASCS FORM CCC-666(Honey) Reverse side is for inspectors remarks on each lot and for each inspection.*



CCC-666 (Honey) (03-20-84)

1. NAME AND MAILING ADDRESS OF APPLICANT

U.S. DEPARTMENT OF AGRICULTUR
Agricultural Stabilization and Conservation S
Commodity Credit Corporation

FARM STORED HONEY LOAN
CERTIFICATION AN [redacted] YSHE

2. NAME OF SPOUSE | 3. TELEPHONE NO. OF APPLICANT | 4. CROP YEAR | 5. ST. & CO. CODE & LOA NO. | IRAG

8. LIENHOLDER(S) NAME(S) & ADDRESS(ES) | NO. & SIZE CONTAINERS 9 | ESTIMA

13. Producer's Certification

*I hereby request a farm stored Commodity Credit Corporation loan on the above identified honey. I certify that I produc of the honey shown in column 10 above is in existence and is stored in the location noted. The honey is in storable condi through the loan period. The honey is stored in containers that meet the specifications for eligible containers. The honey brances, except as shown above. I agree to maintain the identity of the above identified honey and will not move or com*

SIGNATURE OF PRODUCER

14. COUNTY OFFICE CERTIFICATION | *This certifies that the above-named producer is an "eligible" producer as defined in the applicable CCC Honey Price Support Regulations.* | FOR COUNTY ASC COMM

15. TYPE OF ACTION REQUIRED | A. Preloan Inspection ☐ | *(State Condition of the Following When Making Preloan Inspection)* | 1. STRUCTURE

| LOT NO. 16 | STORAGE LOCATION 17 | MOISTURE % 18 | CLASS Table 19 | CLASS Nontable 20 | NO. & SIZE CONTA 21 |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

26. TOTAL LOAN QUANTITY *(Col. 23)* | 27. TOTAL NOTE AMOUNT *(Col. 25)* | 28. EXCISE TAX

31. Commodity Inspector | 32. Appro

A. COMMENTS | A. COMM

B. INSPECTED BY | DATE | OR A

Just what does it mean to "put your honey under loan"? Since this may be the year you want to know, we did a little research to find out. The following is taken from the Handbook for the Honey Price Support Loan Program for 1987 and Later Crops, used at ASCS offices; and, from conversations with ASCS personnel, beekeepers and others familiar with this program.

First let's examine the most important ground rules for you:

- Price Support loans are available to producers from April 1, the year the honey was produced, through March 31 of the year after.
- Price support can be requested for either farm stored (your place) or warehouse stored (somewhere else) in the county the honey is stored, or where your office or house is.
- To be eligible for price support, your honey must have been produced in the U. S. during the current year; be of a known floral source (there are 20+ sources that are NOT eligible, ranging from bitterweed to prickly pear); be below 18.5% moisture content; is not adulterated by poisons; is not burned, overheated, fermented, dirty or imported. Further, it must be in 'acceptable' containers which by definition are — metal, at least 5 and less than 70 gallons, and be suitable for containing honey.
- Containers, according to some sources, should not be plastic (the typical five (or four) gallon) pail used by many sideliners and small scale producers. However, others report this rule is not always followed, so check first. There are several rules for containers, all common sense for safety, cleanliness and accessibility.
- Don't forget about the National Honey Board Assessment. The rules state that if you produce less than 6,000 pounds a year you are not required to pay the 1 cent/lb. fee. But you will need a waiver to that effect. (Of course you can pay the fee and support the Board, and help yourself in the long run.)
- Your storage area (if you choose this route) must be approved, either farm or warehouse.
- To obtain your loan: 1) Certify quantity in farm-storage, and obtain a loan on 90% of it; 2) Place in approved warehouse storage, and obtain loan on 95% of it; 3) Sell, use or feed your honey, and get a loan on 100% of it; 4) Make sure you don't put more honey under loan than your bees could reasonably produce.
- Inspections
  1) Representatives will:
  a) verify the right quantity is in the right place in the right containers; b) do a moisture test (which will be redone every 3 months); c) determine warehouse storage and inspection fees; d) determine the color and quality range.

Now remember, you're dealing with the federal government here, and nothing is as simple as it sounds. There are provisions, limitations, qualifications, definitions, certifications, worksheets, schedules, exemptions, procedures, charges, fees and more, most of which isn't covered here. This is a huge bureaucracy to deal with, and nothing can be left to chance, no loop holes are available, everyone must be treated fairly, and the standards must be such that honey examined in Florida is subject to the same tests and rules as in California.

It can be complicated, but it's not as hard as it may seem because part of this system are the ASCS folks who assist with the paper work. Generally, they are a godsend, and you are well advised to work *with* them, not *against* them or the program they are a part of.

The loan program is, in theory, quite simple. Prices paid are previously set, and change on occasion due to a variety of factors. In a nutshell, it works like this.

Once you decide to take advantage of the program, you contact your local ASCS office(listed in the phonebook under federal government). You will fill out, with assistance, form CCC666 (shown).

ASCS representatives will inspect your honey, determine the appropriate fees, and then send you a check for your honey (but don't hold your breath here, it talkes awhile to cut the money). But, to figure your amount, let's use some numbers.

At the end of September, the loan rate for white honey was $.6202/lb. If you have 25, five gallon cans, your return would be (25 cans x 60 lbs/can) x $.6202/lb. = (25 x 60) x .6202 = $930.30 (less fees and other charges).

But good business sense dictates that you don't merely sit on this, and forfeit it to the government when your loan is due. This for two reasons. First, by utilizing the advantages of the buy back program (see Packer article, page 620) you can make more on your honey (and not lose your containers). And secondly, once the government has the honey, they give it away.

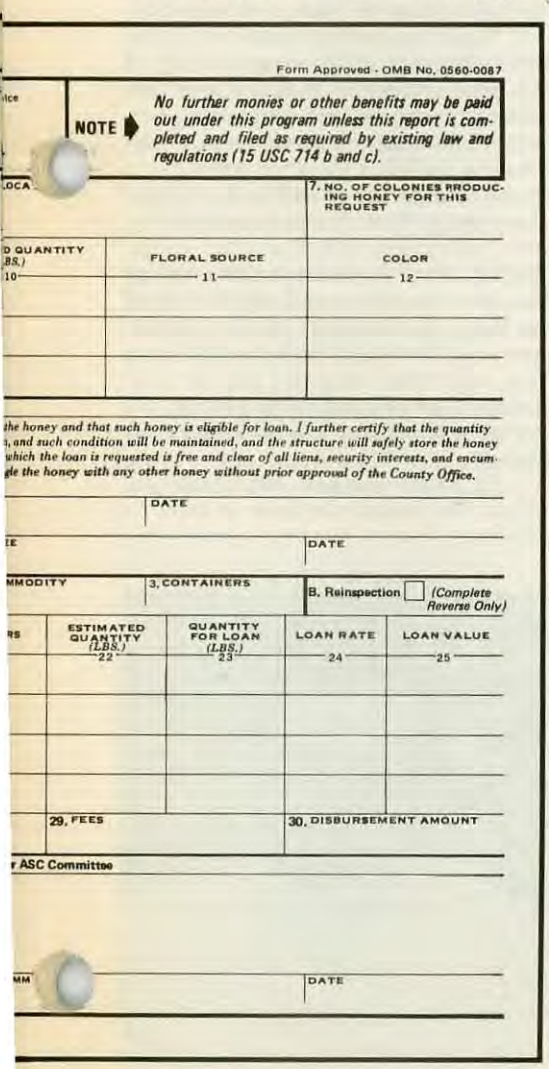
Buying your honey back and reselling it either retail, wholesale or to a packer puts this honey back into the mainstream market. People pay for it then, not receive it as a gift.

Buy back? Let's take a quick look. The buy back program works like this. Once you have put your honey under loan, you can buy it back for the current buy-back rate ($.40/lb white, at the end of September).

Then, you take your honey to a packer or other buyer, who pays you market value for your product. This will probably be exactly the buy-back rate, or maybe a shade higher, but not much. You sell your honey to this person for $.40/lb. which gives you $600 for your 25 cans. And you get cans in exchange.

Let's take a quick look at the final figures. First, the government 'loaned' you $930.30 for your honey. Then, you 'bought it back' for $600.00 and immediately resold it for $600. While it may take awhile for the government check to reach you, you have, in hand, $600.00 and your containers. You haven't 'given' anything away and are (patiently) waiting for the remaining $330.30 to arrive.

If you choose to use the loan program, it only makes sense to use the buy back, too. Giving honey away only hurts the industry. Further, it is a feasible method of moving a large amount of crop that you would otherwise not be able to move, or only very slowly.



Form Approved - OMB No. 0560-0087

NOTE ▶ *No further monies or other benefits may be paid out under this program unless this report is completed and filed as required by existing law and regulations (15 USC 714 b and c).*

7. NO. OF COLONIES PRODUCING HONEY FOR THIS REQUEST

| D QUANTITY (LBS.) 10 | FLORAL SOURCE 11 | COLOR 12 |
|---|---|---|
| | | |
| | | |
| | | |

*the honey and that such honey is eligible for loan. I further certify that the quantity , and such condition will be maintained, and the structure will safely store the honey which the loan is requested is free and clear of all liens, security interests, and encum- de the honey with any other honey without prior approval of the County Office.*

DATE

DATE

MMODITY | 3. CONTAINERS | 8. Reinspection ☐ (Complete Reverse Only)

| RS | ESTIMATED QUANTITY (LBS.) 22 | QUANTITY FOR LOAN (LBS.) 23 | LOAN RATE 24 | LOAN VALUE 25 |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

29. FEES | 30. DISBURSEMENT AMOUNT

r ASC Committee

MM DATE

# PICKING A PACKER

For the honey producer with little time and a surprisingly large amount of honey this year, the option of selling surplus to a honey packer may be attractive. Unfortunately, many beekeepers still eye the packing industry with suspicion and mistrust. Although there have been packers who have deserved this reputation, there are usually as many suppliers who have also been less than perfect.

However, the past few years have weeded out marginal beekeepers and packers, and those remaining, though competitive, are generally worthwhile — and certainly worth investigating.

We visited a packer recently, Groeb Farms, in Onsted Michigan, to find out what we needed to know to deal with a packer.

Groeb Farms is located just out of Onsted. They have a large parking area for trucks, and the warehouse gives one a feeling of a clean, no frills operation. Run by Ernie Groeb, Sr. and son, Ernie, Jr., they have a staff of 17 at their plant. They have a 4000 sq. ft. retail store just down the road with a wide variety of beekeeping supplies available. The store sells directly, handles the mail order business generated from their catalog, and is the distribution point for package bee sales in the spring. They also have another processing plant in Bellview, FL that is a full service outlet, run by Troy Groeb.

Ernie Sr. has been in the business a good part of his life, most of it in some aspect of buying, blending and selling honey. His forte remains a well experienced palate, good business sense, and a concern for what's fair for the customer, and the business.

Ernie Jr. is both enthusiastic and energetic. His strength lies in his marketing skills for the honey and other products they sell, and the energy he brings to the organization. Together, they have a broad spectrum of experience.

Since our interest was in how to deal with a packer — that is what should I look for when considering this type of marketing — our first question was simply, "How much honey do I have to have so you'll buy it?"

ERNIE SR., "We'll take any amount, in any type of container the first time. After that we look for standard industry containers. We ask that it's clean. It doesn't have to be perfect, but clean is a reasonable request".

ERNIE JR., "Actually, there's a whole lot more to it than that, and this is where a beekeeper will get the most for his money. We suggest, in fact we emphasize to any new customers that they shop around, that they find out everything they can before they sign on the line.

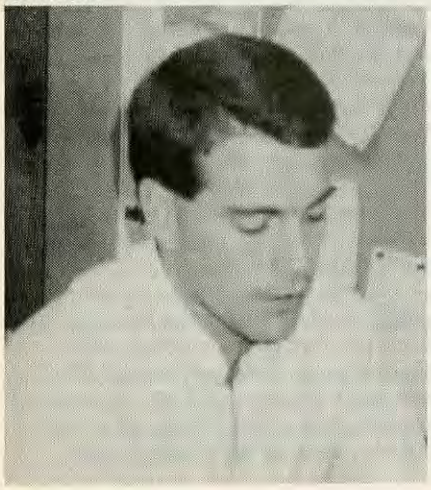
"A good packer offers not only a 'while you wait' service, but much more. Price shouldn't be the only factor when selling your honey, and non-standard containers are only one consideration.

"Call the packer, ask what prices are being paid. Ask, always ask. Find out what other services are available too. For instance, wax rendering, container exchange, bee supplies, warehousing facilities for price support . . . These are are the extras that separate the average from the good packers."

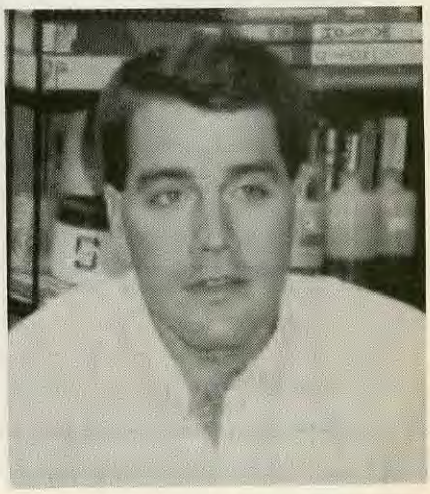
ERNIE SR., "To find out these things you have to call around, talk to lots of packers, beekeepers, maybe credit agencies. You need to find out 'if' they pay, and 'when' they pay you for your honey. That's important to anyone, but it's most important when you need the money.

"But this is a two way street you know. The customers have to meet us

*Ernie Jr.*



*Ernie Sr.*

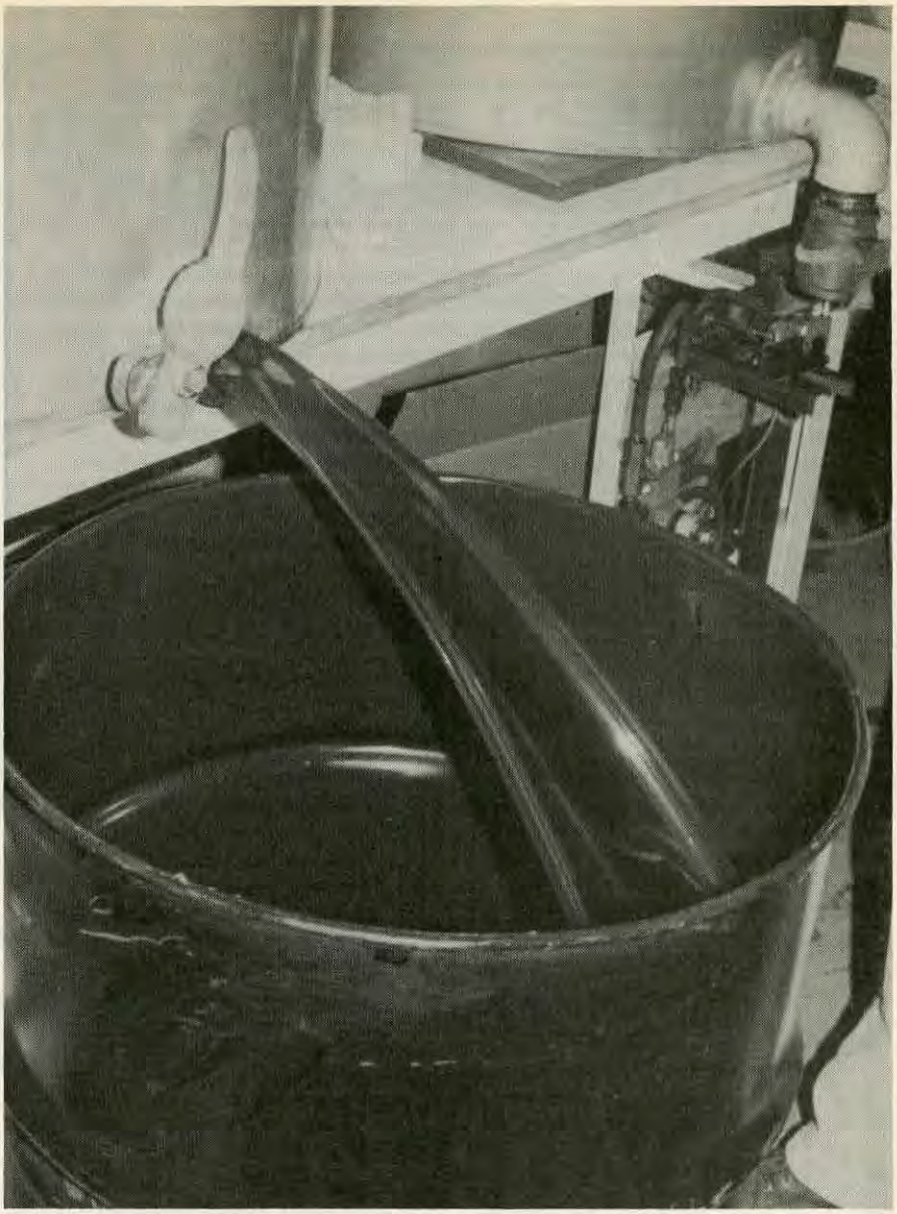


part way to make this work. Packers don't like surprises any more than beekeepers do. If you've called ahead and found out all of the particulars you need to know, there are a few items you have to think of. For instance, standardized containers make good sense — 5 gallon plastic or tin pails, or 55 gallon drums — so we can exchange with you. And, we like clean honey, not fermented, burned or off flavor. And, if you really want to make points, you'll already have drawn samples from each lot of containers. We obviously have to check it for color, floral type, moisture content, and container quality. We are dealing with a food here, and everybody has to take responsibility."

ERNIE JR., "A well educated customer makes everybody's job easier, and more profitable. You have to consider other selling alternatives too, you know. And their costs. Government programs pay more, and are the obvious first step. It does require time and paperwork, however. Wholesaling to other beekeepers, or small packers can be risky, and the price difference is usually minimal. Retailing yourself obviously produces the greatest cash flow, but when you consider bottles, labels, filling, delivering and the rest, along with the time involved — well, nobody can make that decision but you, but make sure you consider *all* your costs."

ERNIE SR., "Certainly we're in business to make money. We take your honey and resell it to people who want large amounts of a standard product. Hobbyists can't supply that, so they're out of the running. But we can, because we're set up to do it. It's business.

Selling your surplus to a packer, either directly or as part of the buy back, works, but it takes a bit of homework to find the best for *your* money.Δ



*The best time to take lot samples is when you are filling barrels or buckets.*

**DID YOU KNOW? . . .** that gout, a form of arthritis in the toe, was the personal affliction of Roman Emperor Charlemagne (+814 A.D.) who, after having been accidentally stung and cured, was so grateful that he became a beekeeper in the Nuremberg forests? . . . that the famous "Jarvis Cocktail" consists of two teaspoons each of honey and vinegar made from whole apples, in a glass of water, drunk thrice daily, as a natural treatment for arthritis? . . . that enzymes — as deduced from chromatographic analysis — are responsible for the toxicity and pain associated with honey bee venom? . . . that AVT stands for "ant-venom therapy," publicized by German refugee Gunter Holzman who emigrated to the Bolivian jungles in the early '70's to run a lumber business? When his rheumatoid arthritis began to flare up, locals suggested ant bites. He felt better instantly. Dr. Roy Altman of the University of Miami discovered that, of 30 patients who got the venom, two-thirds "derived startling benefit." But the toxin seems to work only on rheumatoid arthritis and it must come from the South American tree ants, not any old ant. In Miami, Zonex Corporation has been formed by a group of local medical doctors to promote AVT research. **NOW YOU KNOW!!!**

# POLITICALLY SPEAKING

GLENN GIBSON

Minco, Oklahoma 73059

*"I was angry with a friend . . ."*

Preparing this month's column has been difficult. Speaking politically and retaining a reasonable attitude seems more difficult with each passing month. My wife, Kay, agrees that this month's effort has been a most-trying time. Her role in my journalistic efforts is to serve as secretary and editor-critic. After rejecting several articles, I casually (perhaps a little belligerently) questioned her sincerity. This brought forth a stinging rejoinder that I couldn't ignore: "If you think I am gonna praise your writing when I should criticize, you are wrong. Cool off and you'll see that I am right." In each case I cooled it and admitted she was right. After all is said and done Kay has been a fairly reasonable adviser for 51 years.

The criticism had nothing to do with grammar or spelling (On the point of grammatical errors I am reminded of a quote from Dick Hunger in a Washington bee association newsletter: ". . . this report may contain errors. They are made for the amusement of the nitpickers. . . "). Instead, the editing was mainly concerned about the tone and general message.

On the subject of political action: "Repetition — past articles have discussed this. The call for action needs heavier stress — after calling for action there is no detailed explanation of 'how to' and what the penalties might be for inaction." Victorian writer Thomas De Quincey advises that literature is divided into two classes — knowledge and power. The former teaches while the latter calls for action. Research and association reports convey the knowledge, but seldom call for action (Action comes later in the form of resolutions.). De Quincey sees the cookbook as a good example of action with details of "how to". Beekeeping literature as a whole does a fair job of narrating (teaching), but seldom does it call for action with detailed explanations of "how to".

I thought my article, *Fear of Conte*, was worthy of consideration, but my editor-critic did not agree. I told her it was covering a new subject and might be classed as good. *"Nah — the good part is not new and the new part is not good. Plagiarism maybe?"* was her brief comment. I suspicion that this cryptically appropriate appraisal came from some famous writer (she is silent on this point. I am searching the literature but, so far, a blank. Can some reader assist???).

Another discarded article might have been acceptable except a dream convinced me that it shouldn't go. *Politics and Promotion* would have delivered a harmful message and would have revealed some ignorance on the subject of promotion. Also, the praiseworthy comment was a bit syrupy and probably overlooked persons that should be praised. The name-dropping of the prominent would have been appropriate in political circles, but not among everyday voters. Finally, I was a bit uneasy about the extent of my ignorance on the subject of honey promotion. Too often in the ordinary course of preparing reports, talks and writing there is a strong urge to imply knowledge that most of us do not have. This is much worse for the cause than suddenly understanding an old idea and implying it is new. Eighteenth century writer Wolfgang von Goethe said: "There is nothing more fearful than ignorance in action." (Another translation: "Nothing is so terrible as activity without thought.") Wolfgang, Sir, if one takes your comment seriously, few will have courage to act. Perhaps a further study of his works would reveal the level of ignorance that would be acceptable.

## Future Articles

A number of subjects that have political implications need attention in future articles and at the annual conventions. Pesticide losses have received little attention these last few years. Reports this year indicate a heavier than usual loss. A series of articles about the responsibility of the state beekeeping associations in national affairs or politics is sorely needed. There is a crying need for better communication between the hobbyist and commercial beekeeper. I will try to address these and other subjects in the coming months when the opportunity presents itself.

Mr. or Ms. Beekeeper, I am hopeful that this article has provoked a bit of new thinking about the problems facing the industry and will cause you to go an extra mile for the industry. This time to make new friends and keep this relation in good repair. Also, it is certainly appropriate to attempt an understanding with your political opponents. English poet, William Blake (18-19th century) wrote:

I was angry with my friend;
I told my wrath, my wrath did end.
I was angry with my foe;
I told it not, my wrath did grow.Δ

# HOME HARMONY

**By ANN HARMAN**
**6511 Griffith Road**
**Laytonsville, MD 20879**

Here we go with the Holiday Time of Year! By this time of year, freezers are full, canning jar shelves sag a bit under the weight of gleaming, full jars, and bundles of drying herbs dangle like stalactites from every available rafter. In spite of drought, or even too much rain, it is time to be thankful for a good harvest.

Cranberries are now plentiful. I often wonder how someone found out cranberries were good to eat. Other berries are sweet enough to be eaten right off the plant, but have you ever tried a handful of raw, unsweetened cranberries? Honey is definitely the best sweetener for these beautiful red berries.

## Congealed Cranberry Salad

2 cups raw cranberries
1 orange, ground (use 1/2 of rind)
1 cup honey
6-oz. package lemon gelatin
2-1/2 cups boiling water
1 cup celery, chopped
1 cup pecans, chopped

Grind cranberries and orange, or use blender or food processor. Mix with honey and let stand. Prepare gelatin with the hot water. Cool, then chill until partly congealed. Add celery, nuts and cranberry mixture. Mix well. Pour into a ring mold, fancy mold or individual molds. Refrigerate. Serve on lettuce leaf with mayonnaise. Serves 12.

*Honey Recipes*
North Carolina St. Beekeepers Assn.

I know there are many people who have never made a steamed pudding. Why? Some have told me "it's complicated". Nonsense. A steamed pudding is no more difficult than just baking something. Let me give you some suggestions then you can try this delicious recipe.

Getting the container and pot ready for your first steamed pudding will take a few minutes, but after that you will know exactly which bowl and pot you need, so it is just as easy as getting cake or bread pans ready. For the batter you will need a mixing bowl. The batter should be 1-1/2 to 2 inches from the top of the bowl. Then you need a pot to put the bowl into. I use my old pressure cooker WITHOUT the gasket and NOT sealed shut. This has a rack on the bottom. The rack is rather important because, without a rack the bowl will bump and bang around while the water is boiling. A quickly-made rack can be made from a piece of "hardware cloth" cut to fit inside the pot. Now you're ready to go.

## Cranberry Pudding

2 cups large cranberries, halved
1-1/2 cups flour
1/2 tsp. baking powder
1 tsp. soda
1/2 tsp. salt
2/3 cup honey
1/3 cup hot water

Combine cranberries with a small amount of flour to coat well. Sift remaining dry ingredients together. Add cranberries. Combine honey and hot water and add to cranberry mixture, mixing well. Turn into greased pudding bowl. Take a piece of aluminum foil and cover bowl tightly. You can even tie a piece of string around bowl to hold the foil down tightly. Put the bowl into the pot containing already boiling water, the water should be about halfway up bowl (bowl should NOT float). Steam for 2 hours. Remove bowl from pot and allow to cool a few minutes before removing foil and turning pudding out onto serving plate. Serve hot with Honey Sauce (recipe follows).

## Honey Sauce

1/2 cup butter
2/3 cup honey
2 T. flour
2 eggs, slightly beaten
1/2 cup lemon juice
1/2 pint whipping cream, whipped

Combine first 4 ingredients. Cook slowly in double boiler until thickened. Remove from heat. Stir in lemon juice. Cool, then fold in whipped cream.

*Nature's Golden Treasure Honey Cookbook*
Joe M. Parkhill

This next recipe combines two autumn treats: cranberries and pears. Besides, this is a recipe for a dessert. Although cranberries are excellent as the traditional relish, they are a delicious berry and deserve the honor of being a dessert ingredient.

## Cranberry Pear Pie

1 graham cracker crust
2 cups cranberries, chopped
2 cups apple juice
1/2 tsp. ground cardamon
1 cup honey
1/2 cup cornstarch
1-1/2 cup pears, peeled, cored, sliced
1/2 pint whipping cream for garnish

In a saucepan, add the berries, honey and juice and cook for about 10 minutes. Add just enough cold water to the cornstarch to make a thin paste. Add to the cranberry mixture while stirring. Add the pears. Continue cooking while stirring, until mixture thickens and sauce becomes clear. Pour the mixture into the pie shell and chill several hours. Top with whipping cream to serve.

*Honey and Spice*
by Lorena Laforest Bass

## Graham Sesame Crust

1/4 cup butter, melted
2 T. honey
1 cup graham cracker crumbs
1/2 cup sesame seeds, toasted
1/4 cup wheat germ

Melt butter and honey together. In the pie pan, mix the graham cracker crumbs, sesame seeds, and wheat germ. Pour the butter mixture into the crumb mixture and blend thoroughly. Pat the mixture evenly into the pie pan and chill.

*Honey and Spice*
by Lorena Laforest Bass

Pumpkin pie is so traditional at this time of year that everyone must have their usual recipe. However, just once you might try a new recipe.

## Harvest Pumpkin Pie

1 9-inch pie shell, unbaked
1 cup honey
1 cup sour cream
1-1/2 cups cooked/canned pumpkin
2 tsps. pumpkin pie spice
1/2 tsp. salt
1 Tbls. cornstarch
3 eggs slightly beaten
1/2 c. crsly. chpd. pecans or walnuts

In a large bowl, blend honey, sour cream, pumpkin, spice, salt and corn starch with electric mixer until smooth. Fold in eggs. Turn into pie shell. Sprinkle nuts over top. Bake at 400°F for 45 minutes or until knife inserted near center comes out clean.

*Cooking With Honey*
Judy Powers

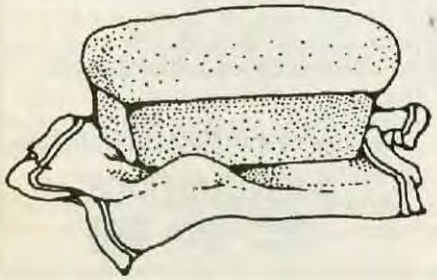
Pumpkin is really so delicious that it should not be used only for pie. Pumpkin bread is versatile. A toasted, buttered slice is perfect with breakfast. A cream cheese sandwich is a good addition to your lunch box. Try it with dinner and as a bedtime snack.

## Pumpkin Bread

2 cups pumpkin
1-3/4 cups honey
1 cup oil
4 eggs, beaten
3-1/2 cups flour
1-1/4 tsp. soda
1 tsp. baking powder
1/2 tsp. salt
1/2 tsp. nutmeg
3 tsp. cinnamon
1 cup chopped nuts, if desired

Combine pumpkin, honey and oil. Add eggs. Mix well. Sift together dry ingredients and stir into batter. Add nuts. Bake in 3 greased bread pans at 350°F for 1 hour. Makes 3 loaves.

Since breads freeze so well, take a few extra minutes to make this unusual yeast bread. Put one of the loaves away in the freezer for a day when you are in a hurry but need something a bit different. The holiday months tend to get quite busy!



## Lemon Dill Bread

1 package dry yeast
1/4 cup warm water
1/4 cup honey
2 cups warm milk
2 T. butter
2 T. grated lemon peel
2 tsp. salt
2 tsp. dill seed
6 to 6-1/2 cups flour

In a large bowl, sprinkle and blend yeast into warm water. Add honey. Stir until dissolved. Add milk, softened butter, lemon peel, salt and dill. Add 3 cups flour. Using medium speed on electric mixer, beat 2 minutes, scraping sides and bottom of bowl frequently. Using spoon, stir in 2 more cups of flour until thoroughly mixed. Place dough on lightly floured board. Knead in remaining 1 to 1-1/2 cups flour. Continue kneading until dough is smooth and elastic (8 to 10 minutes). Place in greased bowl, then turn so greased side is up. Cover. Let rise in warm place until doubled, 1 to 1-1/2 hours. Punch down dough. Divide in half. Shape into two loaves and place in 2 greased 9x5x3-inch loaf pans. Cover and let rise until almost doubled, about 45 minutes. Bake 45 minutes at 350°F, or until loaves sound hollow when tapped. Remove from pans and cool on wire racks.

*Honey Cookbook*
Missouri State Beekeepers Assn.

You might wish to fix several different kinds of quick breads and yeast breads to use as holiday gifts. November is a good time to start baking. Wrap the loaves tightly in foil and put in your freezer. All you need to add is a pretty ribbon and gift card. It is even nicer if you include the honey recipe to encourage others to ***cook with honey***.

Holiday time seems to be day-after-day of ham and turkey. By the time you change the calendar to a new year, you don't know whether to oink or gobble. The best way to keep everyone happy is to serve some beef dishes, before, during and after the holidays.

## Dressed Up Steak

3 pounds round steak
1 teaspoon salt
2 tablespoons oil
1 large onion
1-1/2 cups chopped celery
1 medium green pepper, diced
1 can (1 lb. 4-1/2 oz.) pineapple chunks, drained, reserve liquid
1 fresh tomato, cubed
1 tablespoon cornstarch
1/4 cup honey
1 T. soy or Worchestershire sauce

Cut meat in cubes, season. Brown in oil, remove meat and set aside. In same skillet, saute onion, celery, and green pepper about 5 minutes. Drain pineapple, reserving 1/2 cup liquid. Add pineapple chunks to vegetables along with tomato. Moisten cornstarch with the 1/2 cup pineapple juice. Add honey and soy sauce. Blend into vegetables. Add meat to mixture and blend. Cover and cook at 325°F for 2 hours or until tender. Stir occasionally to blend and to prevent sticking. Pineapple juice can be added if more liquid is required.

*Drops of Gold — Ohio Honey*
Ohio Department of Agriculture

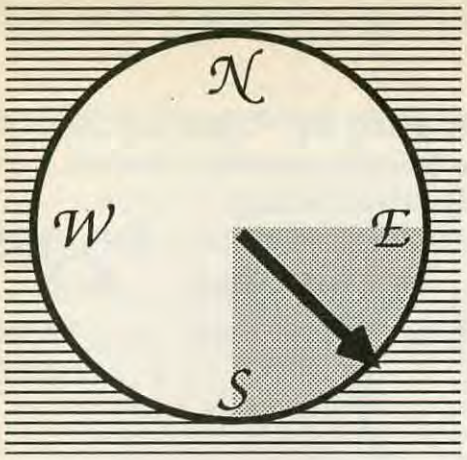
Dill is frequently overlooked as a seasoning for meats and fish. This next recipe features dill as an ingredient of the marinade.

## Dilly Honey Steak

1 or 2 chuck steaks, 1/2 inch thick
1/2 cup honey
1/2 cup water
1 cup white vinegar
2 tablespoons vegetable oil
1 teaspoon salt
1 teaspoon dill weed
1 onion, sliced
1 cucumber, sliced
2 tablespoons butter

In a saucepan, combine honey, water, vinegar, oil, salt and dill weed. Bring to a boil and simmer 5 minutes. Cool. Place steaks (can be tenderized first) in a covered dish or plastic bag and pour marinade over. Add onion and cucumber slices. Marinate a few hours or overnight. Turn occasionally, Drain and save marinade. If tender, steak can be broiled. Otherwise, bake in a 425°F oven until done. Turn and brush with marinade occasionally. Pan fry onions and cucumber slices in butter until lightly browned; use to garnish steak.

*From Mama's Honey Jar Cookbook*
Catharine P. Smith




# Southeast Exposure

ARNOLD and CONNIE KROCHMAL

*It is only appropriate that we begin this series of articles on this part of the country by examining a bit of beekeeping's history. Since bees, and thus beekeeping, were introduced in the southern colonies, it is fitting that our first exposure to bees was from the southeast.*

The domestic honey bee, presumably not native, apparently came to the New World in the 1620's as part of ship's cargo.

In a letter from the Council of the Virginia Company in London, headed "London this 5th of December 1621", a report is made which we have put into present-day English: "We have, by this Ship, sent you diverse sorts of seeds and fruit trees, also pigeons, rabbits, peacocks, mastiffs, and beehives, the preservation and increase we recommend unto you . . ."

Early records show that by 1648 honey had become an important farm product in Virginia, a well established cottage industry at Jamestown Colony. There were wild colonies as well, providing honey and wax for the settlers. A London publication dated 1649 *"A Perfect Description Of Virginia"* wrote: "For bees there is in the country which thrive and prosper very well there . . . a planter had a store of them, he made thirty pounds a year profit of them . . . he makes excellent good metheglin, a pleasant and strong drink, and it serves him and his family for good liquor. If men would endeavor to increase this kind of creature, there would be here; in a short time abundance of wax and honey, for there is all the country over, delicate food for bees . . ."

Another report from the colony of Virginia dated 1649 reports "They have store of *bees* in their woods, make plenty of honey and wax, and also tame *bees* in hives about their Houses."

The famous Peter Force *Tracts on Virginia* listed honey as bringing 2 shillings a gallon and wax four shillings plus a hundred pounds in 1650. As early as 1666 old records of wills included beehives and bee products as property to be passed on.

York County, Virginia, records gives this fascinating insight into the role of bees in the colonial period, in *Wills, Inventories.*

Inventory of Robert Dowsing, May, 1737, "2 potts and honey . . ." Inventory of Capt. Daniel Taylor, Dec. 15, 1712, "A small parcel of bees wax . . . " Inventory of George Wells, May, 1754, "1 cake of bees wax . . . "

An estate listed in 1749 included twenty-one sheep and nine bee hives, another listed in 1767 in Virginia included 5 gallons of honey.

Between October 25, 1763, and October 25, 1764, from the upper district of the James River, a record notes beeswax exports of . . . 11hd and 766 wt. which we cannot interpret. A year later from 1765 to 1766 2000 wt. of beeswax left via ship from the same region.

The *Virginia Gazette Index* of March 10, 1768, credited Stephanus Hunt in West Chester County with "the greatest number of beehives kept over last season, 22 . . . "

Thomas Jefferson wrote "The honey bee is not a native of our continent . . . the one we have . . . resembles perfectly that of Europe . . .

"The Indians concur with us in the tradition that it was brought from Europe . . . The Indians therefore call them the white man's fly, and consider their approach as indicating the approach of the settlements of whites."

Whether or not woven straw skeps were used is not too clear but seems likely for a time, at least. Skeps of straw were the most widely used in England at the time of settlement, so it is likely they were sent over, and copied by the colonists.

An engraving by Paul Revere done in 1772 for a Masonic meeting shows a straw beehive. In 1779 a wooden beehive was shown on some U.S. currency.

Over a period of time tree trunk hives became widely used throughout the south, and were common into the 1900's. Perhaps this use came from the settlers noting the wild colonies in the woods, and adapting their use of a hollow tree trunk. We can only guess that wooden hives came in much later in the late 1700's and 1800's.

Honey bees reached Tennessee and Kentucky by the mid to late 1700's. By 1850 Tennessee's census figures indicated production of close to 1 million pounds of honey and wax. By the early 1800's honey bees were well established in Arkansas, Louisiana, and Texas.Δ

*We are much in debt to the Colonial Williamsburg Foundation, and Susan Bruno who made their records and information available to us. The Sterling Memorial Library at Yale University and the Atlanta Historical Society Center were also kind in providing help in searching for information.*Δ

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# Varroa Adventures

STEVE TABER of Honey Bee Genetics

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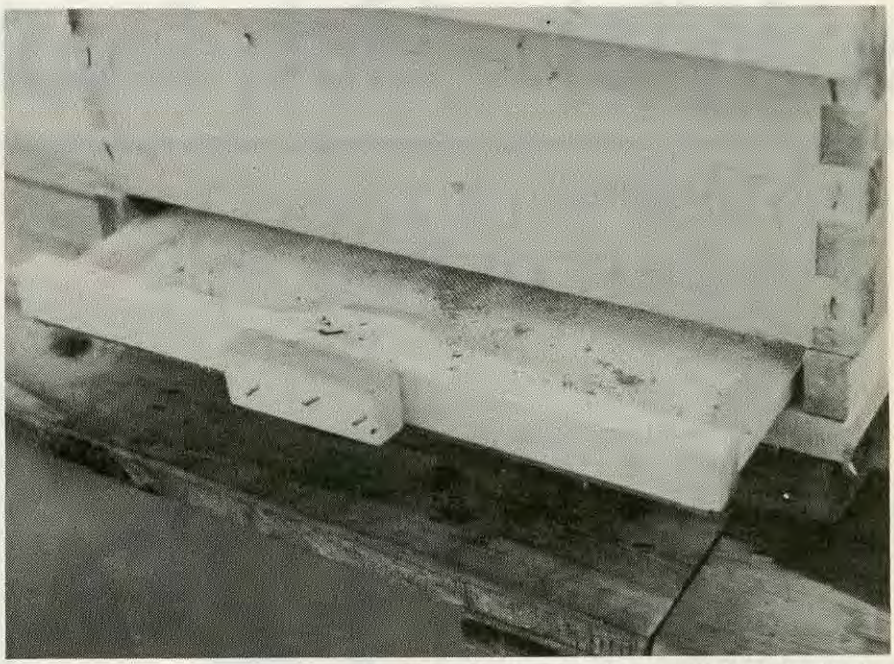
*"The search for this viscious vandal . . . "*

Varroa specialists in Europe tell me that varroa is probably present in all beekeeping states in the U. S. Many beekeepers in Europe ignored similar warnings and lost their colonies because of it. Apparently what happens is that more and more mites develop in a colony, continuously feeding until their population reaches a critical point. Then, secondary organisms invade the adult bees, such as bacteria, viruses and others, and the colony dies. All experts agree though in saying not to chemically treat for varroa, unless their population has reached a level affecting the performance of adult bees.

Plan **now** to survey your bee colonies. This article explains two survey methods that are cheap and easy.



*An adapted bottom board, tray pulled out for viewing.*

The first technique we'll talk about should be done during the spring or early summer, when the bees are raising lots of drones. Obviously this method involves uncapping drone brood, removing the pupae and examining for mites. If you have a small number of colonies, say ten or less, examine them all. If you have fifty or less, examine at least half of them. A hundred or more? Examine at least 30% of the colonies in *each* bee yard.

Remember, if you have mites at a very low infestation level you won't find them unless you look at a hundred drones in each colony. However, if your infestation started several years ago and you have a high infestation level you only need to examine five to ten drones. You'll know by then.

Obviously, to do this you have to have brood to examine. Be sure there are several patches of drone comb the queen has access to. For me that's no trouble, because I don't use foundation on my bees. I let them build their own comb in frames I provide. This results in very few combs with solid worker cells. I don't recommend this procedure to everyone, but to queen breeders who need lots of drones anyway, it's excellent.

If you use plastic combs now, do the following: insert an empty *frame* in the hive and let the bees build their own comb. Usually this will be solid drone cells. Place it in the brood nest when finished. If you have been culling "bad" combs from your hive, and now have few drone cells in your colonies take a knife and cut some holes in select combs, each about 25 sq. in. and keep these in the brood nest.

For those of us in the path of the northward migration of the Africanized bees, raising many more drones in our hives will help dilute African genes. Actually, I would suggest that border area beekeepers, those in Texas, Arizona and California, should keep 10 - 20% of their brood-area combs as drone comb. Left to themselves bees rarely build more than 10% drone cells. Raising this many drones does not seem to reduce honey production.

The second technique for varroa examination is passive, but you have to rebuild your bottom boards. I suggest you place these bottom boards under 5 - 10% of your hives. They are made so that a piece of screen is held about 1/4" off the bottom to prevent the bees from removing the debris that falls from the cluster. The part covered with screen slides out, either rear, (illustrated by photos), front or side.

There is rather high mite mortality during the winter months so these mite observation bottom boards should be in place in the fall, with the examination during early spring. You can examine

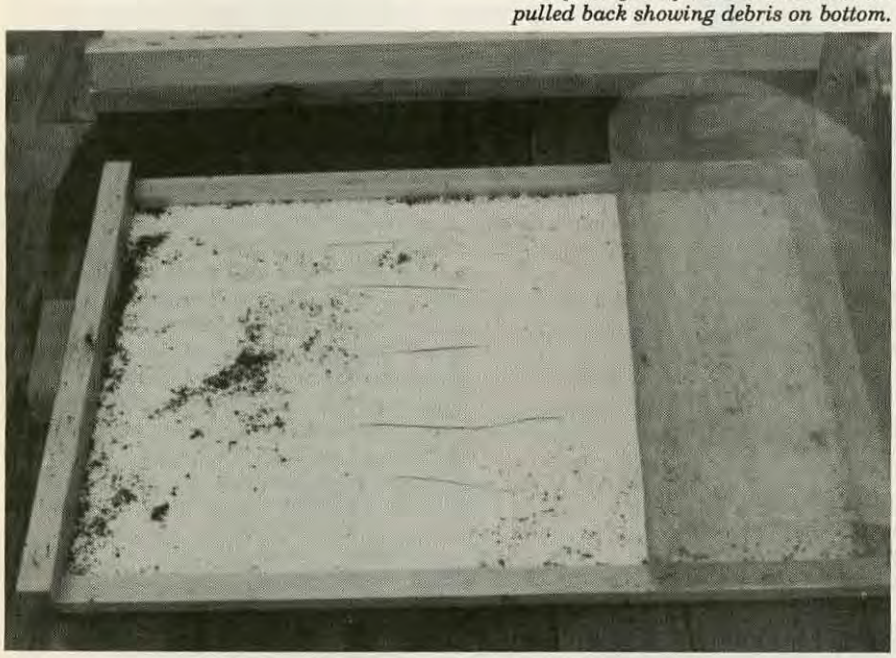
these boards without any special equipment, simply looking for small, brown, regular-shaped round or oval objects, about 1/8" across. After examination, dump the trash out and replace the screen.

Attending two of my courses this past July were students from Trinidad and Jordan, countries infested with varroa, and both use these methods for mite survey. In a recent letter from a veteran varroa fighter, Dr. Friedel Ruttner, he wrote "These last two months (May, June 1988) I had quite an experience. The varroa situation is developing to a real catastrophe in this country, (Austria) there are ideologists who claimed they can get along with sugar syrup and formic acid alone, and more than 100,000 colonies died during last autumn and winter. Now I couldn't stand this stupidity any longer and I decided to start a new battle inspite of my age, using all channels possible. . ."

Of course the ultimate solution is genetics and breeding, first reported by Dr. Robin Moritz in Germany. He reported bees from South Africa are resistant to varroa because of a faster rate of brood development. We could breed for this trait in our bees here, or faster if we could import already resistant bees. Why do we still maintain all the laws, rules and regulations against importing new bee stock to this country? All the reasons those laws were enacted for no longer exist.

But in the meantime, look at your bees for varroa and don't treat them with a chemical until you absolutely have to, which translates to, *look for varroa in your bees now.*Δ

*Tray completely removed with screen pulled back showing debris on bottom.*



# DO-IT-YOURSELF

*Putting together supers, frames, tops, bottoms and the like is not much of a challenge (or at least the manufacturers lead you to believe that it is not) for those of us who like to work with wood, and our hands. And, there are many pieces of equipment that can't be bought any more because of low demand, expense or shipping difficulties.*

*Since this is the time of year when most of us have a little workshop time, we offer several build-it-yourself items to try your hand at. However, our only guarantee is that you'll enjoy making and using these items. Have fun!*

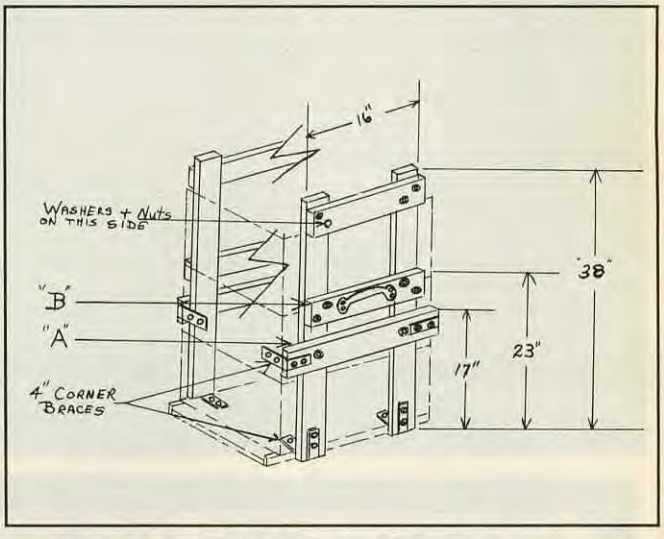
## Moving Bees

**BRUCE BURNEY**

The hive carrier, as shown in the Feb. 1987 issue of *Bee Culture*, in the article on moving bees prompts me to offer a diagram of the one I use. This carrier requires neither metal bending nor welding, two items which, for the backlotter or hobbyist, would usually require a trip to a welding shop. The basic tools needed are only a wood saw, an electric drill, a 1/4" drill bit, and perhaps a hacksaw. It is my adaptation of a carrier shown in *Bee Culture* sometime before 1981. That carrier was also made of metal and also required heating and bending.

My carrier is fashioned of 1" x 4" pine or fir. The bolt-on handles and 4" corner braces are readily available at any home supply center or hardware store. Assembly is done with 1/4" carriage bolts with the heads on the inside toward the hive. I used 2" length for the wood cross pieces and 1-1/2" length for the handles and corner braces. If you don't like the 1/4" or so of the bolt that protrudes after tightening the nuts, just cut it off with the hacksaw. It is also best to use oversize "fender" washers under the nuts.

Positioning of bar 'A' at 17" makes the carrier useable for any hive combination, from a deep and a 6-5/8" super on up. The position of bar 'B' at 23" allows easy carrying for most persons. Holding the handle with arms fully extended downward, the bottom of the hive should be 6 to 8 inches off the ground. The handle could be mounted on bar 'A', eliminating bar 'B' altogether. However, that might make for a top heavy situation when carrying a hive with a couple supers of honey on top. My wife and I have never had any problem with top heavy hives with the handle as shown.




A rope or nylon strapping, or something similar, must be fastened tightly around the hive and carrier somewhere below the handles, preferably just above the entrance opening. The carrier height of 38 inches makes for good stability, and allows for an extra rope to be tied around when carrying anything higher than 3 deeps.

If you use telescoping covers, you will have to remove them, but that poses no problem. With the usual precautions of stapling, taping, and screening, which have been amply addressed by others in numerous articles, you should have a safe move.

Just don't stub your toe.Δ

*Bruce Burney moves bees into, and out of, Applegate, CA.*

# A New Slatted Rack

DONALD COX

My first slatted rack was the type that sits on top of a standard bottom board. I got it from a local Root dealer, and it is still in use today.

Although this is not a high-tech experiment, my results over several years using slatted racks in general (and these in particular) have convinced me that this piece of equipment is beneficial to my bees — and thus to me.

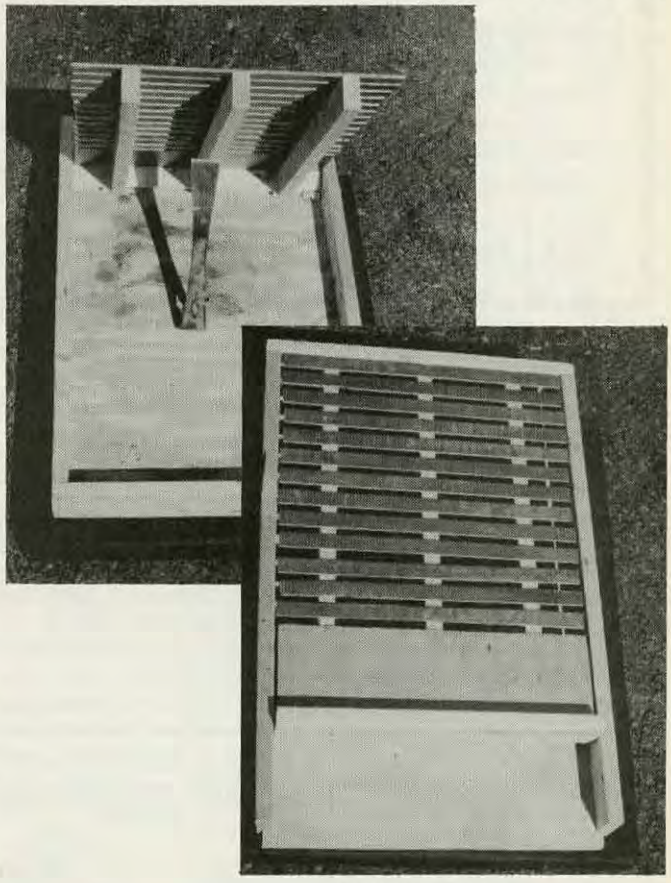
The rack is left as a part of the hive the year round. An experiment was set up, using the colony with the rack and another colony with a standard bottom board. These were set side by side on an H-frame hive stand. The two colonies were equalized for strength and requeened. I supered and treated them both alike that first year. At the first inspection the next spring, the colony with the rack had two frames more bees, and a greater amount of brood than the colony with the standard bottom board.

I then decided to set up three more colonies with rack bottoms. This second generation of racks were made up using 1"x3" (3/4" x 2-1/2' actual) side rails. Two support bars lengthwise of the bottom were used to support the slats. (Illustrated and described in the August, 1984 issue of *Bee Culture*, page 455.) Again these colonies were set side by side with colonies using standard bottoms. All the colonies were treated alike at each visit to the yard. Having stronger colonies each spring was noticible. However, the rack was difficult to clean, due to the slats being permanently set.

To overcome the cleaning problem, a third generation of racks were made. The slats of 1/8" Masonite are nailed to three horizontal support bars. These act as ladders for the bees to climb up into the brood chamber. The entrance cleat with a 3/8" high opening is nailed to the support bars.

The hinges consist of two nails driven through the side rails and into the entrance cleat. The figure shows the rack hinged open for cleaning. Also note that the bottom board is made longer than standard, which provides additional landing area for the bees.Δ

*Donald Cox is a beekeeper and a builder from Lima, OH.*



*Slatted rack #3, open and closed.*

# The Cover Board

DEMOREST HOWARD

Would you be interested in an inexpensive device which can:

A. Insure your bees have sufficient storage space even if you are not present to add supers.
B. Insure that your combs will be thoroughly cleaned and dried without exposing them to strange bees.
C. Eliminate wax worms in stored extracting supers.
D. Provide convenient super storage.

Sound too good to be true? After using just such a device in Arizona for something more than two full seasons, I can attest to its effectiveness.

I was introduced to the cover board through an article by Robert Skilling, *Extracting and Supering in One Operation*, which appeared in the July 1985 *Bee Culture*. For those who may not have access to the article, I will describe how I made cover boards by modifying standard production inner covers.

First, the oval hole, if there is one, must be covered. Then, six, 1/2" holes should be drilled along each of the longer sides of the inner cover, as close to the rim as possible (12 holes total).

Guided by Skilling's diagram, I drilled the first hole approximately 1" in from the short side of the rim, the next hole 3" from the first, then 3-1/4" spacing of remaining holes. Precise placement of these holds is not important.

A cover board and a queen excluder are quite similar. The holes in the cover board provide the workers with access to the storage supers while the solid center blocks the queen's upward movement. They differ in that the cover board remains on the hive all year long. If for some inexplicable reason the workers should all move above the board, the queen can accompany them.

Late in the fall of '85, I placed supers of wet, extracted combs over cover boards on two hives. The bees cleaned all traces of honey remaining in the combs. More important, though no chemicals were used, I experienced no problems with wax worms. Bees could be heard patrolling the empty supers throughout the mild Arizona winter. Wax worms cannot survive when bees have access to the supers.

The hives with cover boards produced considerably more honey during the '86 season than my other hives. I learned there are very early blooming flowers of which I had not been aware until I started using cover boards. I am convinced the increase in production can be attributed to the bees having had access to empty supers when I had assumed no nectar was available.

Mesquite is my primary source of nectar. Its bloom is profuse, but of short duration. Alfalfa, once a primary source of honey, is nearly non-existent due to the almost prohibitive cost of irrigation. Those few growers still in business prefer to cut their crop before it blooms. However, if there is any delay in harvesting the alfalfa, bees will store nectar if they have empty super space. A lot of potential honey may be lost because supers are not on the hives when an unexpected nectar source is present.

After removing my supers for extracting at the end of the '86 season, I put cover boards on several additional hives before replacing the supers. I placed varying numbers of supers on each hive, ranging from three to six. I believed six empty supers on a hive was not practical in this area because it would provide too much empty super space for the bees. I did this only to determine if the bees could keep that many empty combs free of wax worms. Not only did the combs remain wax worm free, all six supers were filled and capped when I took them off for extracting the following year.

As employed by Skilling, the cover board remains over the combination brood and food chamber throughout the year. I found this to work well; but I will go into detail of a method I prefer, though it does require a little more effort. I have used the same system with queen excluders.

To help you more fully understand this technique, here are some definitions.

Hive body refers to a 9-5/8" super. When I mention super, I am referring to the 6-5/8" variety. However, whatever equipment you may already have should be adequate.

Several of my hives have a super on the bottom with a hive body on top, which together serves as a brood chamber. These are topped by another super used as a food chamber. I also have hives made up of three supers for a brood chamber with a fourth on top as a food chamber.

In the spring I sort through the combs and rearrange them in the supers. First, I place all the empty combs and the queen in the bottom super, then I set on the hive body or two other supers, then the cover board, and finally the top super which contains sealed or about to be sealed brood. Of course, the empty storage supers are stacked on top of all.

This manipulation is not to entice the bees to move above the cover board, which is sometimes necessary. I do this for my own peace of mind, knowing the bees will have at least one completely full super of honey for the following winter in addition to what they may have stored in the brood chamber.

In my location, typical winter daytime temperatures are mild; but the nights are freezing. Bees consume large quantities of stores in their fruitless search for winter forage. To preclude spring feeding, it is necessary to leave the bees sufficient stores to survive the colder months and to build up rapidly when warm weather returns.

When it is time to harvest, place the food chamber super *below* the cover board before returning the wet combs to the hive.

Many beekeepers using queen excluders wait for the food chamber to be filled, then they remove the excluder. In theory, the honey in the food chamber discourages the queen from moving up into the supers used for surplus honey. Over the years I have had mixed results doing this; however, if you prefer this method, then the cover board may be similarly removed when the food chamber is filled and it need not be placed back on the hive until

the wet supers are returned following harvest.

The cover board may be added any time during the year except the dead of winter. However, regardless of what manipulations may have been done during the warmer months, the cover board should be *above* the food chamber and *under* the extracted supers in the autumn.

Are there problems? Well, is anything perfect?

Probably the most serious problem results from the very simplicity of the system. It is all too easy to avoid periodic inspections of the brood nest. Because the cover board can be left in place year after year, the only thing a lackadaisical beekeeper needs to do is harvest the surplus and replace the extracted supers once a year.

The bees have access to the supers where surplus honey will be stored at all times. Springtime medication must be applied very early — weeks before the medication instructions imply — just to insure sufficient time elapses between the end of medication and the onset of an unexpected honey flow.

The beekeeper must estimate how much honey will be stored during the season. Too many supers and the bees may be given excessive super space and they will not fill and cap each super. Instead, there may be partially filled combs throughout the stack.

High winds are normal in my area during the latter part of winter and into the spring. Without some sort of windbreak, a hive stacked with empty supers is vulnerable to being blown over. I find it necessary to prop my unprotected hives.

I have not thrown away my queen excluders. For surplus honey I prefer to use *only combs that have never been used for brood rearing*. I have always produced the best combs by placing supers with foundation above a queen excluder directly over the brood nest. On one hive, I put a super of bare plastic frame/foundation above a cover board to determine if the bees would draw it out. They made no effort whatsoever, preferring to clog the brood nest with honey until I added supers of drawn comb.

Summer afternoon temperatures in excess of 100°F are common in my area. I had expected some problems cooling the hives, but this never occurred. In fact, I have experienced little clustering-out since I started using slatted racks several years ago.

The cover board should be of particular value to those beekeepers who are unable to check their bees regularly, those who wish to produce honey without the use of chemicals, and to those with limited storage facilities.Δ

*Demorest Howard keeps his bees covered in McNeal, AZ.*

# Weigh, Lift & Move

**IGNACY FRYC**

Knowing the weight of a hive can be an additional instrument for the management of an apiary. For instance, if you begin to operate an apiary in the fall, it is important that a colony has sufficient food and to know whether it is properly distributed. The upper super should contain the main food storage. To answer these questions, I weigh each super using my device as follows.

First I weigh the upper super (Fig. 1) then both supers (Fig 2). If the first reading is 24 kg. and the second 40 kg., the lower super is 40 - 24 = 16 kg.

If we allow that an empty super with drawn combs weighs 8 kg., the quantity of honey and pollen in the lower super will be 16 - 8 = 8 kg. Similarly, in the upper super there will be 24 - 8 = 16 kg.

In summary, the entire hive will contain 8 + 16 = 24 kg. honey and pollen. In my experience, this is the minimum food required for safe wintering.

During the winter when the bees are in a tight cluster, I do not advise weighing the hives. The queen or the entire colony could be lost. However, when the bees are flying freely in cleansing flights, the hives can be weighed cautiously (without jerking) and smoke used sparingly.

The purpose of weighing the hive during this part of the year is to know how much honey they consumed since the last feeding in the fall. Then we can determine the average honey consumption *per day*.

When spring arrives and the bees are flying for pollen and nectar, weigh them again to find out how much food was consumed. If some hives are light, there is a shortage of food. Therefore, these colonies should be fed with medicated syrup and pollen substitute.

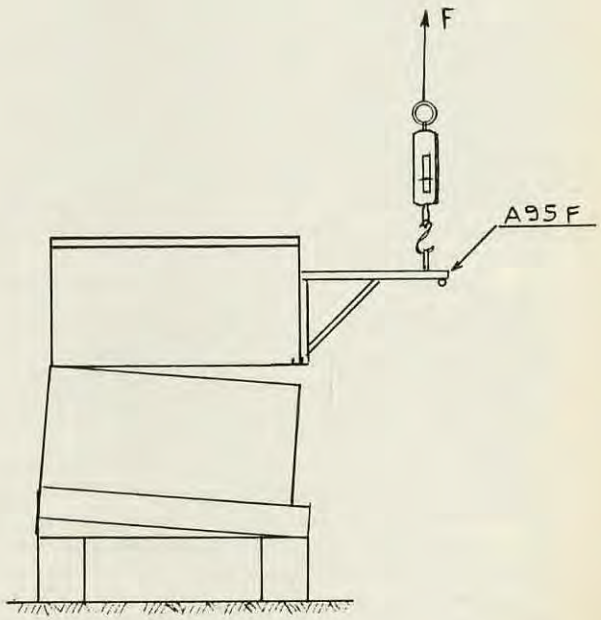



*Figure 1. Weighing upper super only.*

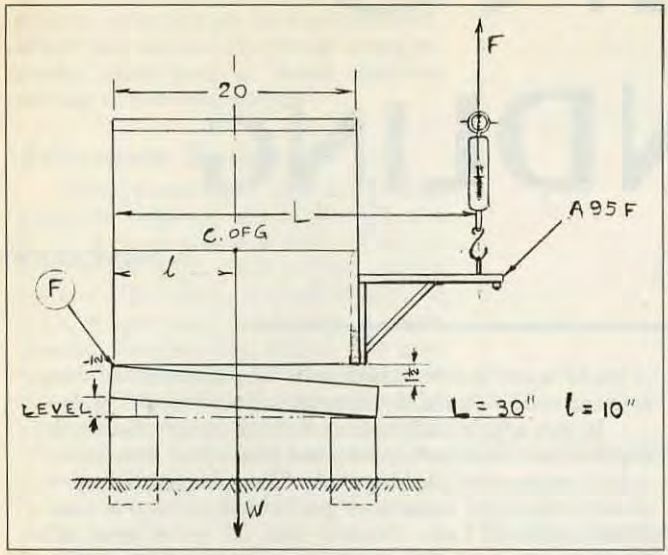



*Figure 2. Weighing both supers.*

Early May is the swarming period. By weighing the hive one can detect from which hive the swarm has escaped — when the hive loses 1-1/2 to 2 kg. in weight.

## Honey Flow

By weighing hives we can determine the beginning and the end of honey flow. With this device we can weigh each super separately (Fig 1).

## Spring Management

A common procedure in spring is to clean the bottom board and reverse supers. It is advisable to do this on a warm day when the bees are flying. To facilitate this I use my device as follows.

First, I prepare the auxiliary stand beside the hive. Then I lift the two supers from the original stand and put them on the prepared auxiliary stand. Then I clean the bottom board. Next I take the upper super and put it on the original bottom board, and on top of the super I place the second super. Following this the supers are reversed; that is, the upper super is on the bottom board the the lower is on its top. To finish I put the inner cover on and close the hive.

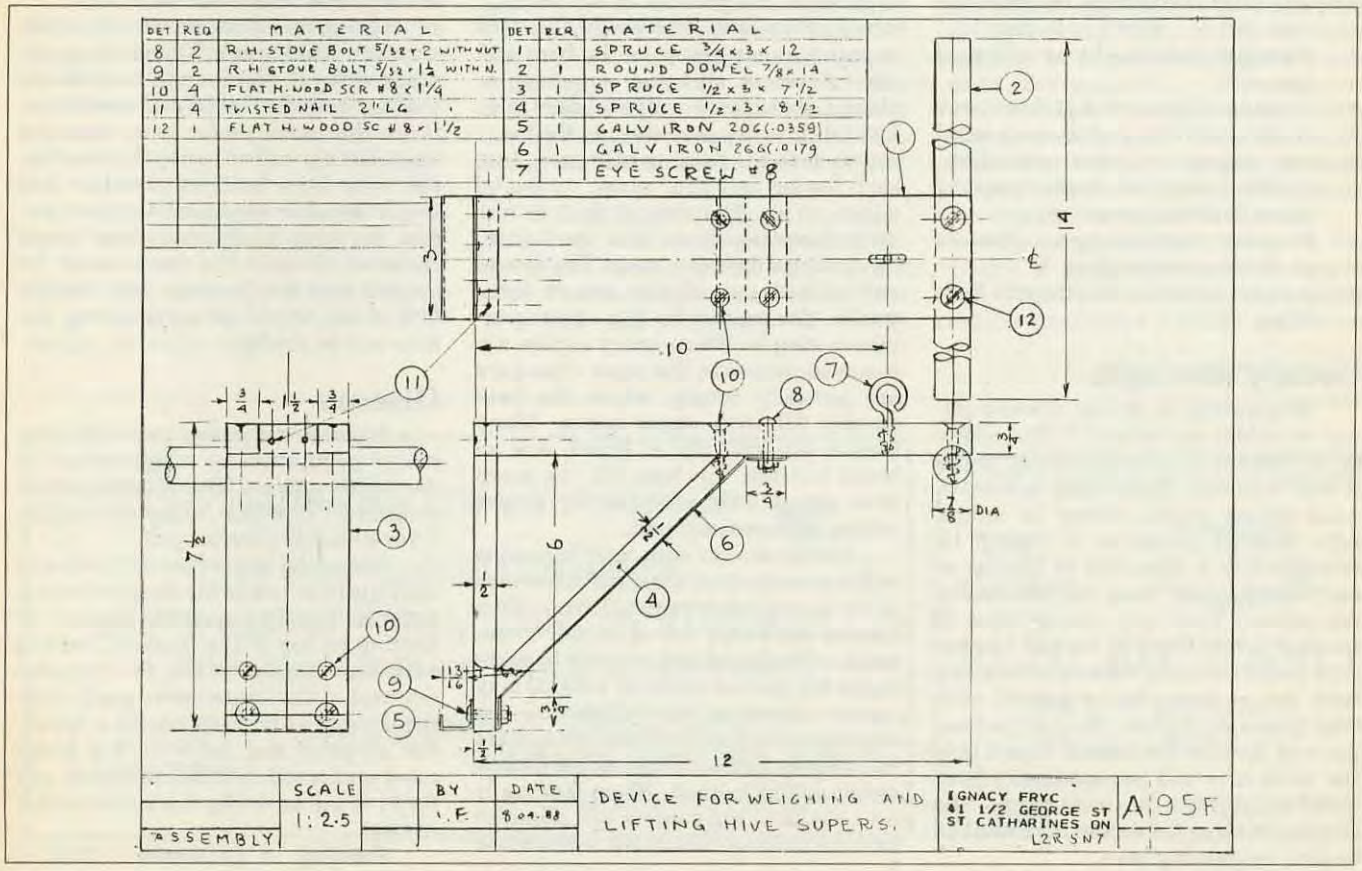
## Weighing Supers — The Method

Without going into mathematical detail, the law of physics that determines the weight of an object when weighed in this manner is as follows:

To achieve an accurate weight, take the weight on the scale when lifting the super(s) 1-1/2" only, and multiply by 3. For instance, when lifting one super, the scale reads 13.3 kg (29.3 lbs.); 13.3 kg x 3 = 39.9 kg (87.8 lbs.).

*Ignacy Fryc has been keeping bees, and improving equipment for nearly 60 years. Originally from Poland, he now resides, (and improves) in St. Catharines, Ontario, Canada.*

*The plan for this device.*



# SPRING DWINDLING

V. SHAPAREW

## Introduction

Apart from the known causes of spring dwindling, it appears that opening the inner cover in late winter or early spring contributes to spring dwindling, because of draft through the hive.

Most beekeeping literature refers to spring dwindling as a condition in a hive where old bees are dying faster than new bees are produced. The remaining bees in the hive are unable to maintain the population under existing conditions in the hive and the colony perishes.

In this article beehives are defined as two standard depth brood chambers, protected from wind with individual commercial packing cases. The apiary, where the observations and tests were performed, is located five miles north of Lake Ontario and 20 miles west of Toronto.

## Causes of Dwindling

We often accept the death of a colony in the middle of winter. It is ironic to see a colony struggle through the winter, only to die in spring. For successful wintering colonies must be properly prepared during the previous summer and fall, which includes:

- Strong disease free hives with good queens
- Abundant honey and pollen stores
- Draft proof hives with some wind breaking material around the hive, i.e. insulation, commercial packing cases, building paper, etc.
- Properly administered disease prevention medication
- Apiary location sheltered from wind.

## Colony Strength

Attempting to winter a weak colony is useless and wasteful. The colony is not likely to survive the winter, while it will consume honey and pollen. A weak colony should either be united with another colony or it should be reinforced with bees late in August or early September. Bees can be readily transferred from very strong hives to weaker hives. Place a conical bee escape board on top of a weak hive, along with two or three honey supers with bees from a strong hive. Most of the bees passing though the escape board *into* the weak hive will remain there. Both hives benefit from this procedure — the strong by losing the excess bees and the weaker by gaining bees.

## Food Reserves

I strongly suggest leaving all stored honey in the brood nest. There are two basic reasons for this practice. First, the honey may contain medication. Second, the bees need this honey to survive. My practice of fall feeding, which proved quite successful, is to feed as much sugar syrup as the bees will take. I remove all honey supers on or about Labor Day. A couple of days later I install hive-top feeders over the inner covers with the feeding hole open. Into each feeder pail pour about 30 lbs. of sugar syrup. The rate of feed intake varies between hives, with the first 30 lbs. taking 3 days to a week. The second pail of feed goes slower, two to three weeks. The reason for this varying intake is simple. When honey supers are removed frames in the brood chambers are partially empty, which the bees quickly fill with sugar syrup. Many frames are still full of brood, and as brood hatches the bees fill the comb with syrup. This accounts for slower intake of the second pail.

Some colonies with prolific queens will take more than three pails, because at the time of super removal, most of the frames were still full of brood. Three pails, or 90 lbs. of sugar syrup (2 parts sugar to 1 part of water by weight) may appear excessive, but by the time the moisture is reduced to about 18%, there will be only 71 lbs. of ripe, capped sugar syrup in the frames. When feeding is over the hive top feeders are removed and the feeding hole in the inner cover must be closed. With this much fall feeding, spring feeding is almost never needed. Spring build up is rapid and the only problem is swarm prevention management

## Draft Proof Hives

I keep my hives near brush, which acts as a wind break. Each hive is covered with a commercial cardboard packing case for additional protection. Since the inner covers were installed immediately after honey harvesting, the bees have both ample time and warm weather to propolize the interface between inner cover and brood chamber. Should the inner cover be opened and the propolis seal broken late in fall, winter or early spring, the hive will be drafty.

## Disease

Any diseases present will affect the colony population by accelerating the dwindling process. The only registered drug for EFB or AFB is Oxytetracycline Hydrochloride (Terramycin).

One of the recommended modes of application is to mix the drug with icing sugar and apply a specified amount by dusting on top of the frames. Dusting with Terramycin in the fall requires removal of the inner cover every time the drug is administered. As a result, the propolis seal between the inner cover and brood chamber is broken and the hive will be drafty during the entire winter.

Starting in September, 1987, I

successfully used an alternative method to administer this drug/icing sugar mixture three times, without opening the inner cover. The mixture was placed on a tray (Figure 1), which was pushed into the hive through the bottom entrance, on the bottom board. With this method the inner cover remains propolised to brood chamber during winter and spring.

## Entrance Reducer

Some years ago I used a standard entrance reducer, which consists of a block of wood with a central cut-out 3" wide x 3/8" high. One winter, toward the end of February, we had a thaw and a lot of bees took advantage of warm weather for cleansing flights. The next night the temperature dropped below freezing. When I visited the apiary the next day I noticed 2 hives (out of 20) with clusters of dead frozen bees at the entrance. Each cluster was between 1/2 lb. and one pound of bees. What happened here?

The entrances were blocked with dead bees and ice from inside, with a passage open for only one or two bees. The bees returning from cleansing flight could not get in because of small passages, which were blocked by slow moving bees. So they clustered at the entrance and froze to death when the temperature dropped. I could easily afford such loss of bees in fall, but not at the end of winter.

This is a new observation of bee loss, which contributes to spring dwindling. A casual observer could attribute these dead clusters to dysentery, but my hives were free of this. This incident prompted me to design a new entrance reducer, (Figure 2). The central opening, like conventional entrance reducers, may get clogged with ice and dead bees, but the two side slots remain open for bees to pass. I have used these entrance reducers for about six years and the problem, which prompted their design, no longer exists.

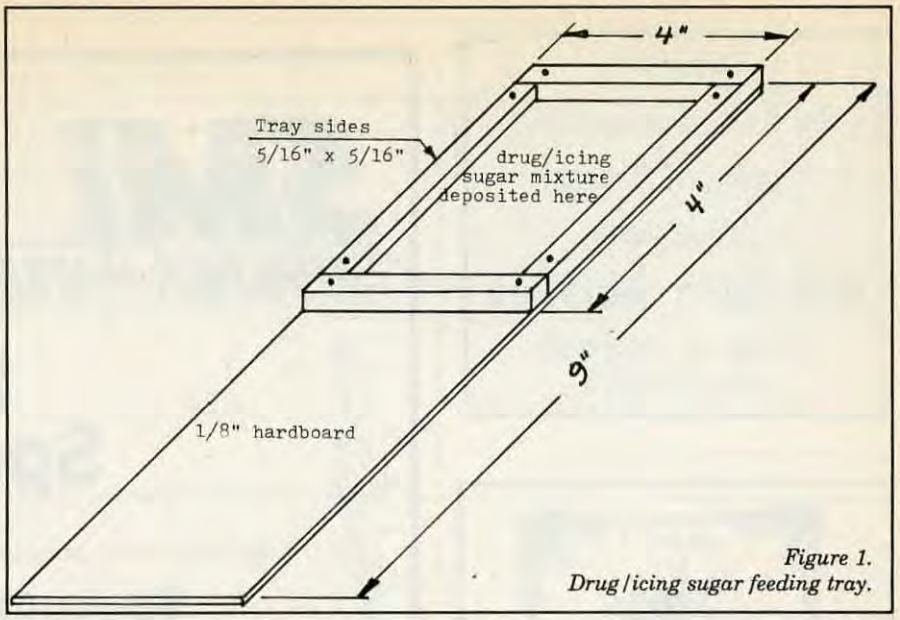



*Figure 1.*
*Drug/icing sugar feeding tray.*

## Early Inspection

Opening the inner cover for inspection early in the spring also may contribute to spring dwindling.

A couple of years ago when the weather was reasonably warm in April, I randomly removed the packing cases from 10, of 20, hives and opened the inner covers for general inspection. The bees covered eight to ten frames in the upper brood chamber. After inspection the inner covers and packing cases were reinstalled. About five weeks later I unpacked all 20 hives and inspected them. The ten hives inspected early in April had, on average, 14 frames with bees, whereas the hives *not* inspected earlier had, on average, 19 frames with bees. The difference was five full frames of bees.

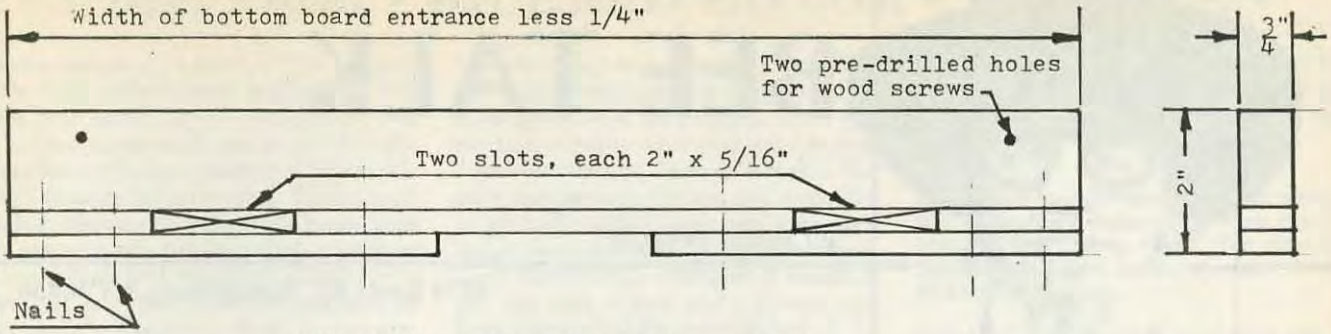
By breaking the propolis seal between the inner cover and brood chamber, a hive became drafty. With a slight puff of wind the air moves through the hive and removes warm air. Early spring inspections, where the inner cover is removed, changes the microclimate in the hive. Strong hives will more readily adopt to new conditions but medium and weak hives may lose peripheral brood and begin dwindling.

## Discussion

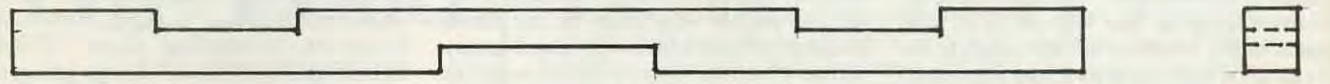
Dwindling may be defined as a continuous reduction in population taking place in winter and early spring. The dwindling process can reduce the population in a hive to a "point of no return", i.e. inability to recover under existing external and internal conditions. For example, in our area, one pound of bees in a hive at the end of March would most likely, represent a point of no return. Whereas, the same amount of bees at the end of May could develop into a winterable colony.

Opening the inner cover in late winter or early spring serves a questionable purpose. If during such examination one finds a weak hive, how can

***Continued on Page 641.***




Externally attached entrance reducer.



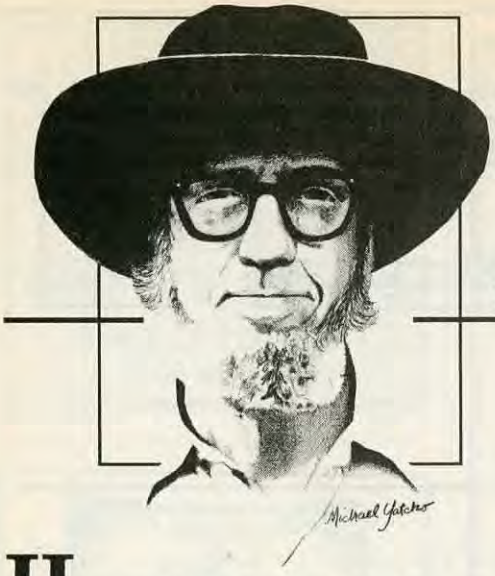
Conventional entrance reducer with two slots, 2" x 5/16", added at the top.

*Figure 3. Clog-proof entrance reducer.*

**SHAPAREW . . . Cont. from page 639**

you help? In the meantime, having broken the propolis and opened the inner cover, the hive becomes drafty, accelerating the dwindling process. Even the beneficial effects of feeding pollen or supplement are questionable since feeding would increase brood production, but the draft through the hive would retard it. The net results, beneficial or otherwise, are not known. My experience indicates that postponing unpacking and opening the hive for inspection until later in spring promotes spring build-up.

In summary, colonies with upper ventilation, properly prepared for winter, including strong populations free of disease and with adequate honey and pollen stores with a wind break wrapped around the hive, and not opening the inner cover until later in spring, will insure a successful winter and spring.Δ



# BEE TALK

RICHARD TAYLOR

9374 Route 89, Trumansburg, NY 14886

*"I raised my prices this year, and sales aren't reduced at all!"*

How unpredictable are the fortunes of a beekeeper. Things seemed so discouraging at the beginning of the season. My colonies did not seem to be in as good condition as I had expected, and some cattle had toppled most of the hives in one apiary. Already I was thinking that, even if things do not go so well this year, some of my hives ought to do all right and I can look forward to better times next year. An unseasonably early swarm at my home yard, which I tried to pretend must have come from some other apiary, seemed to be a portent of things to come. But there then followed, week after week, the greatest succession of honey flows that I can remember. I began harvesting super after super of the finest comb honey I have ever seen, and it went that way all summer, without letup. Even after I had, as I thought, harvested my crop, with only a dozen or so unfinished supers still on the hives, these too filled up in no time with honey of high quality. Then I began to think that perhaps I might have another problem — more comb honey than I can sell. The harvest had kept me so busy that I was late getting my honey stand going, which exacerbated this new problem. But that, too, turned out to be no problem, as I foresee now that, as usual, I am not going to have enough to supply the demand.

There is no doubt that interest in comb honey is increasing, at least at my honey stand. I would guess that three-fourths of the sales there are comb honey, and only about one fourth strained honey. It used to be just the other way around. I don't produce any strained honey, just comb honey. But I swap with one of my beekeeper friends, who produces mostly extracted honey. We trade one round section for two pounds of strained honey, or in other words, thirty sections for one five-gallon pail. That works out just about right. He gets comb honey for his customers, and I get enough bottled honey for the people who come to my stand looking for that. I raised my comb honey prices a bit this year, to $1.85 retail at my honey stand, and $135 per hundred for the wholesale price. This has not reduced sales at all, so far as I can see, and those prices seem fair.

I'm sure that I have been doing my bit in promoting comb honey. Nearly half of the people who stop at my stand do not know what comb honey is. They ask how you eat it, how you get the wax out, and that sort of thing. One customer asked me the other day whether you mix it with water! Well, they all know what it is by the time they leave. If I happen to be on hand I explain it to them. But I'm usually not there. My honey stand is run on the "honor system," and people make their own change from a box that is labeled "HONOR BOX." They also find themselves confronting a sign, from Holy Scripture, reminding them "THOU SHALT NOT STEAL." There are very few thefts, none so far this summer, and only two small ones last summer.

Well anyway, for the customers I never see, which is most of them, there is a stack of neatly printed sheets, explaining what comb honey is, how the bees put it in the container themselves, how good it is, and how to use it. The very same message is on a small label pasted to the back of every section. This printed message is my silent, unpaid salesman, and it has made an immense difference in sales. I always have a big stack of comb honey sections there at eye level. I like to have at least thirty there all the time. This catches people's attention. They pick one up, read the message on the back, find the same message on a pile of flyers stacked right there and, at least half the time, buy their very first section of comb honey. Many then come back. Some return to purchase a dozen or so, to take home to friends, for many of my customers are tourists. I also keep a pad of paper and pencils there, with a note inviting people who are interested in purchasing comb honey by mail to leave names and addresses, and I now have a large bundle of these, from two summers. But I have not gotten in touch with them, for I always run out of comb honey and have none to send them. The pad and pencils, incidentally, also give me another bonus: People leave friendly messages, along with the money in the honor box to pay for their purchases.

The growing interest in comb honey, on the part of both beekeepers and consumers, is highly gratifying. I have long felt that here we have no competition. It is a specialty food and always will be, but it is also forever unique. With this growing interest go

some dangers, however. The dangers are that unfastidious beekeepers will get into comb honey production, and that beekeepers who are not in the right locations will start raising it. The result will be an inferior product. There is not much you can do with comb honey that is not properly finished and capped, or that is dark and unsightly, except try to sell it, and the effect of this can be extremely negative. Don't try to produce comb honey unless you are in an area where you can reliably count on at least *two very strong* honey flows. You just cannot raise decent comb honey in a marginal area. Don't try it. But if you are in a primary area and want to produce comb honey, then do it right. Use only very strong colonies, and do not try to get both comb honey and extracted honey from the same hives at the same time. Give it the attention it needs to get the very nicest comb honey, and keep whatever falls short of that off the general market.

I've got to get an additional apiary going next summer, that's clear. It is just painful to have people wanting to buy comb honey, and find that I'm all sold out.Δ

There were many responses to my recent offer to send out copies of my comb honey message, referred to above. The offer is renewed. Just send me an addressed AND STAMPED envelope.

*Comments and questions are invited. Send to 9374 Route 89, Trumansburg, NY 14886, and enclose a stamped addressed envelope.*

# The Food Chamber

## Better Batter?

Recipes are usually quite explicit on instructions for beating the batter. You will see "use medium speed", "beat for 2 minutes", "beat until just blended". Here is where following instructions is really important. Beating mixes air into the batter, as well as merely combining the ingredients. A little bit of air makes your baked goods light and tender. Too much air from too much beating can make a dry, crumbly product that is not very pleasant to eat. Too much air can cause some mixtures to collapse. Muffin batter is supposed to have lumps. Look at the instructions carefully and remember that "more is not better" when mixing a batter. Δ

# QUESTIONS?

**Q** *How far do swarms normally travel? Is there any information on how far they go over a body of water?*

Ernie Fuhr, Fort St. John, B.C.

**A** Colonies of Africanized bees have been found on islands off the coast of South America at distances of about nine and twelve miles from the coast, and since circumstances make it doubtful that they got there on boats, they probably arrived as absconding swarms. Drs. Morse, Seeley and Lindauer have all experimented with artificial swarms, and the farthest any of these has been known to travel was about three miles. Whether extrapolations can be made from Africanized bees or from artificial swarms to normal swarms not flying over water is of course doubtful. Most experts believe, I think, that absconding swarms do not go very far — normally less than a mile, I would bet.

**Q** *How do you clean queen excluders?*

**A** This question comes in regularly. Queen excluders work effectively even when there is considerable burr comb on them, but the following detailed set of cleaning directions is supplied by Mr. Bruce McCraken, of Oakton, Virginia:

"The approach I follow is to place a deep or shallow super in a bakery type cake pan that permits me to cover the bottom of the pan with a quarter inch or so of warm water. Then on top of the super I place a queen excluder, smooth side up, from which I have carefully removed the bur comb with my hive tool. The hive tool is moved along the carefully spaced queen excluder wires to avoid any bending or damage to the excluder. With the smooth side of the excluder free of burr comb, I use my wife's clothes iron to heat the excluder to the point that the burr comb drops into the warm water. While the excluder is still quite warm I lay a couple layers of paper towling on the excluder and iron again. This absorbs the hot wax on the smooth side of the excluder as well as cleans my wife's iron. Reheat the smooth side of the excluder and tilt the excluder to the vertical so that the liquid wax on the bottom side of the excluder can be sopped up with crumpled paper towling to make an excluder look like new. Now back to cleaning the iron — special care must be taken to clean any steam ports on the the iron if it is a steam type. With sufficient heat all the propolis should come off on the paper; however, if any remains fine steel wool is an effective way of finishing the iron cleaning task.

**Q** *I am new to beekeeping, and my area is covered with Mountain Laurel* (Kalmia latifolia). *I keep reading and hearing that honey from this source may be toxic, yet I can find no authoritative source to tell me definitely whether it is or is not. Is it?*

John M. Dent, Winchester, VA

**A** The belief that honey from Mountain Laurel may be poisonous was apparently started in the last century by a physician who said he had seen many soldiers of the Confederate army suffer severe illness from eating this honey, and who said he had been affected by it in the same way. Certainly many people believe it to be toxic, although I believe that no death has been attributed to it. Some beekeepers have reported that they have never seen a bee on the bloom of this plant. It is very common in the east and south east, and one would think there would be more reports of food poisoning from this source if there were any truth to the claim. I therefore doubt that it is a genuine problem, but I will welcome comment from anyone who knows.

**Q** *In the past I used creosote on the outside of my hives, but it has now been banned as unsafe. Can it still be purchased? If not, what do you recommend?*

Paul R. Maust, Gibbon Glade, PA

**A** Creosote has been taken off the market as unsafe, so it cannot be purchased. An oil base paint cannot be improved upon. Latex paint tends to peel off.

**Editor's Note:** There are several wood preservatives available that last at least as long, or longer than paint for protection. Added benefits are that you preserve the natural look of your equipment and they tend to do better in humid conditions. A drawback is that they tend to be a bit more expensive initially.

**Q** *One of my hives is equipped with a slotted bottom rack. The bees in this hive refuse to take syrup from the Boardman feeder, do not post guards at the entrance and have not cleared the bottom board as effectively as my other colonies. Are these normal effects of using the slatted bottom rack?*

Harold Boretz, East Hampton, CT

**A** I doubt that all, or perhaps even any, of those conditions result just from using the bottom rack. On the other hand, I believe no one has ever demonstrated any significant advantage in using this slatted rack. Dr. C. C. Miller used them, thinking they improved hive ventilation, but my own experience with them did not convince me that they were very useful.

**Q** *How much additional honey does one gain by using drawn comb rather than new foundation?*

*Marchall T. Slotterbach*
*Sellersville, PA*

**A** There is no exact answer to this. Drawn comb is certainly more attractive to the bees, and they will fill this first, but with a good honey flow, foundation is drawn out fast and filled, especially if heavy foundation is used.

*Questions are welcomed. Send to Dr. Richard Taylor, 9374 Route 89, Trumansburg, NY 14886 and enclose a stamped, self-addressed envelope for prompt response. No telephone calls, please.*

# ANSWERS!

Richard Taylor

## STATEMENT OF OWNERSHIP

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*THE INNER COVER . . . From page 603*

The most common problem encountered during an interview about a particular subject is when a reporter either 1) wanders from the subject *you* think is important; or 2) has no intention of listening to your side of a story because they have already formed an opinion, and only need your 'confirmation' before it gets on the air or in the paper.

Both of these can be troublesome at best, are usually discouraging, and almost always damning without good cause. And the worst part is they can almost always be avoided.

## *The Wanderer*

Generally, when you and a reporter get together, you both know why. Either you (or your group) have issued a press release worthy of attention, and a story has been assigned along the line of the release; or something comes into a newsroom 'over-the-wire' that has a local connection. Either way, you and a representative agree to 'discuss the issue'. Since you have agreed, let's assume you are prepared, have done your homework on what questions will 'probably' be asked, and how they will be answered. You also are dressed 'appropriately', have a couple of good 'one-liners' ready, and are calm, cool and relaxed.

The reporter arrives, small talk is made, and the interview begins. For the sake of discussion, let's make the topic *The crisis in fruit pollination due to colony shortages caused by aberrant state quarantine policies*. This is a potentially dangerous topic, certainly a political hot potato, but it's also an excellent chance for you to deliver facts and figures on the value of pollination, local fruit production problems, the good (or bad, depending on your opinion) laws regulating colony movement, and a little about varroa and all the other problems it may cause. This is the chance of a lifetime — books have been written about less!

The interview begins and progresses just the way you planned (yes, planned!). Suddenly, the reporter looks out the window and sees your solar wax melter doing its thing. "What's that?", he asks innocently.

"That is a solar wax melter I use to melt the bits of wax I get from extracting burr comb and the like. I melt it and make candles and such", you respond.

The reporters eyes light up at the thought of real beeswax candles, made from scratch, and, instead of the political hot potato you planned for, you are fielding questions on wax, candles, melting . . .

You have lost control of the interview, and all your work (and good intentions) are up in smoke.

Unless . . . you regain control!

You have two options: the first is fairly straight forward —"Yes, candle making can be very interesting, and I'd love to show you anything you'd like as soon as I have everything set-up and running. In fact, since beeswax is such a beautiful material, and making hand-dipped candles is an art seldom practiced anymore, perhaps I could set-up a demonstration for you when I'm ready, and you could bring a cameraman along to get some really beautiful footage. But right now it is just not possible because my equipment isn't ready."

This may take a bit more convincing, but if you offer a GOOD visual story, along with the promise of an exclusive, that is timed to coincide with something similar — you've probably got a deal.

The second method is not so straight forward but should be seriously considered. It goes like this:

"That's a solar wax melter, which I use to recover bits and pieces of wax. I need to sell this to help with the rising costs of beekeeping, one of which is the increased cost of moving bees due to the regulations this state (or another state) has put on my bees. Of course, I have to pass this cost on to my customers, some of which are the fruit growers I pollinate."

Read that sentence again, I'll wait.

You have taken that reporters attention from an odd piece of equipment sitting outside your window, right back to the topic at hand, all in one breath — you have not controlled the question, but you have *redirected the answer*. You're right back where you want to be.

This little technique, called 'bridging' in the trade, is invaluable when you have a wandering reporter. Don't let an undisciplined or unprepared reporter destroy your work, keep bringing them back to the reason they came and the reason you want them there.

## ATTACKED!

There are many nightmares in the world of press relations, but none worse than a confrontation with a reporter who has already written the story — who has a set of preconceived ideas, and refuses to change, or to even listen to another opinion.

But you need to find out the reporter's point of view first. Ideally, every reporter should be a blank slate, an impartial witness to the interview event. But this is seldom the case. Reporters, like beekeepers, are only human, and not completely perfect. But most try to be.

Don't be afraid to ask the reporter a few questions. There should be some small talk first anyway, make good use of that time. Probe, ask, ask again. Find out, before it's too late. Because if you don't . . .

You have, really, three options if you discover your interviewer is slanted. First, end the interview right then. No if's, and's, or but's. Shut it down. Second, *you* record the interview. This puts the reporter on notice that you are aware of the probable problems, and are amply prepared. There will be no 'misquotes', 'miscues' or other 'out of context' problems.

Finally, you can send the reporter to a different source. State extension agents, national agencies, or the like, are in positions of knowledge and power to deal with this type of confrontation. Don't hesitate to pass the buck.

Next time, *You and the Media* will conclude, with topics such as 'The other side of the question', 'Changing your mind', and finally, 'Crisis'!

## LAST CHANCE

The decision to make (or not make) the honey bee the national insect is almost upon us, but there are not enough sponsors in either the House or Senate.

HJR171 (the House bill) has only 63 sponsors while SJR180 (the Senate bill) has only seven. We need 216 House votes and 15 more Senate votes to make this work.

If you haven't contacted YOUR senator or representative yet, *NOW IS THE TIME*! It's a butterfly or a bee — the choice is yours.Δ

# NEWS . . .

## Federation Meets in Indianapolis

The annual convention of the American Beekeeping Federation is set for Jan. 20-25 in Indianapolis. The site will be the spanking new Westin Hotel, scheduled to open in December in downtown Indianapolis.

The theme of the convention is "Pride in Our Past — Progress in Our Future". Program topics will address all areas of current concern to the beekeeping industry. The latest in beekeeping equipment and supplies is expected to be on exhibit.

The American Honey Show will give Federation members an opportunity to show off the best of their production from water white honey to molded beeswax. Copies of the 1989 Honey Show rules and entry forms are available from the Federation office.

Light honey, dark honey, comb honey, creamed honey — all types of honey will be displayed. The rules call for each entry to consist of four 1 lb. jars of honey, four comb sections, or a 5 lb. block of beeswax. The fee for each entry is $3.00. Entrants must be members of American Beekeeping Federation.

Silver trays will be presented to the first place winners in each of the 13 classes with the best single entry awarded the best of show trophy. Ribbons will be awarded for the second and third place winners.

After the show, the honey will be sold at auction with the proceeds to benefit the American Honey Queen program.

On the social side of the schedule, the Federation convention will feature the annual festivities connected with the crowning of the American Honey Queen and Princess. A special program is being planned for the ladies at the Ladies Auxiliary meeting.

A convention registration packet will be mailed to all Federation members in early November. Anyone else needing information should contact the American Beekeeping Federation, P. O. Box 1038, Jesup, GA 31545-1038, ph. 912-427-8447.

Inquiries about commercial equipment displays, advertisements in the convention guidebook, or the honey show should be directed to the Federation office as well.

## Zoecon Restructures Apiary Division

DALLAS, TEXAS. Zoecon Corporation, a Sandoz Company based in Dallas, Texas announces an organizational change which affects the apiary business unit of the firm.

The New Venture Group is now responsible for worldwide apiary product development and marketing. Heading the group will be General Manager, Frank Siciliano. Promoted to this new position, Siciliano has been with the company for eight (8) years.

Marketing responsibilities will be handled by the group's Marketing Manager, Lou Buice. Previously, Buice was Vice President of Marketing for Professional Agricultural Supply, an animal health distributor in Wichita, Kansas. He also served as Product Manager for Zoecon's livestock products from 1983-1987.

Dr. S. M. Shehata will serve as Technical Director. He will have responsibility for existing and new apiary product development activity for Zoecon. Dr. Shehata, an expert on the Varroa mite and bee diseases in general, earned his Ph.D. in Apiculture-Entomology from the University of Guelph. He is transferring to Dallas from Zoecon's Canadian affiliate where he was Sales and Technical Support Manager.

Zoecon's current apiary product line consists of APISTAN™ Strips for the detection and control of varroa mites and CERTAN, a biological insecticide, used to protect honeycomb from wax moths.

APISTAN is available in three product forms: The 10" APISTAN Strip for use in the brood chamber, the 5" Package Strip and the Queen Tab, both used to certify bees free of the varroa mite for shipment purposes. All three APISTAN products are currently being sold in the U.S. under an emergency use registration granted by the E.P.A. A full U.S. registration is expected next year.

CERTAN has proven effective in the control of the wax moth, protecting the honeycomb between seasons. CERTAN has no effect on the honey bee or the honey.

To obtain additional information about APISTAN or CERTAN, call Zoecon toll free at 1-800-527-0512.

## Canada Close in Price Stabilization

Canadian honey producers are close to achieving a price stabilization plan for their industry.

This follows a conference involving the country's provincial beekeeper organizations and the federal and provincial governments.

Under the plan, which producers would join voluntarily, beekeepers, participating provinces and the federal government would contribute equally to the stabilization fund.

When the market price for honey falls below a specified support price, farmers would receive payments from the fund. It is proposed the support price be based on the previous seven-year average market price, indexed for inflation.

The plan has already received support from the provincial governments in Atlantic Canada and the four western provinces. It still awaits approval from the federal agricultural minister and the Ontario and Quebec governments.

Honey producers will benefit substantially if the plan is put into effect this year. Recent prices for Canadian honey have been around 92 Canadian cents a kilogram. The proposed support level is about C$1.23 a kg.

## Targeted Export Assistance (TEA) Funds Approved

The Foreign Agricultural Service of the USDA has approved the National Honey Board's request for $500,000 in Targeted Export Assistance (TEA) funds for 1989.

These funds are provided by the U. S. government to help offset adverse effects of unfair foreign trade practices on U. S. agricultural exports.

The Honey Board will use the funds to develop export demand for U. S. produced honey in Europe, the Middle East and the Far East.

"Our primary efforts will be in West Germany, Saudi Arabia and Japan", said Dan Hall, manager of the National Honey Board.

The Honey Board's export development program will be launched October 1. The Board will begin by conducting market research, Hall said.

In addition, the Board plans to develop multi-lingual promotional materials to participate in international trade shows and to sponsor an export sales seminar to keep the honey industry informed.

"Our goal is to increase U. S. honey export sales from 3% to 15% of the U.S. honey production", Hall explained. "We will develop a market for premium U. S. honey and honey products in select countries."

## W.A.S. 1988 Spectacular

The 1988 W.A.S. conference was Spectacular. President Dan Mayer, Program Chair Wayne Robinson, and the program committee did an excellent job of finding good speakers and planning exciting social events. Even the weather cooperated, with cool nights and bright, sunny afternoons.

We were also fortunate to have presentations by Dr. Charles Milne, who just filled the endowed chair in apiculture at Washington State University, and Ms. Elba Quintero, Project Manager of the "bee barrier" work in Mexico. Dr. Milne explained the potential for protecting bees from pesticides or diseases by inserting into their genomes genetic messages for the production of special proteins. The proteins can denature pesticides or prevent growth of microorganisms.

According to Elba Quintero, Africanized Honey Bees (AHB) are soon to arrive in the U. S. Elba described what has been done up to this time in Mexico. An "Operational Unit" was set up on the Pacific and Gulf coasts to evaluate different approaches to slowing the movement of AHB or changing its genetic makeup. Much has been accomplished, but the bees move fast. AHB have been detected beyond the operational units and, to the surprise of many, AHB swarmed into the mountain canyons in central Mexico and appear to be well on their way to Mexico City.

Our meeting ended with a delicious banquet meal, including awards to competitive exhibitors and to our specially chosen recipients of the "Outstanding Service to Beekeeping Award" — Dr. Elbert Jaycox and Mr. James Bach.

From those of us who so thoroughly enjoyed this meeting, we extend a warm invitation to any and all of you who would like to join us next year in the suburbs of San Francisco for another educational experience wrapped in a highly social package.

## Stephen B. Bambara Selected as the NCSBA's "Extension Worker of the Year"

Stephen Bambara was selected by the N. C. State Beekeepers Association as the recipient of their "Extension Worker of the Year" award at their summer convention in High Point, N.C. Mr. Bambara is the Assistant Apiculturist at N. C. State University where he has both extension and research responsibilities for the university's apiculture program.

The NCSBA awards its "Extension Worker of the Year" award to that Agriculture Extension employee who has made a major contribution to North Carolina beekeeping at the local and/or state level. Based on his many contributions to beekeeping at the individual, county and state levels, Stephen was the unanimous choice for this year's award. He has been a major force in the development and continuation of North Carolina's beekeeping development and the NCSBA expressed its appreciation by presenting him with a plaque at their convention.

# & EVENTS . . .

### ☆ INTERNATIONAL ☆

**NEW BOOK AVAILABLE!**

New Zealand is well known as a country with a progressive beekeeping industry. Now for the first time, a bibliography makes it easy to refer to the many publications about beekeeping in that country.

The Bibliography of New Zealand Apiculture is a reference book for beekeepers, librarians, teachers, researchers — in fact anyone who wants access to information about beekeeping in that country.

This completely new book lists every significant article, book or periodical that relates to bees, beekeeping or bee pollination in New Zealand. Over 1,350 entries cover the period from 1842 to the end of 1986, and full author and subject indexes are provided.

The Bibliography is available for $NZ 25.00 from: A. G. Matheson, MAF, Private Bag, Tauranga, New Zealand. Send a bank draft or full credit card details (Visa, MasterCard, American Express, Diners).

Reid, G.M.; Matheson, A.G.; Walton, G.M. 1988. Bibliography of New Zealand Apiculture. Tauranga New Zealand, Ministry of Agri. and Fisheries, 171 pp. (ISBN 0-477-08016-2).

### ☆ ARKANSAS ☆

**The 1989 AHP CONVENTION** will be held at The Camelot Hotel in Little Rock, AR, January 10-14. An excellent program is scheduled (full details in the December *Bee Culture*) with an exceptional slate of speakers and topics. Plan now to come south in January. For more information call Darrell Jester, (501) 563-5701).

### ☆ ARIZONA ☆

The **ARIZONA BEEKEEPERS ASSOCIATION** invites all members and non-members, both in-state and out-of-state, to join us this year on December 10-11, 1988 in Tucson, Arizona at our annual meeting. The meeting will be held at the Days Inn, downtown Tucson, 88 East Broadway, formerly called the Santa Rita Hotel.

A dinner party on Friday, December 9, will be for early arriving participants to honor Dr. Harry Laidlaw. It will start the convention and have door prizes. Equipment displays and outstanding Arizona hospitality throughout the rest of the meeting will spice up the program.

**Friday, December 9**

7:00 Dinner honoring Dr. Harry Laidlaw

**Saturday, December 10**

7:00 Registration

8:00 Call to Order followed by Invocation. Welcome address by Dr. Marshall Levin, Research Collaborator, USDA/ARS, Tucson, AZ. Presidents address by Dee A. Lusby, ABA.

9:00 Dr. Barbara Erickson

9:45 Paul Baker, St. Pesticide Coordinator

10:30 Les Davis, Div. Director, Ag. Chemical and Envir. Svcs. Div.

11:00 Pennwalt Chemical, speaker

11:30 Panel Discussion

12:30 Buffet Lunch

2:00 M. Delfinado-Baker, Beneficial Insects Lab., Beltsville. A special pre-taped video taken at the USDA/ARS Tucson Lab during a

seminar with additional comments by Dr. Eric Erickson.
2:45 Dr Marilyn Houck, Dept. of Ecology and Evolutionary Biology
3:30 Speaker to be announced
4:00 Panel Discussion
6:00 Honey Queen Auction
7:00 Buffet Supper
8:00 Honey Queen Night

**Sunday, December 11**
7:00 Registration
9:25 Call to Order followed by Invocation
9:30 Dr. Harry Laidlaw, Univ. of CA, Davis
10:45 Dr. Eric Erickson, Director, Carl Hayden Bee Research Center
12:00 Buffet Lunch
1:30 Dr. Elbert Jaycox, The Bee Specialist
2:15 Dr. Gerald Loper, Research Plant Physiologist, Carl Hayden Bee Research Center, Tucson
2:45 Panel Discussion
4:00 Business Meeting

For those beekeepers who wish to stay at the convention site at the Days Inn, reservations should be made by November 15th to obtain reduced rates.

For more information call or write: Dee A. Lusby, Pres., Arizona Beekeepers Assoc., 3832 E. Golflinks Road, Tucson, AZ 85713, 1-602-748-0542 or Lynn Bushnell, Editor Newsletter, Arizona Beekeepers Assoc., 321 E. Cornell, Tempe, AZ 85283, 1-602-839-9891 or Days Inn Tucson - Downtown, Olivia Gonzalez, Exec. Hotel Coordinator, 88 East Broadway, Tucson, AZ 85701, 1-602-791-7581.

## ☆ CALIFORNIA ☆

**THE CALIFORNIA STATE BEEKEEPERS ASSOCIATION'S 99th Annual Convention is slated for November 14th - 18th at the Hilton** Hotel in Concord, CA. Located about 30 miles east of San Francisco and conveniently located for those interested in the night life of San Francisco and wine tasting in Napa Valley. There are two unique shopping malls and over ten restaurants within easy walking distance of the hotel. US AIR flies directly into Concord and the hotel is only a five minute drive from the airport.

This is an opportunity for our members and guests to renew old acquaintances, make important business contacts and learn more about the bee industry and the world of apiculture. The CSBA invites all beekeepers, family members and interested friends to join us in Concord this November.

**November 14th**
2:00 Apiary Board Meeting
4:00 CSBA Board of Directors Meeting
8:00 Honey Queen Reception

**November 15**
8:00 Registration
9:00 Opening Ceremonies
10:30 Reports
1:30 Dan Hall, National Honey Board
2:00 Thomas Payne, Marketing Honey
2:30 Ria de Grassi, CA Farm Bureau and the Bee Industry.
3:15 Art Eggman, Honey and Pollen Plants of the Sierra
3:45 Mike Rosso, Unit Pollination Pricing

**November 16**
9:00 Beekeepers Panel, The colony decline of 1987. What Happened?
9:45 Eric Mussen, A scientific look at colony decline
10:15 Christine Peng, New Antibiotics for AFB control
11:00 Wayne Getz, Sibling rivalry in the honey bee colony
11:45 Research Lunch, Bill Wilson, Menthol and Tracheal Mites
1:30 Wine tasting tour of Napa Valley followed by SF dinner.

**November 17**
9:00 Ladies Auxiliary breakfast and business meeting
9:00 UAP, Zoecon & Nor-Am representatives will explain products for mite control
10:00 APHIS will discuss the federal quarantine decision
10:45 Ann Sorenson, Current research on honey bees
1:00 Bill Chaney, Effects of synthetic pyrethroids on honey bees
1:40 Bill Wilson, The USDA african bee project
2:20 David Fletcher, African bees, a unique opinion
3:00 Annual Auction
3:30 Annual Business Meeting
6:00 No Host Cocktail Hour
7:30 Annual Banquet/Dance

**November 18th**
7:30 CSBA Board of Directors Meeting

For information and registration contact: Carol Penner, 19980 Pine Creek Rd., Red Bluff, CA 96080, 916-527-0941.

## ☆ ILLINOIS ☆

The fall convention of the **ILLINOIS STATE BEEKEEPERS' ASSOCIATION** will take place on Saturday, November 5, 1988 at the Department of Ag. Bldg., IL State Fair Grounds, Springfield, IL.

9:00 Registration
9:30 Welcome, Lloyd A. Lindenfelser, Pres., ISBA. Secretary's report by Rita Taylor and Treasurer's report by Udell Meyer
10:00 Apiary inspection report, Eugene E. Killion, Super. of Apiary Protection, Paris, IL
10:15 Election of officers
10:30 Break
11:00 *Anticipated impact of Africanized bees and honey bee mites on IL Agriculture*, Don Rawlins, Assoc. Dir. of Am. Farm Bureau Resources, Park Ridge, IL
12:00 Lunch
1:00 Installation of Officers
1:15 *Labeling, packaging and marketing honey*, Jerry Hayes, Jr., Credit Manager, Dadant & Sons, Inc., Hamilton, IL
2:15 Ladies; Auxiliary report, Sharon Heinzl, President, Belleville, IL
3:00 *Some spin-offs in IL apiculture from the Great Drought of 1988*, Lloyd A. Lindenfelser, President, ISBA, Tremont, IL
3:25 Local Chapter reports
4:00 Adjournment

Complete dinner with turkey and dressing will be available at the Agriculture Building cafeteria. Price of the meal will be $6.75 each. Reservations must be received no later than October 22. Make check payable to: Illinois State Beekeepers' Association and mail to: Mr. Udell Meyer, R. R. #3, Box 308, Edwardsville, IL 62025.



## ☆ MASSACHUSETTS ☆

The Holiday Banquet of the **MIDDLESEX COUNTY BEEKEEPERS ASSOCIATION** is Saturday, December 3, 1988 at 7:00 p.m. at the Colonial Inn, Monument Square, Concord.

Mr. Mosser will entertain us with a very special show of wilderness slides.

Remember there is no November meeting but reserve the December date for a fun evening of socializing and entertainment. More details of menu selections, prices and deadline for reservations will be posted in the club newsletter.

All are welcome at our meetings. Contact Linda Boucher, 276 Salem Street, Wakefield, MA 01880, 245-8443.

## ☆ NEW YORK ☆

All are welcome to the 120th Annual Winter Meeting of the **EMPIRE STATE HONEY PRODUCERS**, December 2 and 3, 1988, at the Quality Inn North, 1308 Buckley Road, North Syracuse, NY (just off NY Thruway exit 36 or Interstate 81 exit 7th St. North). Registration starts at 9:15 a.m., Friday, December 2.

The program will include speakers on the honey market, pollination and migratory beekeeping, tracheal mites and wintering, and other aspects of beekeeping. In addition, there will be a honey show, a banquet featuring the presentation of the NY Beekeeper of the Year award, and exhibits and displays. For more information call the Cornell University Office of Apiculture, (607) 255-5443.

## ☆ OHIO ☆

Jacqueline Muren of West Salem, Ohio is the 1988 Ohio Honey Queen. Since her selection in July, Jackie has been involved in a nonstop campaign to promote the use of honey throughout the State of Ohio. Besides the regularly scheduled events of 17 days representation at the Ohio State Fair, and the famous Ohio Honey Festival, Jackie has taken it upon herself to pursue as many festivals, fairs and events as she can this year in her endeavor to promote honey and educate the public.

Jacqueline Muren is the daughter of John and Pat Muren, beekeepers from West Salem, Ohio. She is the former Medina County Honey Queen and frequently joins her father in the beeyard.

## ☆ PENNSYLVANIA ☆

Jill Mathias is the 1988 PA Honey Queen. She is from Hummelstown PA and has been involved in beekeeping all her life. Her father runs a small beekeeping business called Honey Crest Farms.

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**PENNSYLVANIA STATE BEEKEEPERS** will hold their annual Fall Meeting and Banquet on November 12, 1988 at Green Gables Motor Inn, Lewistown, PA. The Executive Board will meet at 8:30 p.m. on November 11th.

The program arranged by Dr. Clarence Collison will include programs on The Africanized Honey Bees; Roadside Marketing of Honey; a program on Tracheal and Varroa Mite and a Workshop on Mead Making.

Green Gables Motor Inn is located at 900 South Main St., Lewistown, PA. For further information please contact Yvonne Crimbring, RD 1, Box 315, Canton, PA 17724, Ph. (717) 673-8201.

## ☆ TENNESSEE ☆

Stacey Joan Greene, daughter of Ken and Donna Greene of Dickson, TN is the 1988 Tennessee Honey Queen.

Stacey has been an active member of the Dickson County Area Beekeepers Association for the past four years, during which time she has been the reporter, Dickson County Honey Princess and Dickson County Honey Queen. She is also a member of the Tennessee State Beekeepers Association and the American Beekeeping Federation.

The Tennessee State Beekeepers Association which sponsors the Tennessee Honey Queen program is comprised of 26 beekeeper associations with over 700 members across the state of Tennessee.



## ☆ TEXAS ☆

**THE TEXAS BEEKEEPERS CONVENTION** will be on November 3, 4 and 5 at the Inn of the Hills, Kerrville, TX. There will be a Beekeepers Short Course on Thursday followed by Meetings, A Queen Luncheon and Non-commercial Programs on Friday. Saturday will host a General Session, Business Meetings and a Country Barbeque.

Make plans now to be in lovely Kerrville, enjoying your beekeeping friends, and stimulating your intellect. This is a wonderful vacation opportunity and golf is available.

### SCHEDULE OF EVENTS

**Thursday, November 3**

6:30 Registration, Medallion Center Foyer
7:00 Bee Buzz, La Fuente Room
7:30 Board of Directors Meeting, River Front Suite 60 (refreshments provided by Adam's Mark)

**Friday, November 4**

8:30 General Session, Medallion Center; Welcome by TBA Representative; Welcome by Kerrville Rep.
9:00 Jim Hightower, TX Dept. Ag.
9:20 Bill Wilson, AHB
10:00 Garry Mauro, TX GLO
10:30 Bill Vanderput, AHB
11:30 Lunch
1:00 Honey Queens' Reports
1:20 Fowden Maxwell, Inspection
1:40 John Milam, NHB
2:10 Richard Adee, AHP
2:30 Jeff Pettis, AHB Survey
3:00 Orley Taylor, AHB
7:00 Queen's Program, La Fuente Room

**Saturday, November 5**

7:30 Registration, Medallion Center Foyer
8:00 Anita Collins, AHB
8:30 Curtis Meier, TX State Fair
8:45 C. W. St. John, Varroa
9:15 Reg. Wilbanks, ABF
9:30 Binford Weaver, Tri-Country Report
10:30 Panel Discussion on Mexico Trip
11:00 Bill Wilson, Tracheal mite
11:45 Lunch
7:00 Bar-B-Que, Poolside; Presentation of 1989 Honey Queen

### ALTERNATE PROGRAMMING

**Thursday, November 3**

8:00 Larry Connor, Beekeeping Short Course, Management

**Friday, November 4**

Carol Moody, Nectar Bearing Plants; B. J. Sherriff, Wax Artistry & Skep Making; Paul Jackson, Honey Bee Diseases; Bob Stroope, Pollination; Richard Weaver, Queen Bee Production.

1:30 Tour (Also 3:00)

**Saturday, November 5**

9:30 Tour (Also 11:00)

For registration contact Diane Chancey, (409) 258-3034 and Jim Braden, Bus. (512) 769-2031 or Res. (512) 769-2148 for General Convention Information.

# ☆ Classified Corner ☆

Classified rates: 55¢ per word, 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.

## WANTED

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