

BEE CULTURE



GLORIANN GLAWE — AMERICAN HONEY QUEEN

First Runner-up

Lynn Marie Hoopingarner, daughter of Roger and Barbara Hoopingarner of Holt, Mich. Lynn attends MSU where she is a sophomore. Her major interest is pre-law.

Gloriann Glawe, daughter of Mr. and Mrs. Ron Glawe, Sioux Falls, South Dakota. Gloriann is a graduate of Nettleton College where she majored in fashion merchandising.

Second Runner-up

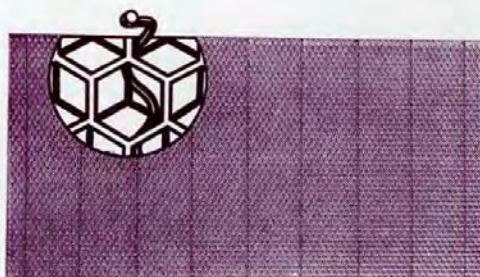
Kim Weatherholt, daughter of Mr. and Mrs. Franklin Weatherholt, Evansville, Indiana. Kim is a sophomore at Purdue University majoring in vocational home economics.

Dadant Quality Foundation --

The foundation you can trust for perfect combs everytime.

Only 100% pure beeswax is used in the manufacturing of all Dadant quality foundations. All foundation is correctly milled, with just the right amount of accurately spaced, correct thickness base. Cell walls are high and exact, making it easy for the bees to draw out perfect combs.

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 throughout the foundation. Sturdy steel hooks at the top of each crimped wire anchor foundation securely into the wedge top bar frame.

CUT-COMB



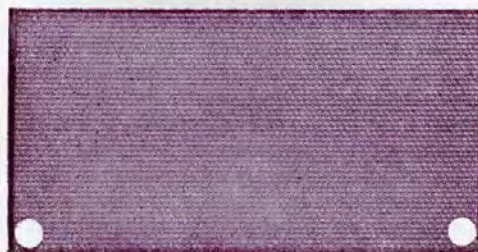
Each portion of the foundation becomes part of the comb honey for sale. We use the utmost care in selecting only the very finest of virgin cappings wax for the manufacture of this foundation. The raw wax is then washed, cleaned and filtered so only pure 100% beeswax is present in the finished sheet of foundation.

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.

DURAGILT



Duragilt is the latest addition to the Dadant line of reinforced foundations. It 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.

BRANCHES



Dadant & Sons, Inc.

HAMILTON, ILL. 62341

Phone 217 847-3324

Everything for the Beekeeper

722 W. O'Connell
Watertown, Wis. 53094
Phone 414-261-5363

P.O. Box 270
Umatilla, Fla. 32784
Phone 904-669-2622

1318 - 11th St.
P. O. Box 575
Sioux City, Ia. 51102
Phone 712-255-3232

P. O. Box 7996
2534 Airways Drive
Fresno, Calif. 93727
Phone 209-292-4666

233 Canisteo Street
Hornell, N. Y. 14843
Phone 607-324-6644

P. O. Box 397
162 Tillman St.
Hahira, Ga. 31632
Phone 912-794-2785

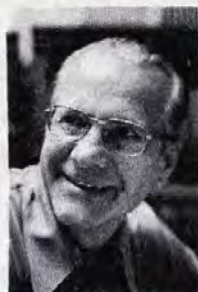
1169 Bonham Street
P. O. Box 146
Paris, Tex. 75460
Phone 214-784-6145

2425 Carroll Avenue
Lynchburg, Va. 24501
Phone 804-846-0666

P. O. Box 1692
234-8 Scribner Ave. N.W.
Grand Rapids, Mich. 49501
Phone 616-458-4410



John Root



Lawrence Goltz



Gleanings in Bee Culture

Lawrence Goltz, Editor
THE A. I. ROOT CO., PUBLISHERS
P. O. BOX 706
MEDINA, OHIO 44256

John Root, Associate Editor
Dr. Roger A. Morse, Research Editor
Naomi M. Yost, Advertising Mgr.
Mary Louise Robinson, Sub. Mgr.

March 1978

Vol. 106, No. 3

Created to Help Beekeepers Succeed
105 Years Continuous Publication by the Same Organization

CONTENTS

Subscription Rates: United States subscribers, one year, \$7.00; two years, 12.50; three years, \$18.00. Single copy, 75¢. Other countries including Canada, Pan American countries and Spain (U. S. Currency only) 85¢ per year additional for postage. Published monthly. Discontinuance: Subscriptions stopped on expiration. Change of Address: Give your old as well as the new and write the name to which the journal has heretofore been addressed. Remittance should be sent by post office money order, bank draft, express money order or check.

Articles are solicited. Stamps should be enclosed to insure return of manuscript to author if not printed.

Opinions expressed by the writers in these columns are not necessarily the opinions of the editors.

Microfilm copies available at University Microfilms, Inc., 300 North Zeeb Road, Ann Arbor, Michigan 48103.

Advertising rates and conditions will be sent on request.

Advertisers' Reliability: While the publishers do not guarantee advertisements in this journal, over the years very few complaints have been received.

Second Class Postage Paid at Medina, Ohio

POSTMASTER: Send Form 3579 to
623 West Liberty Street
P. O. BOX 706
Medina, Ohio 44256
Phone: (216) 725-6677

COVER STORY

These three queens were selected among contestants from 12 states at Orlando, Florida, during the American Beekeeping Federation meeting. Minnesota Honey Queen, Maureen Reeder was chosen Miss Cordiality.

Monthly Honey Report	Lawrence Goltz	100
E. F. Phillips — Who Was He?	Grant D. Morse, Ph.D.	108
Memories of Bee Inspection in the Thirties and Forties	N. Eugene Shoemaker	110
The ABF Meeting in Florida		111
Beekeeping and Neighbors: Keeping Them Both Happy	Stephen Brickley	113
How to Avoid Negative Bee Laws	Lenore M. Bravo	114
How I Defeated a City Ordinance	Fritz Sanders	116
Today Show Features Bee Venom Therapy		117
FDA Inspection		117
Siftings	Charles Mraz	118
News Release		118
Bee Talk	Dr. Richard Taylor	119
From the West	Charles J. Koover	120
Research Review	Dr. Roger A. Morse	121
Fundamentals for All	W. A. Stephen	122
Mosquito Control Doesn't Harm Honeybees		122
Questions and Answers		123
The Collector's Corner	Darl and Iva Stoller	124
Notes from the Straw Skep	Bess Clarke	125
You Be the Judge	Murray Loring	125
The Old Timer		126
Madison Alderpersons Vote Against Bee Ordinance		
Two to One	Benjamin Ashman	127
News and Events		128
Obituaries		130

PITTSBURGH'S LARGEST BEE
SUPPLY HOUSE UNDER THE HIVES

MILES BEE SUPPLIES

THE ROOFTOP APIARY

COMPLETE STOCK
CARRIED AT ALL TIMES

VIRGINIA MILES ELDER

3030 BRISCOE ST.
PITTSBURGH, PA. 15204
Phone: 412-921-4037

AGENT FOR A. I. ROOT
(WE ARE CLOSED EACH SUNDAY)

FOUNDATION MOLD PRESS

Metal dies. Rigid construction.
You can make your foundation,
using your own wax, at over 20
sheets an hour. Langstroth price
\$91, including post. Please send
for full details to:

LEAF PRODUCTS

Nottingham, ENGLAND. NG10 IFR.
24 Acton Road, Long Eaton,

Chrysler's Electric Welded All-Steel Queen Excluder



The only
worthwhile
Queen
Excluder
on the market

- Accurate spacing
- Allows maximum bee passage
- Better ventilation
- More honey production
- No wood. No burr combs
- No sharp edges to injure bees
- So durably made that it is permanently queen excluding and will last a life time.

We manufacture a full line of Bee Supplies. Order from our dealers or direct from our factory. Canadian-made goods are cheaper. No duty. Send for our price list. Always in the market for beeswax. Cash or trade.

W. A. Chrysler & Son
Chatham - Ontario - Canada

SUGAR: TABLE GRADE WHITE REFINED SUGAR

"We can furnish you sugar anywhere in the United States in quantities of 5,000 pounds or more. We can save you money on your sugar supplies because we are large cash buyers and buy directly from the producers. R.C. Daniels started keeping bees 46 years ago and has engaged in all commercial phases of the bee industry in both the north and south. He does understand your problems and enjoys working with his fellow beekeepers. Write us for information or better phone day or night. Telephone Area 601 798-6838."

"Sole World Distributors for the
Original Plastic Queen Cell Cups"
"NATION-WIDE SUGAR DISTRIBUTORS"
R. C. DANIELS & COMPANY
Picayune, Mississippi 39466

F. W. JONES & SON LTD.

Bedford, Que. JOJ 1AO
514 248-3323

MANUFACTURERS OF BEEKEEPERS'
SUPPLIES SINCE 1878

68 Tycos Drive, Toronto
Ont. M6B 1V9 416-783-2818

WE CLEAR AMERICAN CUSTOMS AND MAIL
ORDERS DIRECTLY FROM THE U.S.A.

Wanted All Grades

BEESWAX

PAUL PIERCE'S HARD PLASTIC FOUNDATION AND FRAME, MOULDED IN ONE PIECE AND WAX COATED

New Model - 1 1/8" top bar (cuts burr combing). 1 3/8" end bars, self spacing. Fits standard 6 5/8" deep supers, and most uncapping machines. 72 frame price about 55¢ delivered. Makes the best brood combs as well as honey. Full details, prices and sample frame \$1.50 delivered U.S.A. Inventor and manufacturer of Pierce Electric Knives for 35 years. Commercial honey producer for 20 years.
CLOSED DOWN SEPT. 1 to DEC. 1

PAUL W. PIERCE

1630 W. 9th St.

UPLAND, CALIF. 91786



Bee Supply Company

60 Breakneck Hill Rd. Southboro, Mass. 01772

(617-485-8112)

ROOT BEE SUPPLIES IN STOCK

Open Monday thru Saturday 9:00-5:30

5 minutes from Mass. Pike Ex. 12 or Rt. 495

PIERCE ELECTRIC UNCAPPING KNIFE



Patented adjustable thermostat, blade now wound hotter
at point end, guaranteed for 2 years or 25
tons of honey (many uncap over 100 tons).

(115 volt) 3-wire cord (also 230 volt)

DEALER'S INQUIRIES INVITED

PIERCE MFG. CO. 1320-A N. Miller St. Anaheim, Calif. 92806

M. R. CARY CORPORATION

219 Washington Square
Box 818

Syracuse, N. Y. 13201

A GOOD place to BUY
your Root Supplies
Drums, Cans, and Glass Jars

A GOOD place to SELL
your Honey and Beeswax

Come to see us — or write —
or phone (315) GR 2-5486

FOR THE FINEST COMB HONEY SECTION try

THE LOTZ SECTION

We also carry a
complete line of

**BEE SUPPLIES
& CONTAINERS**

Write for price list.

AUGUST LOTZ CO.
Boyd, Wisconsin 54726

For Honey Extracting Equipment

Contact:

Cook & Beals, Inc.

Box 220 Loup City, NE 68853

JOHNSON DOVETAILING EQUIPMENT

FOR THE BEEKEEPER'S SHOP
Write for details.

CARL E. JOHNSON CO.

1557 Gregory Avenue
LINCOLN PARK, MICH. 48146

BEEKEEPING WOODENWARE



Rocky Mountain Region
Manufacturer

Write For Brochure On Our
Quality Products



Cloverleaf

Manufacturing, Inc.

185 S. Santa Fe Dr., Denver CO 80223
303-722-2714

the weight of your hive is
→ IMPORTANT!

We now offer the **BEST** hive **SCALE** yet
New design **ALL STEEL KIT** and

READS "0" to "410" POUNDS

Registers from center of hive!
only \$18.00 each kit postage paid
U.S.

Bee Flat Scale Co.
Attn: 4 Box 654-6
Reedsport, Oregon 97467



THESE GOODS REALLY FOR SALE?
YOU BET! READY FOR YOUR ORDER!

Coffee Mills, Kraut Cutters, Copper Kettles, Wash
Pots, Wood Stoves, Cider Presses, Kerosene
Lamps, Pumps, Churns, Cow Bells, Baskets, Oak
Kegs, Buggies, Harness, Calico, Razor Strops,
Tonics, Ceiling Fans, Adzes, Shellers, Mouth
Organs, Wool Cards, Sack Tobacco, Galluses,
Singletrees, Forges, Froes, and all other merchandise
you could expect from an old time country
general store. All New Goods and all in our Big
New "WISH & WANT BOOK" Catalogue. 250
large pages of merchandise you thought would
never be available again! Order your copy today—
only \$3.00 ppd. & worth it! In fact, we guarantee it.

Cumberland General Store
Dept. BEM Rt. 3 Crossville, TN 38555

BEEKEEPING EQUIPMENT PLANS

- HONEY
EXTRACTOR
- HIVES
- SUPERS



These complete Plans sets show how to
build your own Honey Extractor, Hives and
Supers. Step-by-step instructions, large "how-
to" photos and diagrams assure your successful
completion of these projects. You can save
up to \$75 just by building your own honey ex-
tractor!

Be ready for the "bee season" with your
own homemade, top quality, low cost equip-
ment. Honey Extractor plans—\$2.50 ppd.
Complete Hive and Super plans—\$3.50 ppd.
Special: Both sets only \$5.00 ppd. Satisfaction
guaranteed. Order from:

Garden Way Publishing
Dept. 80943A Charlotte, VT 05445

Problems with your Bees?



Having trouble
overwintering colo-
nies? Is your honey
yield just so-so? Is

swarming an annual headache? Is queen su-
persedure still something you don't quite un-
derstand? If your answer to any of these
questions is "yes," send for a copy of Garden
Way's **PRACTICAL BEEKEEPING**, and get
some fresh, experienced thinking, expressed
in words you'll understand. Sure to help you
solve those problems and others you might
have. 208 pp., fully illustrated, quality paper-
back, \$5.95; hardback, \$9.95 plus 50¢
postage and handling. Money-back guaran-
tee. Send to:

GARDEN WAY PUBLISHING CO.
Dept. 80943 Charlotte, Vermont 05445

A HEATER FOR ALL SEASONS

Write for information on

Therm-A-Hive
VANREN CO.

P. O. Box 71 Sharon, Mass. 02067



BEE HUNTING

by John R. Lockard

\$1.25 postpaid

Wilkinson's Instruments

Jennerstown, Pa. 15547

E.D.B.

(ethylene dibromide)

for wax moth control.
4 1/2 lb. = \$9.50 prepaid.

Country Honey Farm
P.O. Box 518 Hope, Arkansas 71801



The Old Skep Honeybee Buckle #2

Pewter-Brass Plated

Buckle . . . \$4.95 each

Plus 75¢ postage and handling.

The Old Skep Honeybee Buckle #1

Still available at the same price.

BEE WARES CO.

35 Hillcrest Drive
Wayne, N. J. 07470



**BEAR
DEER**

Order Border Guard Now

Natural repellent eliminates animal
traffic and damages. Single order
protects 900 sq. feet. Satisfaction
guaranteed.

\$20 plus shipping

Border-Guard

Box 1146 - Ph. 213-374-2754
Redondo Beach, CA 90278



Monthly HONEY Report

LAWRENCE GOLTZ
February 10, 1978

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

Wholesale Extracted

Reporting Regions

In 60 Lb. Cans	1	2	3	4	5	6	7	8	9
White (per lb.)		.48	.48	.46	.50	.48	.44	.46	.46
Amber (per lb.)		.38	.44	.43	.48	.41	.38	.43	.42
1 lb. jar (case 24)		18.45	19.15		24.00	19.58	18.82	17.75	18.80
2 lb. jar (case 12)		17.50	18.40			19.00	19.10	16.75	17.70
Retail Extracted									
8 oz. jar		.58	.59	.59		.57	.58	.59	.60
1 lb. jar	1.25	1.02	1.10	.97	1.10	1.06	.94	1.05	1.00
2 lb. jar		2.04	2.05	1.83	2.10	1.87	1.87	1.85	1.87
3 lb. jar		2.85		2.79	2.99	2.80		2.93	2.94
5 lb. jar	5.50	4.15	4.65			4.22	4.25	4.66	3.84
16 oz. Comb		1.65			1.45	1.35	1.20	1.50	1.90
12 oz. creamed				.99			.97		1.15

Beeswax — Light \$1.90 — Dark \$1.88

Comments:

Vermont - Cold winter with lots of snow. No bee flights. May have above normal winter loss again.

Rhode Island - Bees in fair condition. Heavy snows.

Pennsylvania - Bee flights overdue and needed.

New York - Many colonies about covered with snow. No flights since late November. Honey sales good in retail stores with no honey priced under \$1.09 in Ithaca area.

New Jersey - Heavy snow. Honey sales good to fair.

Ohio - Bees in good condition. Snow cover heavy.

Indiana - Honey sales slower at retail. Bees consuming more stores than expected, but wintering well despite prolonged cold.

Michigan - Some feeding of bees. Some good flight days.

Illinois - Heavy snows since mid-January with cold temperatures, but bees in good condition. Some feeding.

Wisconsin - Honey sales good. Moisture conditions good.

Minnesota - Heavy snows in early winter and cold temperatures. Retail honey sales good.

North Dakota - Bees in fair shape.

Virginia - Much ice, snow and cold weather. Bees fair.

North Carolina - Very cold temperatures. Bees need cleansing flights.



Florida - Citrus in good condition, promising a nectar flow which would begin about March 1st.

West Virginia - Severe winter with heavy snow cover.

Virginia - Honey selling well. Bees wintering well, but have had only one flight.

Tennessee - Winter kill may be heavy. Temperatures below normal with few cleansing flights.

Alabama - Heavy demand for queens and package bees.

Kentucky - January temperatures well below normal. Very little opportunity to feed colonies and few opportunities for cleansing flights.

Arkansas - Feeding started in late January.

Oklahoma - Bees in fair condition. Snow and below freezing in late January and bees will need feeding.

Texas - Honey sales brisk. Winter feeding in some areas necessary. Need winter rains.

Montana - Local honey in short supply. Unseasonable winter storms and cold have kept bees confined.

Colorado - Most of state has good moisture. Retail sales above normal.

Oregon - Bees in good condition. Retail honey sales good with many odd sized jars showing up on store shelves.

Washington - Retail honey sales only fair. Bees in good condition.

California - Bees are being given extra food due to the drought which had prevailed. Rainfall and moisture conditions are now good.

FLETCHER THE 4-H'ER



"MARY LOU, THAT PRETTY BEEKEEPER FROM THE 4-H CLUB WANTS TO GO STEADY... I DON'T KNOW IF IT'S ME OR MY KNOWLEDGE OF BEEKEEPING SHE'S INTERESTED IN!"

WHOLESALE PRICES
For the Small to Medium Size
BEEKEEPERS

In the past year we have been putting our ideas together and are very excited about what we now have to offer you.

Whether you are already in the beekeeping business or would like to enter, we feel we have the answers. Having raised bees since 1961, we feel we can save you money in your business.

Because of the volume that is required by most manufacturers we are always at the mercy of the retailer if we want more supplies.

With the ever increasing number of small Independent Beekeepers a few investors got together and feel we now can afford the best for a substantial savings.

The FORDHAM BEE SUPPLY INC. offers volume prices without the financial burden. For a minimal investment of \$50.00 that covers one (1) year, \$100.00 for three (3), or \$250.00 for a ten (10) year membership, you will be afforded the opportunity of buying at prices which up until now were only available to commercial beekeepers.

Act now—with the demand for supplies for the coming season you will want to be on the top to receive your equipment from nationally known suppliers.

WE PAY FREIGHT COST.

The Price List below is available NOW!

Simply fill out your order and enclose your check for that amount plus your membership fee, and forward to Fordham Bee Supply, Inc.

9 5/8 supers.	\$4.10	Frames for 9 5/8 supers.	\$.22 each
6 5/8 supers.	3.00	Frames for 6 5/8 supers.	.21 each
5 11/16 supers.	2.65	Frames for 5 11/16 supers.	.21 each

NOTE: All frames have wedge top bar and grooved bottom bar.

When ordering wax for above frames state whether you want crimp, wire, medium brood or Duragilt, and send 60¢ each for deep supers and 58¢ each for shallow supers.

Hive stand	\$2.65	Plastic Div. feeders	\$1.75
Bottom Boards	3.25	(fits inside hive)	
Queen Excluders	3.75	Entrance feeder	.90
(wood bound)		Alexander veil	7.10
Queen Excluders	3.10	Folding veil	7.25
(all metal)		Smoker (4" x 7")	7.00
Inner Covers	1.65	Hive Tool	1.85
Wood cover	4.75	Electric Uncapping Knife	18.50
(flat metal covering)		(operates on 110 AC)	
Terramycin (6.4 oz.)	1.70	First lessons in Beekeeping ...	.50
Sodium Sulfathiazole	1.50	The Hive and	
Fumidil-B	5.85	the Honey Bee	7.50

*NOTE: You may order in any quantity.

Minnesota residents add 4% sales tax.

Manufacturers guarantees will be in full effect with every order.

If there is any item not included in this list, please enclose a request for information on that item.

Thank you,

Fordham Bee Supply, Inc.
13789 Fordham Court
Apple Valley, MN 55124
(612) 432-7835

As a member you will be sent a certificate of membership and an up-to-date Price List at all times.

WE SPECIALIZE IN CYPRESS BEE EQUIPMENT

Commercial Grade Cypress Hive Bodies
and Supers—Rabbeted Joints

	1-5	6-50	Over 50
9 $\frac{5}{8}$	\$4.60	\$4.45	\$4.30
7 $\frac{5}{8}$	4.00	3.85	3.70
6 $\frac{5}{8}$	3.40	3.30	3.15
5 $\frac{3}{4}$	3.15	3.05	2.90

Cypress or Pine Frames	1-100	101-500	Over 500
9 $\frac{5}{8}$, 7 $\frac{1}{4}$, 6 $\frac{1}{4}$, 5 $\frac{3}{4}$	\$.31	\$.27	\$.24

Cypress Hive Parts	1-5	6-50	Over 50
Hive Stands	\$2.55	\$2.45	\$2.35
Bottoms—Rev. Not T&G	2.40	2.35	2.25
Flat Rev. T&G Covers	2.65	2.55	2.50
Inner Cover T&G	2.90	2.80	2.65
Slatted Rack Assembly	2.55	2.45	2.35
Masonite Inner Cover	2.15	2.05	2.00
4 or 5 Frame Nuc Boxes	5.65	5.50	5.35
Bottoms, Rev. T&G	2.65	2.55	2.50
Flat Covers	2.65	2.55	2.50
Tele. Covers W/O Metal	3.00	2.80	2.70
Tele. Covers W Metal	5.00	4.85	4.70
Entrance Reducers	.32	.30	.27

We sell foundation, nails, veils, excluders, smokers and other miscellaneous equipment. 5% discount on orders \$500.00 to \$1,000.00 — 8% discount on orders over \$1,000.00. Write for list. Prices FOB Homerville, Georgia —subject to change without notice.

FORBES & JOHNSTON

CLINCH INDUSTRIAL PARK
P.O. Box 212 Ph: 1-912-487-5410 Homerville, Ga. 31634

BEE-Keepers' Gardens Should BEE



BEE GARDENS

Ask for Free Catalog of

HONEY PLANTS

Trees, bushes, flowers
selected especially for nectar.

ANNUAL BEE GAR- VITEX negundo incisa
DEN, 1 packet seed each "Bee boosting bushes"
of five biennial honey Seed, ounce \$3.00
plants for \$2.50. ¼ pound \$7.00.

GOLDEN HONEY One year plants: 2-3 ft.
PLANT select, 6 for \$12.00;
18-30 inch size, 12 for
Seed, ½ ounce for \$3.00 \$10.00, 50 for \$28.00;
¼ pound \$15.00

VIRGINIA PURPLE
WATERLEAF LOOSESTRIFE
Wet land honey plant.
Honey plant for shade— Seed, ½ ounce \$3.00
Plant divisions, (Many thousands of
3 doz. \$7.00. seeds) ounce \$5.00.
¼ pound \$15.00.

CHIVIRCO
Seed, per ounce \$5.00. ALL POSTPAID

PELLETT GARDENS

Atlantic, Iowa 50022

DISCOUNT BULK BEEKEEPING SUPPLIES

(smaller orders available at regular discount prices)
*AVAILABLE FOR IMMEDIATE SHIPMENT



ECONOMY (Interlocking)
FRAMES—lots of 500,
minimum 500, specify
type and size. Type—
wedge top or center
grooved top bars, bottom
bars, slotted, grooved, or
solid. Size 9 $\frac{5}{8}$, 7 $\frac{1}{8}$, 6 $\frac{1}{4}$
and 5 $\frac{3}{4}$.

500—\$ 95.00 or .19 ea.
1000— 180.00 or .18 ea.
5000— 875.00 or .175 ea.
Ship. wt. 210 lbs. average
per 500 frames.

ECONOMY SUPERS—
minimum 25 supers of
one size.

9 $\frac{5}{8}$ — \$3.50 — 225 lbs.
6 $\frac{5}{8}$ — 2.85 — 150 lbs
5 $\frac{3}{4}$ — 2.85 — 115 lbs.

CEDAR TOPS AND BOTTOMS, MINIMUM
25 tops or bottoms, \$2.85 each — 120 lbs.

**We carry CRIMP WIRED FOUNDATION & A
COMPLETE LINE OF BEEKEEPING SUPPLIES.
FREE Discount Catalog on Request.

Package Bees & Nucs This Spring (Order Now)

Write or Call:

GLORYBEE HONEY

1001½ Terry St., Eugene, Oregon 97402
503-485-1649

A New Book

COMB HONEY PRODUCTION

by

Roger A. Morse

A practical guide for beekeepers and
potential beekeepers who wish to make
this old-fashioned, natural product.

Approximately 100 pages.

Ready for distribution about March 15.

\$7.95 postpaid

(New York Residents add 7% Sales Tax)

from: Wicwas Press

425 Hanshaw Road
Ithaca, NY 14850

POLLEN FOR WINTER AND SPRING BUILD-UP

Stimulate brood rearing in fall to increase the number of young bees going into winter resulting in a greater colony population in spring.

Our pollen is produced in the famous Peace River country of British Columbia, an insecticide-free area.

Our pollen is ground up fine for the convenience of mixing with pollen supplements.

	\$4.50 per pound postpaid
15# pail	3.75 per pound postpaid
30# pail	3.50 per pound postpaid
100-300# drum	2.25 per pound F.O.B. Fort St. John

Write: North Peace Apiaries Ltd.

R. R. #1, Fort St. John, B.C. V1J 4M6 Phone: 604-785-4808

Producing Pollen for Bee Feed and Health Food Since 1962.



BEE BUCKLE in Solid Brass Fit all belts to 1 1/2"

We pour the finest brass into hand-molded sand to cast this unique Bee motif buckle. Hand polished to a gleaming finish, this is the finest hand made buckle available. Our foundry emblem and date on the back certify a life-time of wear and enduring value.

\$15.50 ea. postpaid money back guarantee

☐ Enclosed is my check or money order, RUSH TO:

Name _____

Address _____

City _____ State _____ Zip _____



☐ Please send free brochure of other designs.

ANACORTES BRASS WORKS, Ltd.

P.O. Box 75 Anacortes, WA 98221

"CANADIAN BEEKEEPING"

(The news media of the Canadian Honey Industry)

Box 128, Orono, Ontario, Canada L0B 1M0

1 Year Subscription (12 issues)

Canada & U.S.A. \$7.00

Foreign \$7.00 plus postage

J. H. Arnott, P.Ag., Editor

Please include cheque at par; or money order.

The Australasian Beekeeper

The senior beekeeping journal of the Southern hemisphere provides a complete cover of all beekeeping topics in one of the world's largest honey producing countries. Published monthly by Fender Bros. Pty. Ltd., Box 20, P. O. Maitland, 3N, N.S.W., Australia. Subscription by Bank Draft Australia and New Zealand \$A7.20 per annum (in advance) postpaid. British Isles and British Dominions (other than Australia and New Zealand) and other overseas countries \$A7.80 per annum (in advance) postpaid. Sample copy free on request.

SOUTH AFRICAN BEE JOURNAL

PUBLISHED BI-MONTHLY

Articles of interest from the home of APIS ADANSONII

1 Year - R4.00 2 Years - R7.00

3 Years - R10.00

PAYMENT WITH ORDER TO

THE S. A. BEE JOURNAL

P. O. BOX 48

IRENE 1675, TRANSVAAL, SO. AFRICA



The "HONEYGRAM"...The beekeeper's quick letter. Write your message on the bright yellow "HONEYGRAM", fold and seal it, and you're ready for mailing. Unfolded size: 5-3/4" x 8-1/2".

002 Honeygram: \$3.25 per dozen (Includes Seals)



"HAVE A BEE-UTIFUL DAY" greeting card...the bright green, yellow and orange colors set the cheerful mood and you do the rest. Folded size: 5-1/2" x 4-1/2".

003 Bee-utiful Day: \$3.50 per doz. (Includes Envelopes)

Canada and Mexico Please Send U.S. Currency

ODYSSEY PRODUCTS

ANOTHER EXCLUSIVE From ODYSSEY PRODUCTS



"BEES DO IT NATURE'S WAY"...embroidered black border around a gold and black bee. Bee-utifully set against a white background. Patch is 3" in diameter and made to last! Sew one on your favorite jacket, shirt and hat...even one on your child's jeans. Bet you can't buy just one.

004 Bee Patch: \$2.50 each

P. O. Box 543, Wetumpka, AL 36092

COBANA[®] ROUND SECTIONS

The ROUND SECTION, manufactured only by the HAPPY HIVE[®], is truly a remarkable invention. It not only saves you time and money, but allows you to produce a product appealing to the general public with a handsome return on investment. There are no wood boxes to assemble or break, make square, or coat with paraffin. The plastic rings are inserted into the ring holder and that's it. It usually takes only 15 minutes to have a Cobana Super ready for the hive, our new supplemental catalog is packed with information on how to produce round sections. WRITE FOR A FREE COPY TODAY.

In addition to the Cobana Line, we are producing the "COLLINS FEEDER". This feeder is perhaps one of the easiest ways to feed bees. Other items that we carry are Follower Boards, Insulite Boards and Gifts. Our new 1978 Supplemental Catalog has it all.

DEALER AND COMMERCIAL BEEKEEPERS WRITE FOR TERMS AND CONDITIONS.

ALSO CONTACT YOUR LOCAL DEALER. HE SHOULD HAVE THE COBANA EQUIPMENT IN STOCK BY NOW!

The Happy Hive[®]



4476 Tulane
Dearborn Hts., Michigan
48125 U.S.A.
Phone: 313-562-3610



Charge your order on Master Charge
or BankAmericard



Business Hours - 6 p.m.-10 p.m.

NEW!

A TOTALLY NEW CONCEPT IN MOLDED FRAMES

- * USES STANDARD BEESWAX FOUNDATION
- * FAST ASSEMBLY WITH NO TOOLS OR JIGS
- * EASY TO REPAIR
- * EASY TO CROSS WIRE
- * MOST ECONOMICAL MOLDED FRAME PRODUCED

Want to know more? Write to us for prices and more information.

Samples will be available after May 1st. Residents of the United States and the Continental United States send \$2.00 for each sample postpaid. Canada — \$3.00. All other countries send \$6.00 as samples must be air mailed.



17300 AVENUE 324
VISALIA, CALIFORNIA 93277
209-798-1495



Look To Maxant

For the Finest In Honey Processing Equipment

Extractors — 8 Sizes (5 Power and 3 Hand)
Bottling Tanks — 3 Sizes
Clarifiers — 3 Sizes
Capping Spinners — 2 Sizes
Un-capping Trays — 2 Sizes
Filters — 3 Sizes
Pumps — Float Switches — Sump Tanks
Storage Tanks — Wax Melters, 2 Sizes
Gates — Bottling Valves — Hive Tools
Also offering the Revolutionary, High Productive
MAXANT-MRAZ Uncapper
Write for detailed catalogue.
Include 50¢ for postage

MAXANT INDUSTRIES

P. O. Box 454 Ayer, Mass. 01432
Telephone: 617-772-0576

Motorized UNCAPPER



New!

Semi-Automatic
CHAIN
UNCAPPER

at a price
you can afford

only \$495.00

F.O.B. MASS.

SAFE! NO KNIVES!
CONVENIENT! NO STEAM!
FAST! 10 SECONDS!
100% RUSTPROOFED!

Order Early—Limited No. Available for 1978

MAXANT INDUSTRIES, INC.

P.O. Box 454 Ayer, Mass. 01432

Superbee, Inc.

Early Spring Special

95% super, select clear pine \$3.50
65% super, select clear pine 2.95

Finest quality No. 1 Frames,
lock-joint top bar with tapered
ends, \$19.00 per 100

Flat top boards and bottom
boards, tongue and grooved,
clear pine, \$2.45

Inflation Fighter No. 2 Frames,
grooved top, solid bottom,
only \$15.00 per 100

Prices good while supply lasts.

Order from this ad.

Superbee, Inc.

822 S. 4th St. Montrose, CO 81401
Phone: 303-249-4666

"Beekeeping and Honey Production" Correspondence Course

Over 625 letters of inquiry.
Excellent enrollment.

Free Brochure

Inquire **SUNSHINE APIARIES**

500 Woodland Drive
ARNOLD, NEBRASKA 69120

IRISH BEEKEEPING

Read An Beachaíre (The Irish Beekeeper).
Published monthly. Subscription \$5.50
per annum post free.

JAMES J. DORAN
St. Jude's Mooncoin Waterford, Ireland

HIVE TOOLS

New Style! RUST PROOF!
9½" Long — Great Leverage!
Two sharpened sides for scraping.
Hook end for prying out frames.



Only \$3.85

STANDARD TOOLS



10" \$2.50 7" \$2.25
Add 50¢ to any order for postage
if not at your local dealer.

MAXANT INDUSTRIES, INC.
P.O. Box 454 Ayer, Mass. 01432



COMB CLEANER

(See Research Review, in Jan. Gleanings.)

Melting up old combs and replacing them
with new foundation costs you time and
money, at least \$5 per super, just for the
honey used to make the new wax!

Recycle those old but sound combs with
COMB CLEANER* for only pennies
each—Saves you work, time & MONEY.

At your dealers now, buy early so your
combs are ready when the bees are!

*A quality product of Winona Research,
Inc. Dealer inquiries invited.

P.O. BOX 866 WINONA, MN 55987

STOLLER

FRAME SPACERS

PROVED AND
APPROVED



This is the time of the year that we can reflect back on last season, and try to increase our production, and lower our costs. One of the ways many producers are doing this is by using our frame spacers. Contact your local bee supply dealer, as they are handled by dealers everywhere.

Support the American Beekeeping Federation by your attendance at the meeting in Orlando this month, and take in Disney World at the same time.



Stoller Honey Farms, Inc.

LATTY, OHIO 45855

For good

results

try a

Classified

Ad

in

Gleanings

REDUCE YOUR COST! MANUFACTURE YOUR OWN

Equipment at cost of lumber and your time. New book covers 29 major beekeeping items.

\$8.50 postpaid in USA



2nd printing hardbound
"Let's Build a BEE HIVE"
by Wilbert R. Miller
92 pages 8 1/2 x 11 of Plans
Details and Illustrations
for ALL the beekeeping
equipment.

Wilbert R. Miller

2028-G W. Sherman St., Phoenix, Az. 85009

PACKAGE BEES & BEE SUPPLIES

Attention beekeepers and friends! Send for Alderman's new catalog of Bee Supplies and Discount prices to large orders. Also beekeepers pick up supplies at M-21 Imlay City Rd., Mich. Ladies can shop at big Antique and Flea Market while men shop for bee supplies. Order now your packages of bees to be picked up in April. Must order early February, March, for bees. White pine wood supplies and everything you want for good '78 beekeeping. We are here to give you good service.

ALDERMAN - Mfg. of
BEE SUPPLIES-BEES & HONEY
FLEA MARKET-ANTIQUE STORE

ATHLETE'S FOOT RELIEF

ATHLETE'S FOOT CAN BE CHECKED
IN LESS THAN A WEEK

After you bathe, shower, or bathe your feet, apply liquid ointment between your toes, rub well and pull on socks, or apply at bedtime. Apply a fresh supply each morning and evening for a week. You will notice the healing effects in a week. Use once a week thereafter. Use for jock and hemorrhoid itch.

Price: \$2.50 P.P. per bottle. Price subject to change without notice.

Write: ALEX

P.O. BOX A-308 FAIRFIELD, CT. 06430

MIDWESTERN HIVE, INC.

1527 East 26th Street
Minneapolis, Minnesota 55404

- A complete line of beekeeping equipment and supplies
- Maxant honey processing equipment
- Package bees

Write for our free catalog

E-Z HIVE LIFTER

LIFT OR CARRY HEAVY
SUPERS OR 2-STORY
BEEHIVES THE EAZY WAY.
SIMPLE TO OPERATE.

\$18.00 Shipping Wt. 8 Lbs.

PRAIRIE VIEW HONEY CO.

12303 Twelfth St., Detroit, Mich. 48206

CAR TAG \$2.50 ea.

Bee



Keeper

G & H BEE SUPPLY
723 MARTIN DRIVE
FORT SMITH, ARKANSAS 72903

DO YOU WANT FREE BEES?

Capture your own free bees using the exciting age-old art of bee hunting. Our kit improves and simplifies this old-time method. Includes a beautiful hand-crafted birch-veneered bee hunting box, plus scientifically tested bee attracting scent with applicator and easy to follow directions.

Only \$10.95 postpaid

JURICA APIARIES

325 Wells Street Johnstown, NY 12095

TOP QUALITY WOODENWARE

ESCAPE BOARD \$5.95
HIVE-TOP FEEDER \$5.95
VENTED HIVE MOVER \$7.50

- MORE -

FULLY ASSEMBLED
POSTPAID

send for free brochure

Edinburgh Bee Supply

1522 Edinburgh Drive
Tucker, Georgia 30084
Dealer Inquiries Invited

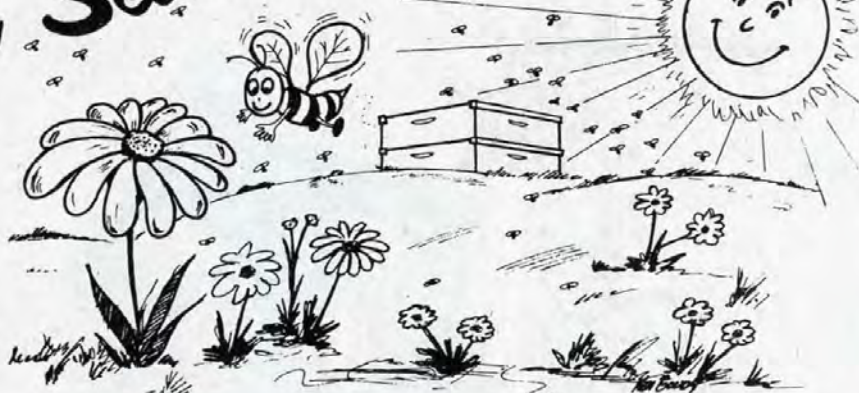
THE AMERICAN RACING PIGEON NEWS

Contains articles on loft management, training, etc.; club news; advertising or leading American fanciers for obtaining stock. Single copy \$1.50. 25¢ extra postage for Canada and Foreign.

Rates: 1 Yr. \$10; 2 Yrs. \$20; 3 Yrs. \$30
Canada & Foreign* extra \$1.50; \$3; \$4.50
*Foreign AIR MAIL Post.-Add \$20 per yr.
Minimum subs. term-1 yr. (11 issues)
2421 Old Arch Rd. (B)
Norristown, Pa. 19401

Another Bee Season

IS HERE



ORDER NOW!

**TO ASSURE
PROMPT DELIVERY!**

**We Have Quality Bee Supplies
at DISCOUNT PRICES!**

PRECISION FRAMES

All frames cut from clear pine lumber.
End bars are a full 3/8" thick and
are drilled to receive wire.

Wedge Top Bar • Grooved Bottom Bar

CAT NO.

W-21-W	9-1/8
W-22-W	6-1/4
W-23-W	5-3/8

Grooved Top Bar • Solid Bottom Bar

CAT NO.

W-21-S	9-1/8
W-22-S	6-1/4
W-23-S	5-3/8

1000 for 197.50 shipping wt. 450 lbs.

100 for 22.75 shipping wt. 41 lbs.

NEW

with wedge top bar grooved bottom bar.
Top bar has special interlocking feature
allows extra gluing surface to the end bar.

W-21-E	9-1/8
W-22-E	6-1/4
W-23-E	5-3/8

1000 for 217.50 shipping wt. 400 lbs.

100 for 24.75 shipping wt. 41 lbs.

**THE ELITE
FRAME**

All prices F.O.B. our warehouse. Small orders (under 100 lbs.)
shipped via U.P.S. Please enclose shipping charges. Orders over
100 lbs. shipped via a commercial carrier freight collect.

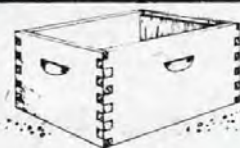
WE OFFER A FULL LINE OF BEE SUPPLIES

Be sure to ask for our FREE catalog!



Strauser

BEE SUPPLY BOX 991 • WALLA WALLA • WASHINGTON 99362



SUPERS

Commercial grade—these will have
tight knots—no knot is closer than 1"
to corner. 10-frame—precision cut
from white pine lumber.

3/4" Deep Rabbit Rests

CAT NO.

W-11	9-5/8" lots of 10—3.50 ea. shipping wt. 85 lbs.
W-110	9-5/8" lots of 100—3.25 ea. shipping wt. 930 lbs.
W-12	6-5/8" lots of 10—2.05 ea. shipping wt. 29 lbs.
W-120	6-5/8" lots of 100—1.85 ea. shipping wt. 600 lbs.
W-13	5-11/16" lots of 10—2.05 ea. shipping wt. 25 lbs.
W-130	5-11/16" lots of 100—1.85 ea. shipping wt. 500 lbs.

BE SURE TO ORDER BY CATALOG NUMBER



Fast Shipments

E. F. Phillips---Who Was He?

By GRANT D. MORSE, PH.D.
Saugerties, N.Y.

Among Beekeeping's Great

There can be but one Michelangelo, one Homer, one Langstroth. But society has need of many such men as Everett Franklin Phillips, an outstanding exponent of scientific beekeeping in America.

From June of 1905 when he joined the Bureau of Entomology, U.S. Department of Agriculture in Washington, D.C., to 1951 when he died after being professor of apiculture at Cornell University since 1924, he was a driving force in the development of the beekeeping industry in this country.

During his working years he made his contribution to several new departures in beekeeping, chief among them being the following: an increase in the commercial use of honeybees for pollination purposes; a solution for good wintering practice; large scale production of liquid honey (rather than comb honey); the development of extension work to help all beekeepers, particularly the small ones, improve their practices in such a way as to avoid the spreading of bee diseases; and the use of standard size equipment.

His biographer, his wife, the talented Mary Geisler Phillips, quotes a resolution by the Cornell faculty at the time of his retirement in which it was said of him: "It is common knowledge among men engaged in the beekeeping industry that he will go down in the records of history as the greatest scientific apiculturist of his time."

Everett Franklin Phillips was born on November 14, 1878 in Hannibal, Ohio, the son of a Methodist minister. His father was the son of a Welshman who migrated to America in the 17th century.

Phillips was irked by the restrictive life that was demanded of a preacher's son. He hated being constantly scrutinized by his father's parishioners who, he felt, were looking for some sin in him.

Nevertheless, his father was highly regarded by his flock, and by the members of the community. Phillips' education in the local public schools was enjoyed by him and was highly successful. He went to high school in Cleveland, Ohio, graduating in 1896. His high marks there earned him a scholarship at Allegheny College, Meadville, Pa. His father had previously earned a Ph.D. degree at that institution. Phillips had good ancestry. Apples don't fall far from the tree.

During his first eighteen years of life, Phillips was disturbed by what he



Dr. E.F. Phillips.



E.F. Phillips was a teacher with a broad knowledge of beekeeping. Here he tells WW I veterans about bees.

regarded as a great chasm between the righteous attitudes of churchgoers on Sunday, and their behavior during the rest of the week. The politics of the church bothered him too. When Darwin's *Origin of Species*, which had burst upon the world some years before Phillips' birth, was studied by him, he was unable to reconcile the tenets of his religion with the principles of science pronounced by Darwin. Nor, says his biographer, did he try to reconcile them.

This writer wishes to pause in this relating of a few of the facts in the life of Everett Franklin Phillips, to say that in all of the science he has studied, and in all of the religious teaching he has experienced, he sees no valid reason for religion and science to be at odds. There is no single good reason to suggest that God in His omniscience is disinclined to use all of the facts of science, along with all other knowledge He possesses, to accomplish His work. Nor, he believes, should any teacher of science ever indulge in trying to instruct his pupils that the two are

irreconcilable or incompatible. On the contrary, God is doubtless the greatest scientist in the universe.

In his mature years, as a consequence of his relationship with a church, or lack of it, Phillips clung to a code of ethics which emphasized honesty. He detested a liar, and was, perhaps almost too zealous at times in imputing dishonesty to his adversaries.

As his biographer says, "Since he loved a good fight, his zest and enthusiasm for a cause knew no bounds."

Upon graduation from Allegheny, Phillips began work for the doctorate at the University of Pennsylvania where he was induced to study the compound eye of the bee. For this work he needed a supply of bees so he was provided a hive of honeybees.

From this brand new experience his subsequent dominating interest in beekeeping sprang. He subscribed to *Gleanings in Bee Culture* published by A. I. Root Co., Medina, Ohio. There Phillips went to learn about bees in the Root apiaries. From this experience an intimate relationship with the members of the Root family was built.

In 1905 he was granted his Ph.D. degree from the University of Pennsylvania and was straightway offered a position with the Bureau of Entomology in Washington, D.C. His title was "Acting in Charge of Apiculture". Here he remained for nineteen years where he was charged with building an organization for research for the benefit of beekeeping.

His training had been in zoology, not entomology. In order to help establish himself in the estimate of U.S. beekeepers he wrote and published during his first year a Government bulletin titled, "The Rearing of Queens". He had learned the fundamentals of the process during his summer at Roots in Medina.

At the U.S. Department of Agriculture, Phillips found beekeepers asking for "practical" information which he was willing to supply. But the real need of the industry, he believed, was more knowledge in the scientific field, for example, information about bee diseases.

Dr. Phillips in 1907 (two years after going to Washington) was promoted to the position of "Apicultural Expert in Charge of Apiculture".

The subjects he believed needed priority were:

1. Importation and breeding of various races of honeybees.
2. A study of the distribution of honey-producing plants.
3. Investigations on bee diseases.
4. Investigations on insect enemies of bees.

A bacteriologist was added to Phillips' staff at his request. An attack was launched on the secrets of bee diseases. It was straightway found out that EFB and Nosema were milder and less insidious diseases than AFB—a fact that had not been universally known previously.

At this time he wrote Farmers' Bulletin No. 442 on bee disease known at the time: The Brood Diseases of Bees, circular No. 79, Bureau of Animal Industry.

As far back as 1881 some unscrupulous beekeepers were adulterating their honey with cheaper glucose. Dr. Phillips participated in securing the enactment of The Hepburn Pure Food Bill outlawing such adulteration.

By 1909 Phillips' staff in the Department of Apiculture in Washington numbered four researchers.

In 1912 George Demuth joined Phillips' staff so that they might together study the problem of wintering bees. They approached a solution by studying the actual behavior of the bees during the winter season. In 1913 they enthusiastically announced the discovery of the fact that honeybees form a cluster when the temperature drops to 57 degrees F.

Previous to this time most colonies of bees in the northern part of this country were kept in cellars during the winter. From 1912 to 1918 several bulletins on wintering were published by Phillips.

On April 2, 1917, the United States declared war on Germany. Sugar became scarce. Phillips urged beekeepers to abandon the production of comb honey, at least temporarily, and concentrate on giving the public liquid honey to help ease the sugar shortage.

As part of this effort, Phillips brought 3-4 of the leading beekeepers of each State

of the Union to Washington for extensive training on this subject, then sent them home to disseminate the needed information.

This practice of training a few leaders, then sending them out to instruct others, led to the policy of Extension Work in Beekeeping. The first man to be employed as a specialist in the Extension Service was George H. Rea, a Pennsylvania beekeeper who began in South Carolina and was later transferred to New York State. (I recall hearing Mr. Rea and was impressed with his effectiveness as an "Extensionist".)

During the war, honey production increased by 400 percent, and the era of liquid honey was upon us. It has not left, nor is it likely to do so.

At about this time Phillips began to feel the pressures of his position at Washington. His tendency to "drive" his co-workers may have induced part of his feeling of pressure.

Anyway, in December of 1924 Phillips had an opportunity to go to Cornell University at Ithaca, N.Y. to join the faculty of entomology, there to teach apiculture. He went with enthusiasm. He was replaced at the Department in Washington by W.I. Hambleton.

In December of 1924 Phillips gave his first short course of a week for beekeepers of the State. E.R. Root participated by giving a talk to the group.

At about this time Phillips conceived the idea of establishing an outstanding library on beekeeping at Cornell. He realized his ambition in this matter when the E. F. Phillips Beekeeping Library was established at the University as part of the Mann Library at Cornell. The A.I. Root Company turned over many old books and bee journals to the new Phillips library.

Phillips liked to travel. In 1926 he went to Europe accompanied by Mrs. Phillips. She was by now a well recognized author in her own right, having published several books about bees and other animals, all of a relatively non-scientific nature, though she was quite knowledgeable in the field of entomology.

They visited several authorities in beekeeping in different countries: Switzerland, France, England, Scotland. An account of their trip was published in *Gleanings in Bee Culture*.

In October of 1925 Phillips reported to A. I. Root that the accessions by gift to the Beekeeping Library numbered 1,050, and donors numbered 69.

About now the program of his directing graduate students at Cornell became heavy. Men came from different parts of the world to study at Cornell: E.J. Dyce from Canada; Sardor Singh from India;

A.E. Lundie from South Africa; George Athens from Cyprus, among others. Later came Virgil Argo, Everett Oertel, A.P. Sturtevant, Ralph L. Parker. Also, J.A. Munro, A.C. Gould, W.E. Dunham, Burl A. Slocum and others.

Following the war and the coming on of the great depression, the honey market fell to a low ebb. Phillips became interested in researching important science subjects that included: the nature of beeswax; the efficiency of electrically heated uncapping knives; the contents of the ash in honey; comb honey grading; records of recurrence of foulbrood in New York State; honey grades; federal inspection of apiaries for disease; and others.

In 1928 Phillips became intrigued with an interest in Rotary International which is perhaps today the foremost service organization in the world. He joined the Rotary Club of Ithaca, N.Y. Rotary became almost a substitute for church in Phillips' life. He rose to high levels of office in that service organization, both nationally and internationally.

In 1929 the great financial crash occurred in this country. Phillips was affected as was almost everyone else in the land.

The year 1940 saw the formation of a honey packing cooperative at Groton, N.Y., not too far from Ithaca. Dr. E. J. Dyce, one of Phillips' graduate students, who had discovered how to process honey by the crystallization method, joined the Cornell apiculture faculty in 1942. Later he would succeed Phillips in his Cornell faculty position.

After six years at Cornell, Phillips was entitled to a sabbatical year leave for study. Russia offered him a trip to that country with expenses paid to advise them on beekeeping for the second Five-Year Plan. He and Mrs. Phillips went, traveling first through Germany, Austria and Yugoslavia where they had many friends in the industry of beekeeping. In Russia he lectured extensively through the services of an interpreter.

During the last ten years of his life, Phillips lived to the full, the interests that had long been with him. He corresponded extensively with leaders in the industry throughout the world. Rotary was a source of great satisfaction to him, partially, perhaps, for reasons we have previously recited. He continued to be active in Rotary circles. So far as he could, he traveled extensively. At Cornell he continued to direct the research being carried on there.

All his life Phillips had been a heavy cigarette smoker. This aggravated his respiratory afflictions which included asthma. Eventually he developed lung cancer. Finally, on August 21, 1951 he died.

(Continued on page 130)

Memories Of Bee Inspection In The Thirties And Forties

By N. EUGENE SHOEMAKER
Red Lion, Pa.

Part II

HAVING SPENT SEVERAL summers as one of the bee inspectors in Pennsylvania and having enjoyed nearly every minute of it, I annually awaited word from the Dept. of Agriculture affirming my reappointment. During the late winter of each year a letter from the Department of Agriculture would inform me that they would be happy to have my services as a bee inspector again and if I chose to sign up to do the work I needed to inform them by a given date, and take the necessary steps to insure that everything was in order. Naturally my answer was always in the affirmative.

At the approach of spring, as the weather got warmer, the children in my biology classes would get restless and long to be in the out-of-doors. We did go on field trips and sometimes class was held outside on the lawn. There were object lessons all around us everywhere we went and, although our outside classes eased the situation, it was always the same near the end of the school year. My glass observation beehive in the window of the schoolroom was of great interest to the children, but it served to make me wish I could spend more time at my hobby of beekeeping. It was time for school to be out.

Although I loved the children and the schoolroom, I also thoroughly enjoyed my work as a bee inspector. It was good for my health to be in the out-of-doors all summer after being cooped up all winter. It was good for my financial standing and very necessary since my teacher's salary, which was paid on a nine month basis, was not so very large.

In due time the Pennsylvania Chief Apiculturist would call together all of the old experienced and newly appointed men who would be the bee inspectors for the summer. This was a most enjoyable get-together of fellows who had a lot in common. The experienced inspectors, in addition to their friendship with each other, knew many of the beekeepers, not only from their work, but also through beekeeper association meetings. Each of the men had much to tell and the time was always too short for us to complete our visit. Not only did we exchange experiences, but the chief gave us our first assignments for the summer's work. It was the custom to give each man a county to work and instructions to work a township at a time until the county was completed.

The first move in the county was to visit the County Farm Agent and seek his cooperation. Many times we received very valuable assistance. Usually, the Farm Agent would let it be known that we were to be expected to visit the beekeepers and this in itself was helpful.

This spring day I waited patiently for my assignment and received none when the rest were handed out. I felt left out and somewhat disappointed, and when finally the meeting was over, the chief said my assignment was to go with him. This was all I learned until we were on our way, and then he told me we were going to inspect the queen breeding apiaries of the State. My feelings now changed from disappointment to delight. Now, I should see beekeeping at its best.

Raising queen bees requires some real "know how" and to be able to see these apiaries, and talk to and learn from the men that operated them, put me in seventh heaven. Indeed, I did see beekeeping at its best. Nice gentle bees, nice white painted hives and combs on frames that worked easily, just as I expected, and beekeepers from whom one could learn in all the apiaries that we visited, made the work very pleasant. It would have pleased me if this assignment would have lasted longer, but we soon finished with it and upon returning to the office I was given a county assignment just as I had expected in the beginning. Only there were certain differences that I was to find out after I arrived in the county. It appears that one of the new men had been in the county and found bee inspection was not to his liking.

My first day in the county started with a flat tire. After putting on the spare, I went to the garage to get the flat patched and the conversation I overheard was about my predecessor in the county. One chap said that the bees drove the bee inspector off, and another said he had to help reassemble the hives for the young man couldn't handle the bees, and there was a tale about how the bee inspector put his head in the watering trough to get rid of the bees. One chap boasted that he couldn't wait until this young fool came to his place, because he knew his bees would sting the so-and-so to death. All these things I heard, and knew that I had to deal with hostile beekeepers, not hostile bees. I don't believe they knew I heard their conversation, and I was sure they didn't know me. After a time I

approached the beekeeper who had boasted that his bees would sting the bee inspector to death, and made arrangements to inspect his apiary that afternoon.

Now I knew the boss had not known the situation he had sent me into or he would have forewarned me. I also knew that unless the word got around that I could handle the bees, I would have difficulty with the beekeepers wherever I went. What should I do to make things work out for me? At least I now knew the problem and on the way out to the apiary with the "killer bees" my mind was at work and I couldn't see a solution. Finally, I decided the best I could do was to put on a good show with the so-called savage bees that were to make short work of me.

It was a beautiful day with hot sunshine and a good honey flow in progress. My clothing was clean and I had on a white shirt. I had long since learned that bees seldom attack clean white clothing, and that a good beekeeper keeps himself free of odors if he wishes to avoid stings. I had a supply of dry, punky, rotten apple wood to be used as fuel for my smoker, and I decided I was ready for the test if indeed there was to be one.

The beekeeper met me with a chuckle and as we approached the bees, I discovered that although I had taken great pains with the lighting of my smoker I had inadvertently left my veil in the car. Should I return to the car for the veil or see how far I could stretch my luck? I hated to go back and show my forgetfulness, so I went right ahead.

The bees had filled their supers and were hanging down in the front of the hives crowded out so to speak. I scooped up a handful, admired them, and tossed them into the air and then carefully proceeded to use the smoker and examine the bees in the first hive. Everything went so well that soon I had completed nearly all twelve of his colonies.

The beekeeper had retreated when I picked up the bees in my hand and now was slowly coming back to join me, and as I remarked to him that if the honey flow continued he certainly needed more supers, he had gotten around in front of the hives. The hives were so close together that you could only work them from the front or back, and I was about to tell him that the back of the hives is a

much better way of approach, when sure enough at least one of the bees decided he was an intruder and would do something about it. I tried not to make much of this incident or even to smile as he retreated again, and it wasn't until I had finished my job of inspection and was writing up the report that he reappeared with something white smeared over the area to the side of his eye where he had been stung.

Of course, I told him he had nice bees and that everything was in good order except maybe he should give them some more room and then departed. Now it came to me that since I put on a good show I should give the folks in the area a little time to talk about it, so I went to the far side of the county where my

predecessor had not been and began to routinely inspect the bees.

Each evening I returned to the county seat where I stayed at the hotel. One of these evenings after dinner as I rested in a comfortable chair on the big front porch of the hotel, the hotel proprietor came to me and said, "Are you the bee 'wizard'?" Of course, I said I was no wizard, but he said that is what everyone was saying about me. He told me they were saying that I used magic and folks didn't understand why one man got driven off by the bees while I could do anything with the bees and not get stung. This, of course, wasn't all true. I did get stung once in a while, only I didn't let people know about it if I could avoid it.

Apparently as the tale was told over and over about my "super-human" relationship with bees it grew with the telling.

My work now went smoothly and everyone wanted to see me work when I got to their place. As a matter of fact, some places I had quite an audience and I found that maybe I was some kind of celebrity in their minds. I can't imagine how they explained that I always wore a veil well secured over my head. (Anyone who works bees is very foolish to risk getting stung in the face by not wearing a veil, because there are conditions beyond your control under which bees will be mean.) At any rate, what might have turned out to be a bad trip, became a memorable experience with people and bees.

The ABF Meeting in Florida

THE PROMISE of warm weather attracted approximately 1,000 registrants, which is the largest attendance ever at an American Beekeeping Federation Convention. The weather was balmy the first day, then cooled off the rest of the week but certainly was no comparison with the icebound Northeast, which delayed the return of many.

Resisting the temptation to remain outdoors in the first few days of Florida sunshine, beekeepers from around the country, Mexico and Canada gathered in the spacious auditorium of the Hyatt Regency for the formal program. A routine formal program? Hardly, what with panel groups, scientists, honey producers, bee and queen breeders, packers and supply manufacturers in the various time spots no phase of the bee industry was neglected. Although the American Beekeeping Federation meeting is oriented to commercial beekeeping there were announcements about the activities of the predominately hobby organizations such as the E.A.S. and W.A.S. Not only was there a formal program but there was a more or less continuous series of discussion groups going on outside the meeting rooms in the corridors, the lobbies and in private rooms. A beekeeper from California, in a typical small gathering would be speaking optimistically of a broken drought and moving bees into the almond groves for pollination, a Minnesota beekeeper, concerned about winter-related problems comments about the blizzard raging through his state even as he enjoys the temporary respite in Orlando. A Florida beekeeper, with tongue in cheek speaks of encouraging signs for a good crop of citrus honey, perhaps the first in several years. A queen and package producer listens intently, gauging from what he hears what his work load is likely to be the next few months. Small knots of people gather spontaneously as friend greets



Robert Ray (left) reelected president of the American Beekeeping Federation confers with newly elected Honey Indus-

try Council President Howard Foster of Calif. (center) and new ABF vice president G.C. Walker Jr. of Texas.

friend, old acquaintances renewed and new ones begun.

Meanwhile, back at the auditorium we enter to see a panel seated to discuss their winter bee losses during the winter of 1976-77. Jon MacDonald of New York and Ray Montague of Michigan, two beekeepers hit by severe winter participated. MacDonald illustrated with slides his winter preparations in New York State. Ray Montague estimated his losses at about 700 colonies, having been caught unprepared by the severity of the Michigan winter and improperly ripened stores from the previous fall. He no doubt expressed the sentiment of many northern beekeepers when he vowed to devote more attention to wintering his colonies. P.A. Yelverton of Mississippi and Homer Park of California enumerated the steps taken by queen and package producers to supply the demand for replacement bees.

Agricultural research stations doing bee research were reviewed by director Dr.

E.C. Martin. New programs and assignments were described by Dr. Martin at the various stations: bee genetics at Baton Rouge, nutrition and disease studies at Beltsville, pollination at Madison, pesticide work at Laramie and various beekeeping related research at Tucson. Problems, such as finding a satisfactory pollen substitute, a bee repellent to be used with toxic sprays to prevent heavy bee kill, a cure for chalkbrood and a satisfactory substitute for cyanogas were problems which remain to be solved said Dr. Martin. Programs showing positive results have not been lacking; bee breeding and pollination studies, ETO fumigation techniques and nutrition studies show promise of having a direct application to many beekeeping problems with which commercial beekeepers are concerned today.

American honey producers are aware that marketing and production in the countries sharing a common border with the United States have a profound effect

on beekeeping in the United States. Gerald Paradise of Canada brought a report from the Canadian Honey Council and Senor Alberto Wuggetzer described the labor-intensive methods used in running the large beekeeping operation of Meil Carlota in Mexico.

What is the role of the bee journals in America? Troy Fore, Jr., editor of *Speedy Bee* gave a short report on the history of several of the current journals and outlined the primary field of influence of each.

New beekeeping films, shown by Dr. Norman Gary of the University of California, Davis were enthusiastically received judging by the applause following their showing.

A queen raising program by the Kona Queen Company was the topic of a slide-talk by Roy Weaver, Jr. Beautiful scenery surrounds the queen rearing sites on the Island of Hawaii. Mr. Weaver said the challenge of producing bees and queens in Hawaii, the advantages of having an early season production and having a genetic reserve that can be maintained influenced their selection of the island site.

"In unity there is strength" was the theme of President of ABF Robert Ray during his report on the status of cooperation among various elements of the bee industry. He suggested that problems that plague the industry may well be settled by compromise and cooperation where deadlocks threaten to prevent any agreement and action whatsoever.

A Friday morning program held the interest of all until the noon dismissal for lunch. Dr. Larry Connor of Genetic Systems, Inc., described their queen rearing facility where artificial insemination replaced natural mating of the production queens. Joe Moffett of the Tucson Laboratory told of several systems developed at the bee experiment facility to prevent excessive bee loss from insecticide spraying.

The American Honey Queen contest drew contestants from 12 states, making the decision of the judges very difficult. When the envelope was opened at the Coronation Ball, South Dakota's Gloriann Glawe, the daughter of a beekeeping family in Sioux Falls had won. Gloriann is a graduate of Nettleton College where she majored in Fashion Merchandising. The first runner-up was Michigan's Lynn Hoopingarner. The second runner-up was Kim Weatherholt from Indiana and Maureen Reeder, the Minnesota queen, was chosen Miss Cordiality.

At the business session on Friday the 27th resolutions passed, excluding the usual "Thank you" type, started with the 3rd resolution which dealt with the problem of Dr. White's retirement and



Dr. Frank Robinson (left) has been appointed Sec. Treas. of the ABF upon the retirement of Robert Banker (right) from the position. Banker has served the

bee industry for many years. In addition to having been Pres. and Sec. Treas. of the ABF, he has also long been active as Vice President of Apimondia.



Dr. Jonathon White Jr. (left) is presented a plaque in recognition for his work in honey research over the years. Dr. White and his colleagues at the Eastern Regional Research Laboratory recently developed tests that can be used in prosecuting honey adulteration even when sophisticated high-fructose corn syrups are used.

Presenting the award is past president of the Honey Industry Council, Jim Powers, who along with the ABF and NHP and DA was responsible for raising the over \$100,000 Honey Defense Fund for research and legal counsel to fight honey adulteration.

the question of future funding for honey research at the Eastern Regional Research Laboratory in Philadelphia. A study is presently being conducted by the Carter administration as to the necessity of government funded research of this type. This resolution asked for the continuation of this program.

The U.S. Postal Service no longer insures package bees for delivery beyond the 4th zone and will not accept them for air mail shipment. The convention urged reinstatement of the practice of insuring packages anywhere in the continental United States and accepting them for air mail.

In concern for the large quantities of honey being imported into the United

States, the officers and members were urged to continue to work on obtaining import quotas and/or duties.

On the question of the indemnification law, the Department of Agriculture was requested to raise the indemnification rate due to inflation over the years and restore the category of "moderate damage". In addition they urged a change in the regulations on inspection to take into consideration the effects of encapsulated pesticides. ASCS was also asked to extend the early cut off date of October 1 because many areas of the country have continued bee activity after that date. Since there have been some alleged abuses and misuse of the indemnification program, beekeepers were urged to be circumspect in their use of the program.

GLEANINGS IN BEE CULTURE

In an effort to reduce the incidence of Nosema disease, beekeepers over the country were asked to feed Fumadil-B.

Government agencies were requested to refrain from encouraging, supporting or participating in programs that would control or eradicate valuable bee forage plants in the U.S. The Secretary of Agriculture was urged to reinstate the Honey Loan Program for 1978 and to support honey at 90% of parity.

Highway departments were asked not to cut the roadsides lower than 6 inches and to use honey plants for ground cover.

In view of the fact that it looks as if there will be some "set-aside acreage" this year to reduce over production of grains in the United States, the convention requested the planting of legumes as cover crops in this acreage.

The supervisors of scientists engaged in bee and/or honey research were asked to place less emphasis on basic research and more emphasis on research aimed at helping to solve the industry's present day problems.

Senator Hubert H. Humphrey was recognized for his help on industry legislative problems.

It was urgently requested that research be conducted to determine the effectiveness and practicality of alternate methods of controlling the wax moth involving genetic alterations by radiation technique.

The USDA was asked to employ an extension apiculturist as quickly as possible.

The Executive Board was asked to proceed to draw up and introduce legislation patterned after the National Wool Act for the relief of the Honey Industry.

The Economic Research Service of the USDA was encouraged to initiate a study to determine the true relationship that the honeybee has to all phases of agriculture and how continued use of the new encapsulated formulation of pesticides can affect this relationship. It was also felt that insecticide formulators should be required to provide an impact study of the effects their new pesticides have on honeybees and other beneficial insects.

The bee Bio-Environmental Laboratory in Beltsville, Maryland, was requested to develop the "data packages" required to obtain label registration for Sulfathiazole as well as other registered chemical bee disease treatments, as they may be required.

The Federation has taken an official position opposing all mass media presentations such as "The Swarm", produced by Universal Studios, which portray the honeybee as an undesirable member of

the agricultural community. If the Executive Board feels the industry has been damaged by such presentations, they are instructed to explore the possibility of initiating a "class action" suit against those persons responsible, as well as action to prevent future showings.

The California beekeepers pointed out that the present ABF convention schedule during the latter part of January conflicts with almond pollination in California and they request that future organizing committees take this into consideration in establishing future convention dates.

The USDA and EPA were requested to do all possible to protect bees from pesticides and encourage Integrated Pesticides.

The Federation will urge, through its representatives to Apimondia, that Mexico's bid to hold the 1981 International Congress in Acapulco be accepted.

In the financial report Secretary/Treasurer, Bob Banker reported that total income for the year amounted to

\$53,918.00, an increase of 5% and revenue exceeded expenses by \$9,017.00. Total assets now amount to \$122,953.00, an increase of 4% over last year and the Honey Defense Fund established to provide research and legal funds to prevent honey adulteration now stand at approximately \$74,000.00. Legal Counsel Robert Rubenstein has indicated the names of a number of honey establishments have been turned over to the Food & Drug Administration for prosecution for adulteration.

In the election of officers, Robert Ray of Minnesota was re-elected president, Secretary/Treasurer Robert Banker, normally appointed by the Board, indicated he wished to retire from that position, former vice president, Dr. Frank Robinson has agreed to accept this appointment. As a result, G.C. Walker of Texas was elected to serve as Vice President during the coming year.

The 1979 Convention will be held in San Diego, California, which should again attract a lot of northern beekeepers tired of the winter snow.

Beekeeping and Neighbors: Keeping Them Both Happy

By STEPHEN BRICKLEY
San Francisco, CA

WHAT WILL THE neighbors think when the bees are right next door? What's that set of white boxes with hundreds of the little devils flying about? The answers could be favorable if a few beekeeping techniques are observed.

Those people who live next door who you've never spoken to will quickly become a part of your life. Hopefully, they will be nature lovers. If this is not the case, then use **tip one**: answer their questions and promise to pass some honey their way when you reap from the hive. Bees have this built-in quality of knowing how to influence people. A little honey goes a long way. Soon the neighbors will be customers awaiting a new flow of honey.

Now that they are out of the way what about Mr. Grumpy. He's the type who carries bug repellent and is disgusted with anything that crawls or flies. Dealing with an irrational person, such as Mr. Grumpy, in a rational manner is useless. They don't understand. Careful beekeeping is the necessary ingredient for having all remain happy. **Tip two**: work with the bees when Mr. Grumpy is not around. **Tip**

three: always use smoke when opening the hive. **Tip four**: position the hives out of view.

Life will be fine until a swarm of bees hovers and lands on Mr. Grumpy's favorite tree. Simply stated, there are only two reactions you can have when a swarm emerges: be tense or take it easy. Obviously, the best position to take is a rational one. **Tip five**: When the neighbor begins feeling uncomfortable and surly just look at the swarm and say, "What a wonderful way for nature to reproduce." He will remain nervous, but at least you've shown an ability to deal with bees calmly.

Soon those inquisitive neighbors may be keeping bees—and it's all due to the picture you've given to them that bees are nice to have flying about.



Subscribe To
THE SPEEDY BEE
Monthly Beekeepers'
Newspaper
Rt. 1, Box G-27, Jesup, Ga. 31545 USA
\$4 per year in U.S., \$7 foreign

How to Avoid Negative Bee Laws

By LEONORE M. BRAVO
San Francisco, Ca.

THE FIRST requirement in trouble free city beekeeping is a **sense of responsibility** on the part of the beekeeper toward his neighbors. This doesn't require that one be friendly. There are certain built-in tensions in the territoriality aspects of neighboring that are less likely to erupt when an aspect of respectful distance and polite acknowledgement is maintained. For this reason, asking your neighbors if you can keep bees is not recommended. One has as much right to keep bees as to have a dog or cat. The responsibilities are the same, to keep the animals in such a way as not to interfere with the peace, quiet, and security of others. Asking gives the neighbors a power over your life which is not theirs.

David De Jongs' "Beekeeping in Populated Areas", *Gleanings*, October 1975, is a carefully thought out recipe for so placing bees and so maintaining hives that they will not constitute a nuisance to the neighbors, provided that one has the skill and competence to handle them. I would suggest that it be reprinted at this critical time for hobby beekeeping. We have provided every member of our organization and every participant in our various community college lecture series on beekeeping with a copy of it. If people abide his suggestions for **locating hives** so that flight patterns do not interfere with neighbors, when to inspect hives and **when not to!**, how to avoid making your bees angry, how to keep them under control and of their need for water, their bees will not become a nuisance in the neighborhood.

Some people who are enthusiastic about bees do not have the space requirements as above. And we try to find them a spot somewhere to place a colony. Our neighbors, The Alameda County Beekeepers, have an apiary on park land and we anticipate getting a site on our watershed. Meanwhile, we discourage people from keeping bees on inadequate sites.

Given that the prospective beekeeper has a suitable yard for beekeeping, the next requirement for success is **expertise** in manipulating the colony so that he does not rile the bees. To achieve this we teach a course in the community college district using an experienced old beekeeper who is an artist in handling bees and a professional teacher who having come lately to beekeeping knows what needs to be taught. She doesn't assume that everyone

ought to be like the experienced old beekeeper. She grasps what needs to be covered and how to go about it. The course is centered around the tools and equipment of the beekeeper with practice in manipulation without bees before a field trip with live bees in which everyone handles them.

Given that the bees are properly located and the owner skillful in their management there should be no trouble with the neighbors, except as a result of swarms which will be dealt with further on.

An important aspect of skillful relaxed handling of bees is proper dress and equipment because it gives the operator confidence that he or she won't be stung and enables one to proceed without haste or anxiety. The body including the head, except for the hands should be securely covered in light colored cotton clothing, a veil should be worn, and a lighted smoker should be at hand.

Having taken all of the above steps, trouble is unlikely. But if we don't, and there is trouble, the neighbors will be right. For example, you placed your hive right next to your neighbor's fence close to the back of both of your houses, and in the swarming season she feels at peril trying to hang out her laundry five feet from your bees. Common sense and the logical expectations of your neighbors for peace and security require that you move them. And when you return them to your yard, think ahead and place them 50 feet away at the back of the yard with a screen that will cause them to fly up high as they leave.

Now let's suppose that you have done everything right and are skillful and prudent in handling your bees. But in spring, seven swarms land in your neighbor's *Genista* bushes. The seventh comes on a day which is poorly aspected for your neighbor, or you, or your bees, or maybe all three! He cites you with the health department for maintaining a public nuisance. And you're given five days to remove it. Follows a successful course of action in keeping our bees:

We wrote a letter to the chief of the health department pointing out that we had been keeping bees successfully for a year without trouble, that the bees weren't necessarily ours, and that was true! That we were doing no harm to our neighbor's plants or property in removing them. That they hadn't stung anyone.

Further we pointed out that *Genista* is the plant of choice in our area for bee swarms. That if the neighbor would get rid of it, it would keep the bees out of his yard. (He did and it worked.)

Simultaneously we tried to ameliorate the neighbor, but held our ground when he was unyielding.

Simultaneously we typed up a statement to the effect that our bees had been no nuisance and had it signed by everyone on the block except the neighbor. But his tenant living in the same building signed it. (It's well to maintain a generally friendly attitude in all directions in the neighborhood, about to the extent of a cherry hello to be used in cases like this.)

We wrote up an informational sheet on the bee swarm explaining its place in the life history of the bee emphasizing the generally peaceful nature of a swarm unless attacked. This sheet also explained that bees that get into the house will go to the window if left alone and can be easily removed, giving directions for doing so safely. We sent leaflets to the whole neighborhood with this material and had many appreciative comments from people who didn't know anything about bees. We also gave them numbers to call to have the bees removed, free.

We advise people who have bees to leaflet their neighbors with this sheet just before swarms begin or when they do. Hysteria is due to misinformation or a lack of information about bees.

Let me interject for the benefit of professional critics who may still be with me, that the reason why we do not try to prevent swarming by dividing the colony before it swarms is that my lot is only 25 feet wide and we have determined that it is better for us, in this situation, to avoid any manipulation that might result in a sting. And a swarm is far less likely to sting than a disrupted colony.

We insisted that the health department come and view our operation, the officer who came could see that we had exercised caution in placing our bees and that their flight patterns menaced no one.

The health department dropped the matter. Relations with the complaining neighbor, who denied having complained, of course, were carried on by nice letters since he didn't want to talk. Finally the relationship was normalized and the next year when a swarm landed in his ivy he called us to remove it and watched the operation with interest. Important, don't forsake difficult situations without first doing all that you can to "bring the man to reason". Most people are reasonable, in the end.

Incidentally, we checked with the city health department at the beginning of our campaign for the bees and found that since 1917 when records were first kept there have been no deaths reported as due to bee venom in San Francisco.

The above actions on the part of the cited reflect a **confident attitude** toward the self, the bees, and the neighbors which resulted in being able to handle the bureaucracy, i.e. the health department. This is another essential for success in avoiding negative actions from the bureaucracy.

To further assure a favorable climate for beekeeping we organized the San Francisco Beekeepers. Essential to bringing people together was Louis Dubay's "little black book" with the names of people he had started in beekeeping over the years. His presence and wisdom were our drawing card. I'm sure that every community where bees are kept has such a personality to draw on. There were and still are many in the community who do not belong to our organization preferring to keep their possession of bees unknown to the authorities or at least unadvertised.

The organization provided an opportunity for exchange of information, improvement of operation through this exchange and via the fine speakers and films and other means at our disposal, and very importantly, a public relations tool for our interest including **one for fighting negative actions**. In addition to that we can police ourselves and reduce chances of negative actions because we know that just one careless hobbyist who can be nailed for a stinging is a threat to all of us.

In our twenty months of existence we have successfully helped two members who were "having trouble with the neighbors" to keep their bees even though in both cases the complainants had attorneys. We based our defense in both cases on the fact that the bees hadn't done anything and since the complaints were made virtually upon installation we argued that the bees should be given a chance. Since threat of adverse allergic response was being used against the bees we argued successfully that such degree of response was not applicable to a **significant percentage** of the population besides the obvious fact that there are bees everywhere in San Francisco. They inhabit the Eucalypts of which we are so lucky to have stands of all over town.

We have accumulated all the latest material on allergy and have copies to give to such people. Our posture is always **friendly, helpful, and informational**. But firm in our right to maintain bees unless they are in fact a nuisance. That is just cause for their removal as was the case mentioned earlier of the man with his bees badly located.

To further improve the climate for hobby beekeeping we have entered every community program that will give us a chance to present our hobby in a favorable light. That program began with a glass hive **manned by knowledgeable beekeepers** who weren't lazy about talking to the public and answering their questions and/or listening to their "bee

stories", an ample supply of honey recipe booklets provided by the California Honey Advisory Board to give away, informational sheets on stings and swarms, and our backyard honey to sample. Our first display was at a big shopping complex in which a Berkley Consumers' Co-op store had a concession and was made possible because it was one of our member's ways of taking part in the Co-op sponsored "community educational activity day".

Teachers saw it and we were invited into the schools where we developed a lesson tailored to the various age groups that wanted it. There were so many requests that that activity has now become a paid business as far as the schools go.

People of all ages are fascinated by the bees. They love to watch them; they are ready to join us and get a beehive when they taste our honey; and are glad for the information that we supply.

A feature of our community exhibits is the "San Francisco honeybank". Each member provides a six ounce jar of honey labeled with his **neighborhood** and/or street; not name or address because of the desire for a certain desirable low profile. The public can taste these honeys, we use toothpicks and it goes a long way. The various honeys vary in taste and the public finds this fascinating.

A requirement for doing our lesson in the schools is that the school duplicate our sheet on swarms and the one on stings and one on the African bee provided by Entomology Extension, 1735 Neil Ave., Columbus, Ohio. I received this valuable asset from Leo Vanderpool or Len Foote of the California State Department of Agriculture and have been duplicating it ever since. Both of these knowledgeable people have spoken for us as well as Dr. Eric Mussen, our state extension apiculturist. I'm sure that all communities have access to such resources, **organization** is what is needed.

We have been greatly helped by the Josephine Randall Jr. Museum of San Francisco. The director, Dr. Kirk Conragan, is sympathetic to beekeeping and provides us a place to meet and some space on the roof for students who are living in rooms or apartments and want to keep a hive and learn beekeeping. Much duplicating of informational sheets mentioned was done by the museum until we began our program in the community college district. There we gained another "patron", Dr. Francis Baron, the Director of the campus sponsoring our course, who has greatly helped our educational efforts in the community. Besides taking our course and becoming a very competent beekeeper.

Our community work in schools and elsewhere continues. The writer has on hand a collection of spontaneous bee art from children which has stimulated further activities in bee art. We have just

begun negotiations with a gallery here to put on a show of bee art in the fall of 1978. Any reader who does bee art of **any sort** including stitchery in which the honeybee and/or tools of beekeeping are featured is invited to participate. We'd like to hear from you. We hope to have some bee fine art also. We'd like a good skep.

We provided all TV stations in town with a packet of research reprints on the subject of the Africanized bee which the writer obtained from Adair Stoner of the Laramie Research Station. **Thanks to an article in Gleanings.**

We have requested "equal time" for the honeybee as a result of showing of "The Swarm", the old one with Gloria Swanson about two weeks ago here. The TV station will give us a "45" spot for a taped rebuttal. We have it written.

So what is needed to combat negative bee laws is:

1. **Competent hobbyists.** We have to have a license to drive a car which can cause trouble when it gets out of control. Maybe we should pass a course in beekeeping to keep bees in the city. In the two cases cited above that were successfully defended, the cited made an issue of the fact that they had taken a course in beekeeping, could handle them safely, were competent.

2. **Confidence** in ourselves based upon the competence described earlier and an attitude of "bees belong" which we can successfully demonstrate when necessary.

3. **Membership in a beekeepers organization** which is something more than a coffee-klatch. It must be a strong arm for education in the community about bees and how to live in harmony with them **including the Africans if they came.**

Organizations should encourage their members to subscribe to and read a bee journal regularly. Being well informed is essential to having confidence in what we're doing and in maintaining good community relations.

5. **A constructive practical attitude toward bee stings.** Nearly everyone in the population has been stung by a bee. In asking the question "How many of you have been stung by a bee?" in fourteen first grade classrooms, as preparation for telling them **how they could have avoided it** and what to do about it, we learned that practically every child had been stung by that time. The most common way was while running barefoot on the lawn. (Bees looking for water.) Or when grasping a water fountain or water valve. We should take the attitude that indeed one may get stung by a bee or other hymenopterous insect, usually without much more than some discomfort. As far as those people who are extremely allergic

(Continued on page 130)

How I Defeated a City Ordinance

By FRITZ SANDERS
Livonia, MI

IN OCTOBER 1976 I was stung by the "Bee Bug" to the extent that I first took a course in beekeeping at the Cranbrook Institute of Science, Birmingham, Michigan, and second, bought two complete colonies of Italian bees from a seasoned commercial beekeeper.

My enthusiasm was boundless, carrying over to my 15-year-old son, who in time became my trusted helper. Why should my enthusiasm not carry over to my neighbors! The fallacy of this logic I was to find out in the following spring, when my neighbor across the backyard decided to move to greener pastures. He was replaced by one with less tolerant views of such critters as "dangerous" insects that could inflict grave and painful harm to him and his family. What imagination can do to a person's mind! This neighbor's first "neighborly" act was now to call the mayor's office and to complain bitterly about the presence of my bees in Livonia, particularly so close to his hide. After all, there was something called a city ordinance, stating that bees may not be kept here, because they are "creatures, the nature of which, if not confined, are inherently a danger and a nuisance...." etc.

Now, if examining this ordinance a little closer, it implies that it applies to all creatures falling under the category of being dangerous if unconfined. Knowing that our jails are full of such people, one could follow this logic to its conclusion and proclaim all people, because of the inherent danger they present, as falling under this ordinance, but also dogs, cats and other household pets. The potential for danger under certain conditions is all there.

I thought an ordinance like this was not to be taken too serious unless the actual proof of a nuisance could really be established. And my bees had not stung anyone but me so far. The hives were also well concealed from my neighbor by 14 feet high Juniper bushes. Unfortunately, in spite of my arguments to the chief inspector, in charge of ordinance enforcement, and the city attorney's office I received a notice of violation and, upon noncompliance a summons for court appearance. In our area around Detroit, beekeepers have been harassed by city attorney's actions previously, in each case losing the battle in the courts, whenever the beekeeper stood up for his rights.

My first trip was therefore to two of those rugged individuals, who thought like I, and hopefully many others. Out of our conversations these thoughts crystallized: Don't try to be your own lawyer.

It's like trying to cut your own hair, you don't see and know all there is to know, because the view behind your horizon is obstructed. A lawyer also has much better know-how to get the information about previous trial and court decisions that can effect your own case. It may cost some money, but you have to make a choice, of how much it is worth to win the case.

Next, get to know your neighbors, not just that bad one giving you all the trouble. Write a petition, stating that your bees in the opinion of your neighbors are no threat to them and do not present a nuisance in the neighborhood. Best is to try to use the words of the ordinance as much as possible or make reference to the ordinance. Now get the signatures of as many neighbors on your block as you can. Include also the signatures of the other members of the households you visit on the petition. Numbers do count! Don't promise any honey in return for the favor or anything else, at least not before the signatures are given. This could possibly backfire if the city attorney is sharp and gets some witnesses. It may destroy the credibility of the petition. And remember, your neighbors are the ones the ordinance is supposed to protect.

Well, I was lucky, because I got almost 40 signatures, and I met many nice people I had not met before. I also got some publicity in the local newspaper. Maybe this did not actually help, but it boosted my moral and fighting spirit. Some people, beekeepers in the area, called me at my home and wished me luck. Through one of them I found out that Schoolcraft College in our city also kept eight beehives with the permission of the city and obviously in violation of the city ordinance. Beautiful, because now I could also claim discrimination. This College is tax supported, paid for out of my pocket. It was somewhat strange that my tax money went to support of the college that was allowed to by-pass the ordinance, which was then used to force me to get rid of my bees.

All this homework I had done was greatly in my favor, I found out. Plus, being a member of the North American Beekeepers Association (W. Jansen, president, 21905 Garrison Ave., Dearborn, Mich.) helped me to secure a good lawyer, young and enthusiastic.

Let me here insert a plug for the NABA. They are great, not just because they helped, but because it is a growing organization with an active interest to support beekeeping in this area and to prevent the kind of legislation or fight it,

that tends to destroy the small beekeeper and his operation because of such widespread ignorance about bees and beekeeping among the public.

The day of reckoning came on August 5, 1977. We found out first that the prosecutor was not prepared at all because of the great case load he had to carry. He just hadn't had the time to check back with my dissident neighbor, nor had he ever taken the time to contact me. My attorney, however, took the time during a recess among all the other cases called, to buttonhole the prosecutor to ask him about the details of the charges against me. At this time it became apparent that he was in fact unprepared. My attorney showed him therefore my signed petition, photos of the apiary showing how well protected it was from my neighbor. He also made him aware that as the prosecutor it was his job to prove to the court that my bees had at any time actually made a nuisance of themselves in my neighborhood by molesting anyone. And if that was so, he had to prove that the molesters were really my bees and not someone else's; and that they were honeybees and not some other insects. All that requirement was based on precedent setting cases in the State of Michigan. All the details of these cases had been researched by my lawyer. So it becomes obvious how important it is not to try to be one's own attorney. The prosecutor succumbed to the prospect of a trial that he could not possibly win and went to the judge's chambers together with my attorney. The judge himself was in agreement that with what my attorney presented the city had no chance of winning. So, when the case was called, the judge told the prosecutor to submit a legal brief by September 2 to him and copy to my attorney. My attorney was to respond to it by September 22 and a new pretrial would be held on October 5.

The end of it all came simply by the city attorney not responding to the court's request and on October 5 asking the judge to dismiss all charges against me.

Quite a number of beekeepers in this area were made aware of this trial by the article in the Livonia Observer and Excentric. They will be relieved to know that they have to fear our city ordinance only if they cause an actual nuisance or danger to the public due to carelessness or otherwise poor apiary management.

I hope that my experience is going to be of help to others, harassed by up-tight city officials.

Remember, a bee that has not stung anyone is no more liable than a dog that did not bite. — And dogs may be kept.

Today Show Features Bee Venom Therapy

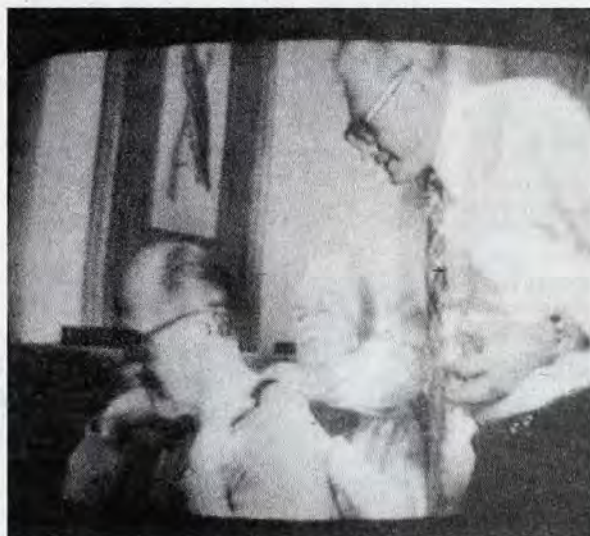
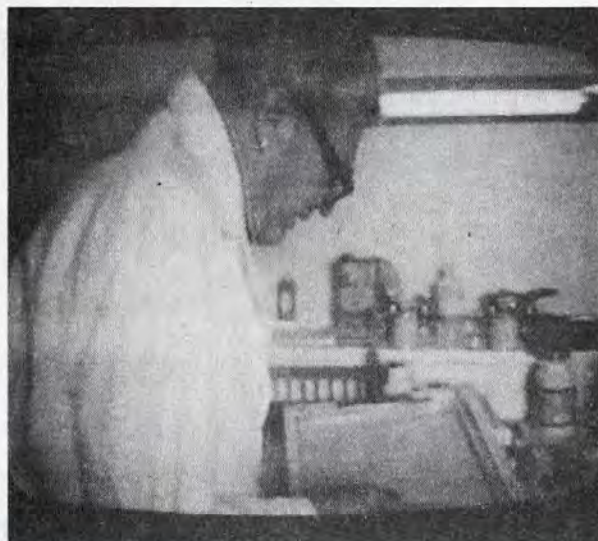
FRANK BOURGHOLTZER, on NBC's **TODAY** show of Monday, February 13th reported on the progress of using pure bee venom in arthritis research. The current research is centered around testing pure bee venom on animals. Calling bee venom a "gift of life", Bourgholtzer focused on Charles Mraz of Middlebury, Vermont in the "Bee Venom Capital of the World". Mraz was called the "number one believer" in the United States regarding the qualities of bee venom to help arthritis. Pure bee venom is extracted by Mraz in Vermont, processed in California and tested on animals in New York. In Washington, D.C., Col. Vick of the U.S. Army is testing bee venom on animals.

Bee venom stimulates the body to produce cortisone according to researchers.

"If testing cannot be done on people in the United States, we will test in other countries", says researchers. Bee venom research and testing is being given much greater priority in European countries, such as the U.S.S.R. according to several researchers who were interviewed.

"There is no regulation on the use of bee venom when the bees do it", Bourgholtzer announced, as Charles Mraz was shown gathering bee venom and administering stings to an arthritis sufferer.

Charles Mraz gathers
bee venom.



Bee venom is administered
the "natural" way.

FDA Inspection

THE FOOD AND Drug Administration Act provides the authority to inspect any establishment where food is processed, packed or held for introduction into interstate commerce. The following points should be noted by packers and processors of honey who are subject to F.D.A. inspection.

1. FDA inspector has authority to enter premises and make inspection without first obtaining owner's permission.

2. If owner refuses inspection, in-

spector can obtain search warrant after which owner's continued refusal will constitute a misdemeanor.

3. Packers and processors dealing with food in interstate commerce must keep records on all foods which moved in interstate commerce or are being held during or after such movement.

4. Inspector is entitled to see quantity, name of shipper and name of consignee in connection with a particular shipment, and may make copy of any such record on request when the

request is accompanied by statement, in writing, specifying the nature or kind of food to which such request relates. Inspector may not require owner of food establishment to disclose purchase records, formulas, recipes, lists of customers, etc. However, with respect to a specific shipment of food which may be in question because of possible contamination or other harmful content, inspector is entitled to information sufficient to enable FDA to trace such shipment. Owner of estab-

(Continued on page 130)

Siftings

By CHARLES MRAZ
Middlebury, Vt.

ANOTHER FEDERATION meeting has come and gone. It is interesting to see in the past two years or so, the great increase in learning more about Apitherapy, the study of the therapeutic activity of various bee products. I have been one of the few that has been interested in this field for the past 45 years, and most of these years we were a very small voice crying in a "wilderness" of "modern medicine". The reason for this increased interest is that we can now apply "scientific reasoning", to much of these "old wives tales". Even more important, is that they work where modern medicine has so far failed.

On the cover of *Gleanings* we see new ideas for a pollen trap, apparently many people are interested in collecting pollen. Much of this may be for bee feed, but personally, I believe it is much more valuable for "people feed". It has some very important therapeutic activity. There is always the problem, it will get into the hands of racketeers, who want to make a fast buck on poor imitations. Pollen is pollen. It must be viable and fresh. Otherwise results will not be the same. This goes for all bee products, including honey. There is a great reduction in the therapeutic activity of honey that has been heated to a high temperature with high moisture content and that went through a filter press, compared to honey well ripened in the hive and left in its natural state. Unfortunately, very little "natural honey" is sold on the market today. Most of it is overheated (above 120°) and filtered through diatomaceous earth, even when labeled, "natural raw honey". Even worse there is some honey so labeled that actually contains artificial honey or isomerized corn syrup. You say how can it happen? At the meeting in Orlando, it came up that it is happening, samples of this adulterated honey have been picked up, tested and sent to Pure Food and Drug administration. I am told the adulteration continues. Not a nice picture of our present pure food enforcement.

At the meeting I have been told the new movie coming out, "The Swarm", is going to be a horror picture to beat all horror pictures. And at our expense, and our bees. Bees apparently will be pictured as giant, mutated insects that feed on garbage, and fly in clouds miles long and destroy whole cities by stinging everyone in it. At least that is the way it was in the book and I am told it will be worse in the picture. We shall see. A resolution was passed at the meeting of a possible law suit by beekeepers if this vicious lie will harm

our bees and beekeepers. Personally, publicity is fine if it is based on facts, but when based on such vicious lies and distortions, I don't believe we should take it lying down. We should at least have a chance for a rebuttal such as the pending NBC-TV Show, if it ever has a chance to come on.

Some of the uncertainty that exists in Apitherapy is found on page 75 of February 1978 *Gleanings* in the Questions and Answers page. For perhaps 50 years or so the allergin used to treat people hypersensitive to insect stings, was made by smashing up the whole insects, then extracting and drying this "gut juice", believing it contains the venom of the insect. The fact is, it does not, what little venom (about one thousandth part) was in the gut juice is almost completely destroyed by the very active body fluids. Recent tests carried out with this whole body extract have shown it is no more effective than a placebo such as plain water. The pure venom, on the other hand is almost 100% effective. Many hypersensitive people taking the whole body extract for years, thinking they are "immunized", when they get stung, find they are not. This is not a good situation.

Fortunately, far as I know, at the present time there is no law against a person getting stung by a bee. Bees have been doing it for a long, long time. All I can say, J. L., Ct., when your arthritis hurts so you can no longer stand it, you will get over being "chicken". Most doctors know nothing about

BV Therapy and will not touch it. And I don't blame them, they are not beekeepers and cannot handle bees. If your son is a beekeeper, perhaps you will "accidentally" get stung where you have the arthritis. Arthritics are seldom allergic to BV, they usually have too much histamine in their system, so that should be no problem. And of course, after you get stung enough and the arthritis does go away, you don't have to blame it on the bees, you can say it was "spontaneous remission".

As time goes on, let us hope more and more people, especially hobby beekeepers will become more and more interested in Apitherapy. All the bee products, honey, wax, pollen, royal jelly, propolis and bee venom are harmless and have no side effects. There is no reason why a beekeeper cannot use these to perhaps both prevent and perhaps relieve disease if there is no other treatment and it does not interfere in any other therapy that may be used. In Europe in some countries they call bees, "The Winged Pharmacists". I don't know of a better name for our indispensable friends, the bees. So be ready to inform your friends and neighbors, God and Nature did not make bees to destroy mankind, but to save him from the continuing increase in the destructive degenerative diseases.

At future meetings, let us hope more and more beekeepers will ask questions and that there will be more and more beekeepers with experience to answer them.

NEWS RELEASE



The beautiful setting of the Agricultural Technical Institute near to site of this year's Eastern Apicultural Society meeting in Wooster, Ohio. ATI offers a 2 year degree in Bee Technology and participants in the E.A.S. meeting will have a chance to tour the facilities. John Caulk, the course instructor, will be in charge of

the E.A.S. workshops and one of the highlights will be a demonstration of making a bee beard. There will be special programs for youngsters and ladies in addition to the usual lectures and workshops. Make your plans now to attend August 9-12.

GLEANINGS IN BEE CULTURE

BEE TALK-----



By **RICHARD TAYLOR**
Trumansburg, NY

I noticed the other day that some government official has announced his finding that comb honey is acceptable as a food. Apparently he had been wondering about the beeswax in it. And this made me think again of an adage common among Englishmen, that "a man can be educated daft." Imagine that! People have been eating comb honey since before recorded history. It is probably the loveliest, most delectable food known to mankind. It has always been the premium product of apiculture, and known to every beekeeper to be healthful. So someone having more knowledge than sense, and more orientation to laboratories than to the general fitness of creation, decides to tell us whether it is all right to eat comb honey. I expect next an announcement that we will be allowed to go on eating apples without peeling them. Good judgment does not always gravitate towards the offices of government.

Lately I've been thinking of comb honey in other ways. I learned belatedly from my friend Tom Ross that Dr. W. Zbikowski, the inventor of the Cobana round comb honey section, had died. This surprised me, for Dr. Z., as we called him, seemed indestructible, and I had heard that he was still seen riding around, on his bicycle only last summer. He was quite old, but never seemed to get any older, and I guess he never lost his sharpness of intellect. It is too bad that so little is known of this man who contributed so much to beekeeping, so I'm going to talk about him this time. The merit of his invention is now firmly established. Only a few years ago it was relatively unknown. Now I believe it is being manufactured on a large scale by at least two companies, and I see full page ads for it in the bee journals. All this has caused some strange thoughts in me, as I look back over the years; but let me go back to the beginning.

I heard of the round section in 1955 or 1956, soon after it had been invented. It struck me as an advance of major significance in apiculture. That summer I had to go to Detroit, so I visited Dr. Zbikowski in Dearborn, to learn that he

was a retired physician who had just taken up beekeeping. I was raising bees in Rhode Island then, and became instantly convinced of the value of his invention, so I took a couple of Cobana supers back with me. I made up more supers, put them to use that summer, and was amazed at the result. Here, I felt sure, was a system that would revolutionize comb honey production. I wrote up my experiences and published them in *GLEANNINGS*, in 1959 I think it was, and for years afterwards I took Cobana supers and samples to every bee meeting I attended. Yet strangely, this equipment was slow in becoming adopted by beekeepers. Ten years afterwards, when I was asked to talk about it at the E.A.S., it was almost unknown to members of the audience. What was wrong? The difficulty lay in the business methods of its inventor, about which there has been much speculation, and bitterness, over the years.

Dr. Zbikowski never let his invention out of his control. Orders were sent directly to him, and he personally filled them--when he had time. And he seldom had time. He was too busy with other beekeeping inventions, most of which, in my opinion, had almost no merit. So a lot of people ordered round comb honey equipment and then never heard from the supplier again, became discouraged, and the whole thing began to get a bad name. I sometimes remonstrated with Dr. Zbikowski over the phone, and he admitted to the slipshod quality of his business methods, but lamented that he just didn't have time to do things properly.

I visited Dr. Zbikowski in Dearborn a couple of times. He was most eager to have me look at his inventions, and render my opinions. He had invented a special extracting super with plastic frames, a special frame divided into three or four sections, whose use I never did figure out, special "sanitary" bottom boards, a new plastic queen excluder, new kinds of foundation with plastic base, and a special extractor and knife that would (when perfected) enable one to extract the honey without removing the combs from the supers. It was a dazzling array of inventions, and I suspect there were still more when he died. Dr. Zbikowski would always ask me, with great eagerness, to comment on them, and I honestly told him that they did not seem very practical; but this only produced from him lengthy disquisitions on their merit. So it was not so much that he wanted my opinions, as my praise. He was quite a difficult man, with fixed opinions. And yet his invention of the round sections--his very first invention--was a stroke of such brilliance that it forever effaced, in my mind, any faults he might have.

I have lots of good memories associated with the appearance of Cobana equipment. Dr. Zbikowski amazed me one day with his account of the source of that name. He had discovered some kind of sleeping powder, which he supplied to me in great quantity, but which I never actually tried, since I already spend too much time sleeping, rather than too little. And perhaps I was a little afraid that I might never wake up, if I took them. Anyway, the sleeping powder was called "Cobana", after one Father Copana, a nineteenth century Jesuit missionary in South America!

I do not know why Dr. Zbikowski insisted on keeping such a hold on his invention. Certainly the regular bee supply companies could have done a wonderful job of distribution. Instead, Dr. Zbikowski ran the business (after a fashion) from his kitchen. I think he was just too set in his ways either to do this well, or to let anyone else do it. A few years ago I began buying the equipment from him by the truckload, to redistribute to beekeepers and thus keep the invention alive. But then when my customers needed to be resupplied, I found Dr. Zbikowski too busy with his other brainstorms to get the supplies to me, and my customers began to resent me for the delays. So I gave that up. I explored the idea of buying the molds and going into the manufacture of this equipment myself, or finding someone else to, and while this appealed to Dr. Zbikowski's wife, he would not hear of it. It was very frustrating. Nevertheless, I was able to get all the equipment I needed for my own comb honey business, by ordering a five-year supply at a time, so at least my own needs were filled. Most of my customers who stop by for comb honey have to this day never before seen round sections, except on my stand.

(Continued on page 130)

Dr. W.S. Zbikowski



From the West



By CHARLES J. KOOVER
1434 Punahou Street
Honolulu, Hawaii 96822

The Voice of Experience

"Dear Mr. Koover: I am writing in regard to your statement in the December issue of *Gleanings* concerning one deep brood chamber being sufficient.

"In the Eastern North Carolina gallberry area where my yards are, the honey flow starts early and ends abruptly in June. After that we have no surplus quality flow. All my experience has been with double brood chambers because of 'modern teachings'. I just accepted that two chambers are necessary, yet, in my six years of keeping bees seriously while expanding slowly, I couldn't convince myself that all that expensive space was really being used. I have been blaming my ignorance, my queens and queen suppliers for all my lead heavy hives with little or no surplus.

"Now you come along and say one deep super will take care of a queen's 21 day brood cycle. I think you have told me what I've been seeing but not realizing. So, I'm going to believe and set up 15 colonies this spring and see.

"This letter is a long-winded way of saying 'thank you' and to ask that you write a little more in a future column on the subject. Sincerely yours..."

I just love to say not just a little but a whole lot on the subject. And since I am being asked to do so I am going to take full advantage of this timely opportunity. For it is possible to have all the worker bees you need, no matter where you live, with a single brood chamber. It works like this. With molded plastic foundation a queen has an unobstructed brood nest the year around. It is against all the teachings but it works. Don't try to do it with all wax foundation that has a center core of polyethylene plastic.

For that is not molded plastic foundation. Molded plastic foundation is a solid plastic with cell bases one-eighth

of an inch deep. There is a complete misunderstanding about the different types of plastic foundations and also about the different substitutes and I don't seem to be able to put across what the differences are. The confusion I have created is just unbelievable and it has led to a great deal of unnecessary correspondence. So I am asking you to read the advertisements carefully so that you understand what you want to order. Today, while I was typing this article, the mail brings me another excellent "Voice of Experience" letter and I am going to copy it right now.

"I have worked with deep molded foundation experimentally for years. I have tried composite frames, 'as is frames,' and everything I could think of. You have it all figured just right: cut out the foundation and use it in a regular frame. It is tough, strong, rigid and everything else needed. It is a bit heavy but I can stand that.

"Last year when I selected combs for cut comb honey I inadvertently selected one of permanent foundation and discovered it only when I tried to cut into the honey!

The best one was to discover a frame of drone brood from a laying worker in one of my epoxied-together 9 1/8" frames. A few strokes of a wide putty knife restored it to use!"

There are more letters to quote from but this is enough. Please stop asking questions you can find the answers to in articles I have been writing for *Gleanings* in the last six months. It is wonderful to get so much mail as long as it is about where to get the proper frame and where to order the deep molded foundation. But some readers, especially beginners, want me to give them a short course in beekeeping. I can't do it. I simply haven't the time. My answers to inquiries have to be very short for I am way behind in answering all that mail.

I have a tiger by the tail and can't let go. All of you who wrote received a short reply if you sent me a self addressed stamped envelope or a postcard. Foreign readers should go to their post office and ask for an international answer coupon. When you send me that coupon my post office here gives me the correct stamp to put on my envelope to you. If you want an air-mail reply it takes two stamps. As for the letters from foreign countries; I have received letters from Sweden, Peru, Guatemala, Switzerland and a number from Canada.

What it sums up to is that beekeepers the world over are ready for molded plastic foundation.

Last Call for Painting Hives

If you don't paint your hives you are not doing right by your country. The time is gone that we can be wasteful. Wood is becoming scarce and it has become an expensive item in our economy. We can't afford to waste it any longer. Dr. Miller wrote in his *Fifty Years Among the Bees*, "If I had only a dozen colonies and were keeping them for the pleasure of it, I should have their hives painted, perhaps ornamented with scroll work, but please remember that I am keeping them for profit, and I cannot afford anything for looks. I suppose they should last longer if painted, but hardly enough longer to pay for the paint."

Dr. Miller paid \$1.00 for a hive in his day. If he were alive today he would have to eat his words. Further on he stated, "Another reason for not painting hives is that I'm afraid bees do not do quite so well in painted hives, especially in winter." I have an answer for that too. One reader in the northern states wrote me a few days ago that his bees winter much better in plastic hives than in wooden hives. Now how do you explain that?

I can honestly claim that I was the first one to write about supers not blistering if they were painted with latex paint. That was many years ago. Today oil base paints are about a thing of the past. On labor alone no one can afford to use them any longer. I am not going to waste your time telling you the virtues of latex paints. Just ask your paint dealer. I began using it on my house I had built 35 years ago it no other paint ever since. When I sold my house I had built 35 years ago it looked so good that it sold for seven times as much as it cost me to build. And I give latex paint full credit for that. My hives, when I had to sell them when I moved to Hawaii, brought me a fancy price too and they too were 35 years old. "Save the surface and save all." Latex paint can be thinned so it can be sprayed on using a small compressor. Commercial beekeepers can do it quickly in the field where their bees are on location. It dries so fast that the bees are not affected. Backlotterers can brush it on their hives in less time than it takes me to write about it. It's so easily done that you haven't got a single excuse left for not doing it. Know something? When I go into an apiary and look at a man's hives I immediately know what kind of a guy he is by the looks of his hives. Something to think about.

Mr. Koover is being swamped with mail—domestic and now Foreign on plastic foundation. He is doing his best to answer all of the inquiries. A stamped self-addressed envelope should accompany inquiries to anyone from whom you expect an answer.—Editor.



Research Review

Australians Are Importing Queens

A REPORT from Australia indicates they are in the process of importing queens from Europe; the project has government approval. Apparently it is felt that new stock is needed to improve Australian honey production. The idea that there is a greener pasture, or better stock in someone's backyard, whatever the animal, is not new.

The reference I have indicates that the queens will be held in quarantine but there is no indication of what kind of quarantine will be used or for how long. It is also stated that it is important that the queens be disease free.

At least two diseases exist in Europe which the Australians (and we in North America) do not have. One is the mite which causes Isle of Wight disease. The biology of this disease is reasonably well known and it should be possible to protect against it through quarantine.

A second problem is the Asian varroa disease which has been of special interest to me since I first saw how it brought about the death of many colonies in the Philippines over a decade ago. Varroa disease is not mentioned in most textbooks and the life history of the causative organism is poorly known. I don't know how one protects, even in quarantine, against a disease which is, for practical purposes, unknown. The first reports of the Asian varroa disease from Europe were from Russia (1965) and Bulgaria (1973). However, at the time of the Bulgarian report it was widespread in that country and it is now close to the borders of Greece, Romania, Turkey and Yugoslavia, if it is not already present in those countries. I am aware that the disease is in West Germany and it has probably been there for many years; no one knows how widespread it is in that country. Varroa was reported in Paraguay, South America in 1975 and I have heard reports that it is probably in northwestern Africa. Thus, it would appear that only Australia and North America are free from the problem and now it remains to be seen if Australia will escape an infestation of the mite.

Still another Asian bee disease, even more poorly known than varroa, may be uncovered in Europe. Again, a mite is involved; it is *Tropilaelaps clareae*. It has been reported from India to the Philippines. The fact that bees have



By **DR. ROGER A. MORSE**
Research Editor of *Gleanings*
Professor of Apiculture
Cornell University, Ithaca, N. Y.

been taken from Asia to Europe many times in recent years suggests it may be lurking in some European apiary awaiting the time when it may be transported to another continent.

We in North America are not free from people who think stock is their problem and who are reckless enough to bring in queens or brood illegally. I am aware that the U.S. quarantine service made two interceptions from Europe in 1977. This will be a continuing problem. I take view that we don't need new stock here but more important, we don't need any new bee diseases!

Taylor, W.A.

Queens from Europe due to arrive in Australia. *The Australasian Beekeeper* 79: 45, 1977.

Clemson, A.A.

European visit. *The Australasian Beekeeper* 79: 53-56, 1977.

Pollen Substitutes

I HAD a good talk a few weeks ago with Dr. Lawrence Connor, former Extension Specialist in Beekeeping at Ohio State University and now President of Genetic Systems, Inc., queen breeders in LaBelle, Florida. I asked if there was a good pollen substitute. This is a vital question to all queen breeders.

"No", said Dr. Connor, "there is no perfect or near-perfect substitute for natural pollen that we know of." We agreed that many supplements will help but all must be mixed with natural pollen to be effective.

The Drs. Johansson (T.S.K. and M.P.) have just reviewed the extensive literature (134 references) on feeding pollen and pollen substitutes including their nutritional value, various methods of feeding and their effects. The list of factors that determine success in-

cludes the major impediment: honeybees stubbornly resist accepting substitutes if there is any fresh pollen to collect. Furthermore, if pollen is fed to bees this reduces the collection by the bees of an equal quantity.

The basic formulation has some ten alternatives with 25 recipes. While we still have no perfect answer to the problem, this paper indicates how extensive the search has been for a satisfactory substitute. The fact there are so many alternatives indicates those of us engaged in bee research have much to do. We still know too little about basic honeybee nutrition! And, until our knowledge is increased, we will be forced to search for alternatives.

Copies of the Johansson's paper are available for \$1.00 postpaid by writing: International Bee Research Association, Hill House, Chalfont St. Peter, Gerrards Cross, Bucks, SL9 0NR, England.

Johansson, T.S.K. and M.P.

Feeding honeybees pollen and pollen substitutes. *Bee World* 58: 105-118, 161-164, 1977.

Biological Control of the Alfalfa Weevil

ALFALFA IS a major honey plant in the United States and therefore we have a strong interest in noxious insects which affect it. The alfalfa weevil was first found in North America in Utah in 1904 and spread rapidly throughout the western states. For many years it was thought that it could not live in the humid, cold East but in 1951 it was found in Maryland. It has since spread northward through most of New England and New York. Farmers using chemical sprays to control the alfalfa weevil have cost beekeepers millions of dollars in the United States in the past two and one-half decades; there have been losses of honeybees through spraying of flowering alfalfa as well as through contamination of weeds in and around alfalfa fields.

Over the past 20 years, however, various insects that are parasitic on the alfalfa weevil—some on the eggs, some on the larvae, and some on the adults—have been introduced, along with other biological agents, to replace chemical controls. In several of the eastern states, parasites are now controlling the alfalfa weevil cheaply and successfully. There are a few counties in western New York where biological control is still weak, but this is because these are the areas of most recent invasion by the weevil. Spraying alfalfa to control the weevil is now a thing of the past in most parts of the East and it is expected that natural control methods will be satisfactory to protect the several million acres of alfalfa grown here for forage.

Gyrisco, George G.

Biological control of the alfalfa weevil; a spectacular success in New York State. *New York's Food and Life Sciences* 10 (4): 14-16, 1977.

Fundamentals for All

"Great Questions"

WHAT IS A GREAT QUESTION? Does it come well-phrased and precise? Must it arise out of wisdom, or can it come from ignorance? To ponder these questions and relate them to revelations learned and yet-to-be learned about goings-on in the beehive may lead you to ask questions which seem small today, but may be considered great by future students of beekeeping.

Taking our cue from the last statement, I believe that history determines what is great. Like the tip of an almost-buried treasure, uncovering it is the result of the question, "What?" But it seems to me that the question "Why?" is more important in uncovering truths. As any parent knows, there is a time in a child's life when there are persistent queries "Why?". Many of you may not have the answer, but they may cause you to think more deeply, if exasperation does not intervene.

Some day a simple question beginning with "Why?" may become much greater than it appears today. Such a question may be the result of inquisitiveness, the desire to learn, but it may also arise out of much study. I think it must depend on how far-reaching subsequent questions extend. To refer back to almost-buried treasure, the value of the search for answers is determined by the richness, quality, and quantity of the find.

I am not suggesting that the following discussion is the result of great questions. I simply know of no satisfactory answers. They may lead you to ask questions which seem simple today, but may lead to great truths.

Let us take the case of those bumps of propolis which bees put on the bottom board. Why? Of course, they are stair steps, or ladders, to help the bees reach the bottom of the frames hanging from above. How high do the ladders have to be to get the bee within reach of the frame? Does the bee span the space by itself, or is it assisted by a bee, or bees, above? Are such ladders important, and, if so, how many should there be? If important, how important? In their absence, how much time is lost traveling along, or across the bottom to reach the side of the hive in order to make the circuitous journey to the storage area?

We have learned that house-bees—those not yet foragers—are the ones which receive the incoming nectar and convert it into honey. Would these honey makers wait on the side combs to receive the nectar, or would they more likely be



By W. A. STEPHEN
Worthington, OH

on centrally located combs near the bottom? Or is their location determined by the present needs of the colony? The first honey coming in will be needed in the brood nest and that not consumed immediately by nurse bees will be stored in cells within the brood area. This could come most readily from the bees on the ladders, rather than from bees coming up the sides of the hive. On the other hand, when side combs are being filled, the nearest route would be up the sides of the hive. Is it a question of either/or—or is it both? I believe that it should be both. We should consider that the ladders have been constructed for a purpose. And, yet, when we clean off our bottom boards, we knock them off as though they should not be there. I have done it many times, not without a slight twinge of conscience. After this writing, next time I shall use more consideration.

How about constructing bottom boards with built-in ladders, so that the bees would be able to reach the bottom bars of the suspended frames? With wooden bottom boards, such construction was impractical, but now, with molded boards of synthetic materials, it would be quite simple. Besides, it would save the bees much time and effort building their own ladders. To be properly constructed, a study would need to be made of the numbers, placement, size, and shape of natural ladders. Do all strains of bees require the same number of ladders? Do all geographical races build ladders, and, if they do not, why not? Would it be beneficial to have shallower bottom boards, so that no ladders are required? In order to retain the present deep entrance, both with wooden bottom boards and others made of synthetic materials, they could be built on the split level principle—deep entrance for ventilation, but becoming shallower two, or three inches back.

How did we come by our deep bottom boards, anyway? Some of my earliest recollections of reading about hive manipulations said that the shallow side should be used for winter and then turned over in

summer to provide for greater ventilation. No thought was given to bee space. Langstroth, in his patent application, specified a space of about three-eighths of an inch between bottom bars and the hive bottom. For years, we have ignored Langstroth's bee space in designing bottom boards and I, for one, have destroyed the ladders which the bees constructed to rectify our error.

In the absence of definite answers to any, or all, of the above questions, we must go to the bees for answers. A recent article that I read said that questions came from wisdom. Wisdom is developed, knowledge acquired. Beginning with the child's elemental "Why?", we must, to best adapt to the bees' needs, find the simple answer and, on this knowledge, begin to build by finding the answers to other, and greater, "Whys".

Why do we not ask more "Whys"? Is it because of fear? Fear that we shall reveal our ignorance? Fear has been the reason for not asking great questions throughout the ages. Mark 9:32 tells of the disciples being afraid to ask a question that puzzled them. In our sophistication, we would sooner not ask the simple questions. We would like to ask the great question. It takes courage to ask, to learn, to apply fully the knowledge obtained. Great questions, like mighty oaks from small acorns, must begin with the simple query, "Why?"

MOSQUITO CONTROL DOESN'T HARM HONEYBEES

HONEYBEES exposed to an aerial application of fenthion used to control larval mosquito populations, were only slightly affected by the spray. Only a partial loss, less than expected, of foraging bees was noted. And that affect lasted only one day.

This means that beekeepers needn't move their hives—an expensive and time consuming task—out of areas being sprayed for mosquito control says Adair Stoner, entomologist at U.S. Dept. of Agriculture's (USDA) Honeybee Pesticides/Diseases Research Unit, Laramie, Wyoming.

Many irrigated mountain meadows provide excellent forage for honeybees. Unfortunately, these same areas are prone to supporting immense mosquito populations that require control. In addition to making life unbearable for humans living in these areas, mosquitoes can cause actual dollar losses in terms of reduced weight gain that have been established to be about \$25 per beef cow per summer.—Taken from Colorado State University "B Notes".

Questions and Answers

Q. Can I combine swarms to make a larger colony of bees?—W.R.J., Texas

A. Dr. Richard Taylor suggests combining the swarms by dumping them in front of an empty hive. The swarms will join as they enter the hive. Watch for the queen and remove the extra one if you see her; otherwise the bees will dispose of the extra one.

A swarm may also be used to strengthen a weak or queenless colony. Simply dump the swarm in front of the hive after having shaken the bees from the weak colony off the frames into the swarm at the entrance. There will be little or no fighting in the confusion.

☆☆☆☆

Q. My new location is one quarter mile from a large apple orchard. Will their legal use of pesticides kill my bees?

I am also the same distance from a large vineyard. Will their activities hurt bees? —E.J.M., Missouri.

A. From my experience in Ohio, I have not detected any extensive bee damage

from orchard sprays although some of my bees were located very close to an apple orchard. The location would bear watching, however, as some orchardists use sprays which may be more toxic than others. We do not believe that having bees near a vineyard will present a problem.

☆☆☆☆

Q. Although I have four acres of ground here in suburban N.J., I know little of farming and seed selection. I have about an acre that can be planted with clover for my bees but I know not what the best type would be for maximum honeybee forage.

I have flat, semi sandy land. —D.B., New Jersey.

A. Your conditions may be different from what we have in Ohio. If you wish to try clover our choice would be first the white sweet clover and second, yellow sweet clover. Perhaps you would wish to divide your acreage into equal amounts of each. The third choice would be Birdsfoot Trefoil, which I'm sure would do well in New Jersey. White clover is excellent for bees but requires controlled conditions to grow whereas sweet clover does not.

Q. We are commercial beekeepers of about 4,000 colonies in an area that much of the time due to weather is short pollen and a steady nectar flow for spring build up.

Previously, for a nectar flow we have fed sugar syrup. Is there a way of feeding both pollen and sugar syrup at the same time? What are we looking at for cost; and what type of feeding devices are there?—G.M., Idaho.

A. Dr. Roger Morse of Cornell University has this to say. "The answer is that there is no perfect, or near perfect, pollen substitute on the market. However, there are some materials which may be combined with bee-collected pollen and which work reasonably well. Some have sugar added but none are fed as a syrup.

The whole subject has just been reviewed by T.S.K. and M.P. Johansson. A copy of their paper is available for \$1.00 postpaid by writing the International Bee Research Association (Hill House, Gerrards Cross, Bucks, SL9 0NR, Eng.) and asking for "Feeding Honeybees Pollen and Pollen Substitutes" from *Bee World* volume 58."

(See Research Review in this issue.)

Langstroth's original book on beekeeping available for the first time since 1919...

As nearly as possible, an authentic 1853 reproduction of the original book on beekeeping by Lorenzo Lorraine Langstroth, "Father of Modern Beekeeping".

This 402-page, hard-cover replica with 55 original drawings will show you how, through a book and an invention, an industry was born.

Truly a keepsake for you and your family to treasure and enjoy for the many years to come.

You won't want to be without this literary masterpiece in your beekeeping library.

Order your copies today

Catlog No. X3 ONLY \$7.95

THE A. I. ROOT CO.

**P. O. Box 706
Medina, Ohio 44256**



W.A. Stephen says, "Many books written a hundred and twenty-five years ago would be so outmoded that little could be gained from reading them today. Langstroth on the Hive and the Honey-Bee is unique. It is not only worth reading, but is worthy of

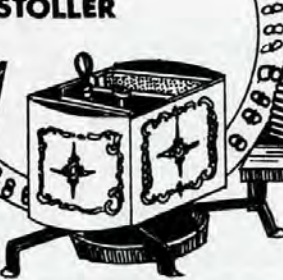
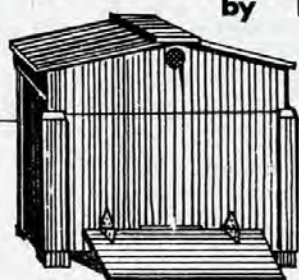
study. Some ideas of the period have been proven misdirected, but these may be overlooked in view of the fundamental truths unveiled. I can do no better in summing up his contribution to beekeeping than to use the oft-reprinted quotation of A.I. Root, 'May God reward and forever bless Mr. Langstroth for the kind and pleasant way in which he unfolds to his readers the truths and wonders of creation to be found inside the beehive.'"





The Collector's Corner

by DARL and IVA STOLLER



WE HAVE recently returned from the American Beekeeping Federation meeting, that was held in the beautiful city of Orlando. Many beekeepers were there from all over the country, as well as a considerable number from Canada, Mexico, and other countries.

Many of the ladies wore beautiful bee jewelry on their clothing, including bee pins, rings, bracelets, etc. Also, some of them had handbags with some sort of bee design that they either made or purchased somewhere. Many of the men wore bee ties with their suits, and tie pins with bees on them. Also, many of the men wore bee belt buckles.

There was one display of new bee jewelry, and it was a very busy place as they had many beautiful pieces of jewelry. Also a number of the bee supply dealers had some interesting and lovely collectible items, and they were all selling very fast.

The following article on the Dadant library was sent to us by Howard Veatch, who was recently assigned to the position as Director of Publications. He is doing an outstanding job there in reorganizing and adding to their library.

The library at Dadant & Sons, Inc. was started by the founder of the firm, Charles Dadant, and his son, C. P. Dadant who carried on an extensive correspondence with individuals and organizations connected to beekeeping the world over. C. P. Dadant maintained a special interest in the library throughout his life and added a large number of volumes to it as well as acquiring many rare and valuable works pertaining to beekeeping.

C. P. Dadant's son, M. G. Dadant, also took a great interest in the library and made further valuable additions to it as well. During his travels, he was able to acquire many rare and valuable additions as well as arranging for the library to house collections of current literature pertaining to beekeeping.

Succeeding members of the firm have maintained the library and added both current and historical items until today,



The Dadant library.

the library contains over 1500 volumes pertaining to beekeeping and 60 volumes of rare books and early editions. The library also houses 66 different titles of magazines contained in a collection of 542 bound volumes and 561 unbound issues. Contained in the magazine collection are full sets of the **American Bee Journal**, **Gleanings in Bee Culture**, **Australasian Beekeeper**, **British Bee Journal**, **Bee World**, and **Beekeepers' Record**. In addition, the **American Bee Journal** is exchanged with 45 foreign language beekeeping publications, many of which are redistributed to other beekeeping libraries and institutions for their use. Twenty-five different state newsletters are contained on file in addition to thousands of state, federal and foreign bulletins, reports and announcements, and hundreds of beekeeping supply catalogs, many of which are now quite rare. The library also contains a file of several hundred pamphlets. There is also a rather large miscellaneous collection including many letters of the Rev. Lang-

stroth, newspaper clippings, postcards, and photographs.

The library was reorganized in 1975-76 and is currently cataloged according to the English alphabetical subject indexed to universal decimal classification numbers. Because of the difficulty in replacing lost or damaged volumes, items may not be borrowed from the library. The library has been from the beginning, a working library to aid in the research program of Dadant & Sons, Inc. and as background information for Dadant publications. There is limited public access to the library because of the nature of the daily business routine and because of space limitations.

We will include the article on the bee hunting boxes in the next issue, as we needed to do some more research on it.

Thanks for the cards and letters we have received, and we welcome any contributions you can give us. Until next time, happy collecting.

GLEANINGS IN BEE CULTURE



By **BESS CLARKE**
Canton, Pa.

WHILE THE WORST blizzard in a century swirled around the northeast beekeepers from all over the country were enjoying the bright sunshine of Florida. It's true that the air was chilly and the breeze more than balmy, but the sun did shine, and it was possible to lounge outdoors at poolside to watch the palm trees waving against the blue sky.

Almost a thousand people were registered for the five day event at the Orlando Hyatt House near Disney World. Eight hundred persons feasted at the Luau Dinner held Tuesday evening and some late registrants were disappointed at not being able to obtain tickets. A fabulous Hawaiian style entertainment followed the dinner and set the tone for the whole conference.

The accommodations were luxurious. The line-up of commercial exhibits along the hallway leading to the meeting room was convenient for prospective customers. Tours were available to Disney World and to Buena Vista Shopping Village.

As they do at all meetings, beekeepers talked to each other. The conversations went on, unabated, all week, before, after, and during the excellent program. It's always pleasant to greet friends after an absence and to catch up on current conditions of business and family.

After the meeting we went further south and camped for a week in one of Florida's fine state parks south of Sarasota. Our two grandchildren and their parents joined us for several days. Enjoying the beach with small children is about the nicest occupation one can find. We were in the right place at the right time for the Ringling Brothers and Barnum and Bailey Circus too.

A note from the small world department: we bumped into Mr. and Mrs. Norman Sharp from New York State on the beach at Venice, Florida.

And we took advantage of our location to visit Jim and Addie Marsh, long time Maryland beekeepers, in their retirement home at Nokomis. You've heard, I'm sure, that it always is nicer if you can visit in a native home when you're traveling and we felt just that way about the

Marshes' lovely place. They have several varieties of citrus trees on their property as well as specimens of other tropical trees and plants. It was great to find the names of sea grape, ponytail palms, Hong Kong orchid and staghorn fern, to name a few. We'd been frustrated in our previous efforts to identify them.

The flag of Scotland was flying over Marsh's house, in honor of their house guests, the Peter Mortons. Mr. Morton has been active in Apimondia and some of you may have met him at the International meeting in Maryland.

I have a dandy recipe for you this month. It's direct from the land of Florida sunshine. You can substitute canned or frozen fruit of course.

You be the Judge

By **Murray Loring**
Attorney at Law
Williamsburg, Va.

Even stings have a "bite". That is, a monetary bite, if you agree with the facts, arguments and decision below. Bees were a pastime and hobby with Charles D'Asaro. He had seven hives which he kept for the honey and for his own enjoyment. One particular day a swarm of the bees buzzed over to the neighbor's yard and commenced bothering the dog. Seeing her dog annoyed, Dorothy Ferreira went to the dog's rescue and was severely stung by many of these insects. Medical attention was immediately necessary as shock was imminent. Relating her unfortunate situation to D'Asaro and requesting repayment for her expenses, Dorothy received answers in the negative.

Into court buzzed Dorothy suing D'Asaro for monetary damages as the result of injuries received from multiple bee stings. Her husband, Clyde, joined in the action and sought derivative damages, not only for his wife's medical expenses,

Florida Citrus Salad: 1 cup orange sections, 1 cup grapefruit sections, 1 cup orange juice, 1/2 cup lemon juice, 1/2 cup orange blossom honey, 1 tablespoon unflavored gelatin, 2 eggs beaten, 1 cup dairy sour cream, 3 ounces cream cheese softened, 1/2 cup coconut flakes. In saucepan combine juice, honey, and gelatin. Heat until gelatin is dissolved. Gradually stir a small amount of the hot mixture into the beaten eggs. Return to saucepan, bring to boil, and cook two minutes, stirring constantly. Remove from heat and add sour cream and cream cheese. Beat till smooth. Chill until partially set. Fold in fruit and coconut. Turn into a mold and chill until firm. Unmold on bed of lettuce. If desired, garnish with strawberries or maraschino cherries.

but for the loss of her services and consortium.

The presented evidence pointed out that D'Asaro was allegedly negligent keeping bees in close proximity, 31 feet, to the Ferreira's residence; by failure to properly house the bees, having supposed knowledge of their propensity to inflict injury; by failure to control or contain them when they became angered and aroused to violence; and that such keeping and handling of the bees constituted a nuisance.

"I am sorry for the stings received by my neighbor", retorted D'Asaro, "but she was responsible for her own injuries. She had been living with my bees for quite a time and had never received any previous stings. She brought the peril upon herself by swatting at them. If she had let them alone, they would have returned to their hives".

"I agree with you Mr. D'Asaro", decided the Honorable Judge Carroll of the District Court of Appeal of Florida, "that your bees had no propensity to cause injury but your keeping them constituted a nuisance".

Speaking for the Court, Judge Carroll said:

"The liability of an owner for injury inflicted by bees is for negligence in the location and manner of keeping them. Anything which annoys or disturbs one in the free use, possession, or enjoyment of his or her property or which renders its ordinary use or occupation physically uncomfortable may become a nuisance.

And damages may be awarded for loss or injury proximately resulting from maintenance of a nuisance.

Judgment for Dorothy and Clyde Ferreira.

Ferreira v. D'Asaro, 152 So.2nd.736



The Old Timer

Disaster at Three Valley Gap

THE FOLLOWING story came about when I ran across a photo today, of "the road" (see picture). The incident being so vivid in my recollections that I have no trouble remembering the details. When we lived up in the interior I went "out" occasionally to work for distant loggers and ranchers between bouts of getting our own place built up. This one time I had been called out to a place to do a job with which the regular man couldn't cope, along with all his other many dawn-to-dusk chores, such as cleaning out stables, feeding, milking, hauling water from the river and so on. I had been there about a month building split rail fences and had the job just about completed when, "Smitty" (no one ever called him anything else to my knowledge) rode in one day with a note for me. It was from a part-time bee inspector who lived in town and whom we all knew. It was written on the inside of a ripped open cigarette package, and went something like this, starting with my name on the top. "Friend, I'm stove up and can't move, can I trouble you to pick up my bees, 30 hives, when you have the time. They are up on that first ledge above Three Valley Gap, just before you get to Jim Blakeney's.

After watering our horses and turning them loose in the paddock to graze, we went in for dinner. Smitty said, "George Baker, (the bee inspector) had broken a leg and I'm to tell you the bees would winter all right, stores-wise, but later on those darn winds coming down through the pass would like as not blow the hives off'n there, clear out of the country and scatter them over the province. I could leave them at my place or anywhere else that was safe and he'd pick them up in the spring."

Of course, I'd be glad to see to the matter, and said so, telling the courier I would be finished here anyway in a couple of days and would pick up the bees as soon as I could thereafter.

After chores a few mornings later I was ready to leave. My old truck coughed to life and I pulled out of the yard heading north, with beekeeping paraphernalia, chains, axe, saw, coal oil lantern, baling wire (to bind the hive bodies together) and carrying sandwiches. With vehicle springs in mind, I wondered how heavy the colonies would be. According to Smitty, each hive was comprised of two hive bodies. George had removed everything above this with the surplus, prior to his accident. It's only about 30 miles, but the road (if you can call it that) leaves a



"The road leaves a lot to be desired."



"Wilderness stretched around me, almost uninhabited."

lot to be desired, and its no better even to this day. The old truck would be in low gear much of the time and certainly never in high. It was a beautiful late fall day, bright sun but with no warmth and when I stopped occasionally I noted frost on the underside and cementing the thick batts of dry leaves that completely covered the ground. More of this brightly colored, rustling foliage was falling constantly. So much so, in fact, that the truck box was rapidly filled due to the close proximity of the overhanging branches. A vast jackpine wilderness stretched around me, almost uninhabited for hundreds of miles. Fresh snow on the mountains ahead of me, came down to well below the half-way mark. Quiet and lonesome, I always remember this road; the darnedest place for moose, in fact they are a real menace just standing there not budging, or running unexpectedly across the road. To get on with the story, I finally reached a valley which ends in a narrow passage with high precipitous sides, which opens out into two more long valleys bounded by mountains. Thus its name. Three Val-

ley Gap, or just "The Gap" a phrase coined by old Baldy long ago.

There is no other way in or out with a vehicle or even on foot, unless you are a skilled mountaineer. It would be extremely difficult and dangerous to negotiate these sheer cliffs which guard, fortress like, this fantastic hidden region. After traversing this shadowy gorge I turned sharply into the mountain and began to climb. The apiary was half a mile or so above me, and easy to spot on account of it was perched precariously on a rocky plateau jutting out into space. Each hive was weighted down with a heavy granite slab. Thousands of acres of now dead fireweed stalks, head high, marched up and down the mountain side in waves as far as the eye could see, so it was no surprise when I hefted a few hives to find they were like lead. It was very cold up there with a shift of snow and a thin wind moaned dismally through the branches of tall gaunt pines at the rear of the promontory. I lost no time in getting at the business of wrapping a wire, front and back of each hive (with the outer cover removed). Since they were all so heavy, a low spot, in which I could back the truck, helped immensely in loading. I was almost finished and just beginning to get my second wind, when I heard a kind of muted, rumbling, swishing noise, ending with a muffled thud, from somewhere far below. The sound, though not loud, echoed and re-echoed up through the canyons and around the rocky walls. It was a blood chilling sound that carried with it the threat of disaster. I couldn't see past the bend in the gap but as I watched I thought I could discern dust issuing from it. My heart sank and I hoped what I thought it was, wasn't so, but I was very apprehensive nevertheless. It was getting late in the day and wreaths of snow drifted like grey smoke across the dark green and brown backdrop of the mountain opposite. Returning to the job at hand I made a record breaking finale, and began the descent. There were times when my heart was in my mouth as I eased the old truck downhill with all caution possible, for I was grossly overloaded, and there were snow and icy patches to contend with. I levelled out at the bottom but my sigh of relief was short lived, for there before me was the thing I had feared. The path was blocked by a slide. A few small stones and earth still coursed down from somewhere above. Switching off the engine I dismounted and went forward to see how bad it was.

A layer of stones, boulders and earth with some small trees, from one to several feet thick, covered the roadway. It was just a small slide really, I found and not all that bad, but impassable for the overloaded vehicle. It extended for 50 yards or more and I could readily see it would take days to clear a passage sufficient to allow

the truck to pass, and I didn't know how much time I had. Snow could make things a whole lot worse if I was not out of here soon. Thirty hives of bees plus the old truck would be lost forever, for if they survived the winter, the mighty forces of a spring thaw would reduce everything to wreckage. I could do with some help before it was too late so without further ado, I struck out for Jim Blakeney's place about 10 miles or so to the west. I could have taken a few short cuts through the woods but darkness was almost upon me, so I stayed to the road, dog trotting a lot of the way. To make matters worse it began to snow, although, some hours later when I "hullowed" old Jim's cabin, it had stopped. We had a bite to eat, washed down with tea, while we discussed a course of action. We then grabbed what little sleep the night had left for us.

Next morning with old Ben, Jim's horse, and sleigh we struck out in a blinding snowstorm. Struggling with a sense of doom I wondered if we were too late. Reaching the site, we tethered old Ben in the lee of an overhanging bluff and began the task of clearing away some of the boulders and other debris. The roadway in the narrow confines of the gap is bordered on one side by a small stream and is not much wider than the vehicle for its total length of about 200 yards. Then came the unloading, one hive at a time and struggling with it across the shifting barrier to be deposited further on in a niche by the roadside. The loose stones and gravel, snow covered, was treacherous underfoot and several times we went to our knees. Carrying hives without handles in a situation like this is difficult. Once, during an incautious moment we slithered uncontrollably down the unstable mass into the creek. Knee deep in icy water I staggered around trying to retrieve the hive before it became waterlogged. Not able to gain a foot hold on the loose scree I ended up by walking down the creek towing the partially floating box of bees past the slide area where we got it up the bank. Now I removed my trousers, wrung out most of the water and donned a pair of rubber boots which I nearly always carry in the cab. With the last hive safely over the obstacle we did some more road work, then hitched old Ben to a long chain, the other end of which was connected to the truck. Rear wheels churning and Ben straining mightily we were finally up and over the avalanche and on solid ground once more.

Not a bit too soon either for night-fall was upon us and the weather had deteriorated into a regular blizzard. So much snow had fallen that we had to shovel it off the truck before beginning the fastest loading operation on record. Then with all in readiness once more for departure Jim stated he would follow with old Ben "just in case". To

which I replied emphatically, "nothing doing Jim, enough is enough. You've got a long trip ahead of you as it is. I'm indebted to you and Ben and I certainly appreciate all you've done for me this day. I'll take it real easy and with this load I don't expect to get stuck. I'll probably be home about the same time you are." To this he shook his head saying, "I doubt that, but I sure do hope you make it all right." As the old vehicle crept forward, his last words, shouted in the teeth of the gale were, "I sure don't envy you tonight boy. Good luck!"

His lanky form with that of stalwart old Ben and the sleigh were still standing there watching while I with headlights stabbing the storm shrouded blackness began my 30 mile nightmare. Several times I got out to see if I was still on the road and I didn't dare waste

precious moments to eat a frozen sandwich during my race against time. The inadequate heater failed to prevent my pant legs from freezing into icy white, iron-hard sheaths which crackled with every movement.

The storm abated, its clouds fast disappearing over the horizon to be replaced by a brilliantly star lit sky which bathed the landscape with its eerie white light. Now familiar landmarks of the last few miles began showing up. Then a most welcome sight for tired aching eyes, the homestead came into view, blue smoke from the stove pipe curling upwards in the frosty air, and the old dog barking his head off bringing the Missus dashing out to see what all the commotion was about.

The wilderness really is a most fearsome place, which creates humility.

Madison Alderpersons Vote Against Bee Ordinance 2 to 1

By BENJAMIN ASHMAN
Madison, Wi.

This is my story of a city ordinance at Madison Wisconsin, February 20, 1976. The ordinance had a \$200.00 fine for keeping bees within the city limits.

About twenty-five persons appeared at a hearing who favored the ordinance and perhaps forty who opposed it.

I don't recall the arguments used on either side except that bees sting and we don't want to be stung. Several persons mentioned the fact that other insects also sting.

My own statements referred to the fact that I have about 3-1/2 acres and a small orchard of 100 trees. I need the bees to pollinate them and that without the bees I would lose a couple of thousand dollars in produce and honey. I said that to the several thousand persons in the city who had a few fruit trees, berries, etc., the ordinance was simply a slap in the face.

As to stings, yes, the honeybees do sting but so do hornets, wasps, bumblebees and yellow jackets. Therefore, amend the ordinance to say that such insects should not be allowed in the city.

I explained what to do if stung, quickly scrape off the stinger. A few persons, maybe one or two percent are quite allergic and such persons should go to their doctor who will prescribe pills which if placed under the tongue would be quickly absorbed and therefore relieve the

discomfort. I stressed that cases of death by honeybee stings were rare, more often the stings come from wasps or hornets.

I explained that the drones or males have no stingers and, therefore, the ordinance cannot be against them but only against the tens of thousands of females and, therefore, is discriminatory. This raised a laugh.

What the ordinance could have, I thought, is a rule that all hives be placed say thirty feet back from the sidewalk or street with a tall hedge or other barrier over which the bees would have to fly and then no one walking past would know that there were bees near. Also that a container of water with a very slow drip onto a board should be near so the bees would use it instead of birdbaths or nearby swimming pools.

The vote by the alderpersons was about 2 to 1 against the ordinance.

The Australian Bee Journal

Published Monthly.

\$AU7.20 per annum.

BANK DRAFT PREFERRED.

Write to - Editor

Victorian Apirarists' Association

P.O. Box 29, ORMOND. 3204.

Victoria, Australia

Sample Copies on Request.



OHIO

EAS Meeting, Wooster, Aug. 9-12

Dr. Walter Rothenbuhler (left) program chairman for the August 9-12 Eastern Apicultural Society meeting in Wooster, Ohio and E.A.S. Vice President Charles Divilbiss wrap up the final details on a program that will appeal to all levels of beekeepers from commercial to hobbyists.

Wooster College, the site of the meeting has plenty of recreational facilities for youngsters. Nearby is the Agricultural Institute which offers the only two-year degree course in Beekeeping Technology. Ohio is the furthest west E.A.S. meetings are ever held, which will make it easier for midwesterners to attend.

PENNSYLVANIA

Bucks County Beekeepers Association

Dr. Clarence Collison, the Pennsylvania State University Extension Specialist on Beekeeping, will be the guest speaker at the March meeting of the Bucks County Beekeepers Association. The meeting will be held on Thursday, March 9th in the Mandell Hall Auditorium on the campus of Delaware Valley College which is located approximately one mile west of Doylestown, Pa. on Route 202. The meeting will start at 8:00 p.m. and is open to the general public. Dr. Collison will be speaking on the timely topic of Spring Management to Increase Colony Vitality and Maximize Honey Production.

CALIFORNIA

Two-Day Short Course at Los Angeles

A weekend short course on the Life of Bees and Beekeeping will be taught by Dr. Norman Gary, who teaches beekeeping at the University of California, Davis Campus. The course is scheduled for Saturday and Sunday (9-5), April 8 and 9, at the UCLA Campus at 4000A Math Sciences Bldg.

Pre-enrollment information may be obtained from the Department of Biological and Physical Sciences, P.O. Box 24902, UCLA Extension, Los Angeles, CA 90024. Out-of-state people are welcome too. The course fee is \$45. You may enroll at the door if space is available. However, early pre-enrollment is advisable. If you have questions, call 213-825-7093.

NEWS and EVENTS



NEW HAMPSHIRE

Merrimack Valley Beekeepers Assn.

The Merrimack Valley Beekeepers Association (New Hampshire and Massachusetts) announces its second beekeeping school to be held Wednesday nights, 8:00-9:30 p.m. for 10 successive weeks, starting March 15, 1978. It will be held at the Alvirne High School, Derry Road, Rt. 102, Hudson, N. H. A charge of \$5.00 per family will cover the cost of text and materials.

The school is geared for the beginner but all interested in beekeeping are encouraged to attend. Slides, films, demonstrations and many guest speakers will be included. Two outdoor demonstration sessions are scheduled at the close of the school.

Registration will be held on March 8, 1978 at 8:00 p.m. at Alvirne High. Further information can be obtained by calling 603/635-3428.

NEW JERSEY

Below is a photograph of Christine Peters, former Morris County Honey Queen representative and now New Jersey State Honey Queen for 1978. With her are Mrs. Harold Koechlein, chairman of the honey queen nominating committee, and Lloyd Hildebrand, out-going president of Morris County Beekeepers Association.

Miss Peters is a graduate of Bridgewater-Raritan High School West and has received her bachelor of Arts degree in speech pathology at Montclair State College.



OKLAHOMA Beekeepers Association

Jim Ross, President of the Oklahoma State Beekeepers Association reports that the association will hold its spring meeting Saturday, April 22, 1978. The meeting will be hosted by the Northwest Oklahoma Beekeepers Association.

The president of this association, Dr. Richard Whittaker, announces the meeting will be conducted in the O.S.U. Extension Fairgrounds Building in Woodward, Oklahoma. He extends an invitation to anyone interested in beekeeping to please attend.

MISSOURI

State Beekeepers Association

The Missouri State Beekeepers Association will hold its annual spring meeting in Room 2-16 Agriculture Building, University of Missouri, Columbia, Missouri on March 18th.

Two speakers have accepted invitations to our meeting, namely — Dr. Richard Taylor of Trumansburg, N.Y., and Glen Gibson of Minco, Okla.

Registration will be at 8:30 with the meeting over about 4:30 in the afternoon.

WASHINGTON

State Beekeepers Association

Elected at the annual meeting in Bellingham, Washington, the 1978 officers are: President, Elwood Sires, 6 W. Pine, Union Gap, WA 98903; Vice President, Robert Gorham, Box 296, Wapato, WA; Secretary-Treasurer, Marcie Sires, Rt. 1, Box 1090-A, Selah, WA 98942.

OHIO

Mid Ohio Valley Beekeepers Assn.

Present officers are: Pres., Worthy Husk, Box 551, Beverly, OH 45715; Sec.-Treas., Janet S. Davis, Route 1, Waterford, OH 45786.

Proposed Programs to Sept. 1978
(subject to change)

Mar. 20 Discussion and film on Installing Package Bees — W. Va. State Apiarist, Clyde Hutchinson

Apr. 17 Discussion on Swarm Control, — W. Va. State Apiarist, Earl Cochran

May 15 Discussion and films about AFB and other bee diseases, — Wash. County Apiarist, Worthy Husk

Jun 19 Howard Cunningham — A display of extracting equipment and discussion of methods of extracting

Jul. 17 An outing at a beeyard and visit to the bees — Howard Cunningham, Rt. 1, Parkersburg, WV

Aug. 21 A state speaker discussing Requeening

GLEANINGS IN BEE CULTURE

Sep. 18 Election of officers and an association display (anything members can bring connected with bees)

Meetings are on the 3rd Monday of each month. Time and location available from Secretary-Treasurer.

WISCONSIN ETN Conference

Wisconsin beekeepers can review "spring and summer bee colony management" during a statewide Educational Telephone Network (ETN) conference March 8, 8-10 p.m.

Walt L. Gojmerac, University of Wisconsin-Extension (UWEX) entomologist, as well as researchers from the USDA bee laboratory in Madison and the Wisconsin Department of Agriculture, will lead the session and be available for questions.

Gojmerac said county beekeepers associations may want to hold their monthly meeting before the ETN program and then tune in at 8 p.m.

If you would like to participate in the free program, contact your local county UWEX office to make sure a room is available.



NEW JERSEY

Governor Byrne receives a sample of New Jersey honey from New Jersey Honey Queen, Chris Peters of Somerville during New Jersey Farmers' Week. New Jersey Secretary of Agriculture, Phillip Alampi looks on.

CALIFORNIA Beekeeping Workshop

Norman Gary, Ph.D., apiculturist/professor, entomology department, at UCD—Participants learn how to examine and manipulate colonies of bees; assemble equipment; effectively manage colonies with respect to diagnosis and treatment of disease; feeding, rearing, and introducing queens, and evaluating colony performance. Also covers methods of honey production and harvest, and emphasizes the proper use of smoker, veil, and other beekeeping equipment. Students provide their own equipment; a list will be sent upon enrollment, along with a map with directions to the Bee Biology Facility.

(774K41) Davis: Conference Room, Bee Biology Facility, Hutchison Drive, UCD; Saturday, 9 a.m.-5 p.m.; May 20; 1 meeting; \$25 non-credit only.

Limited enrollment; enrollment requested by May 15.

(774K13) Davis: Conference Room, Bee Biology Facility, Hutchison Drive, UCD; Sunday, 9 a.m.-5 p.m.; May 21; 1 meeting; \$25 non-credit only. Limited enrollment; enrollment requested by May 16.

Queenrearing

Christine Y.S. Peng, Ph.D., assistant professor, and Jerry Marston, B.S., staff research associate, entomology department, UCD—This course offers a foundation and review of the principles of queenrearing, with demonstrations on practical techniques for beekeepers. Each student performs all operations involved with queenrearing. Artificial insemination not included. Students should bring sack lunches.

(774K10) Davis: Conference Room, Bee Biology Facility, Hutchison Drive, UCD; Saturday, 9 a.m.-5 p.m.; June 3; 1 meeting; \$25 non-credit only. Limited enrollment; enrollment requested by May 26.

PENNSYLVANIA Beekeeping Short Courses 1978 Delaware Valley College Doylestown, Pa. 18901

Spring: Sat. April 1, 8, & 15, 1978
Summer: Wed. Thur. & Fri., Jun. 28-30

Delaware Valley College will again be offering its spring and summer beekeeping short courses. The courses are offered under the direction of Dr. Robert Berthold (Associate Professor Biology) in cooperation with Jack Matthenius (N.J. Supervisor of Bee Culture). Instruction will take place on the Delaware Valley Campus, with the College apiary and honey house being utilized.

Total cost for the three-days of instruction is \$18. An application for the course or further information may be obtained by writing Dr. Berthold, c/o Delaware Valley College, Doylestown, Pa. 18901, or by calling him at Area Code 215-345-1500.

MARYLAND Apiary Inspectors of America

A highly successful and profitable A.I.A. conference is now history. Attendance records indicate 75 conferees attended the meeting.

Officers and directors elected are as follows: President, Gerald Stevens, New York; Vice President, Harry Fulton, Mississippi; Sec.-Treas., Floyd Hilbig, Nevada. Directors are: Warren Cyrus, Paul Jackson, Sam Neely, Gordon Rudloff and Leo Vanderpool.

Motions presented and carried were: To make inquiry of the State of Hawaii in regard to an apiary inspection program for certification of queens and package bees from Hawaii to mainland states; To have each member state

advise in regard to location of shippers of nuc packages and advise relative to any problems associated with these shipments; Review inter-state certificates presently in use; Hold 1979 meeting in San Diego, California and the 1980 meeting in Laramie, Wyoming.

OHIO State Beekeepers Association

The spring meeting of the Ohio State Beekeepers Association will be held March 18 at Otterbein College in Westerville, near Columbus. OSBA President Richard Osborne, Middletown, will welcome members at 9:30 a.m. with a full program following. Highlights will include:

Charles Milne, Research Associate, University of Guelph, Ontario, Canada, will discuss facets of his work on Canadian bee research.

John Koulinevich of Yugoslavia, working on a research grant at O.S.U.—Longevity of Worker Bees.

"Australian Panel"—Ohio beekeepers who participated in last September's trip to "Down Under" will exchange experiences for the benefit of those who stayed home. This panel consists of Bill Stephen, Martha Pemberton and Charles Divelbiss.

Gordon Rudloff, State Apiarist, will analyze the Beekeeper Indemnification Bill now in the Ohio General Assembly, as well as report on departmental activities.

Carl Rase, Minford—Spring Management Techniques in the Beeyard.

Luther Gibbs, Fremont—Improving Relationships Between Beekeepers and Pesticide Operators.

WASHINGTON Green River Community College Beekeeping Classes

Three beekeeping classes will be offered by Green River Community College this spring. The classes will be taught by well-known bee authority Melvin Milne.

A five-week beginning beekeeping class is scheduled to begin on Monday, April 3, from 7 to 10 p.m. on the campus. Followed by a five-week intermediate class to begin on Monday, May 8, from 7 to 10 p.m.

An advanced class for the serious beekeeping student with prerequisite experience or study will emphasize apiary management and is to be offered on Wednesday evenings for 11 weeks beginning March 29.

For further information about enrollment, write: GRCC, 12401 S.E. 320th, Auburn, WA 98002, or call 833-9111 (Auburn, Kent) or 464-6133 (Seattle) or 924-0180 (Tacoma).

Obituaries

Harold C. Achtenhagen

"ACHTE" as he was known by many of his fellow workers and friends was a former Chicago high school teacher and an authority on beekeeping. He was born May 6, 1900 in Watertown, Wisconsin and passed away November 29, 1977. He and his wife, Esther, who survives him lived in Western Springs, Ill.

Throughout Mr. Achtenhagen's lifetime he had an intense interest in the care and management of bees. He developed and operated the A. C. Honey Company and was active in its management until the time of his death.

Mr. Achtenhagen was involved in the beekeeping organizations at the local, state and national levels. He served in many capacities in the Cook DuPage Beekeepers Association including the presidency.

"Achte" performed many duties for the Illinois State Beekeepers Association and guided its activities as its President from 1971-1974. At its annual meeting in 1976 "Achte" was honored by the ISBA as the Beekeeper of the Year.

At the national level Mr. Achtenhagen served as Illinois Membership Chairman for both the American Beekeeping Federation and the American Honey Producers Association.

Marie Morse

ON FEBRUARY 14 we received notice of the passing of MARIE MORSE of Sharon, Connecticut. For many years Marie gave dedicated service as the Treasurer and Historian of the Eastern Apicultural Society. She had been ill since the latter part of December.

Lloyd C. Gardner

LLOYD C. GARDNER of Delaware, Ohio was born March 2, 1895 and passed away January 11, 1978.

During the late 1920's and extending into the late 1940's, Lloyd developed one of the largest commercial operations in Ohio. He was one of the most progressive and modern beekeepers in Ohio during this period.

Lloyd served in the Ohio Department of Agriculture as apiary inspector, served as president of The Ohio State Beekeepers Association for several years and as manager of The Ohio Honey Cooperative Association for many years.

He was an inventor of no small achievement. Some of his patents on honey processing equipment represent a crucial breakthrough in the honey industry.

We salute a man of great devotion and optimism for a bright future for the beekeeping industry of the country.

BEE TALK

(Continued from page 119)

I have some other good memories of all this. Over twenty years ago, for instance, I decided that these round sections needed a little message, to paste on the back, explaining what they were. So I composed one in the printer's office, on my way to work, saying, among other things, that the bees had put the honey in the container themselves. This has evoked considerable amazement, and skepticism, among customers. When Duane Waid and I designed a new wrap-around label, we transferred that message to the label itself. Now it has become part of the standard Cobana label, and whenever I see Cobana honey, from whatever part of the country, lo! there is my little message, word for word. I guess it gives me a feeling of having left some sort of mark on the world, however minute. The real mark was left by Dr. Zbikowski, and it is a large one indeed.

E. F. PHILLIPS--WHO WAS HE?

(Continued from page 109)

In addition to establishing the beekeeping library at Cornell, Phillips founded the Miller Memorial Library at the University of Wisconsin.

Today the library at Cornell possesses more than 4,500 books and volumes of bee journals. It is known as the Everett Franklin Phillips Beekeeping Library. The present endowment is well over \$10,000. Nearly \$2,000 of this was contributed by beekeepers, mostly from New York State. The interest is used to help maintain the library.

E. F. Phillips was one of the great leaders among beekeepers in this country for a period of forty-six years. He was seldom passive in his attitudes. Any cause he embraced became a crusade. His official positions gave him repeated

opportunities to further causes in the interest of beekeepers and beekeeping. He seldom failed to seize his opportunities.

HOW TO AVOID NEGATIVE BEE LAWS

(Continued from page 115)

go, like the writer, their allergies are their responsibility to learn to live with. We can't make the world safe for them. They have to learn to live safely in the world. A bee sting is not cause for suit!

The most aggressive hobbyist in a community having no beekeepers organization should search out the rest of the hobbyists by a news ad if necessary and get organized. United we stand and divided we'll be legislated out of business by the highly verbal fearful minority.

Please send bee art replies to the writer at 47 Levant St., San Francisco, Ca. 94114

FDA INSPECTION

(Continued from page 117)

lishment not required to furnish information not relating to such shipment.

5. Inspection must be conducted at reasonable times and in a reasonable manner, within reasonable limits. Inspection is not intended to be a fishing expedition.

6. Photographs of the premises may be taken, if consent is given. At present, law is unsettled as to whether photos may be taken by inspector if owner of premises objects. We recommend that inspector be politely asked to leave his camera in his car. Test cases are now in Court to determine this issue, so if you are confronted with this situation in the future, it is suggested you consult with your attorney as to your rights and responsibilities in your particular case.

7. After inspection, inspector must give owner or agent in charge, report in writing, setting forth any conditions or practices observed that indicate that a food in the establishment contains any filthy, putrid or decomposed substance or has been handled or held under insanitary conditions.

8. If samples are taken by inspector for the purpose of analyses, at least twice as much must be taken as is necessary for analyses so that a portion of the sample will be available if the owner of the premises requests that a portion be furnished. It is suggested that owner, at same time, have inspector initial an identical sample and retain it for use in case it becomes necessary to contest FDA's findings on analyses of samples taken.

9. Results of analyses of food samples obtained in the course of a factory inspection must be promptly furnished to the owner or agent in charge of the establishment involved.

GLEANINGS IN BEE CULTURE

(Member, Better Business Bureau)

ASBURY-BISHOP

— MANY HAVE HARVESTED THIS BEEMASTER STRAIN'S
TREMENDOUS PRODUCTIVITY — WHY DON'T YOU?

GUARANTEED SATISFACTION

* **DEPENDABILITY** * **QUALITY** * **PERSONALIZED SERVICE**

* **FOR OVER 55 YEARS**



Here 3 frames of brood have almost all hatched in this 4-frame size styrofoam shipping container—Now with 5 to 6 lbs. of bees and a good start for making honey.

**** TRY OUR GUARANTEED**

BEEMASTER SUPER-HYBRID

STRAIN FOR 1978 **

(Guaranteed only in lots of 25 or more) which are:

Send for our free brochure describing our queen-rearing techniques, lines, and FULL SEASON GUARANTEE.

EARLY QUEENS — March 1st

**BEEMASTER
Super Hybrid Strain**

This is the finest true hybrid stock in the world. The breeders are selected from stock that averages more than 500 lbs. per colony for two seasons from the upper Mid-West.

Quantity	1-10	11-99	100-up
EACH	\$6.50	\$6.00	\$5.50

"ALASKAN-SUN" QUEENS

A proven line of gentle, silver-grey bees with breeders selected in Alaska.

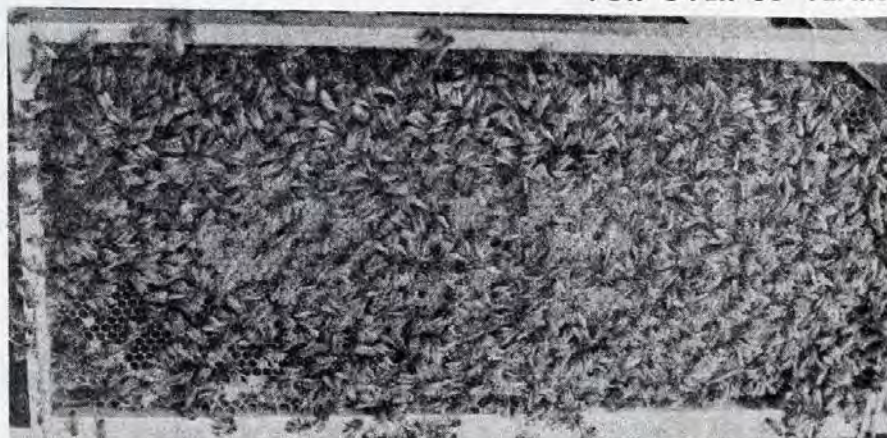
Quantity	1-10	11-99	100-up
EACH	\$7.50	\$7.00	\$6.50

—Shipped Air Mail, Insured, and Special Delivery or Air Freight

ASBURY-BISHOP

5772 East Le Grand Road
Merced, California 95340

Ph: (209) 722-7945—Day or Night



Standard frames of sealed brood, at least two thirds sealed, with adhering bees are selected for shipment as the best method of starting colonies.

**FOR HONEY PRODUCER, POLLINATOR, HOBBYIST
2 TO 4-FRAME NUCS F.O.B. MERCED, CALIFORNIA**

	1-10	11-up
2-frs. Sealed Brood & Bees w/Hybrid Queen	\$21.50	\$19.50
3-frs. Sealed Brood & Bees w/Hybrid Queen	31.50	29.50
4-frs. Sealed Brood & Bees w/Hybrid Queen	41.50	39.50

(Frames are Langstroth Standard Depth for brood)

**** Brood Nucs are available after first of March to first of September, depending upon spring weather conditions.**

NOTE: ADD \$5.00 EXTRA EACH NUC FOR PREPAID SHIPPING

(We deliver orders of 500 or more nucs at \$2.00 each.)

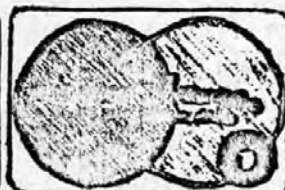
The shipment of frames of sealed brood with adhering bees is the best method of starting colonies. They arrive in better condition and with few bee losses to the most distant customers. A 3-frame nuc will have 5 to 6 pounds of bees in it when the brood hatches, oftentimes, placing them 2 to 3 weeks ahead of package bees and gives the beekeeper the best chance of making a crop. Shipped in an insulated box with Health Certificate.

TERMS: Small orders cash with order, larger orders \$3.00 per unit deposit with order and balance 30-days prior to desired shipping date.

Now Booking Orders.

**Now... You
Can Charge
Bees & Queens
On Bank Cards**

ASBURY-BISHOP now accept. Master Charge & Bank Americard. Give your name as it appears on your charge card, your complete number (including the 4-digit bank number for Master Charge), and the expiration date. Charge card orders accepted by mail and phone. (No collect calls please.)



**Contact: Mr. Jeff Asbury, rep.
or Mr. Jerry D. Bishop**

1978 PRICE LIST

ITALIAN QUEENS

1-99 \$5.72 100-up \$5.15

All Queens Clipped Unless Ordered "NOT CLIPPED". Marking 50c. All queens shipped air mail postpaid. \$1.00 deposit per queen required to book order. Balance due 10 days prior to shipping date.

PACKAGE BEES — — PARCEL POST

PRICES INCLUDE POSTAGE, HANDLING FEE, INSURANCE, AND SPECIAL HANDLING. WE DO NOT GUARANTEE LIVE DELIVERY.

2# — \$25.00 per package

3# — 30.00 per package

PACKAGE BEES F.O.B. MOULTRIE

	1-9	10-99	100-699	700 up
2#	\$17.77	\$16.61	\$15.71	\$15.50
3#	22.15	20.99	20.09	19.75

\$1.00 ALLOWANCE FOR USEABLE CAGE WITH COVER BLOCK. QUEENLESS PACKAGES DEDUCT \$3.50 FROM ABOVE PRICES. \$3.00 PER PACKAGE DEPOSIT REQUIRED TO BOOK ORDER. BALANCE DUE 10 DAYS PRIOR TO SHIPPING DATE.

All Prices Subject to Change Without Notice.

"THEY PRODUCE"



ROSSMAN
APIARIES, INC.
P. O. BOX 905 MOULTRIE, GA. 31768
(912) 985-7200

ITALIAN

Queens CHARNOCK APIARIES

Book early — 20% books order

Minimum order 15 queens

Available through May 15th

1978 PRICES

\$4.95 Each

CHARNOCK APIARIES

2839 Chickamauga Ave.

W. PALM BEACH, FLA. 33401

Phone: 305-683-3654

PACKAGE BEES ??

Avoid postal problems. Try our fast dependable service direct to the NORTH EASTERN STATES and EASTERN CANADA.

Marasan Honey Ltd.

890 Denison Cres, Ottawa, Ont., Can. K2A 2N5

Phone: 613 729-9981

ANDERSON APIARIES "Specialists in Nucs"

Now booking orders for spring 1978. Three and five frame nucs with laying Italian queens.

3-fr. nucs, \$35 5-fr. nucs, \$40

Price includes postage and insurance. For commercial pickup orders (our boxes)

3-fr. nucs, \$25 5-fr. nucs, \$30

115 North Oak Street Phone
Adel, Georgia 31620 (912) 896-4419

QUALITY BRED ITALIAN QUEENS AND BEES

Queens \$4.50 each Air Mail and Insured

3-Frame Nucs with queen \$30.00 each delivered to 5th zone. Loaded on your truck \$27.00 each. These Nucs are ideal for starting new colonies and for use in pollination of Berries and Fruit trees and the clovers.

Bred for Honey gathering and Winter Hardiness.

Walter D. Leverette Apiaries

P.O. Box 3364

Ft. Pierce, Fla. 33450

Phone: 1-305-461-4776

MRAZ QUEENS

Winter hardy. Disease resistant.

1-10 \$6.00

11-99 5.75

100-up 5.50

NO PACKAGES

Clip or Mark 35c

Add 50c per order under 10 queens for postage.

Sundown Apiaries

P. O. Box 172

Columbus, Miss. 39701

Ph: 601-327-8739 after 5 p.m.

BRITISH BEE JOURNAL

Monthly

Single copies 18p. plus postage.
Annual subscription U.K. £3.20
per annum, post paid.

OVERSEAS: annual subscription
\$7.00 or £4.10 per annum pp.

Keep up-to-date by taking out a
subscription now either direct from
us or through our agents.

Medina, Ohio 44256 U.S.A.
Gleanings in Bee Culture

At Navasota, Texas this is our 53rd year of producing.

FAMOUS WEAVER QUEENS

	ITALIAN	STARLINE	BUCKFAST
1-25	\$6.25	\$6.75	\$6.85
26-99	5.65	6.15	6.85
100-999	5.10	5.60	5.70
1000 & up	5.00	5.50	5.60

Write for Package Bee prices and available delivery dates.

WEAVER APIARIES, Rt. 1, Box 111, Navasota, TX 77868

Phones: Office — 713-825-2312 Night — 713-825-7203

BEE INTERESTED

For beekeeping information read the
American Bee Journal. New editorial
emphasis on practical down-to-earth
material, including question and answer
section. For more information or free
sample copy, write to....

AMERICAN BEE JOURNAL
Hamilton, Illinois 62341

The New Zealand Beekeeper

Quarterly magazine published for
the National Beekeepers' Association
of New Zealand. A new
editorial policy emphasises practical
beekeeping, latest research and
feature articles with the aid of
larger format, new writers and
more illustrations.

Subscription: \$NZ7.50 (\$US7.80)
a year, surface postage free.

EDITOR: TREVOR WALTON
Box 176 Carterton, New Zealand
Phone: 8348, Carterton

ITALIANS (Postage Paid)

In Lots of	Queens	2-lb. & Qn.	3-lb. & Qn.
1-24	\$5.00	\$20.00	\$24.00
25-99	4.90	19.50	23.50
100 up	4.75	19.00	23.00

Clip or Mark Queens — 25¢ ea.
TRUCK ORDERS 100 up
2-lb. w/q \$16.75 2-lb. w/q \$15.75
3-lb. w/q 20.75 3-lb. w/q \$19.75

Payments in full 15 days prior to shipping date.

HARDEMAN APIARIES Mt. Vernon, GA 30445 Ph: 912-583-2710

**KEYLINE QUEENS AND PACKAGES**

Fine Queens available April 1st through September 30th.
Pay less, Pay more, you can't get a finer queen anywhere.

Write for Free Brochure.

KEYLINE, INC.

Business address — Rt. 2, Box 207, Nauvoo, Ala. 35578

Production address — P.O. Box 218, Theodore, Ala. 36582

THE CALE 876 HYBRID

This three-line hybrid is produced through instrumental insemination from
inbred lines from the Dadant and Sons, Inc., bee breeding program.
Production is limited, so order early:

Number	Price per Queen
1-5	\$7.50
6-15	7.20
16-99	6.90
100 & Up	6.60

Prices include clipping of each queen.

AVAILABLE ONLY FROM:

GENETIC SYSTEMS, INCORPORATED

Route 1, Box 711 LaBelle, Florida 33935 Phone: 813-675-0541

Non Swarming — Gentle — Productive

**BANAT STRAIN
CARNIOLAN QUEENS**
\$5.00 each

3 lb. packages \$30.00 ppd.

GITTA APIARIES
Denton, Md. 21629

Caucasian Queens

1-49 \$4.85

50 & up 4.50

VAUGHN APIARIES

Box 3116 Huntsville, Ala. 35810

QUEENS**Italian**

	1-24	25-99
2-lb. pkg. w/queen	\$16.50	\$15.75
3-lb. pkg. w/queen	21.50	20.75
Nice large queens	6.00	5.40

Caucasian

100 up
\$15.00
20.00
5.00

Clipping 50¢ Marking 50¢

For package bees by truck write for prices. — Fumidil-B fed to nuclei.
We are expanding our queen yard and package bee production and guarantee your
order will be shipped on date scheduled or within three (3) days of it.
No live delivery on package bees through U.S. mail. Package bees can be insured.
You file the claim. Queens are guaranteed in quality and live delivery.
Order 1 or 1,000

MITCHELL'S APIARIES

and Son-in-Law, DOUGLAS LAMBERTSEN
Bunkie, LA 71322 Phone: 318-346-2176

QUALITY QUEENS

Italian Queens Produced
With Extra Care

1-24 \$5.00

25-up 4.75

Queen Cells Available

GLENN APIARIES

2000 Fortune Hill Rd.
Fallbrook, CA 92028
Ph: 714-728-3731

QUEENS --- NUCS --- PACKAGES --- CELLS

ITALIAN --- CAUCASIAN --- CARNIOLAN

IDEAL CLIMATE PRODUCES OUTSTANDING QUEENS & BEES

QUEENS

NUCS

PACKAGES

CELLS

		3 FRAMES	4 FRAMES	2-lb. w/q	3-lb. w/q
* 1-24	\$6.25	\$28	\$35	\$18.25	\$23.50
* 25-99	\$5.50	\$26	\$32	\$17.50	\$22.75
* 100&up	\$5.00	CALL FOR QUOTES		\$16.75	\$22.50

AFTER MAY 1 ALL QUEEN PRICES WILL BE REDUCED \$.50 PER QUEEN

QUEEN PRICES INCLUDE POSTAGE

CALL FOR QUOTATIONS FOR CELL ORDERS OVER 500 WE WILL PERSONALLY DELIVER BY AIRPLANE

ALL ORDERS REQUIRE 20% DEPOSIT TO BOOK ORDER
REMAINING AMOUNT IS DUE 30 DAYS PRIOR TO SHIPMENT

RIO GRANDE VALLEY QUEENS

(A DIVISION OF HONEY FARMS, INC.)

3 MILES SOUTH JACKSON ROAD
MC ALLEN, TEXAS 78501

CONTACT: TOM SPRAGUE
PHONE: 512-687-5421

BETTER BRED QUEENS THREE BANDED ITALIANS

Get with your supply dealer, State bee inspector, neighbor beekeepers, pool your orders and haul by truck. We will ship by insured mail but cannot guarantee live delivery or replace package bees.

QUEEN PRICES

1 to 24	\$5.25
25 to 99	4.75
100 or more	4.50

PACKAGE PRICES

	2 lb. w/q	3 lb. w/q
1 to 25	\$20.50	\$25.00 Postpaid
Truck Prices	15.50	20.50

Phone 205-829-6183 A L Webb Sr., Manager
205-829-6074 Mrs. Knox, Sec. Call between 5 & 10 PM only.

CALVERT APIARIES, INC. CALVERT, ALABAMA 36513

TESTED QUEENS

Caucasian and Italian, all double grafted into Fumidil-B fed colonies and nucs. Queens caged after sealed brood reared, all clipped and marked. Air-mailed postpaid. In multiples of 25 only. Booking March 15 to May 1 at \$6.00 ea. Phone: 904-429-3447

MIKSA HONEY FARMS

Rt. 1, Box 820
Groveland, FL 32736

HOMAN'S

QUALITY BRED CAUCASIAN & ITALIAN BEES & QUEENS

2-lb. w/q \$15.00 3-lb. w/q \$19.00

Queens \$4.50

Queens postpaid airmail. Packages F.O.B. Shannon.

Health certificate furnished. Write for prices and dates on truckload lots.

HOLDER HOMAN APIARIES

Rt. 2, Box 123-B SHANNON, MS 38868 Ph. 601-767-3880

CHOICE HYBRID QUEENS

Gentle, high honey producers. Requeen with the finest quality queens.

1-10 \$6.00

10 up 5.50

SCHILLER APIARIES

104 South Brewer
BRYAN, TX 77801
Ph: 713-823-8526

JACKSON APIARIES

P. O. BOX 159

PACKAGE BEES --- QUEENS --- HONEY
FUNSTON, GEORGIA 31753

Phone 912/941-5522

PRICE LIST

ITALIAN PACKAGE BEES AND QUEENS

We ship pure worker bees by your truck, car, trailer or by parcel post. Prices are F.O.B. Funston, Georgia.

	2 lbs.	3 lbs.	4 lbs.	5 lbs.	Queens
With Queens					
1-24	\$16.25	\$20.50	\$25.00	\$30.00	\$5.75
25- 99	\$15.75	\$20.00	\$24.50	\$29.50	\$5.40
100 Up	\$15.25	\$19.50	\$24.00	\$29.00	\$5.00

Clipping Queens 40¢ each --- Marking Queens 40¢ each.

For queenless packages deduct \$3.00 from the above prices.

Packages can be shipped only by parcel post or your transportation.

Get away for a few days, pool your order with your neighbor, pick your bees up here and save the postage. Deduct 75¢ each if you bring your own usable cages. \$2.00 deposit per package required to book your order --- balance due 15 days prior to shipping date. For most desirable shipping dates book your order early.

Prices subject to change without notice.

Thank you

Shipping Dates April 1st thru May 20th

THREE BANDED ITALIANS

SERVING THOSE WHO DEMAND THE BEST IN PACKAGE BEES AND QUEENS

—Prices—



	1-9	10-24	25-99	100 up
2 lb. pkg. with young laying queen	\$17.25	\$16.75	\$16.25	\$15.75
3 lb. pkg. with young laying queen	22.00	21.25	20.75	20.25
4 lb. pkg. with young laying queen	26.75	26.25	25.50	25.00
5 lb. pkg. with young laying queen	31.25	30.75	30.00	29.50
Extra Queens	5.75	5.50	5.25	5.00
Queens clipped 25¢ each		Queens marked 25¢ each		

Queens are Postpaid and Shipped Air Mail.

Package Bees are F.O.B. Shipping Point.

TERMS - Small orders cash, large orders \$2.00 per package deposit and balance two weeks prior to shipping date.

QUALITY DOES NOT COST — IT PAYS

THE WILBANKS APIARIES, INC. Box 12 CLAXTON, GA. 30417

Phone: Area Code (912) 739-4820 or 739-1408

BOOKING ORDERS FOR 1978

3-BANDED ITALIAN PACKAGE BEES AND QUEENS

	Queens	2-lb. w/qn.	3-lb. w/qn.
1-9	\$6.00	\$16.50	\$21.50
10-24	5.50	16.00	21.00
25-99	5.25	15.50	20.50
100 up	5.00	15.25	20.00

Add \$2.25 per 2 lb. pkg. and \$2.75 per 3 lb. pkg. for postage and insurance.

Write or call for truckload prices.—Call after 6:00 p.m.—Ph: 205-846-2662

MILLRY BEE CO. MILLRY, ALA. 36558

Rt. 2, Box 55-B

1978

QUEENS AND PACKAGES

Italian — Caucasian — Carniolan
QUEENS

\$6.50 ea. postage prepaid
minimum order 10

PACKAGES

\$30.00 2-lb. w/queen

35.00 3-lb. w/queen

postage prepaid

Terms: 25% deposit with order, balance due 2 weeks prior to shipping. Available April 15th, weather permitting.

C.E.M. APIARIES

P.O. Box 303 Grass Valley, CA 95945
(916) 273-1097

FARRIS HOMAN

SHANNON, MISSISSIPPI 38868

PACKAGE BEES — Headed with either strain queen — CAUCASIAN or ITALIAN		They Rank Tops in Honey Production		
Shipments Start April 15th		In Lots Of		
In Lots Of	Queens	2 lb. W/Q	3 lb. W/Q	4 lb. W/Q
1-24	\$5.50	\$16.00	\$20.00	\$24.00
25-99	5.10	15.25	19.75	23.25
100 Up	5.00	14.50	18.75	22.75

Above price does not include shipping charges on pkg. bees. Queens PP Airmailed, 25¢ ea. extra for marking & clipping. Please make remittance 15 days prior to shipping date.

ITALIAN QUEENS

1-24 \$4.50

24-up 4.00

FLOYD'S APIARIES

Rt. 1, Box 328 Deville, La. 71328
Phone: 318-466-5289 or 318-443-7879



QUEENS AND PACKAGE BEES



CAUCASIAN

	Queens	2-lb.	3-lb.
1-10	\$6.20	\$17.25	\$22.25
11-39	5.75	16.75	21.75
40-99	5.45	16.25	21.25
100-499	5.15	15.75	20.75
500 up	4.95		



MIDNITE

	Queens	2-lb.	3-lb.
1-10	\$6.60	\$17.65	\$22.65
11-39	6.15	17.15	22.15
40-99	5.85	16.65	21.65
100-499	5.55	16.15	21.15
500 up	5.35		

HOWARD WEAVER & SONS
Rt. 1, Box 16-A Navasota, Texas 77868
Phone 713-825-7714

For clipping and/or marking queens add 40¢ per queen. Truckload prices on request.

YOUR livelihood -- Success or failure?

Why not utilize the very best? Insure the finest honey crop available. USE THE ONE PROVEN PERFECTED STOCK available ONLY from

BERRY'S

"Old Reliable" Hybrid Italian Bees Preferred by Leading Honey Producers
PRICES THRU MAY 20th — 10% REDUCTION AFTER THAT DATE

	1-24	25-99	100 up
Queens	\$ 6.00	\$ 5.75	\$ 5.50
2 lb. pkg. w/q	17.00	16.50	16.00
3 lb. pkg. w/q	21.00	20.50	20.00
4 lb. pkg. w/q	25.00	24.50	24.00
5 lb. pkg. w/q	29.00	28.50	28.00

Tested Queens \$2.00 each extra.

For prices on queenless pkgs., deduct \$3.00 for queen.

Now booking 1978 orders. Shipment made by your car, truck, or trailer. Deduct 75¢ each for your usable screen cages from above price. Book early for most desirable shipping dates. 10% deposit required for booking—balance due two weeks prior to shipping date. MAY WE BOOK YOUR ORDER NOW? Parcel Post Orders: Postage, Insurance and Special Handling when available.

2-lb. package \$4.50 ea. 3-lb. package \$5.00 ea.
4-lb. package 5.50 ea. 5-lb. package 6.00 ea.

Prices Subject to Change Without Notice.

Queens postpaid airmail—no extra charge. Packages F.O.B. Shipping Point
Queens clipped, 20¢ each extra. Clipped and marked, 40¢ each.

Postage must accompany all parcel post orders.
References: Union Bank & Trust Co., Montgomery, Ala.; Any
Bee Journal in U.S. or Canada; any Extension Agent.

M. C. Berry & Sons Montgomery, Ala. 36101

P.O. Box 684 Phone: 205-262-0668 or 205-269-9998

Eighty-one years of Select Breeding with the Bees.

Accredited and Certified — The Best in America

Productive—Winter Hardy (No Packages)

Breeding stock comes from Vermont

1-10 \$6.00

MRAZ QUEENS

11-99 \$5.75 100 & over \$5.50

Shipped postage paid from about April 1st
...10 and under add 50¢ handling fee

Booked up until May 15th

CLEAR RUN APIARIES

Disease Resistant

....Resists EFB and Nosema Apis

10% to book —

balance due 3 weeks before shipping

Clip or mark 25¢

Amos McLamb P.O. Box 27 Harrells, N. C. 28444 (919) 532-4782

Caucasian, Italian,

Dadant Midnite Hybrid

Queens & Pkg. Bees



KANE APIARIES

R. 1, Box 192
Ph. 512-798-3287
Hallettsville, Texas 77964



SUNDANCE



3 Frame 5 Frame

CORRUGATED NUC BOX

Now Introducing
The 5 Frame Nuc Box

Please write for more information, prices and shipping costs
Transport Bees On Frames Eliminate Nuc Box Deposit
Faster Spring Build Up Package Bee Container
Pollination Unit Water Resistant
Splitting Hives Easy Assembly
Lightweight Economical
Wax Coated Reusable

3 Frame Prices	10	100	1000
Screened lids each	\$1.70	1.80	1.50
Solid lids	\$1.55	1.45	1.35

Add shipping costs at 1.8 pounds per box + \$1 per order for pkg.

Orders 50 or less, call UPS for shipping rates

3 frame sample send \$3 + 5 frame sample send \$3.50

California residents add 6% sales tax

For more information write:

Sundance Honey Company

Post Office Box 12101

Santa Ana, California 92712

(714) 545-3033

QUEENS

Two good strains of bees. Very gentle and good workers.

Dadant's Starline Our Regular Italians

1 to 24	\$7.25	\$6.75
25 to 99	6.50	6.00
100 up	6.00	5.50

Clip and Mark 50¢ each.

GEO. E. CURTIS & SONS, INC.

Box 507 La Belle, Fla. 33935 Phone: 813-675-1665 or 675-1566



ALL PURPOSE ITALIAN QUEENS

Some plants produce only nectar, other plants produce only pollen. Your hive needs both nectar collectors for honey, and pollen collectors for brood rearing and pollination. Pollen is becoming a popular health food.

Our gentle yellow Italian queens are bred for all these purposes.

Available March 15 till June 1

2-9 \$5.00 10-49 \$4.75 50 up \$4.50

Marking 20¢ Clipping no charge

Sent air mail postage paid 10% payment books your shipping date.

Hel-Le Bee Farm

P.O. Box 95

Phone: 904-468-1494

Hampton, FL 32044

THE STOVER APIARIES, INC.

MAYHEW, MS. 39753

Phone: 601-327-7223

ITALIAN

STARLINE

PARCEL POST PACKAGE BEES AND QUEENS

In Lots of	Queens	2-lb. & Queen	3-lb. & Queen	4-lb. & Queen	5-lb. & Queen
1	\$6.00	\$25.00	\$30.50	\$36.00	\$41.50
2-24	6.00	23.00	28.50	34.00	39.50
25-99	5.50	22.00	27.50	33.00	38.50

WRITE FOR PRICES FOR 100 AND UP

PRICES INCLUDE POSTAGE, SPECIAL HANDLING, AND INSURANCE FEES.

STARLINES ARE 50¢ EXTRA.

Packages can only be shipped parcel post. To book parcel post orders check or money order must accompany order. Prices are subject to change.

Live delivery can only be guaranteed until May 20, on package bees. We may run late on shipping, but will come as near as possible to your desired shipping date.

TESTED Queens will NOT be available until after May 20th and are \$1.00 Extra. Marking of Queens is 25¢ per Queen.

QUEENS AND PACKAGES TO BE PICKED UP AT OUR APIARY

In Lots of	Queens	2-lb. & Queen	3-lb. & Queen	4-lb. & Queen	5-lb. & Queen
1-24	\$6.00	\$17.50	\$22.75	\$28.00	\$31.50
25-99	5.50	16.75	21.75	27.00	31.00
100-Up	5.00	16.00	21.00	26.00	30.00

PACKAGE BEES & QUEENS

M. C. Colby and Son

37 years continuous service.

HONEY BAR APIARIES

7193-B Pleasant Grove Rd.
Pleasant Grove, CA 95668

Perrin's High Quality ITALIAN QUEENS

1-24 \$5.50 25-99 \$5.25 100 up \$5.00
Clipped & Marked Free Upon Request
Live delivery guaranteed.

PERRIN'S APIARIES

P.O. Box 70 Ponchatoula, LA 70454
Ph. (504) 386-9704 or 386-3485

ITALIAN QUEENS

These queens are proven honey producers, best colonies made 8 supers in Georgia in 1977. LARGE WELL-DEVELOPED YELLOW QUEENS.

1-9 .. \$5.00 10-49 .. \$4.70
50 up .. \$4.30

Clip 20¢ - Mark 25¢

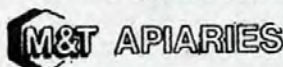
Health certificate airmail postpaid.

COLSTON APIARIES

Rt. 1, Box 17A Taylorsville, Ga. 30178

ITALIAN

Package Bees, Queens, and Nucs



Phone (916) 678-3251
After 7:00 678-3424

Our 1978 catalogs are in the mail.

64 pages of super bargains on plastic and wooden goods, comb foundation, tanks, extractors etc.

1978 Catalog

If you have not received a copy write today.

WALTER T. KELLEY CO.

Clarkson, Kentucky 42726

ITALIAN PACKAGE BEES & QUEENS

Bees Bred for Honey Production

In Lots of	Queens	2-lb. w/Q	3-lb. w/Q
1-24	\$6.50	\$18.25	\$23.50
25-99	6.00	17.50	22.75
100 up	5.50	16.75	22.50

20% Down Books. Please Add Sufficient Postage.

QUALITY, SATISFACTION & DEPENDABILITY
with personalized service

DONALD E. RUSHTON APIARIES

Rt. 6, Box 15 Laurel, MS 39440 Phone 601-428-4003



ITALIAN PACKAGE BEES & QUEENS

You can't buy better, Why pay more?

	Queens	2-lb. w/q	3-lb. w/q
1-24	\$6.00	\$16.50	\$21.50
25-99	5.50	15.50	20.50
100 up	5.00	15.00	19.00

Add \$2.00 per package for postage and insurance on 2-lb., \$2.50 on 3-lb. 10% to book, balance 15 days before shipping.

Write or call for prices on truckload lots.

W. L. TATE & SON BEE CO.

Rt. 2, Millry, Ala. 36558 Ph: 205-846-2661

ITALIAN

Package Bees and Queens

Good honey producers, easy to work with.

2-lb. and queen	\$16.00
10 or more	15.00
Choice queen	5.25
10 or more	5.00

Add \$1.50 per package for parcel post queens postpaid. Marked on request.

Neal's Apiaries

Box 502 Hamburg, La. 71339
GOOD QUALITY & DEPENDABLE SERVICE
Call 1-318-985-2416

LOHMAN APIARIES

Quality and Understanding has kept our family Package and Queen Business going for over 31 years. We don't overbook.

This year try:

Lohman Apiaries

Route 1, Box 8F
Arbuckle, CA 95912
916-476-2322

No Order Is Too Small.

Package prices are set in August. Caucasian Queens are shipped from May 1 to July 1.

McCary's

NO MORE QUEENS

FOR 1977

BOOKING ORDERS

FOR 1978

G. D. McCary & Son Bee Co.

Buckatunna, Miss. 39322

Ph: 601-648-2747

BRANDEL BROS. APIARIES

Start right this Spring, order nucs that are inexpensive and have an excellent start in life. All nucs are state inspected to assure you the best of quality. Health certificate included with each nuc ordered.

- 2 FRAME NUC with sealed brood and adhering bees (your choice of queen) \$25.00
- 3 FRAME NUC with sealed brood and adhering bees (your choice of queen) \$30.00
- 4 FRAME NUC with sealed brood and adhering bees (your choice of queen) \$35.00
- 5 FRAME NUC with sealed brood and adhering bees (your choice of queen) \$40.00

ITALIAN MIDNITE STARLINE

NOTE: Equipment has Langstroth dimensions and are rabbeted. All queens are instrumentally inseminated from superior stock in our own bee yards. Crosses are done only on your request with each order, no extra fee is charged. All orders are shipped via air freight from our Apiaries to assure safe arrival of bees.

TERMS: 10% down to book order. Balance two weeks before date of shipment. We deal strictly on a first come, first served basis.

WRITE —

BRANDEL BROS. APIARIES

P. O. Box 54

Lake Elsinore, California 92530

Phone (714) — 657-1905

MRAZ QUEENS

1978 PRICES

1-10	\$6.00
11-99	5.75
100 & up	5.50

Live delivery guaranteed. Payment due 15 days before shipping date.

Order of 1-10 require 50¢ special handling fee per order.

Clipped or marked 25¢.

MRAZ — THE HONEY BEE

BEE ISLAND APIARIES

HARRELLS, N.C. 28444

PHONE (919) 285-2029

IF NO ANSWER CALL 285-7450

YORK'S--- Quality Bred

1 STARLINES

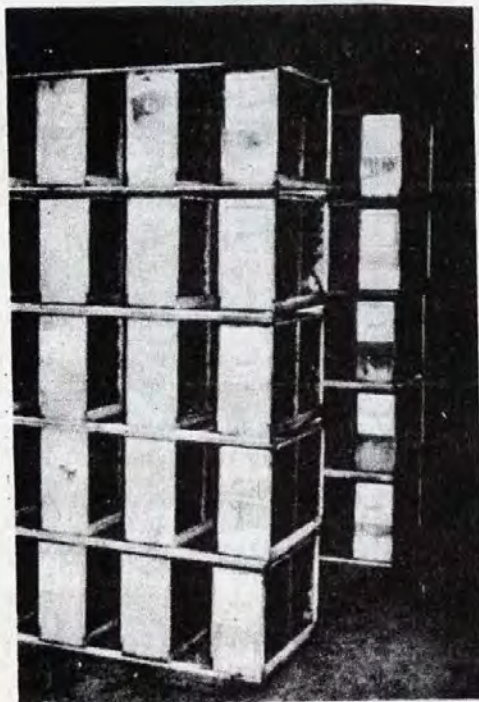
9 MIDNITES

7 ITALIANS

8

The Strains Preferred by Leading
Honey Producers

Have you tried York's bees and service? Make 1978 your season to purchase your bees from a firm featuring both types of hybrid stock. New Starlines and Midnites continue to be the only privately developed strains of hybrids that consistently return more honey per colony. Be modern and use hybrid queens that produce vigorous workers which will extend your season and add to your total crop. Shipment made by parcel post, or your truck or station wagon. Information leaflets available on Starlines and Midnites; write us for your copy by return mail. Now booking for choice dates.



Bees & Queens

For Hobbyist - Honey Producer - Pollinator

ITALIANS

	1-3	4-25	26-99	100 up
2-lb. pkg. w/q	\$16.25	\$16.00	\$15.75	\$15.50
3-lb. pkg. w/q	20.85	20.60	20.35	20.00
5-lb. pkg. w/q	32.50	32.00	31.50	31.00
QUEENS	5.50	5.40	5.30	5.20

STARLINE OR MIDNITE

	1-3	4-25	26-99	100 up
2-lb. pkg. w/q	\$16.65	\$16.40	\$16.15	\$15.90
3-lb. pkg. w/q	21.40	21.00	20.75	20.40
5-lb. pkg. w/q	32.90	32.40	31.90	31.40
QUEENS	5.90	5.80	5.70	5.60

Prices F.O.B. Jesup

Queenless packages — deduct \$2.00 per pkg.

Tested Queens—add \$1.00 per pkg. or queen.

Clipped and Marked 50¢ each.

Terms: Small orders cash, larger orders \$2.00 deposit per package and balance three weeks prior to shipping date.

Shipments start first of April depending upon spring weather conditions.

APRIL 1978

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

MAY 1978

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

JUNE 1978

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

PLAN NOW on your shipping dates for the coming spring. Present indications are that shipments will have to be planned now for more difficult delivery schedules by parcel post. Now booking orders.

Particularly plan to use hybrids for the coming season. Our rate of production of hybrids continues to rise as modern, commercial beekeepers learn of increased benefits to them. BEE WISE — HYBRIDIZE.

YORK BEE CO.

POST OFFICE BOX 307

(The Universal Apiaries)

412 W. Orange St. Ph: 912-427-7311

JESUP, GEORGIA 31545

Help us to help you

ORDER TODAY

BUY & SELL

Classified rates: 32¢ per counted word, each insertion. 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) count as one word. Copy should be in by the 10th of the month, preceding publication. Send classified ads to: The A. J. Root Co., Advertising Department, Gleanings in Bee Culture, 623 W. Liberty St., P. O. Box 706, Medina, Ohio 44256.

MAGAZINES

THE AMERICAN BEEKEEPING FEDERATION needs your support; participate in national affairs; receive six issues of the **NEWS LETTER** per year. The ABE, Rt. 1, Box 62, Cannon Falls, Minn. 55009.

DO YOU FIND IT difficult to secure information about sheep and sheep ranching methods? **THE SHEEP AND GOAT RAISER** reaches more sheepmen with more information on range sheep than any other magazine published. Subscription, \$5. Box 1840, San Angelo, Tex. 76901.

THE SCOTTISH BEEKEEPER — Magazine of The Scottish Beekeepers' Association, International in appeal. Scottish in character. Membership terms from R. G. Brown, Publicity Convenor, Richmond Villa, Richmond Avenue, Dumfries, Scotland. Sample copy sent. Price 20 pence or equivalent.

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

Bee Craft — Official (monthly) magazine of the **BRITISH BEEKEEPERS ASSOCIATION.** Contains interesting and informative articles. Annual Subscription (Sterling cheque £2.22p. or U.S. \$6.) Post paid. The Secretary, 15 West Way, Copthorne Bank, Crawley, Sussex, RH10 3DS.

MISCELLANEOUS

EMBLEMS CUSTOM EMBROIDERED; for club or business. Minimum ten. Write: TLM28, 1929 East 52nd, Indianapolis, 46205.

DISTRIBUTORS WANTED for new items. Consolidated Sales, Box 3231-G, Orlando, FL 32802.

HONEYWINE recipe, Herbs, Spices. Free catalog. Bacchanalia, 273BC, Riverside, Westport, CT 06880.

RENDERING every day in our all new plant. All honey saved from capings. Rendering slumgum and old combs. Write for **FREE** shipping tags and rates. **HUBBARD APIARIES,** Onsted, Mich.

QUALITY BEE VEIL: Nylon mesh, elastic top, drawstring, folds flat. \$4.50 for two. Postpaid. **Supplies,** Post Box 411, Farmville, Va. 23901.

"MY STORY by A. Honeybee": "Beekeeping 'Round the World"; "Beekeeping for Beginners". Each has 40 colored slides, printed script and cassette recording, \$27.50 each or \$75.00 for all three. C. A. Divilbiss, Route 10, Mansfield, Ohio 44903.

BEEKEEPERS PLANNING Guide & Record Book helps keep track of income, expenses, inventory, production, beeyard information. Includes year-round management planner \$2.95 postpaid. M. Cnatelain, P. O. Box 1373, Baton Rouge, Louisiana 70821.

NEW STYLE Queen Cell introduction cage. Two samples, instructions, and price list \$1.00. Miller, 2028E W. Sherman, Phoenix, Arizona 85009.

SAVE \$3.00 per pound. An inexpensive **COFFEE** substitute you make, tastes great \$1.00 recipe. Miller, 2028K W. Sherman, Phoenix, Arizona 85009.

HAVE YOU read Richard Taylor's **HOW TO RAISE BEAUTIFUL COMB HONEY?** \$3.95 ppd. Linden Books, Interlaken, NY 14847.

POSITION WANTED

HARDWORKING biology student with hobby experience wants commercial experience this summer. Write for information. Tom Queer, 207 Henderson, Pittsburgh, PA 15237.

HELP WANTED

RESPONSIBLE person for migratory beekeeping operation. Florida winters, summers traveling northern states. Contact Tom Charnock, 2841 Chickamauga Avenue, W. Palm Beach, FL 33401.

HELP WANTED for all around beekeeping. Permanent position for right party. Schultz Honey Farms, Ripon, Wis. 54971.

HONEY FOR SALE

WE BUY AND SELL all varieties of honey. Any quantity. Write us for best prices obtainable. Hubbard Apiaries, Onsted, Mich.

CLOVER, ALFLALFA, Buckwheat, Tulip Poplar, Wild Flower, or Orange in 60's. Dutch Gold Honey, Inc., 2220 Dutch Gold Dr., Lancaster, Pa.

HONEY IN 60's FOR SALE. Bedford Food Prods. Co., 209 Hewes St., Brooklyn, New York 11211. Tel: 212 EV4-5165.

TWELVE—60-lb. cans of clover honey, \$33.00 a can. George J. Toft, Buda, Ill. Telephone: (309) 895-2931 after 6:30 p.m.

HONEY WANTED

BEEKEEPERS TAKE NOTICE — We cannot guarantee honey buyers' financial responsibility, and advise all beekeepers to sell for **CASH** only or on **C.O.D.** terms except where the buyer has thoroughly established his credit with the seller.

WANTED—All grades of extracted honey. Send sample and price. Deer Creek Honey Farms, London, OH

WANTED — All types in drums, tins, truck and car lots. Send samples and prices each lot. Chas. E. Farris Co., Inc., 40 Worth Street, New York, N.Y. 10013. Established since 1910.

BUCKWHEAT, light and light amber honey. Bedford Food Products, Inc., 209 Hewes St., Brooklyn, N.Y.

WANTED — White Extracted or Comb Honey. Send sample. Millersport Honey Co., Millersport, OH

WANTED — **HONEY,** all grades. Send samples and price. M. R. Cary Corp., Box 818, Syracuse, N.Y. 13201.

HONEY WANTED—Any quantity in cans or drums. Walker & Sons Apiaries, Box 415, Milford, Mich. 48042. Phone: 313-684-2935.

WANTED: All grades of honey in 60's or drums, truck or rail, car load lots. Send sample and price to **DUTCH GOLD HONEY, INC.**, 2220 Dutch Gold Dr., Lancaster, Pa. 17601.

WANTED—All grades of extracted honey. Send sample and price to MacDonald Honey Co., Sauquoit, New York 13456. Area Code 315 737-5662.

WANTED HONEY! The Honey Man's Raw Honey. Forest Lake, Minn. 55025. Phone: 612-464-5420, 612-922-5234.

I NEED HONEY — Give me a call evenings so we can talk. Frank Joynt, 914-687-7552.

BEESWAX WANTED

BEESWAX WANTED — Highest prices paid in cash or trade for bee supplies. The A. I. Root Co., Medina, OH 44256; Council Bluffs, IA 51501; San Antonio, TX 78204. Box 9153.

WRITE FOR SHIPPING TAGS and quotations on rendered beeswax. We buy from one pound up and if you have over 25 pounds let us work it into foundation for you at a 25% saving. Walter T. Kelley Co., Clarkson, Ky.

BEESWAX WANTED — Highest prices paid in cash or trade for bee supplies. Dadant & Sons, Inc., Hamilton, Ill. 62341 OR ANY BRANCH. See Dadant ad for addresses.

BEESWAX WANTED — Small lots to truck loads. Write or call. **DONALD SCHMIDT**, 859 W. 9th Street, Winner, S.D. 57580. Ph: 605-842-0350.

WANTED

WANTED—All varieties bee gathered pollen. Must be clean and dry. Pollen traps available. Hubbard Apiaries, Onsted, Mich. 49265. Phone: 517-467-2151.

BEES, LOCATIONS and equipment in Idaho or western Montana. Box 101, San Carlos, CA 94070. (415) 591-9149.

MANAGER for migratory beekeeping outfit in Texas and Nebraska. Start immediately. Must be experienced and have references. Opportunity to lease in the future. Try us. Box 3, Gleanings, Medina, Oh. 44256.

WANTED: BEES to run on share crop. Bruce Rabe, Box 245, Woonsocket, South Dakota 57385.

EXPERIENCED, ambitious, young man would like to purchase 600 9% hive bodies, 200 tops and bottoms, 200 queen excluders. Payable on time. Will pay negotiable amount over cash price. Prefer pick-up in Midwest. Contact: Gregg Helms, 307 Washington, Elgin, Iowa 52141.

WANTED TO BUY—Colonies and honey house equipment. All colonies must be in good condition, registered and disease free. 216-264-8584.

WILL PURCHASE up to 25 colony beekeeping business with all equipment. Must be located in Connecticut. Contact W. Whitehead, 16 Shetland Drive, Wallingford, Conn. 06492.

WANTED: Apiary or suitable site in eastern Pennsylvania, upstate New York, or southern New Hampshire. Send all particulars and price first letter. Gleanings, Box 101, Medina, Oh. 44256.

BEES & QUEENS FOR SALE

WE USE ALL POSSIBLE CARE in accepting advertisements but we cannot be held responsible in case disease occurs among bees sold or if dissatisfaction occurs. We suggest that prospective buyers ask for a certificate of inspection as a matter of precaution.

STUD SERVICE—from your breeder: \$25.00 each daughter. No minimum order. Breeder returned. Winter-Hardy Queens, Barneveld, N. Y. 13304.

PELICAN STATE QUEENS — "Italian Type Hybrids"—1-5 \$5.50 each. Over 5 \$5.00 each. Postpaid, Live Delivery Guaranteed. Clipped and marked on request. Make our **QUALITY CONTROL PROGRAM** yours. Member American Bee Breeders Association. Pelican State Apiaries, P. O. Box 2904, Baton Rouge, LA 70821. Phone: 504-293-3034 Evenings.

FIVE FRAME nucs \$25.00. Homestead Apiaries, Cannon Falls, Minn. 507-778-3307.

ITALIAN QUEENS and Packages. Queens 1-5 \$4.75, 6-25 \$4.50, 26-100 \$4.25, 500 and up \$3.75. 2-lb. packages w/Q \$13.50 plus package. John L. Rickard, Rt. 3, Box 449E, Cottonwood, CA 96022. Ph: (916) 347-4141, 347-4547-365-5551.

PACKAGE BEES delivered to Wisconsin; near Green Bay, Eau Claire and at my home. Ronald Hazard, Rt. 2, Poyntette, Wis. 53955. Phone 414-992-3217.

PACKAGE BEES—Large number of 2-pound only. Available in April. Pick up in Florida only. Contact Sunset Honey Farm, 111 Pythley Court, Longwood, Fla. 32750. Ph: 305-862-0381.

Five-frame NUCS for April and May delivery. Pick up in Florida or Osseo, Wisconsin. Large order possibly delivered. Contact Sunset Honey Farms, 111 Pythley Court, Longwood, Fla. 32750. Phone: 305-862-0381.

1978 PACKAGE bees with Italian queens, available April-May. 2-pound \$14.50; 3-pound \$19.50. Nucs available. 20% books order. Ron Erb, 4700 Sardine Creek Rd., Gold Hill, Oregon 97525. Ph: (503) 855-1248.

RESERVE YOUR package bees early. We provide free delivery in Minnesota or western Wisconsin on minimum orders of 100 packages. Write for details. Midwestern Hive, Inc., 1527 East 26th St., Minneapolis, MN 55404.

PACKAGE BEES FOR SALE DELIVERED in Spencerville, In. First load delivered about April 12. Also 100 hives for sale the second week of May. Write for details. E & T Growers, R. 1, Spencerville, IN 46788.

ITALIAN, CAUCASIAN or **STARLINE**. April or May, delivered in Pardeeville, Wisconsin. Also some hives of bees. Write or call for prices. Ramsey Jewelry, Pardeeville, Wisconsin. 608-429-3045.

LOUISIANA QUEENS—Good cold weather bees from quality breeding techniques. Any number, postpaid with inspection certificate, \$4.50 each. Clipped and marked free. Larry Mornhinveg, 1223 Convention, Baton Rouge, LA 70802.

ITALIANS—1 to 300 colonies in single or double brood chambers. Pick up after the 15th of April. M. W. Brister. Ph: 405-367-2570, Caddo, OK.

THREE-FRAME NUCS with queen \$27.00 April 1st. Queens \$4.50; 10 and up \$4.00. Single story colonies, April 15, \$50.00. The Honey Bee Farm, RR 10, Chambersburg, Pennsylvania. 717-264-3044.

SINGLE STORY colonies, any number, \$40.00 each. Pick up in May at Union Springs, N.Y. Davis Brothers, Box 350, 13160.

WILL BRING 3-lb. packages and queens. **VAUGHN CAUCASIANS**, \$24.00 (U.S.) includes transit. Deposit \$5 each with order. Pick up Saturday, May 6 between 7 and 10 a.m. at Hamilton, Ontario. Send order to: H. EXNER, 1504 BRITAIN AVE., DE LAND, FLA. 32720. Tel: 904-736-6727 (after 8 p.m. only).

MICHIGAN BEEKEEPERS; South Central Area. Will be hauling package bees this spring. Call 517-655-3792 for prices and information.

TWO-LB. PACKAGES with Starline queens. Generous weights. Pick up here April. Order now! Leroy, Minn. 507-324-5716.

BEEKEEPERS in Central Michigan Area. Will be hauling package bees again this spring. For prices and information call Don Reimer 517-695-9031.

IMPROVED ITALIAN QUEENS nice large yellow ones, bred from gentle stock for honey production and less swarming. Airmail postpaid. Health certificate. 1-9 \$4.60; 10-49 \$4.30; 50 up \$4.20. Jon Colston, Rt. 1, Taylorsville, Ga. 30178.

QUEENS ARE available. Packages from end of March to mid-May. Italian or Caucasian queens mated to select Italian drones. Allen's Bee Ranch, 6040 Smith Lane, Redding, CA 96001. Ph. 916-243-2656.

SINGLE STORY 10-frame hives for early May pick-up. New equipment with '78 Italian queens, \$50. Anderson Apiaries, 115 North Oak Street, Adel, GA 31620. Tele. (912) 896-4419.

QUEENS, MRAZ—1-10 \$6; 11-25 \$5.75; 26 up \$5.50. ROUSE APIARIES, Rt. 2, Box 373, Warsaw, NC 28398. Phone: (919) 293-7166.

ONE-STORY BEEHIVES available after June 15th in New York, Massachusetts, or Maine. \$50 hive. Norman Sharp, Fishers, NY 14453. 716-924-2747.

THREE-POUND packages of bees and queens. Italians or Caucasians, \$25 each. Prices on hauling and load size lots on request. John Rathburn, Peterborough, NH. Tel. 924-3431.

1,000 one or two-story **COLONIES**, \$40-\$55. Available northern California by April 1. Fully inspected. Contact Mr. Reamer, Area Code 206-621-4154.

300 **SINGLE-STORY** colonies or nucs for spring. Order now for early delivery. David Wasson, Dayton, OR 97114.

FOUR-FRAME NUCS, new queens, no frame exchange. Available March, April, May. \$25. 20% books order. Harold Lee, Box 503, Taylor, Arizona 85939. 602-536-7982.

NUCS-3-frames loaded with bees and brood, with young, established Italian queen. 1-3 \$34.50; 4-10 \$34.00; 11 up \$33.00. Price includes shipping. For more information call or write Coleman Apiaries, 344 Westside Dr., Roswell, GA 30075. 404-993-0004.

NORTHERN New England Beekeepers save on shipping costs of bee equipment. Pick up at my home. Cox's Apiaries, Farmington Falls, ME. Call after 5:00 p.m. 1-207-778-6765.

NORTHERN CALIFORNIA Italian Queens, shipped airmail, postpaid and insured. April 1st to May 15th. 1-25 \$4.50; 26-99 \$4.25; 100 or more \$4.00. After May 15th, 1-25 \$4.00; 26-99 \$3.75; 100 or more \$3.00. Live delivery guaranteed. Ken Bachman (Bachman Apiaries), 1801 Calin Lane, Anderson, Calif. 96007. Phone: 916-365-4029 or 365-4175.

ITALIAN QUEENS — Productive, gentle, \$4.00. Taking orders for March 20. Morgan Apiaries, Rt. 2, Box 34C, Oklawaha, FL 32679. 904-288-4706.

Double-grafted **ITALIAN** and **CAUCASIAN QUEENS**, from Fumidil-B fed nucs, 1-23 \$5.50; 24-up \$5.00 from central Florida, **HONEY LAND FARMS**, Garry Oreskovic, P.O. Box 571, Groveland, FL 32736. 414-675-6022.

PACKAGE BEES with Italian Queens, 2 lb. \$16.75; 3 lb. \$22.50. Queens \$5.50 each postpaid. To book, write or call: Carolina Apiaries, Box 27G, Garnett, SC 29922. Phone: 803-625-3865.

ROYAL JELLY

SUPER STRENGTH Royal Jelly capsules, 100 milligrams per bottle of 100, \$12.50; five bottles, \$60. Prairie View Honey, 12303 12th St., Detroit, Michigan.

PURE FRESH Royal Jelly, 2 oz. bottle, \$17; 1 lb. \$120. Prairie View Honey, 12303 12th St., Detroit, MI

SEEDS

HONEY PLANTS our specialty. Catalog on request. Pellett Gardens, Atlantic, Iowa 50022.

HUBAM SWEET CLOVER SEED For Sale, 85% germination. 50-lbs. 85¢ lb.; 100-lbs. 72¢ lb.; 500-lbs. 68¢ lb., FOB San Antonio, TX, P.O. Box 20320, San Antonio, TX 78286.

POLLEN

FRESH, PURE, Bee Pollen available in 1 pound lots, \$6.50 per pound; 10 pound lots, \$5.90 per pound. Large lots, ask for price. Hubbard Apiaries, Inc., Onsted, Mich. 49265.

DEHYDRATED 1977 crop, clean table grade pollen. Not cleanings refuse, and no water to pay for. Clean of diseases. 5 lbs. \$27.44; 10 lbs. \$50.96; 25 lbs. \$115.64; 50 lbs. \$213.64; 110 lbs. \$431.20. Postpaid, Insured, U.S. and Canada. Available normally year around. **REHKA APIARY**, 880 NORTHWOOD, SALEM, OREGON 97301. Tel: 503-362-1512.

PROPOLIS

PROPOLIS MARKET again slow. Have discontinued buying until further notice, hopefully this summer. Propolis USA.

BEE SUPPLIES FOR SALE

WRITE FOR CATALOG—Quality Bee Supplies at factory prices. Prompt shipment. Satisfaction guaranteed. Hubbard Apiaries, Manufacturers of Beekeepers' Supplies and Comb Foundation, Onsted, Mich.

NEW CYPRESS BEE WARE — 9½" hive bodies, 7½", 6½" and 5½" supers, frames to fit. Also covers bottoms, hive stands and other beekeeping supplies. Write for list. **FORBES & JOHNSTON**, P. O. Box 212, Homer, Ga. 31634.

FOR TOP QUALITY BEE SUPPLIES and advice on beekeeping problems, visit your nearest Root dealer and send for your **FREE** Root catalog. Satisfaction guaranteed. The A. I. Root Co., P.O. Box 706, Medina, OH 44256.

QUALITY CYPRESS BEEKEEPING SUPPLIES: Manufacturing for those who know the best costs less in the long run — dovetailed 9½", 6½", 5½" supers, hives, hive parts, Cobana supers, nucs, beginner's kits, and complete supplies. Write: **BEE-JAY FARM**, 1524 Drowning Creek Road, Dacula, Ga. 30211.

WE CARRY A COMPLETE LINE OF BEE SUPPLIES and containers. Write for price list. **E & T GROWERS**, R. 1, Spencerville, Ind. 46788. (A suburb of Ft. Wayne). Phone 657-5136.

WAXMASTER CAPPING SEPARATOR... melts cappings fast with temperature controlled, circulated hot water, electrically heated. Pack fine quality honey with the **PAC-KING HONEY BOTTLING SYSTEM**. All equipment stainless. Free brochure. **HONEY SALES COMPANY**, Mfrs., 2817 No. 2nd Street, MINNEAPOLIS, MINN. 55411.

GLEANINGS IN BEE CULTURE

TOP QUALITY Bee ware, supers and frames. Quantity discount. Johannessen Bee Supply, 695 N 1300 East, Industrial Park, St. George, Ut. 84770. 801-673-2826.

ROSS ROUND COMB SECTIONS. Cobana supplies; Frames \$27 per carton; Section rings \$16.00 per carton; Section covers \$22.00 per carton. Include \$4.00 shipping for each carton, excess refunded. Tom Ross, 1721 Tenth St. N.E., Massillon, OH 44646.

BEEKEEPING SUPPLY DEALERS. Economy frames, at wholesale prices. Other items. Glorybee 1001 1/2 Terry St., Eugene, Oregon 97402. 503-485-1649.

ECONOMY frames, 9/8, 7/8, 6/4, 5/8, \$95.00 per 500, minimum 500, lots of 500. Truck only. **IMMEDIATE SHIPMENT.** Free discount catalog. Glorybee, 1001 1/2 Terry St., Eugene, Oregon 97402.

COMPLETE LINE of Bee Supplies. Jansen Farm, 21917 Garrison Road, Dearborn, MI 48124.

SAVE ON PDB moth crystals. Write for prices and shipping information. Edinburgh Bee Supply, 1522 Edinburgh Drive, Tucker, GA 30084.

"LAGRANT'S", New England's largest Manufacturer of Bee Supplies. Send for our catalog! Northern bred, 3-frame nucs with 1978 queens: \$35.00 (limited number). Lagrant's, Ware, Mass. 01082.

COMPLETE BEEHIVES — 6 1/2" dovetailed supers, improved telescope cover, closed end bar frames. Write. Francis L. Scott, Box 26, Prospect Rd., Forestville, N.Y. 14062. Phone: 716-965-2657.

ATLANTA & ATHENS best source for supplies, bees, books, novelties, etc. Wildwood Bee Supply, 251 Trinity Ave., S. W., Atlanta, Ga. (404) 525-4786 or Athens (404) 783-5651. Yes, we are beekeepers too!

NEW Clog-proof Ventilated Escape Board makes robbing a breeze. Bees stay calm and cool. Same day honey harvest. Fully Assembled. \$5.95 postpaid. Edinburgh Bee Supply, 1522 Edinburgh Drive Tucker, GA 30084.

FOR SALE

PLASTIC CUT COMB HONEY BOXES. Buy direct and save on quality. clear, styrene boxes, 4 1/4 x 4 1/4 x 1 3/8". \$26.00 per 100, \$220.00 per 1,000. Prices include shipping and insurance. Pennsylvania Plastics, Box 391, Conneautville, Pa. 16406.

FOR SALE: Good used 55-gallon steel honey drums, \$5.00 each. M. R. Cary Corporation, Syracuse, New York 13201. (315) 472-5486.

ANDERSON APIARIES, specialists in quality nucs. Family operated, 40 years' experience. (No disposable cardboard boxes used—our nucs are too strong with bees.) Three-frame nucs, \$35; five-frame, \$40, postage and insurance included. Contact for discount on large pick-up orders. My boxes or yours. No better nucs sold. 115 North Oak St., Adel, Ga. 31620. Ph: 912-896-4419.

SQUEEZE COSTS: — Giant polypropylene squeeze bottles is virtually clear, holds 24 ounces of honey, has snip top spout and cap. Only 19¢ each, lots of 100. UPS shipping weight 11 lbs. Samples \$1.00 postpaid. Hollowville Products, Hollowville, NY 12530.

COLLECTORS ITEM: A few books available "BETTER QUEENS" by the late Jay Smith \$25.00 postpaid. Write Manly Smith, 2431 Wabash Ave., Vincennes, Ind. 47591.

50-75 strong SOUTH TEXAS, 2 1/2 story colonies. Available in early May. Charles Cook; 410 E. Roca; Refugio, Texas 78377. 512-526-4758.

COOKBOOKS — 250 recipes using honey plus many household hints. \$3.60 postpaid. Quantity discounts available. Michigan Beekeepers Association, 335 Houghton St., Milford, MI 48042.

DELICIOUS HONEY CAKES, no sugar added. No preservatives, no cholesterol. Send \$2 for sample to Holland Honey Co., Dept. BC, PO Box 732C, Holland, MI 49423.

FULL 10-frame COLONIES and 2-3-5 frame nucs. Delivered to Quint Cities and immediate area. Delivery April and May. For full information write Box 3192 Davenport, IA 52804.

SALE—TOPS AND BOTTOMS. Made from 3/4" exterior plywood. Not painted or treated \$2.00 each. Stearns, 4605 Redstart, Houston, TX 77035.

CAYMAN BRAC, CAYMAN ISLANDS, BWI. Only beekeeper on Island. One bedroom furnished house. One acre. No income or property tax. \$29,000. Unique opportunity. Retirement or expansion. **SWINDALL.**

FOR SALE—40 hives of bees in early May, also new covers, bottoms and supers. Write or see John Seitz, Oxbow Rd., Canastota, NY 13032.

HONEY BUSINESS and bottling plant. All stainless steel equipment. Temperature electrically controlled. Suitable for bottling highest grade honey. New York State, Box 34, Gleanings, Medina, OH 44256.

WELL ESTABLISHED honey business in the B. C. interior of Canada. All facilities; excellent sales record. Situated on desirable commercial acreage. For complete resume please write to Box 32M, Gleanings, Medina, Ohio 44256.

SERVING THE NORTHEAST— Order Package Bees now for April 25, pick up in Troy, N. Y. and Springfield, Mass. — Quality bees competitively priced, 2 or 3 lbs. with Italian Queen. — Our own Beeline woodenware at budget prices, also Dadant and Root equipment. — For fast, courteous service contact: **SEAVER'S BEELINE**, 24 Martin Lane, Troy, NY 12182.

500+ 8-frame SHALLOW SUPERS; 500+ 10-frame shallow supers; \$7.00 each or \$6.00 each if take all. Call 509-697-7975 or write Artesian Honey, Rt. 1, Box 1290, Selah, Wash. 98942.

WATER WHITE clover honey in drums. Truck load lots only. North Peace Apiaries Ltd., R.R. 1, Fort St. John, B.C. V1J 4M6.

PINE BEE SUPPLIES — Beehives, dovetailed \$3.00 each; Supers, 5/8 or 6 1/2" \$2.50 each; Frames, per 100 \$25; Frames per 1000 \$225; Lids and Bottoms \$3.00 set. Allow manufacturing time on all orders. **MARVIN SMITH APIARIES**, Rt. 1, Parma, Idaho 83660. 208-722-5271 Eves. 722-5278 Days.

200 1 1/2 story, strong COLONIES, \$55.00 each, in northern Florida. Available in May. Also 5-frame NUCS, \$32.00 each, in Florida or at **DICK'S BEES**, Belmont, NY 716-268-7684.

FOR SALE: New dovetailed 9 1/2" single super colonies with 78 queens, \$50. Pick up only. Stan Thornton, (213) 455-2225. Topanga, CA.

200 USED SUPERS with frames and new foundation; 45 frame extractor; new honey pump, motor, sump tank and fittings; 1,000 lb. honey tank; plus many more items. Call John Turnmyre, Marcellus, NY 315-673-3502.

1975 E-Z PULL TRAILER, 32 foot gooseneck, tri axel, open sides, roof and drop nets. Specially built for bee transporting. Gabel's Honey, Lenox Rd., Collins, NY 14034. Phone: 716-532-5495.

FOR SALE—25 8-frame HIVES with honeybees. Louis V. Dubay, 241 States Street, San Francisco, CA 94114. 552-3168 or UN1-5636.

200 10-frame HIVE BODIES with drawn combs, \$10.00 each. Old Mill Apiaries, Fair Haven, Vt. 802-537-3961

100 HIVES BEES with stands, excluders, supers, inner and telecopping covers. George Ziegler, 17 Circle Dr., Carlisle, PA 17013. (717) 249-2242.

PACKAGE BEES

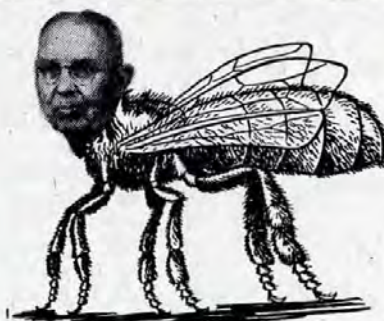
Due to the very severe January weather the winter loss has been the heaviest in years and the cold weather continued down into the far South resulting in package bee shippers being flooded with orders while their colony build-up has been held back and shipping dates must be rolled back. Many buyers will not be able to place package bee orders on the dates desired and so we advise you to feed POLLEN SUBSTITUTE PATTIES to build up your remaining colonies rapidly and later buy queens and make divisions which will be cheaper and better.

	Ship. Wt. Lbs.	
Cat. No. 72—5 Lbs. Mixed Substitute	7	\$ 4.00
Cat. No. 73—25 Lbs. " " "	27	15.00
Cat. No. 75—100 Lbs. " " "	105	50.00

Write for big 64-page
BEE SUPER MARKET SUPPLY CATALOG.

WALTER T. KELLEY CO.

Clarkson, Kentucky 42726



Italian Bees and Queens

Swarms shipped only from our Louisiana bee farm, Queens from Louisiana and Kentucky via Prepaid Air Mail. Clipping or painting queens 40¢ ea. extra. Due to slow parcel post delivery we are shipping swarms only to the following states:

LOUISIANA	TENNESSEE	INDIANA
MISSISSIPPI	KENTUCKY	ILLINOIS
ALABAMA	OHIO	MISSOURI
ARKANSAS		

Queens, \$5.50 ea. Write for prices on 24 & more.

2# swarms w/queens, wt. 8 lbs. \$16.50

3# swarms w/queens, wt. 10 lbs. 21.00

Write for prices on lots of 24 & more.

THE WALTER T. KELLEY CO.

Clarkson, Kentucky 42726

Index to Display Advertisers

Alderman	106	Forbes & Johnston	102	Miller, Wilbert R.	106
Alex	106	Fordham Bee Supply, Inc.	101	Milroy Bee Co.	135
American Bee Journal	133	G & H Bee Supply	106	Mitchell's Apiaries	133
American Pigeon Racing News	106	Gardenway Association, Inc.	99	Neal's Apiaries	138
Anacortes Brass Works, Ltd.	103	Genetic Systems, Inc.	133	New Zealand Beekeeper	133
Anderson Apiaries	132	Gitta Apiaries	133	North Peace Apiaries Ltd.	103
Apiary Plastics	104	Glenn Apiaries	133	Odyssey Products	103
Asbury-Bishop	131	Glorybee Honey	102	Pellett Gardens	102
Australasian Beekeeper	103	Happy Hive	104	Perrin's Apiaries	137
Australian Bee Journal	127	Hardeman Apiaries	133	Pierce Mfg. Co.	98
Bee Flat Scale Co.	99	Hel-Le Bee Farm	136	Pierce, Paul W.	98
Bee Island Apiaries	138	Homan, Farris	135	Prairie View Honey Co.	106
Bee Supply Co.	98	Homan Apiaries, Holder	134	Rio Grande Valley Queens	134
Bee Wares Co.	99	Honey Bar Apiaries	137	Root Co., A. I.	123, Back cover
Berry & Sons, M. C.	136	Hubbard Apiaries, Inc.		Rossmann Apiaries, Inc.	132
Border-Guard	99	 Inside back cover		Rushton Apiaries, Donald E.	137
Brandel Bros. Apiaries	138	Irish Beekeeping	105	Schiller Apiaries	134
British Bee Journal	133	Jackson Apiaries	134	South African Bee Journal	103
Calvert Apiaries, Inc.	134	Johnson Co., Carl E.	98	Speedy Bee	113
Canadian Beekeeping	103	Jones & Son Ltd., F. W.	98	Stoller Honey Farms, Inc.	106
Cary Corp., M. R.	98	Jurica Apiaries	106	Stover Apiaries, Inc.	137
C.E.M. Apiaries	135	Kane Apiaries	136	Strauser Bee Supply	107
Charnock Apiaries	132	Kelley Co., Walter T.	137, 144	Sundance Honey Co.	136
Chrysler & Son, W. A.	98	Keyline, Inc.	133	Sundown Apiaries	132
Clear Run Apiaries	136	Leaf Products	98	Sunshine Apiaries	105
Cloverleaf Mfg., Inc.	99	Leverette Apiaries, Walter D.	132	Superbee, Inc.	105
Colston Apiaries	137	Lohman Apiaries	138	Tate & Son Bee Co., W. L.	138
Cook & Beals, Inc.	98	Lotz Co., August	98	Vanren Co.	99
Country Honey Farm	99	M & T Apiaries	137	Vauughn Apiaries	133
Cumberland General Store	99	Marasan Honey Ltd.	132	Weaver Apiaries	133
Curtis & Sons, Inc. Geo. E.	136	Maxant Industries, Inc.	105	Weaver & Sons, Howard	135
Daniels & Co., R. C.	98	McCary & Son Bee Co., G. D.	138	Wicwas Press	102
Dadant & Sons, Inc. Inside front cover		Midwestern Hive, Inc.	106	Wilbanks Apiaries, Inc.	135
Edinburgh Bee Supply	106	Miksa Honey Farms	134	Wilkinson's Instruments	99
Floyd's Apiaries	135	Miles Bee Supplies	98	Winona Research	105
				York Bee Co.	139



A Year 'Round Buyer of Honey and Beeswax



32 oz. Bee Pollen	\$12.95
16 oz. Bee Pollen	6.50
4 oz. Bee Pollen	2.00
100 Bee Pollen Tablets	3.25

*Bee Pollen shipped post paid
Canada add \$1.00*

FOOD APPROVED GREASE

For Extractors and Food Handling
Equipment. Packed in Tubes for
Alemite Guns.

\$5.50
per tube

BEE SUPPLY MANUFACTURER

Bee Approved Comb Foundations

Thin Super Medium Brood
Rib-Wired Hooked

LOCKED
CORNER
HIVES

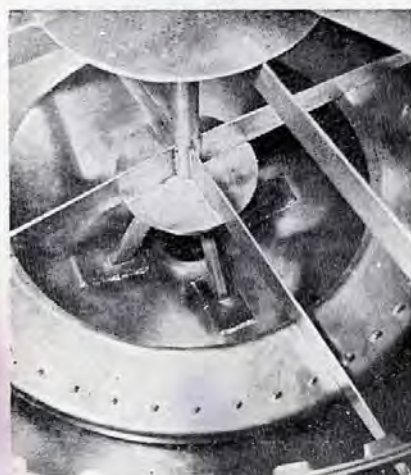
Note perfect fit
and handholds.



The Revolutionary New



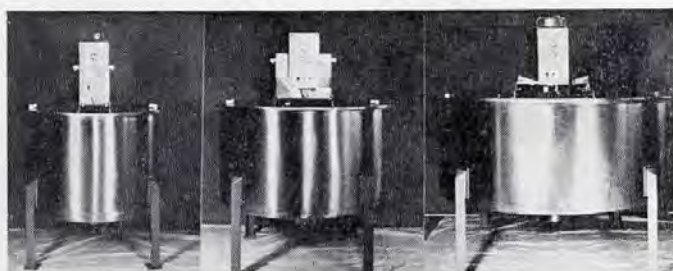
Extractor



All the extractors have V shaped sloping bottoms with large center drains. The extractor tank and reel are made of heavy 16-gauge 304 quality stainless steel. Note the continuous weld and reinforced construction on reel and tank.



Note the easy to use controls. The top dial is the speed control; the bottom dial sets the acceleration time.



Our family of extractors

Model Number	2401	4401	8001
Frame Capacity	24 Deep/44 Shallow	44 Deep/60 Shallow	80 Frames
Voltage Required	110 volts	110 volts	110 volts
Motor Type	1/4 Hp.	1/2 Hp.	3/4 Hp.
Drain Diameter	2" FPT	3" FPT	3" FPT
Tank Height	34"	36"	38"
Tank Diameter	30"	38"	55"
Reel Diameter	28"	35"	52"
Shaft Diameter	1 1/4"	1 1/4"	1 1/2"
Brake Type		Electric Disc	Electric Disc
Warranty	One Year Complete	One Year Complete	One Year Complete
Catalog Number	HO 61050	HO 61070	HO 61040
Price	\$1250	\$1795	\$2350

20% Discount of Overstocked 24/44 Extractors.
This is a limited time offer.

IN STOCK - READY TO SHIP

The Hubbard Extractor comes to you complete and ready to use! All you do is bolt it down and plug it in. The unit is all stainless steel with heavy welded construction. Absolutely NO lead soldered joints. The acceleration and speed are fully adjustable with convenient dial settings. The smooth, gradual acceleration (2 to 20 minutes) prevents costly comb breakage. The cone bottom allows free honey flow and easy clean-up inside and out. The Hubbard extractor is a quality food industry product, engineered for extended life and superior performance.

AT HUBBARD YOU GET MORE THAN WHAT YOU PAY FOR

HUBBARD APIARIES

ONSTED, MI 49265
Telephone 517-467-2051

BELLEVUE, FL 32620
Telephone 904-245-2461

Can You Tell Which Half of this Picture Was
Taken Through a Root Bee Veil Screen?



Delphos Folding Veil

Having difficulty seeing through your present bee veil? Then it's time to switch to the veil with **better vision**.

The Delphos Folding Veil on the left has an especially clear screen in the front panel. The rear and side panels are of a coarser screen giving the veil more body. The Delphos veil can also be folded into a flat 8 x 10 inch package.



Alexander Veil

The Alexander veil on the right gives you **better vision** too and can be worn without a hat.

If you chose the left half of the picture as the side photographed through a veil screen you are very observant and have probably noticed that the queen is not in the photo.

The A. I. Root Company

Factories at Medina, Ohio 44256 — Council Bluffs, Iowa 51501
P.O. Box 9153, San Antonio, Texas 78204 — Branch at Elizabeth, New Jersey 07201
Distributors in Principal Cities — Dealers Everywhere