

# W.A.S.

## Western Apicultural Society Journal

Volume 7 • No. 3

May 1985



# Beautiful, Modern Conference Center Awaiting Beekeepers

### PRESIDENT'S MESSAGE

For those of us in the Pacific Northwest who reside on the western slopes of the Cascade mountains, the beekeeping year has begun in earnest with warmer days and the floral signals of blooming peaches and plums. The average bloom periods for several key species are behind the ten year average, so we appreciate some catching up to do. However, as concerns the 1985 WAS meeting, things are right on schedule and going along well. The program, which was near brimming, is now over the top. Several new and welcomed additions to the meeting were added in the middle of March. Dr. Margaret Adey, the new director of the International Bee Research Association (IBRA), will be with us in August. She will be attending the Eastern Apiculture Society meeting in Pennsylvania one week before WAS and to complete her first trip to North America, she will join us in Oregon. (Oregon must be a popular place with IBRA directors for at our last WAS meeting here in 1979 we had Dr. Eva Crane as a featured guest and speaker.) Additionally, the Eastern Apiculture Society plans on sending Dr. Dewey Caron, their 1986 president-elect to attend our gathering. I'm personally delighted with this particular circumstance as it reaffirms and strengthens the ties with our older sister society from the east. Dr. Caron will give us a presentation of his findings in Panama concerning the Africanized bees as they have been moving through Central America.

To produce a successful WAS meeting takes planning and anticipation. One of the reasons the meetings are improving each year is the experience gained from past meetings. One thing that really helps your society continue to improve the quality and enjoyment of the annual meeting is advanced knowledge of who is coming. In this regard I would ask all of you to pre-register early.

The January issue of the WAS Journal contained a small item that would suggest your society's president was careless with the "Doug McCutcheon Memorial Tie" in a California hot tub. This vicious lie will be refuted in August. I can assure you that the tie is alive and well and will reappear in Corvallis in August. I have heard, however, that Becky and Dane Westerdahl will be loading their hot-tub on the back of the UC Davis flatbed truck and transporting it to Corvallis for evening soaks beneath the beautiful Oregon firs.

If you haven't already done so, please highlight your August calendar for the dates 13-16.



## EDITOR'S CORNER

All reports from Corvallis point to another fun-filled and fulfilling conference this August. Mike, as we know, will go all out to host a gathering that will be remembered for a long time.

It is hoped that the slight change in dates this year will enable more members to avoid the conflicts and attend the conference. Those of us that attended the last Corvallis affair remember the great setting and beautiful campus. Mike assures us that it will be even more pleasant this year in a new conference facility with housing and meals very close by.

This issue contains all the information you need to complete your plans to attend the conference. Please get your pre-registration forms in as early as possible. This will be a big help to Mike and the conference planners as so many of the planning details depend on a firm indication of the probable attendance. Your early registration will help insure that there will be enough facilities and that we won't over-reserve which could cost us.

The competition rules appear also in this issue. Plan your entries and lets have a full showroom this year. You will see from the program that there will also be a full agenda of interesting topics to be discussed and plenty of social events.

Also in this issue is the information about the China-Japan trip. This is a rare--probably once in a lifetime--opportunity to visit the Orient with a full beekeeping agenda.

Eric tells me that this issue should reach you by late May and if we don't have any more mite crises, we can get another out by early summer. Let's hope so. We don't need any mites in the Western states nor do we need any more missed publication dates because of them.

## MISCELLANY FROM CLUBS

Nile Peterson, WAS Director from the State of Utah, was elected President of the Wasatch Beekeepers Association in Utah. The Wasatch Club now meets the first Tuesday of every month (except July and December) from 7 to 9 pm at 2500 South, Salt Lake City (library auditorium). They have tentative meeting topics listed through April 1, 1986!

Tim Bruhns, writing for the Nevada County Beekeepers Association Newsletter, devoted a full article and a portion of the second to various species of *Ceanothus* found in California. The term California lilac apparently is appropriate for any of these plants, but watch out for the term "buckbrush." In California only *Ceanothus cuneatus* should be called buckbrush. In Washington *Ceanothus sanguineus* is known as buckbrush. In northeastern Oregon antelope brush (*Purshia tridentata*) is called buckbrush. Buckbrush is also the common name for smooth dogwood (*Cornus paniculata*) in Arkansas, wolfberry (*Symphoricarpos occidentalis*) in Idaho, snowberry (*Symphoricarpos racemosus*) in various parts of the country, and for Indian current (*Symphoricarpos orbiculatus*) throughout the

# FUMIDIL\*B

WITH THE 'MITE' PROBLEM  
ITS MORE IMPORTANT THAN EVER  
TO KEEP YOUR BEES HEALTHY  
AND IN TOP FORM.

USE 'FUMIDIL B' IN THE FALL  
AND IN THE SPRING TO CONTROL  
NOSEMA DISEASE.

SEE YOUR LOCAL BEE SUPPLY DEALER FOR FUMIDIL B.  
OR PHONE MID-COM COLLECT AT 816/492-1870.

\*Reg'd T.M. ABBOTT LABORATORIES.

MID-COM authorized user.

eastern U.S. All this points out that if a beekeeper says his bees are working buckbrush, you still won't know what plant they really are visiting until you see it.

## WESTERN APICULTURAL SOCIETY OF NORTH AMERICA, INC.

|                     |                    |  |
|---------------------|--------------------|--|
| President           | Michael Burgett    | Entomology Department (503) 754-4816<br>Oregon State University<br>Corvallis, OR 97331 |
| Vice-President      | Diana van Driesche | 3286 Talbot Road S. (503) 327-3609<br>Jefferson, OR 97352                              |
| Secretary-Treasurer | Zandy Neese        | 711 College (916) 661-3659<br>Woodland, CA 95695                                       |

## EDITORIAL STAFF FOR W.A.S JOURNAL

|                 |                    |  |
|-----------------|--------------------|--|
| Editor          | M. "Burt" Spangler | 451 Mill Street (916) 273-0736<br>Grass Valley, CA 95945                     |
| Managing Editor | Eric Mussen        | Dept. of Entomology (916) 752-0470<br>Univ. of California<br>Davis, CA 95616 |

|                                |       |                                |        |
|--------------------------------|-------|--------------------------------|--------|
| Individual .....               | \$ 10 | Advertising Rates: 1/4 page.   |        |
| Couple Membership .....        | \$ 15 | One Year .....                 | \$ 50  |
| Assoc. (Club) Membership ..... | \$ 10 | Single Copy .....              | \$ 25  |
| Commercial Membership .....    | \$100 | Business Cards:                |        |
| Life Membership .....          | \$100 | (Supporter) for One Year ..... | \$ 20  |
| Couple Life Membership .....   | \$150 | Single Copy .....              | \$ 5   |
| Benefactor .....               | \$500 | Patron .....                   | \$1000 |

Payments in foreign currency should be adjusted to reflect current rate of exchange (U.S.).

Copy deadline is the 10th of the month. Send all copy to the Editor. Information must reach the Editor at least one month in advance of the copy deadline.



WESTERN APICULTURE SOCIETY  
LaSELLS STEWART CONFERENCE CENTER  
OREGON STATE UNIVERSITY, CORVALLIS, OREGON

TUESDAY, AUGUST 13

1:00 Registration. LaSells Stewart Conference Center  
3:00-4:30 Delegates and Directors Meeting. LaSells Stewart Conference Center  
DINNER  
7:00 Wine & Cheese Reception  
At the residence of WAS President, 1021 NW 30th, Corvallis

WEDNESDAY, AUGUST 14

9:00 Official Opening & Welcoming to WAS '85 and Oregon State University  
9:15-10:00 Beekeeping in Western Oregon  
Mr. Lucien Alexander, Consultant Forester and WAS Past President  
10:00-10:30 Hospitality break  
10:30-11:15 Bees & Plants  
Mr. Lawrence Goltz, Editor, Emeritus, Gleanings in Bee Culture  
11:15-12:00 A History of Plastics in Bee Equipment  
Dr. Herbert Drapkin, Perma-comb Systems  
LUNCH  
1:30-2:15 One Hundred and Twelve Years of Gleanings in Bee Culture  
Mr. Mark Bruner, Editor  
2:15-3:00 Trends in Canadian Beekeeping  
Dr. Mark Winston, Assoc. Professor, Simon Fraser University  
3:00-3:30 Hospitality break  
3:30-4:15 Africanized Bees in Panama  
Dr. Dewey Caron, Professor, University of Delaware  
6:30 OREGON SALMON BAKE  
Avery Park

THURSDAY, AUGUST 15

8:30-9:15 The Role of the International Bee Research Association in International Apiculture  
Dr. Margaret Adey, Director, IBRA  
9:15-10:00 The Honey Bee Tracheal Mite in North America  
Dr. William T. Wilson, USDA, Laramie, WY  
10:00-10:30 Hospitality break  
10:30-11:15 The Role of Drones  
Ms. Susan Cobey, Vaca Valley Apiaries  
11:15-12:00 The North Carolina Master Beekeeper Program  
Dr. John T. Ambrose, Assoc. Professor, North Carolina State University  
LUNCH  
12:00-5:30 SUPER TOUR to Pacific Wax Works, Newburg and The Ellendale Vineyards, Dallas  
(Box lunch provided)

FRIDAY, AUGUST 16

9:00-9:45 A Review of the Honey Show  
Mr. Doug McCutcheon, British Columbia Ministry of Agriculture  
9:45-10:30 Systems Management of Honey Bees  
Mr. Wayne Robinson, Systems Engineer, Puallyup, WA  
10:30-11:00 Hospitality break  
11:00-12:00 Annual Business Meeting  
LUNCH  
1:30-2:15 Bees & Trees  
Dr. Daniel Mayer, Assoc. Professor, Washington State University  
2:15-3:00 Queen Rearing--My Way  
Mr. Steven Taber, Taber Apiaries, Vacaville, CA  
3:00-3:30 Hospitality break  
3:30-4:15 The Fascinating World of Bee Research: 33+ Years  
Dr. Carl Johansen, Professor, Washington State University and 1984 Recipient of the  
WAS Outstanding Apiculturist Award  
4:15-5:00 Delegates and Directors Meeting  
LaSells Stewart Conference Center  
6:30 Western Apicultural Society Annual Banquet  
Corvallis Elks Lodge

SATURDAY, AUGUST 17

BREAKFAST AND FAREWELLS!!



Look To



# Maxant

For the Finest  
in Honey Processing Equipment

- Extractors — 7 Sizes Power — 3 Hand
- Bottling Tanks — 3 Sizes
- Clarifiers — 3 Sizes
- Capping Spinners — 3 Choices
- Un-capping Trays — 2 Sizes
- Filters — Pumps
- Float Switches — Sump Tank
- Storage Tanks
- Capping Pumps — 3 Sizes
- Motorized Chain Uncapper

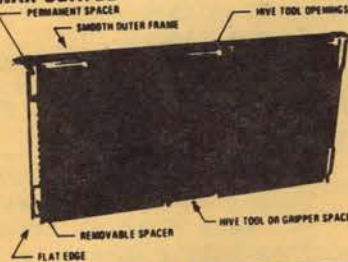
A COMPLETE SYSTEM  
for the  
LARGEST or SMALLEST  
BEEKEEPER

MAXANT INDUSTRIES, INC.  
P.O. Box 454 Ayer, Mass. 01432 617-772-0576

# perma-comb

"The new tool for beekeepers."  
**FULLY DRAWN CELLS**  
At The Natural Angle  
(1/2" Deep)

- PLASTIC COMB & FRAME (one unit)
- ALL WORKER CELLS
- WAX COATED
- BOILABLE
- NO WAX MOTH DAMAGE
- FITS ALL STANDARD SUPERS

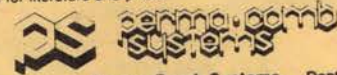


Extract  
Without  
Uncapping



| SAMPLES POSTPAID<br>(Continental U.S.A. only) |             |
|---|-------------|
| #918 (9"x18")                                 | \$ 6.00 ea. |
| #618 (6"x18")                                 | \$ 5.00 ea. |
| 1 pc #918 and 1 pc #618 @                     | \$10.00 pr  |

Write for literature and prices



Perma-Comb Systems Dept. 284  
22543 Ventura Blvd., Suite 214 • Woodland Hills, CA 91364 (818) 992-0368

## BEEKEEPING GOES HIGH TECH

How would you like to be able to heat or cool the brood nests of your colonies from your arm chair? How would you like to have a hive which is able to tell you where it is located, to within a fraction of a mile, if it gets stolen? And, of course, all this is powered by solar energy. Too good to be true? Not really.

David Horton, 2316 Stevens Creek Boulevard, San Jose, CA 95128 [(408) 277-0807], has combined computer technology, state of the art electronics, and the advent of fully drawn plastic combs (Perma-Comb) to produce a bee hive over which the beekeeper can maintain remote control.

In layman's terms, a mini-computer is placed in the field and wired to as many as 39 hives. Fitted with the proper sensors, the computer can monitor hive temperatures, weather data, its location according to the Loran Address (used by commercial airlines for the same purpose), and detect intruders. Depending on the instructions programmed into the computer, heaters can be turned on, fans can be activated, a mini-air conditioner can be turned on, and electric fences can be activated. The system can monitor itself and report to headquarters if any component in the system fails.

Computers do not draw a lot of power, so the system can operate on energy obtained from the sun (solar collectors) and stored in batteries at the apiary location. With the proper programming and a COMSAT microwave communications station to home base, you can monitor your hives and change hive conditions from home. As an example, if you were aware of a toxic pesticide application being made in the area, the hive could be cooled down to temperatures below flight range and the bees would be confined to quarters until you turned off the cooler.

This introduction just scratches the surface of the potential applications of "cutting edge" technology as it applies to remote control beekeeping. Like most brand new ideas, this system carries a hefty price tag. However, if it saved the beekeeper very many trips or it reduced the requirement for winter feed, or it maintained ideal brood rearing temperatures in mating nuclei during extreme weather fluctuations, the system might pay for itself in a relatively short period of time.

If this sounds intriguing to you, give Dave a call at the earlier number or on his message machine at (408) 286-5789. Dave will send you a nice brochure describing the system, and he really enjoys discussing the concept. Hopefully, Dave will have a high tech hive operating in Corvallis at the WAS meeting.



## 1985 COMPETITIVE EXHIBITS — GENERAL RULES FOR ALL EXHIBITS

1. All exhibitors, whether or not they attend the conference, must have a current membership in the Western Apicultural Society (W.A.S.).
2. An individual beekeeper may make only one entry per class in each exhibit.
3. Identifying labels attached to entries are forbidden.
4. Entries must be registered in the Exhibit Room in the LaSells Stewart Conference Center between 1:00 p.m. and 5:00 p.m., Tuesday, August 13 or between 8:00 a.m. and 10:00 a.m., Wednesday, August 14.
5. Judges may neither submit entries nor assist in acceptance or registration of entries. Entrants may neither assist in the acceptance of other entries nor help in any phase of judging.
6. W.A.S., Exhibit Stewards, or Exhibit Judges assume no liability for loss or damage to entries.

**SCORING:** Individual exhibit prizes and the sweepstakes prize will be awarded to exhibitors collecting the greatest total number of points (First = 10, Second = 6, Third = 4, Fourth = 3, Fifth = 2, Sixth = 1).

### GADGET EXHIBIT

Prize ribbons may be awarded to as many as six winners in each class.

**Code**

- 001 Class 1. Large devices (extractors, wax rendering equip, etc.).
- 002 Class 2. Hives or machines (lifters, weighing devices, etc.).
- 003 Class 3. Small miscellaneous items.
- 004 Class 4. Non-competitive exhibits (no prize).

**Special Rule:** All entries must be accompanied by a typed or printed explanation on a card no larger than 8x5 inches. This information will be used in scoring by the judge.

| Score Card                          | Maximum Points |
|-------------------------------------|----------------|
| 1. Practicality .....               | 50             |
| 2. Explanatory text .....           | 25             |
| 3. Ease of reproduction .....       | 15             |
| 4. Contribution to beekeeping ..... | 10             |
|                                     | Total 100      |

### ASSOCIATION EXHIBIT

Prize ribbons may be awarded to as many as six winners.

**Code**

- 005 Class 1. An attractive and educational beekeeping display.

**Special Rules:**

1. The display will contain not less than 1 lb. honey.
2. The display will occupy a maximum frontage of 4 ft. and be no deeper than 3 ft.
3. The display shall be prepared so as to be accommodated on an ordinary conference room table.
4. The display must portray some aspect of beekeeping and may be related to a local, regional, or state or provincial situation.

| Score Card                    | Maximum Points |
|-------------------------------|----------------|
| 1. Attractiveness .....       | 40             |
| 2. Educational features ..... | 40             |
| 3. Quality of honey .....     | 20             |
|                               | Total 100      |

### MEAD EXHIBIT

Prize ribbons may be awarded to as many as six winners in each class.

**Code**

- 006 Class 1. Mead, dry.
- 007 Class 2. Mead, sweet.
- 008 Class 3. Mead made with fruit juices.
- 009 Class 4. Mead, sparkling, with or without fruit juices.

**Special Rule:** All entries must have been brewed by the exhibitor.

| Score Card              | Maximum Points |
|-------------------------|----------------|
| 1. Clarity .....        | 20             |
| 2. Bouquet .....        | 20             |
| 3. Taste .....          | 20             |
| 4. Body .....           | 10             |
| 5. Color .....          | 10             |
| 6. Bottle .....         | 10             |
| 7. Bottle Closure ..... | 10             |
|                         | Total 100      |

### BEESWAX EXHIBIT

Prize ribbons may be awarded to as many as six winners in each class.

**Code**

- 010 Class 1. \*Single block, pure beeswax, not less than 1 pound.
- 011 Class 2. \*Candles, dipped, one pair, pure beeswax.
- 012 Class 3. \*Candles, molded, one pair, pure beeswax.
- 013 Class 4. Candles, fancy, one pair, pure beeswax.
- 014 Class 5. Candles, novelty, three assorted, must contain beeswax.
- 015 Class 6. Beeswax novelty item, additional components permitted.

**Special Rules:**

1. All entries in Classes 1 thru 3 (marked ★) must be made from natural beeswax. Chemical processed or bleached beeswax permissible only in Classes 4 thru 6.
2. Colored and novel-shaped beeswax candles should be entered in Class 5.
3. All entries must have been made by the exhibitor.

| Score                                       | Card  | Classes 1, 2, 3<br>Maximum<br>Points | Classes 4, 5, 6<br>Maximum<br>Points |
|---|-------|--------------------------------------|--------------------------------------|
| 1. Color and aroma                          |       | 30                                   | 25                                   |
| 2. Cleanliness (free from honey impurities) |       | 35                                   | 25                                   |
| 3. Uniformity of appearance                 |       | 20                                   | 20                                   |
| 4. Freedom from cracking and shrinkage      |       | 15                                   | 15                                   |
| 5. Creativity                               |       | —                                    | 15                                   |
|   | Total | 100                                  | 100                                  |

### HONEY COOKING EXHIBIT (Non-professional)

Prize ribbons may be awarded to as many as six winners in each class.

**Code**

- 016 Class 1. Cookies, crisp 1 dozen
- 017 Class 2. Cookies, soft 1 dozen
- 018 Class 3. Bars or Brownies 1 dozen
- 019 Class 4. Cake, unfrosted 1 cake
- 020 Class 5. Cake, frosted 1 cake
- 021 Class 6. Yeast bread 1 loaf
- 022 Class 7. Yeast bread, fancy 1 loaf
- 023 Class 8. Yeast rolls 1 dozen
- 024 Class 9. Quick bread (fruits or nuts optional) 1 loaf
- 025 Class 10. Muffins (fruits or nuts optional) 1 dozen
- 026 Class 11. Pie (rules apply to filling) 1 pie
- 027 Class 12. Candy ½ pound or 12 pieces

**Special Rules:**

1. Each entry must be accompanied by the recipe as used, written on 3x5 inch cards in triplicate.
2. At least 50% of the sweetening used must be honey.
3. No "mixes" or prepared sweetened cereal may be used.
4. Entries will be exhibited as received. Plates will not be furnished at the conference.
5. Pie crusts will be judged on appearance (not burned, broken, etc).

| Score Cards  | Maximum Points |
|--|----------------|
| <b>A. Baked goods</b>                                  |                |
| 1. Flavor .....  | 35             |
| 2. Texture, grain, moisture, uniformity of color ..... | 30             |
| 3. General appearance .....                            | 20             |
| 4. Lightness .....                                     | 15             |
|  | Total 100      |

|                                      |           |
|--------------------------------------|-----------|
| <b>B. Candy</b>                      |           |
| 1. Flavor .....                      | 35        |
| 2. Texture .....                     | 25        |
| 3. Attractive appearance .....       | 20        |
| 4. Handling quality in serving ..... | 20        |
|                                      | Total 100 |



## HONEY EXHIBIT (Open and Novice)

Prize ribbons may be awarded to as many as three winners in each class.

### Code

- 028 Class 1. ★Three 1-pound jars of honey, liquid, white (U.S. classes: water white, extra white, and white).  
 029 Class 2. ★Three 1-pound jars of honey, liquid, golden (U.S. classes: extra light amber).  
 030 Class 3. ★Three 1-pound jars of honey, liquid, amber (U.S. class: light amber).  
 031 Class 4. ★Three 1-pound jars of honey, liquid, dark (U.S. classes: amber and dark amber).  
 032 Class 5. Three section boxes of comb honey, light.  
 033 Class 6. Three section boxes of comb honey, dark.  
 034 Class 7. Three sections of cut comb honey.  
 035 Class 8. Three sections of round comb honey.  
 036 Class 9. Three 1-pound jars of finely granulated honey.  
 037 Class 10. Three 1-pound jars of chunk honey.  
 038 Class 11. Three identical, novel-shaped containers filled with honey.  
 039 Class 12. One novelty gift box of packed honey.  
 040 Class 13. One shadow box or Niche display of honey or honey related subject.  
 041 Class 14. One shallow frame of extracting honey.  
 042 Class 15. One full depth frame of extracting honey.

### Special Rules:

- The "Novice" category for classes 1 thru 10 may be entered only by individuals who have never won an award for their honey in the past.
- Entries in Classes 1 thru 4 (marked ★) may be in QUEENLINE or other recognized 1 lb. (12 fl. oz.) HONEY JARS.
- Colors in honey in Classes 1 thru 6 will be determined by the honey steward.
- Entries in Classes 5 thru 7 must be packaged in window cartons or in clear plastic film.
- Entries in Class 8 shall have clear covers on both sides and be without identifying labels.
- All entries must be the product of the exhibitor's apiary and must have been produced within the 12-month period immediately preceding the conference.
- Entries in Classes 14 and 15 must be wrapped in clear plastic film or placed on bee proof transparent glass or plastic.
- Extracted honey of 16% moisture or less shall be awarded full points. 1 point shall be deducted for each 0.2% moisture above the 16%. In case of a tie, the honey with the lowest moisture content shall be declared the winner.
- Winners in both open and novice competitions of classes 1 thru 11 will donate at least one of their three containers of winning honey to W.A.S. to be auctioned at the awards banquet.

| Extracted Honey Score Card   | Maximum Points |
|--|----------------|
| 1. Moisture content (above 18.6% disqualified).....                                    | 20             |
| 2. Freedom from crystals.....  | 10             |
| 3. Clarity (cleanliness; freedom from foam).....                                       | 30             |
| 4. Containers (cleanliness; neatness; uniformity).....                                 | 10             |
| 5. Fill (uniformity between containers; appropriate level).....                        | 10             |
| 6. Flavor (down-grade for overheating, fermentation, other objectionable flavors)..... | 20             |
| Total 100  |                |

| Comb Honey and Bulk Honey Frame Score Card  | Maximum Points |
|---|----------------|
| 1. Uniformity of appearance.....            | 20             |
| 2. Absence of uncapped cells.....           | 15             |
| 3. Uniformity of color.....                 | 15             |
| 4. Absence of "watery cappings".....        | 10             |
| 5. Cleanliness of section or frame.....     | 15             |
| 6. Freedom from granulation and pollen..... | 10             |
| 7. Uniformity of weight.....                | 15             |
| Total 100                                   |                |

| Granulated Honey Score Card                              | Maximum Points |
|--|----------------|
| 1. Appearance and uniformity of containers.....          | 10             |
| 2. Freedom from foreign material.....                    | 15             |
| 3. Freedom from frosting and froth.....                  | 15             |
| 4. Flavor and aroma.....                                 | 10             |
| 5. Firmness of set.....                                  | 15             |
| 6. Uniformity of honey.....                              | 10             |
| 7. Texture of granulation (smooth and fine).....         | 20             |
| 8. Uniform level of fill approx. ¼" from top of jar..... | 5              |
| Total 100  |                |

| Chunk Honey Score Card  | Maximum Points |
|---|----------------|
| 1. Neatness of cut—uniform size, with four-sided parallel cuts and ragged edges.....          | 20             |
| 2. Absence of watery cappings, uncapped cells and pollen cells.....                           | 20             |
| 3. Cleanliness—no travel stain, specks, flakes of wax, foam or crystallization.....           | 20             |
| 4. Uniformity of appearance—uniformity of capping structure, color and thickness of comb..... | 30             |
| 5. Density and flavor of liquid honey.....  | 10             |
| Total 100   |                |

## CRAFT EXHIBIT (Non-professional)

Prize ribbons may be awarded to as many as six winners.

### Code

- 043 Class 1. Honey bee-related, hand crafted item.

### Special Rules:

- All entries must have been crafted by the exhibitor.

| Score Card   | Maximum Points |
|--|----------------|
| 1. Attractiveness.....                                 | 35             |
| 2. Ingenuity.....                                      | 25             |
| 3. Practicality.....                                   | 15             |
| 4. Appeal in promotion or depiction of honey bees..... | 25             |
| Total 100  |                |

## PHOTOGRAPHY EXHIBIT (Amateurs only)

Prize ribbons may be awarded to as many as three winners in each class.

### Code

- 044 Class 1. Macro print (ABJ Trophy): Close-up of bee, flower, beekeeping or related subjects.  
 045 Class 2. Scenic Print (A.I. Root Trophy): Bee forage and apiary sites, etc.  
 046 Class 3. Portrait (Speedy Bee Trophy): Photograph depicting a person or a beekeeping procedure.  
 047 Class 4. 35 mm Slides (W.A.S. Trophy) Photographic essay (series of 4-7), depicting a complete story related to beekeeping.

### Special Rules:

- All entries must be recent, original photographs taken by exhibitor.
- Prints may be color or black and white, must measure 8x10 inches, and must be mounted but unframed.
- Slides should be submitted in plastic pocketed sheets.
- Winners will be expected to donate a copy of trophy-winning prints to their sponsors for possible publication.

| Score Card                 | Maximum Points |
|----------------------------|----------------|
| 1. Appeal.....             | 30             |
| 2. Content.....            | 35             |
| 3. Photographic Skill..... | 35             |
| Total 100                  |                |

ALASKAN WILDFLOWER HONEY BEEKEEPING SUPPLIES

## Hives & Honey

S.R. BOX 80632  
 FAIRBANKS, ALASKA 99701

DAVE TOZIER  
 (907) 488-6484



# VACA VALLEY APIARIES



CARNIOLAN QUEENS  
ITALIAN QUEENS  
CORDOVAN QUEENS

## INSTRUMENTAL INSEMINATION SERVICE

**CUSTOM INSEMINATION  
BREEDER QUEENS  
PERSONAL II TRAINING  
I.I. EQUIPMENT**

**WRITE FOR DESCRIPTIVE  
BROCHURE AND DETAILS**

**6745 BUCKTOWN LN.  
VACAVILLE, CA. 95688  
(707) 447-6723**

**ALL COLONIES FED FUMIDIL-B**

DETAILS OF WAS SPONSORED CHINA TOUR  
September 25-October 9, 1985  
General Information and Conditions

Please review the following general conditions and payments carefully so that we may avoid any unnecessary misunderstanding at a later date.

**PAYMENT SCHEDULE:** In order to maintain suitable progress toward departure, the following payment schedule is established: Upon China hotel confirmations = \$75/person nonrefundable deposit; 90 days before departure = \$125/person partial payment; 45 days before departure = final payment (balance) due; 30 days before departure = all passports + visa applications due.

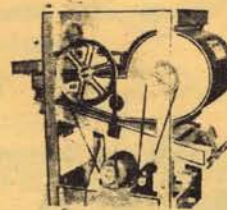
**NOTE:** Any changes required after agency receives roomlist, including additions and/or cancellation may be subject to a \$75 transaction communication fee.

**CANCELLATIONS AND REFUNDS:** Cancellation penalties within China are strictly enforced. Please be aware of the following cancellation penalties (which are applied based on the number of persons cancelling once initial confirmation has been made): Receipt of deposit--60 day review = \$75/person cancelled; 60-30 days before departure = \$125/person cancelled; 30-14 days before departure\* = forfeit of full China portion plus \$25 administrative fee.

\*Any cancellations for individual passengers received within fifteen (15) days of the

(714) 768-7750

## New Pollen Cleaner



22"x38"x41" hi

- new design cleans fresh or dry pollen
- combined multiple screens/vacuum system
- fast production with only one man
- separate discharges for debris types
- non-clog hopper holds over 50 lbs.
- separate air motor for fine air control

**\$585 — Please allow 4 weeks —**  
Freight Collect from Midwest USA

**MR. 'B' BOX 1066 EL TORO, CA 92630**

ERIC MUSSEN  
Extension Apiculturist



Department of Entomology  
University of California  
Davis, CA 95616

Telephone  
(916) 752-0470

Ph. (801) 245-4018

**WILLIAM P. NYE**  
BEE POLLINATION CONSULTANT  
U.S.D.A. Retired

HONEY BEES  
and  
WILD BEES

459 VALLEY VIEW DR  
HYRUM, UTAH  
84319



departure may incur cancellation charges for hotels in cities outside of China during peak periods. These charges will be advised at the time of cancellation. Our agency will try to see that these fees are waived whenever possible.

**MINIMUM TOUR GROUP:** In order for the tour to depart, a minimum of 15 persons must be paid-up members of the tour group.

**LAND COSTS:** All land costs charged are based upon current tariffs plus rates of exchange costs and schedules and are subject to change without notice. Any fluctuations of currencies could result in a higher land cost.

**HOTELS AND MEALS:** Hotel accommodations are based on those mentioned in the itinerary and are subject to confirmation. Meals are provided only when specifically mentioned. All meals are based on table d'hote menus, unless otherwise stated. This agency is not responsible for meals which are specifically noted as being served "en route" while on aircraft, should the service or flight be subsequently changed. Please note that within China, all accommodations are assigned by the China International Travel Service (CITS) and will not be known exactly until arrival.

**BAGGAGE AND PORTERAGE:** Baggage is at "owner's own risk" throughout the tour. Porterage for two pieces of luggage per person, with a maximum weight of 20 kilograms (44 pounds), is included at airports and hotels when travelling with the

# Everything for the Beekeeper



**DADANT & SONS,  
INC.**

P.O. Box 7996  
2534 Airways Drive  
FRESNO, CALIF. 93747  
Phone 209-292-4666

Conveniently  
located dealers  
over most of  
the Western U.S.

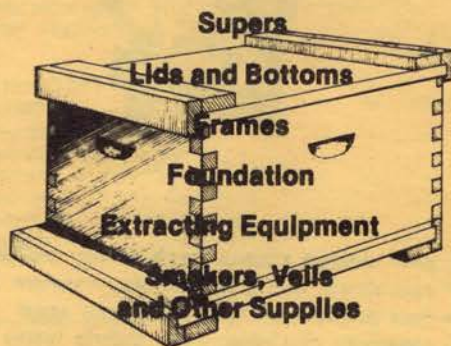


## Strauser

**BEE SUPPLY, Inc.**

Box 991, Walla Walla, Washington 99362

1-800-541-8908



**A FULL-SERVICE BEE SUPPLY MANUFACTURER.**

**Quality Products That Are Guaranteed!**

**WRITE FOR FREE CATALOG.**

tour group in the Orient. Within China, however, porters may not always be available, so that passengers may have to carry their own luggage. Please note that weight restrictions on domestic airflights within China are strictly enforced. Due to local airport regulations, passengers often will have to carry their own luggage from the distribution point through customs channels in most Orient airports.

**SIGHTSEEING, TRANSFERS, TIPS AND TAXES:** All sightseeing and transfers as mentioned in the itinerary will be conducted in airconditioned, private motorcoaches. In addition, professional, English-speaking local guides will conduct all services in an efficient and appropriate manner. Tips in the form of prepaid service charges, and all applicable taxes, are included whenever practical. Tips to local guides, however, are not included, as this is left to the discretion of the individual tour member.

**NATIONAL GUIDES AND LOCAL HOSTS:** Each tour consisting of fifteen (15) or more members will have the services of a national guide and local hosts in each country on the itinerary. In every other city in the Orient, there will be a local host who will be responsible for all arrangements while in that country. Within China, a national guide is sometimes assigned, and sometimes the tour group is locally hosted. This is entirely at the discretion of CITS, subject to the availability of guides. In any event, all guides are English speaking.



# GLEANINGS IN BEE CULTURE



**SUBSCRIPTION:  
Only \$10.35 for 12 Issues**

**WE'LL GIVE YOU A HAND WHEN YOU NEED HELP!**  
—Since 1873, GLEANINGS IN BEE CULTURE has been helping beekeepers succeed. Now, to meet demanding contemporary needs, GLEANINGS offers even more practical beekeeping help.

**THE A.I. ROOT COMPANY**  
623 West Liberty Street P.O. Box 706 Dept. WAS  
Medina, OH 44258-0706 PH: (216) 725-8677

**MEALS:** Those meals that are included in the land costs will be shown in parentheses (at the end of each tour day) in the final itinerary to be provided to tour members. They are coded as follows: B = full breakfast; L = table d'hote lunch; D = table d'hote (including dine around).

**HOTELS:** The hotels within China will be chosen by CITS and announced upon arrival. Hence, they cannot be guaranteed in advance by this agency.



**BURTS BEES**  
MANFORD "BURT" SPANGLER  
451 MILL STREET  
GRASS VALLEY, CA 95945

PHONE  
(916) 273-0736

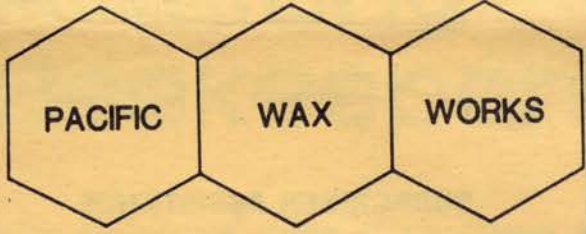
**BEEES  
HONEY  
EQUIPMENT**

**DOCUMENTATION:** It is the tour member's responsibility to see that passports, visa applications, etc. are in order before being sent to the agency for Chinese visa processing. Since we cannot determine when the passports will be returned, it is advisable to obtain all other required visas (for example, for Japan) before submitting the passports. Passports, visa forms and two pictures per person must be received no later than thirty (30) days prior to departure in order to ensure completed processing and return to the tour member. The cost of Chinese visa processing is included in the land costs.

**NOT INCLUDED:** The tour fare does not include: meals, unless specifically indicated in the itinerary; service charges for obtaining passports and/or visas other than for China; mineral waters and liquors, unless specifically mentioned; beverages with meals outside of China; laundry; optional tours shown in the itinerary which may be purchased locally in the Orient; baggage portage outside of the Orient, or when travelling without the other group members; and any other items of a strictly personal nature.

**SPECIAL NOTES**

**AIR AND RAIL TRANSPORTATION:** For transportation wholly within China, the airfare and reservations are included in the land costs. All rail transportation is included, based on monoclase or second class soft car reserved seats in China with four to a compartment, unless specifically indicated otherwise.



**DEEP CELL FOUNDATION  
FOR  
THE BEEKEEPER  
WHO DEMANDS THE BEST  
AT  
VERY COMPETITIVE PRICES**

**PLAIN OR WIRE  
WAX RENDERING**

Write for prices

Route 3, Box 272  
Newberg, Oregon 97132

(503) 538-5591



## "THE MASTER FAMILY"



- **ELECTRIC UNCAPPING KNIFE**

Adjustable Thermostat  
"The 600 Watt Knife"  
For 115V or 230V Service  
Now UL Approved

- **QUEEN GRAFTING TOOL**

- **QUEEN MARKING KIT**

- **FRAME WIRING AND EMBEDDING BOARDS**

at your dealers  
OR WRITE FOR BROCHURE

### PIERCE MFG. CO.

1320 -A- N. MILLER  
ANAHEIM, CALIF. 92806

## ASTRA LIFT



One person operation for load and off loading.  
Easy to operate.

No motor, no batteries, hand operate with ease.

Easy storage when not in use. Large wheels for rough ground. With addition of spring scale the Astra Lift will weigh loads with reasonable accuracy.

Loads hive from end or side depending on bottom board. Lift and move many other loads from boulders to refrigerators.

If you are moving colonies for pollination or other reasons, the Astra Lift is for you. After using it you will wonder how you did without it.

For More Information Write:

**OLYMPE ASTRA**

Box 1125, Revelstoke, B.C. V0E 2S0, CANADA

Phone 604-837-9573

### SUBSCRIBER ASSISTANCE

Use of this form will help us make accurate adjustments to your subscription. Otherwise, you should copy the full name, address and codes from the address label on your most recent issue.

**CHANGE OF ADDRESS**     **RENEW MY SUBSCRIPTION**     **DUPLICATE COPIES**

Please state month address changes (6 weeks advance notice required) and write in new address below.

Check your current label and list any corrections in blank below.

Should you receive duplicate copies send both labels. Subscriptions will be combined.

**New Subscription**

PLEASE PRINT

Name: \_\_\_\_\_

Address: \_\_\_\_\_



FIRST CLASS MAIL