

November/December 1994

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### Convention Highlights

In order of their presentations at the California State Beekeepers Association convention, I'll share some interesting information from the speakers.

1. Wilse Morgan - Arizona Beekeeper - AHBs seemed to have stopped going north from Phoenix. Total AHB colonies detected: 1993 = 57, 1994 = 27. Not many locations lost, but vandalism has increased. There are more small-sized swarms around, particularly in the fall, but beekeepers' colonies are not being affected. Wilse reported that on the Tucson lab's AHB apiary, 18 of 27 captured swarms turned out to be AHBs. The behavior of the 18 varied from docile to very defensive (4 are "hot.") Pollen production was similar AHB vs. EHB, and the honey crop was so poor that no data could be collected. The AHBs, did not show a tendency to swarm or abscond and it appeared that AHBs were not influencing surrounding colonies (only 5 of 1200 examined

were "touchy" = typical for Arizona bees). The state relied on an education program instead of

regulation. The governor of AZ found \$300,000 to support the educational effort and a trapping program.

2. Randy Johnson - Idaho  
Beekeeper - Reported on beekeeping as he observed it in Russia. most colonies housed in very large boxes with very large frames (like Dadant "Jumbo" equipment). During the honey flow, unripened honey is removed from the boxes by the frame at three day intervals (basswood flows are immense). The frames are extracted and exchanged for filled ones. Usually an apiary contained 50-100 colonies, 1 scale hive, and lots of nucs. Many bee-keepers practiced indoor wintering in "hibernation chambers" - 2 story buildings: the lower built into a hill and housed the bees; the upper a workshop heated by the bees below. Hives are moved by 4 persons and pipe lifts - truck beds are nearly 5 feet high. Honey is extracted with 4-frame, hand cranked extractors. It is stored or taken to market in 100 lb. milk cans (no wheeled carts involved). Oxalic acid, amitraz, and fluvalinate are used for Varroa

control. Good sized, European bees were being reared in small cell sized foundation and combs.

3. Henry Graham - Texas  
Beekeeper - Rearing your own cells and mating them in Rio Grande Valley out of the question. Twice as many feral colonies as he used to see. Re-queens annually: 94% acceptance - 70% may last a season and he will successfully replace another 10% during the season. Hybrids don't test out as AHBs, but they have expansive, solid brood patterns with very light colored cappings; are runny on the combs; require a shaker box to find the queen. Re-queening that type of colony with mated EHB queen usually unsuccessful, so he marks them and kills them in the fall if they haven't straightened out. The area of Texas south of a line from Corpus Christi to Laredo has about 80% AHB drones. You will have problems with 25% of your colonies if you do nothing in the area. Eliminating feral colonies reduces the problems to 5-10%. Ferals can be reduced or eliminated by capturing drones, coating them with insecticide, and sending them home. Quarantines require certification if you wish to leave the area: 1. purchase and requeen with bees from outside zone of Africanization; 2. purchase certified breeders and saturate mating area with pre-scribed numbers of drones, or 3. have a 10% sample of the bees collected and analyzed. If one sample fails, you are staying in the controlled zone. Prices for these tests vary from \$150 for the first hive to \$600 for 2000 hives. To keep his stock under control, Henry now hires 10

people, full-time, year around, to do the work that used to be done by 6. He spends \$40,000 for replacement queens. Fortunately, pollination prices range from \$38 to 44 a field, but the extra costs have eaten up all Henry's profits.

4. John Hones - California Beekeeper - Estimated that he could run 6000 colonies for costs of \$20/ colony 10 years ago. In 1987 tracheal mites took 2000 of his colonies. He is trying to build back, but expenses (other than labor, which tended to stay the same) sky rocketed to \$95/colony. He released his help and reduced his operation to a size that he and his wife can handle.

5. Shannon Wooten - California Beekeeper - Had to adjust from package to nuc production when Canadian border closed. Desires to keep bees close to home, but finds it necessary to move bees to the State of Washington for pollination and into the midwest for honey production.

6. John Miller - North Dakota Beekeeper - Reported that he is a 4th generation beekeeper, but there won't be a 5th generation beekeeper in his family. Started maintaining a lot of "in place" nucs in 1984 and feels that they are essential to his survival.

7. Wayne Harrison - California Beekeeper - Actually increased the size of his operation from 2000 to 4000 colonies over the last decade. Had 1 helper, now has 2.5 (someone asked him if he had really slowed down that much!). He sells queens, packages, and nucs with a pretty good regional demand since Varroa

arrived. Wayne still thinks that queens can be introduced into otherwise hopeless colonies by waiting until dark, pulling the cork out of the queen cage, and placing the cage at the hive entrance.

It was surprising to hear cost estimates for maintaining a colony for a year, Not long ago bee- keepers used to tell me \$30-35. I told them that I thought \$55-60 was more likely. Beekeepers on the panel quoted \$95, 95, 95, 80, and \$0.95 to make \$1.00. They estimated \$0.80 to 1.30 per pound to produce honey. If these new costs are accurate, beekeepers are going to have a hard time surviving in California.

8. Business conducted: CSBA asked CDFA to establish fee structure for services of Analysis and I.D. Branch if AHB certification becomes necessary, although CSBA still remains opposed to internal quarantines.

Next year's officers are: Bob Miller, President; Glenda Wooten, Vice-president; and Kathi Brandi, Secretary/Treasurer. Candidates submitted to CDFA for replacing two outgoing members of the Apiary Board in prioritized order: position one - Jim Robertson, Richard Allen and Troy Bunch and position two - Norm Carey, David Bradshaw, and Steve Godlin.

The 1995 convention is scheduled for Harrah's Hotel and Casino, South Lake Tahoe. Rooms will be \$75 per night and shows will be \$5 per person. See you there!

## Awesome Extractor

Dr. Herbert Drapkin of Perma-comb Systems recently shared with me some printed information and a video tape of a new honey extractor. Designed for use with Perma-comb frames, the centrifugal extractor spins at rates up to 1,100 rpm! Once loaded, it takes only 10-15 seconds to get up to speed, 10-15 seconds to extract 8 frames of capped honey, and 5 seconds to stop the machine using an automobile disk brake.

Obviously, modifications of previous horizontal extractors were needed to make this device work. The extractor is built of much sturdier components than are usually used. In case the rotor ever got way off balance, the extractor shell might have to be protective.

Running at the speed that it does, the honey would be whipped into froth if it splattered against an immobile extractor wall from the old design. In this case the rotor is surrounded with an inside tub that spins at the same speed as the rotor. So rotor, tub, and honey will spin around together until the machine is stopped.

Gears, chains, belts, etc cannot handle this sort of acceleration. The choice of the manufacturer was to rely on hydraulics to spin the extractor. A 35 horse power engine is adequate to power the device. In fact, the whole thing is small enough to consider "extracting in the bee yard," again. It would be operated from a vehicle power take off, a portable gasoline or electric motor.

The only major drawback that I noted from the video was the noise involved in running at high speeds. First, the extractor was being run by electricity being generated by a gasoline generator (noisy). When the extractor "winds up," it produces a scream of it's own (real noisy). I don't know the decibel level, but protective hearing devices surely would be mandatory.

This potentially revolutionary device is manufactured by the same company that produces custom boom loaders for many beekeepers: Yentes Welding and Manufacturing, 42209 5th Street East, Lancaster, CA 93555. Contact Jess Yents (805) 948-2555 for more information on one of the newest labor-saving devices in bee-keeping.

## Ideas from Russia

I had an opportunity to spend some time with a visiting beekeeper, Mikhail Voljsky, from St. Petersburg, Russia. He was visiting on a "home stay" basis with a number of California beekeepers and he attended the CSBA convention. Mikhail was not really interested in the U.S. as an import country, because he gets premium prices for his honey locally. He said that is because he allows his honey to be capped and ripened before he extracts (an abnormal practice in Russia). But, he ends up with a lot of cappings and he "rotates" his combs (renews with foundation) every three years (no more AFB!!). He has a large volume of beeswax and no one wants it. So he uses it medicinally (that is another story).

Mikhail is very health oriented. He rarely eats meat and he doesn't like using chemicals in his bee hives. Varroa nearly terminated Russian beekeeping years ago, so I asked him how he controlled Varroa. He said that he waits until very dry weather. He puts granulated sugar into a food dehydrator to drive off any residual moisture. He blends 10 lbs. of dried sugar with 1 lb. of talcum powder (would increase talcum ratio, but too expensive). The mixture is run through a mill to produce as fine a dust as possible. Then approximately 1/4 - 1/2 lb. of dust is sprinkled over the top bars and bees between the combs from the top of the hive. The dust should fly all over in the hive. Static electric charges on the bees attract the dust to their bodies. The bees are not too happy with the dusting, and they try to wipe it off. Very shortly, the mites start falling off the bees.

In Mikhail's operation, he feels that 3 treatments at 3 day intervals, in the hot, dry weather, gives economic control for a year (his apiaries are isolated from beekeeping neighbors). An additional 2 more treatments (5 total) are said to eliminate the mites. He treats any swarms or new colonies in October.

Assuming his treatment is effective, in theory the dust would have to be disrupting mites for at least 15 days, because drone brood is capped that long. Earlier reports concerning dusting with baking flour varied from excellent control to no control. Is the dry weather and

ultra-dry dust the secret? I don't know, but we have dry enough weather in the summer for this approach to be tested.

The other interesting treatment was directed at chalkbrood. Apparently, chalkbrood is actually overwhelming and killing colonies of bees in many parts of Russia and eastern Europe. In this case, iodine is added to sugar syrup and sprayed on the bees and both sides of all the combs in the hives. Again, this is a 3 treat-ments at 3 day intervals program.

I didn't get all the specifics, but it sounded like a tincture of iodine, like we use on wounds, is added in quantities low enough that no color can be detected in the sugar syrup.

In this case, I am unaware that iodine is a fungicide, or, at least, we use it as bactericide. It would be interesting to test this treatment, also.

## Pollination Directory

in the fun. Exhibit spaces are

The second annual edition of the Almond Board of California's Pollination Directory is a very much improved edition over last year's list. A fancy, colored cover (front and back) contains 9 pages of beekeepers who rent bees for almond pollination (including 99 entries from CA out of 138), a couple pages of Other Services (like Bee Removal, Beekeeping Supplies, Brokers, etc.), and Tips for Growers (about bees).

If you would like nearby growers to know who you are and where you operate your bee business, this is the place to be listed. Obviously, almond growers will be asked for the booklet by neighbors desiring summer pollination services.

A year from now, the third edition will be printed. If you want to be listed, free of charge, contact the Almond Board at (209) 549-8262. If your company name begins with the letter "H," you might be listed next to a beekeeper advertising from Massachusetts.

## Days of Wine & Honey

It is just barely winter and already the organizers of the Fourth Annual Days of Wine and Honey Festival are seeking participants. Livermore Main Street, Inc., a non-profit historic preservation and revitalization organization, invites educational displays, "live hives," bee products and honey tastings along Honey Row.

About 40,000 people come to visit the historic sites and join

opportunity to purchase one or more copies of the book.

10'X 15' and only cost honey vendors \$50. Everyone else pays \$200-\$300.

If you have honey, apiary products, or other very honey bee oriented items to share with or sell to visitors, please contact the Days of Wine & Honey Festival, P.O. Box 1067, Livermore, CA 94551 or call (510) 373-1795.

### Small Farming

Two exterior forces are operating to encourage development of small farms across the country. First, there is a perception (among the general public and administrators) that farmers tending smaller acreages are "gentler" to the environment and operate in a more sustainable mode. Second, there has been a large population influx of foreigners who come from a background of farming. There are substantial markets for "exotic" produce and recent immigrants are farming to fill that market. To a lesser extent, some families are turning toward farming as an escape from the urban "rat race."

Whatever the reason, interest in small farming created a demand for an introductory text to explain some of the principles and opportunities of farming on a small scale. Shirley Humphrey and I edited and contributed directly to the text of the newly released, "Small Farm Handbook." More descriptive information, the cost of the book, and ordering instructions are on the next page. If you, or someone you know, is considering farming on a small scale, please take this

## Pollination Book

Do you know about the almond growers' concerns, and do they know about yours? Just about anyone would learn something by reading Joe Traynor's publication, "Almond Pollination Handbook." This 86 page paperback, with 12 color illustrations, is written to be understood by the lay public. It covers important beekeeper and grower considerations in detail. The book has received excellent reviews in beekeeping and horticultural journals.

The best part of the deal is the price of the book. A single copy is \$7.40, post paid, to the customer. Purchase two or more copies and the tax is picked up - only \$7.00 per copy. Of this \$7.00, Joe contributes \$4.00 to fund honey bee mite research.

This is probably the simplest and most "objective" way to communicate your concerns and beekeeping struggles to our grower(s). Why not pass out a few books and go after the mites at the same time? Order books directly from: Kovak Books, P.O. Box 1422, Bakersfield, CA 93302.

Sincerely,

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