

May/June 1995

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Blame the Bees

Frequent winter storm fronts, that supplied California with enough water to refill its reservoirs, also significantly reduced the amount of nut and fruit set on deciduous trees this spring.

These events were noteworthy in California during the months that they were happening. They became noteworthy in the rest of the country only when prices were four times higher than normal for California cherries.

Earlier press releases by the California Farm Bureau Federation were amplified by the Sacramento Bee. As is usually the case, a reporter for the Bee called to ask for details and names of other possible contacts. That article caused quite a chain of reactions.

Someone at the Wall Street Journal decided that this was a good story. My phone rang again and I spent quite a while explaining bees, pollination,

etc., to the writer. The article that resulted from that interview was well written and spread the news all over the country--the bees didn't get the job done.

Then came the successive string of live radio interviews. "Hi, Eric. Why didn't the bees do their job?" "The weather kept the pansies in the hive?" Occasionally, I had the chance to sneak in a statement about rain bursting pollen grains or infectious diseases attacking wet flowers. This information received broad coverage--stations from San Francisco to Montreal, Canada.

Culminating the burst of interest was an hour-long farm talk radio show from Kansas City, Missouri. Specifically desiring to discuss midwest crop pollination, the host felt that he had lost control when callers asked about bee removals from buildings, dealing with swarms, how to be desensitized to bee sting allergy, and the use of apitherapy in treating multiple sclerosis (MS). Luckily, I didn't have much trouble

answering the questions, but the host was pretty disappointed with the direction the show took. It was an excellent opportunity to inform people about honey bees.

Colony performance in crop pollination is likely to be a contentious topic for years to come. Growers who rent colonies of bees want highly populous colonies that cannot fail to provide 100% pollination. Not many of them are aware of climatic constraints that keep bees at home--darkness; rain or heavy fog; and winds above 12 miles per hour. They are equally unaware of the manner in which honey bees develop a priority ranking of available nectars and pollens. They eat what they like best, regardless of what they were rented to visit.

Finally, I do not believe that growers really know how much work and expense are involved in keeping colonies of honey bees healthy. Problems with pesticides, lack of adequate forage, unrealistically low prices for honey, and the constant battle to protect colonies from parasitic mites and diseases usually are discussed between beekeepers at the coffee shops, not so frequently with their growers. You can't expect others to have empathy or sympathy for your problems, if you keep the information to yourselves.

The A. I. Root Co. just released a video called, "The Honey Bee--A Grower's Guide". I haven't seen the video, but its producers say, "What this video does for you, as a pollinator, is guarantee a grower he is getting

his money's worth when hiring you". Call 1-800-289-7668 ext. 3219 or write the A. I. Root Co. at 623 W. Liberty St., Medina, OH 44256. The video is catalog number XV219 and costs \$49.95, shipping and handling included.

Niche Marketing

For decades, if not a century, American farmers have produced and harvested their crops and then asked, "What will you give me for it?" That approach is highly successful when demand for the produce exceeds the supply. Demand has been high, and will continue to increase, as the human population expands. What is new, however, is that supply has increased dramatically for many crops and produce on the world market. Examples of competitive agricultural commodities that can be purchased inexpensively include: orange juice, ground beef, cotton, alfalfa seed, figs, soy beans, and, of course, honey.

This probably would be an ideal place for a lengthy discourse on the value of protectionism in agriculture, government assistance, tariffs, etc., but I don't know enough about them. What I do know is that at the Small Farm Center growers are told to find a marketing niche for their produce or change to another crop (easier to do with farm fields than with bee hives).

Why am I associated with the Small Farm Center? Because, you, my readers, are all small farmers by national and state definitions. The Small Farm

Center at UCD originated as a specific line item in the state budget, but I believe that its support was recently rolled into the university budget. The intent is to provide individuals, farming on a small scale, the best information available on crop production and marketing; thus, the emphasis on niche marketing.

Marketing a novel item, as long as it has innate appeal, is no trick. But marketing your item successfully in a sea of similar produce can be very challenging. Many years ago beekeeper Jim Powers stated at national meetings that we were missing the boat when it came to local honey advertising. Jim had visited many foreign countries and he had seen the value of promoting individual brands of honey.

What are customers looking for in honey? The National Honey Board tells us they want a "pure" product, but that they don't really care where it comes from. You ought to be able to do better than that! Is your honey "pure"? If not, let's quit here. Is your honey likely to be better than what some customer out there is buying? Why do you think so? Does that customer know that yours is better? Does that customer know that yours is special? Does that customer know that you can always provide that quality product when it is needed?

If your customer is a broker, I'm not sure that too much of the above matters. If your customer is a small chain of grocery stores, a large bakery, a

packer of specialty honeys, a meat processor, a tobacco processor, a candy maker, a farmers' market, etc., then your positioning of your product in the market means the difference between an empty warehouse due to total sales or an empty warehouse due to bankruptcy.

I believe that it is time for beekeepers to devote some time and effort to developing niche markets for their hive products. It seems like only a few ever do it. Such an effort must be directed specifically toward some target and not be a shotgun approach. Determine who the narrowly defined customer will be, what that specific customer especially needs, and how and why you are the best to supply that need. It's work, but right now being a small drop in a sea of honey is economically unsound.

Bees Can Hear

Using a well-conceived series of experiments, researchers Claudia Dreller and Wolfgang Kirchner from Germany, and William Towne from Kutztown University in Pennsylvania, determined what and how bees hear. Previous attempts at training bees to sound (human audible) produced negative results. However, investigations of the waggle dance revealed a sound component that is way too low for humans to hear. Using that frequency of sound, the following experiments led to the discovery of hearing in bees.

1. Feeding bees were exposed to the sound for five

seconds. Four seconds later they received an electric shock through their syrup if they didn't withdraw their mouthparts. Over days of training they learned to avoid the shock.

2. Bees were subjected to a "Y" test. Training to go to or away from the sound worked very well.

3. Since bees actually had to "feel air movement" instead of hear with a membrane, hairs were removed from the head and the antennae. Nothing changed.

4. Cutting off portions of antennae did not do too much, but total loss of one or both antennae made the bees partially or completely "deaf".

5. Antennal joints became the next target. The researchers put plastic tubing cuffs around each joint. The joint that connects the long, distal flagellum to the pedicel at the right angle bend turned out to be the place.

August Meetings

Even though I would prefer that you come to our WAS Conference in August if you want to attend a honey bee meeting, I'll tell you about another good apicultural meeting.

Apimondia, the International Federation of Beekeepers' Associations, is holding its 34th, biannual world beekeeping meeting in Lausanne, Switzerland, from August 15th to 19th. On the shore of Lake Geneva there will be sessions on: 1) economic and ecological challenges to beekeeping, 2) preventing bee diseases, 3) bees as pollinators of cultivated and wild plants, 4) new beekeeping developments, 5) quality and therapeutic effects of hive products, and 6) apiculture and international cooperation.

Extremely attractive and educational exhibits of beekeeping equipment and hive products make these meetings very enjoyable.

There are at least two "tours" encompassing the meeting that are vying for your attention. Paul Heins of Albany Travel in Albany, Oregon, has developed a 13-day tour around the meeting. His tour starts with the Apimondia meeting, then spends another week touring other areas of Switzerland: Berne, Interlaken, Ballenberg, Lucerne, Lugano, Chiavenna (Italy), St. Moritz, Chur, Appenzell, St. Gallen, Lichtenstein, Vaduz and Zurich.

If you wish to join this tour (about \$2,855 per person), call Paul at 1-800-327-2699.

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Additionally, Dr. Bob Brooks, a research pharmacologist who works in apitherapy, is also leading a tour that encompasses the Apimondia meeting. The Apimondia meeting comes first, then there is an apitherapy tour of Bulgaria and Poland. In Bulgaria, you will be hosted by Dr. Stefan Shkenderov, the world's leading expert on venom fractionation. In Poland, the host will be Dr. Andreas Pidek, Director of the Polish National Bee Laboratory. This lab conducts studies on the medical uses of propolis.

If you have a technical or medical interest in hive products and apitherapy, this is an ideal trip. The cost per person on this trip will depend upon where you start in the U.S., but

appears to be less than \$3,700 per person. A bit more "leg work" has to be done to get these better prices.

To learn more about the Apitherapy Study Tour to Bulgaria and Poland, contact Harold Liberman, Global Nature Tours, Inc., at (301) 627-4777. Call soon, because there has to be a specific level of minimal interest to be certain that the tour is a "go".

Sincerely,

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