The Bee Line

Newsletter of the Oregon State Beekeepers' Association

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Above: Kelton Shockey of Applegate OR. Kelton's thoughtprovoking essay on pollination by honey bees won first prize in the American Beekeeping Federation's 2007 4-H beekeeping essay contest. Many congratulations to you, Kelton!

Honey bees pollinate 100 percent of almonds and 90 percent of such crops as apples, avocados, blueberries, cherries, cranberries, and sunflowers grown in the US. The National Honey Board reports that the practice of renting bees for pollination, primarily by commercial beekeepers, is expanding.

STAY-AT-HOME BEES: Some Thoughts on Conserving Pollinators

Kelton Shockey

Many types of insects and animals can be pollinators; however, species of the genus *Apis* are the main pollinators of North American crops. Despite their small size, bees are important to pollinating American crops and natural plants alike, increasing crop yields. This discussion will refer to only one species of pollinator, *Apis mellifera*, the common honey bee found in the American market.

Throughout history the honey bee has provided pollination for crops naturally. The earliest records of bees appear as fossil deposits from about thirty-five million years ago at the time of the Oligocene period.(1) Man has interacted with the bee for wax and honey since the pyramids were built in ancient Egypt at the time of the Old Kingdom about 2500 BC.(2) Rock art suggests mankind has interacted with the bees earlier still.(3) For centuries the bee and the human had maintained a balanced relationship. With the development of the movable Langstroth hives in the mid-19th century (4), beekeeping changed from a small endeavor to a large-scale operation where hives could be moved long distances for increased crop and honey yields. And so we see the birth of modern beekeeping. This system has worked very well until recently.

In the world of contemporary beekeeping, the honey bee plays an important role in crop productivity and the income of beekeepers. Large monoculture orchards, for example, almonds, are often pollinated by imported colonies of honey bees. Sometimes these bees are moved many times during a season to perform this task. Only recently has there been a significant loss of natural pollinators in North America. In the last twenty years, the number of colonies in the United States has gone from about seven million to little more than two million.(5) Some of this loss could be due to increasing US honey imports from other countries, mainly China and Argentina.(6) But that isn't the total reason. This loss is threatening the present beekeeping industry as well as threatening the existence of many crops we

The Bee Line

The Bee Line is the official publication of the Oregon State Beekeepers' Association. The newsletter is published ten times a year, and subscriptions are included with membership in OSBA.

Please send news about your bees and your experiences in keeping them, as well as corrections, letters, comments, photographs and stories (old and new), interviews, and requests for advertising to the Editor, *The Bee Line*, PO Box 42363, Portland OR 97242; thebeeline@comcast.net.

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Please submit all copy by the 10th of the month prior to publication. The next issue will be July 2007. Contact the Editor for any additional information. Thank you!

MESSAGE FROM THE PRESIDENT

Today is May the seventh and at 6:00 AM I was moving bees as usual for any day in April or May. I received a phone call from Mark, which also was normal. We call each other to pass the time while driving. This is the main reason that I had to double my cell minutes from one thousand. I remember when I had only sixty.

Mark was going to a crimson clover field on Sunset Highway. We talked about the fog until I drove up to a meadowfoam field out of Silverton. After unloading I called back to find that Mark was at the tire shop. He had noticed his trailer tire was near flat as he left the crimson field after unloading. This brings me to my story for this *Bee Line*. I often play a game I call "Bad Luck, Good Luck." Flat tire, Bad Luck. Already unloaded, Good Luck. And more, he didn't have a lug wrench to change the tire, Bad Luck. He was less than a mile from a friend's house, Good Luck.

Often we think only of the Bad Luck. While coming home from California a few years ago, I noticed smoke coming from my forklift trailer. A wheel bearing had frozen and the wheel was about to fall off. I had just checked the tires at the Weed rest area and hadn't noticed any problem, Bad Luck. I was just at the Yreka exit on I-5, Good Luck. It was Sunday, Bad Luck. At the parts store they put me in contact with a man who makes his living fixing car and truck problems for people passing through on weekends, Good Luck. A couple of hours and I was on my way.

During a trip to pick up some equipment last summer, the turbo went out on my truck, Bad Luck. Jeanne and I were just leaving Pendleton, Good Luck as it could have happened forty miles later in the mountains. It was Friday and the garage couldn't look at the truck until Monday, Bad Luck. The part did not come until Wednesday, more Bad Luck. But we became tourists and now know more about Pendleton than most people who live there, Good Luck?

I am sure you get the idea. Bad luck is sure to come. Sometimes it is our own fault—a bit of carelessness, a lack of observation. Still, sometimes it just happens. You can erase a frown from your face if you just look at what could have been far worse.

Chuck

UC DAVIS BOOSTS BEE PROGRAM

Bob Krauter

Stung by budget cuts and faculty retirements in the past decade, UC Davis announced today that it will boost its bee biology research program back to prominence. Neal Van Alfen, dean of the College of Agricultural and Environmental Sciences at Davis, announced in a news release that he intends to rebuild the 65-year-old program to address a variety of problems that have beset California's honey bee industry.

"The honey bee industry plays a key role in the success of California agriculture, and it is imperative that UC Davis provide the research necessary to help solve some of the pressing problems related to bee health, breeding, and pollination," Van Alfen said. He has recruited Ohio State University bee breeder and geneticist Susan Cobey to join the UC Davis staff, and Van Alfen said other hires will be made.

"During the coming years we will be adding new staff and faculty to our bee biology program and renovating the Harry Laidlaw Jr. Honey Bee Research Facility here on campus," he said.

Cobey, who once operated an apiary in Vacaville, will manage the Laidlaw facility and plans to hire two bee researchers, including a pollination ecologist and an insect molecular specialist. "My emphasis is going to be selective breeding to find solutions to the problems that involve breeding selection," Cobey said. "The problems are very complex. That's my emphasis and that's where I am going to look."

California beekeepers, who are vital to dozens of crops for pollination, have been battered by mites, small hive beetles, and more recently, a mysterious disease called colony collapse disorder. The malady has killed bee colonies in California and several other states.

"It is a complex issue, and we are not really sure of the sources. It looks like a lot of that is virus, nutrition, a combination of chemical residues, all kinds of things," Cobey said. "Of course that is something we will look at for sure."

Cobey is no stranger to the Laidlaw lab. She worked there in the late 1970s and early 1980s under the mentoring of the lab's namesake, the late Professor Harry Laidlaw.

Collaborating with Cobey is Dr. Eric Mussen, UC Cooperative Extension apiculturist, who has held down the fort in the university's bee biology department for years after several professors of apiculture either left or retired. From a robust program in the 1960s and 1970s, Mussen said at one point there were no professors at all. He welcomed the news that the university is will renovate the program.

"It is definitely a step in the right direction. It would be wonderful to be able to get back to the kind of emphasis that we had at one time," Mussen said. "Unless all of a sudden the state infuses the university with a ton of money that they don't know what to do with, I don't know how long it will be. I am really hoping that we will get back up to where we were, but that may never happen."

Van Alfen indicated that UC Davis plans to strengthen the bee biology program further by hiring a new professor in UC Davis' entomology department who will specialize in the biology of bee pollination. The university plans a \$500,000 renovatation of the 8,200 square-foot Laidlaw lab and will establish a \$1 million endowment fund that will directly support research efforts in the areas of honey bee genetics and pollination biology.

Note: Reprinted with permission from the *Capital Press*, 1-800-882-6789. A strong program has the potential to help *all* bees and their keepers. As some have suspected, *Nosema ceranae* has been identified as a potential "culprit" in CCD in the United States. In addition, a virus from the genus *Iflavirus* has been implicated in a number of problems in the bee industry. (See: http://pub.ucsf.edu/today/cache/feature/200704251.html.)

OREGON STATE BEEKEEPERS' ASSOCIATION RESOURCES

OSBA REGIONAL REPRESENTATIVES

Columbia Basin: Debbie Morgan 3800 Benson Rd, The Dalles; (541) 298-5719

Eastern Oregon: Jordan Dimock 2635 Mitchell Butte Rd, Nyssa; (541) 372-2726

Metropolitan Area: Doug Woods 14285 S Union Hall Rd, Mulino

North Coast/Webmaster: Thom Trusewicz 90041 Logan Rd, Astoria (503) 325-7966; ccbee@intergate.com

Southern Oregon: Pat Morris 1333 Rogue River Hwy, Gold Hills (541) 855–1402

Willamette Valley: Harry Vanderpool 7128 Skyline Rd S, Salem; (503) 399–3675 shallotman@yahoo.com

OSBA REGIONAL ASSOCIATIONS



Central Oregon Beekeepers

Meets 6:30 pm, third Tuesday, Bend Deschutes Public Library, Hutch Rm **President:** Dennis Gallagher (541) 389-4776; denbend@coinet.com **Secretary/Treasurer:** Glenda Galaba (541) 383-1775; galaba@msn.com

Coos County Beekeepers

Meets 6:30 pm, third Saturday (except Dec) Olsen Baxter Bldg, 631 Alder St, Myrtle Pt **President:** Thomas Kyelberg (541) 297-4017; usvi@charter.net **Vice Pres:** Spike Richardson; (541) 267-4725 **Secretary:** Marda Burgdorff; (541) 888-5695 **Treasurer:** Jane Oku; (541) 396-4016 jane_oku@hotmail.com

Lane County Beekeepers

Meets 7:30 pm, third Tuesday, Eugene EWEB Meeting Rooms, 500 E 4th Ave **President:** Morris Ostrofsky (541) 685-2875; ostrofsky@pacinfo.com **Vice President:** Judy Scher judy scher@catdreams.com Secretary: Barbara Bajec; (541) 767-9086; mbartels@bbastrodesigns.com Treasurer: Nancy Ograin (541) 935-7065; woodrt@pacinfo.com web site: www.lcbaor.org

Portland-Metro Beekeepers

Meets 7 pm, second Thursday, Oregon City Hous Auth Clackamas Bldg, 13930 S Gain **President:** Kerry Haskins (503) 632–8448; kh251@aol.com **Vice President:** Peter Forrest (503) 236-7787; pdxpete57@msn.com **Secretary:** Paul Hardzinski; (503) 631-3927 **Treasurer:** Barbara Derkacht (503) 631-3063; bderkacht@yahoo.com

Southern Oregon Beekeepers

Meets 7:30 pm, first Monday, Central Pt So Or Res & Ext Ctr, 569 Hanley Rd **President:** John Jacob (541) 582-BEES; oldsol@jeffnet.org **Vice President:** Floyd Pawlowski 415 Pompadour Dr, Ashland **Secretary/Treasurer:** Suzanne Davis suzanne@mighty.net **web site:** www.southernoregonbeekeepers.org

Tillamook County Beekeepers

Meets 7 pm, first Thursday, Tillamook Forestry Building, 5005 Third St **President:** Bob Allen; (503) 322-3819 **Vice President:** Terry Fullan (503) 368-7160; tfullan@nehalemtel.net **Secretary/Treasurer:** Wayne Auble

Tualatin Valley Beekeepers

Meets 7:30 pm, last Friday, Beaverton OSU Ext, #1400, 18640 SW Walker Rd **President:** Andrew Schwab (503) 537–0506; pyr4ausi@verizon.net **Vice President:** Todd Balsiger (503) 357-8938; toddbalsiger@comcast.net **Secretary:** Preston Gabel (503) 530-1436; preston@gabelhaven.com **Co-Treasurers:** Michael and Brigette Hendrickson hendricm@ece.pdx.edu

Willamette Valley Beekeepers

Meets 7:30 pm, fourth Monday, Salem Chemeketa Comm College, Bldg 34, Rm A **President:** Richard Farrier; (541) 327–2637 **Vice President:** Harry Vanderpool (503) 399–3675; shallotman@yahoo.com **Secretary:** Mike Rodia (503) 364-3275; drodia@yahoo.com **Treasurer:** Susan Rauchfuss (503) 391-5600; smokfoot@cyberis.net

REGIONAL ASSOCIATIONS

Lane County Beekeepers

Ken Ograin writes that yellow jacket queens are finally starting to show up in his traps. It may seem that they are later than most years, but he suggests that the colder temperatures this winter and the late April rain probably have more to do with this than anything. He is sure that they will be plentiful come July. Ken notes an article in the *Capital Press* about a new Asian invasion. The Giant Asian Hornet has established a foothold in France and is spreading to Spain. The thinking is that it stowed away on a container ship from China. The European honey bee has no defense against this pest. It is just another hit that beekeepers have to deal with in this global environment.

Ken shares his latest lesson in 21st century beekeeping. It involves hiving a swarm into equipment with a screen bottom. His suggestion—to cover the screen. If not, the queen pheromones will be in great abundance under the hive, and so will bees trying to find her. He asks the group to remember a meeting a few years back about 4.9-mm brood cell being the answer to Varroa control. The idea behind the 4.9-mm cell size is that the brood cycle will be shortened by a few hours, thereby cutting down on the numbers of mature Varroa that emerge from the brood cell. Ken relates that anyone who has ever tried to get bees to draw out 4.9-mm foundation and had the same results he did knows that it just does not work. A company in California has come out with fully drawn plastic foundation in 4.9 mm. He has purchased some of these frames and has placed some in the brood chambers of a couple of his hives. Ken will keep us informed as the season progresses.

Portland-Metro Beekeepers

Peter Forrest notes that the group greeted four new members at the May meeting. He, Kerry Haskins, and Glen Andresen talked about how to catch swarms. In June, Jim Barlean will talk about hive inspection, hive manipulation, and the benefits of establishing nucs in the apiary. The group will continue discussions about participating in the Clackamas County Fair as well as looking at ways to help fund research on the honey bee.

On April 21st, the group sponsored the annual bee field day at Foothills Honey Farm in Colton. Peter notes that even the steady afternoon showers could not dampen the excitement that approximately eighty attendees had at this year's event. The day began with George Hansen talking about the late Bill Ruhl, for whom this day has been named, and Bill's impact on George's beekeeping and his mentorship of many other beekeepers in Oregon. Discussions and demonstrations focused on bees and beekeeping with presentations from George Hansen, Dr. Lynn Royce, Chuck Sowers, Thom Trusewicz, Harry Vanderpool, and Doug Woods.

With many using umbrellas and raincoats by afternoon, participants braved the conditions to the end of the day to learn as much as they could from those who gave of their time to pass on years of experience and knowledge of beekeeping. Not word for word, but Peter remembers that Harry Vanderpool said something like, "You truly must love beekeeping if you stayed until the end of the day." Peter says he thinks the raffle at the end of the day could have been another good reason for folks to hang in there. The club is very thankful for the support received with items donated by Dadant, GloryBee Foods, and Ruhl Bee Supply. It made for a very successful event. Thank you all.

Tualatin Valley Beekeepers

Andrew Schwab reports that Dan Hiscoe was the speaker for the group's April meeting. Dan gave a great presentation on the mechanics of grafting queens on a small scale, including what he looks for in his breeders, cell builders, etc. In addition, the group now will have an extractor to rent out to club members (in good standing).

KEEPING BEES IN WESTERN OREGON

Todd Balsiger

- Blackberries are in full bloom, so nectar flow will be at its zenith. Generously super. Studies have shown that supering ahead of the need for space increases honey production and reduces swarming. I would define generous as one or two supers above the top most super the bees are working in. It is a balancing act. We want ample storage space for the bees *and* fully filled supers.
- Encourage bees to fill out peripheral combs in a super by trading their position for the filled-out combs in the center.
- If you have comb to draw, then there is no time to waste. Put it on now. The summer's dearth is around the corner.
- Remove and extract supers containing *well-ripened honey* (most cells should be capped). In general, early season honey is wet and thin, and late season honey thick and dry. Uncapped honey in a cell in June probably means it hasn't been sufficiently dehydrated. Keep this in mind; you don't want to risk having excessive moisture in your honey.
- If you have bees next to agricultural areas, if possible contact the growers and discuss ways to reduce bee poisoning from pesticides. Communication is the key. Consult OSU Extension Publication 591 for more information on how to reduce bee poisoning. This publication has been provided to OSBA members.
- When the opportunity affords, continue to purge old, dark, drone-riddled, and defective comb with foundation or new comb. If you don't remove these frames, adopt the convention of always moving them to the sides of the brood boxes to facilitate future removal and replacement.
- If you find hives with the beginnings of swarming tendency, remove the forming queen cells and rotate brood boxes. Pull a couple of frames of sealed brood and fortify weaker hives. Place foundation in their place. Give those juveniles a serious job to

do-secrete and draw wax!

- If you find sealed queen cells, well, it's probably too late to prevent the hive from swarming. My literature states that after the first queen cell is capped, the swarm leaves the hive within a day or two. There are no absolutes as for what you should do for this hive; it depends on what you want to do. A suggestion: Without damaging the queen cells, look for the old queen. If you find her (and it *is* the old queen, right?), you can remove her and place her in a nuc (add feed and brood, too). You can make another nuc and add some of the extra swarm cells. Let the parent colony raise a new queen. This most likely will prevent the hive from swarming. Or you can let nature take its course; it's your choice. Avoid making this your primary source of queens, as you will be selecting for swarmyness.
- Provide a steady supply of water.
- Continue to be on the lookout for foulbrood.
- Start sampling colonies for mite load. According to Harry Vanderpool, sticky boards can be found at www.greatlakesipm. com for a reasonable price.
- Attend your association's monthly meeting.

If you feel I have omitted important tips and ideas, please let me know.

Stay-at-Home Bees—Continued from page 1 have come to depend on. Among the reasons for this decline could be the cultivation of large monocultures, the use of herbicides and pesticides, loss of plant diversity, and the increase of diseases and parasites.(7) Worthy of exploration are two other factors, and these have to do with contemporary beekeeping practices. First, the attempt to destroy disease and threats instead of strengthening against them. And second, mass colony transportation for widespread crop pollination. Something could be wrong with the standard practices.

Instead of attempting to destroy the mites through medication, I propose we focus on strengthening our hives. I believe a strengthened hive will be more resistant to disease. I would like to explore the possibility that the movement and transport of colonies are partly responsible for the recent decline in the general strength of the bee, making it no longer resistant to opportunistic diseases and parasites like the *Varroa* and tracheal mites. I believe we should consider the practice of supplementing the hive with sugar.

In nature, honey bees are a home-based society. For years a hive is one location. The colony lives on year after year like a well-functioning village. Every day the worker bee returns home thousands of times. Bees swarm when their "village" finds it necessary, and they requeen when necessary. They are involved in keeping their colony strong. This "village" idea does not exist in contemporary practice. Bees from other colonies can be introduced, swarms are discouraged, and queens come from elsewhere. The colony is moved sometimes hundreds of miles. Does turning a very home-based agricultural species into a nomadic-based one contribute to spreading disease? Can the stress factor of movement from original location as well as mixing the populations of colonies cause the weakening of the the hive? Perhaps we should observe the nature of the bee's behavior and design methods that will work with it to strengthen the hive.

During the pollination season, bees are brought to the fields and build honey stores for the winter. After the season is over, the bees are trucked home. They glean local nectar and are fed a sugar-and-water mixture to make up for the honey that is removed for harvest. Here we might have a problem worthy of exploration. Honey, which is the bee's natural diet, has a very different molecular structure than sugar, a much cheaper alternative.(8) Could feeding bees a supplement that is molecularly different have, over generations, a negative effect in weakening the bees' immunity against the havoc created by the mites, *Nosema*, American foulbrood, and such? Is feeding the bees sugar the equivalent of feeding them "junk food"? Corn syrup is also much different than honey, though they may seem similar in their consistency. Corn

syrup does not have any minerals in it, whereas honey is very high in minerals. Could our bees be becoming weakened from lack of minerals, making them prone to diseases and pests?(9) It may not be economical to supplement with honey. Southern Oregon beekeepers Scott Keene and Don Ruddick "suspect the bees may have died from syrup they were fed, a manufactured high-fructose corn syrup that when overheated can produce a chemical toxic to the bees." Both beekeepers have suffered major losses from what is now being called *colony collapse disorder*, a nationwide problem with no solution imminent.(10) However, could a supplement that is molecularly similar to honey be developed? Or do we have to forgo some honey for the sake of our hives?

The problem of declining bee populations is very real. Honey bees don't just provide honey, they are vital to the production of many foods. The honey bee is much more than a small insect. The bee is vital in sustaining our food sources. It would be a great folly to lose this species. The large monoculture model, though, may no longer be sustainable. It is time to find solutions. The solutions might mean thinking local. A system that develops local pollination and builds strong local farmer and beekeeper relations perhaps could help prevent the loss of Apis mellifera. There could be a system where a local beekeeper contracts his or her pollinators to local farms, eliminating long-distance transportation of hives. Would returning to more traditional beekeeping methods, while maintaining some modern methods, help preserve the honey bee?

Apis mellifera, the common honey bee, is not the only pollinator in North America; in fact, many many other insects pollinate our crops and natural vegetation alike. However, if the honey bee is driven to extinction through our own lack of understanding their specific needs, the natural pollinators—bumblebees, mason bees, butterflies, moths, and others—may not be sufficient to provide the amount of pollination needed to support America's agriculture alone. However, their role in pollination across the globe should not be overlooked.

The Bee Line

Stay-at-Home Bees—Continued from page 7

I believe that it is increasingly important to listen to the thoughts and ideas of other beekeepers. I am confident that in working together on this issue a solution can be reached. I think that any person who has an idea that he or she feels could help deserves to be heard. The problem must be acted upon, no matter what the solution. We as keepers and stewards of the bees must help them now if future generations are to experience the benefits of the honey bee. They have helped mankind and the plant world for years. We must do all we can to ensure the survival of these pollinators, even if it means rethinking the way we have approached the problem up until now.

Endnotes

- Wikipedia encyclopedia. "Pollination" & "Pollinators." URL, http://en.wikipedia.org/ wiki/Pollination.
- (2) Clapham, M. France. *Picture History of the World.* Grosset & Dunlap, New York, 1986.
- (3) Delaplane, S. Keith. *Honey Bees & Beekeeping,* second edition. The University of Georgia, 1996.
- (4) Crane, Eva. *The World History of Beekeeping and Honey Hunting*. Gerald Duckworth & Co., London, 2000.
- (5) Hauk, Gunther. *Toward Saving the Honey Bee.* Biodynamic Farming and Gardening Association, San Francisco, 2002.
- (6) Steiner, Rudolf. *Bees*. Translated by Braatz, Thomas. Anthroposophic Press, New York, 1998.
- (7) American Beekeeping Federation. 2007 4-H essay contest. Accessed, 1-26-07. URL, http:// abfnet.org/4-h-essay-contest/2007-essaycontest-rules/.
- (8) National Agriculural Statistic Service. 7-20-06. United States Department of Agriculture. Accessed, 1-26-07. URL, www.nass.usda.gov.
- (9) Pentek, Lazslo. 7-5-05. *High Fructose Corn Syrup*. Accessed, 4-26-07. URL, http://www. drmirkin.com/nutrition/honey.html.

Additional Resources

(A) Sammataro, Diana, and Avitabile, Alphonse. *The Beekeepers Handbook,* third edition. Cornell University Press, Ithaca and London, 1998.

- (B) Pollination—The Bees Second Shift. Accessed, 1-23-07. URL, http://www.ebeehoney.com/ Pollination.html.
- (C) A Look at the US Beekeeping Industry. Accessed, 1-20-07. URL, http://gears.tucson. ars.ag.gov/dept/abf.html.
- (D) Betterbee Beekeeping Supplies. URL, http:// www.betterbee.com/resources/index.html.
- (E) Vergano, Dan. "Bee Fossil Is a Honey of a Find." URL, www.usatoday.com.
- (F) Barker, J. Roy. "Considerations in Selecting Sugars for Feeding to Honey Bees." URL, http://www.beesource.com/pov/usda/ abjfeb1977.htm.
- (G) Flottum, Kim. "The Science & Business of Pollination Contracts." 3-1-00. URL, http:// www.beeculture.com/storycms/index.cfm?cat =Story&recordID=66.

Sign in farmer's field: *The farmer allows walkers to cross the field for free, but the bull charges.*

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Membership in the Oregon State Beekeepers' Association is open to anyone with an interest in bees and beekeeping. You do not need to own bees or reside in Oregon to join. Membership includes a vote in OSBA elections, discounts on publications, and ten issues of *The Bee Line*. To become a member, send check made payable to OSBA with completed form to: Patricia Swenson, 11665 Webfoot Rd, Dayton OR 97114.

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Folks in the US consume more than 400 million pounds of honey annually.

The **Oregon State Beekeepers' Association** is a nonprofit organization representing and supporting all who have an interest in honey bees and beekeeping.

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