Anderson Co. beekeeper Preston to lead KSBA certification program

Sarah Preston is the inaugural manager of the Kentucky Certified Honey Program (KCHP), hired by the board of directors of the Kentucky State Beekeepers Association (KSBA).

Preston will be introduced at KSBA’s spring meeting March 30, held in conjunction with the Hardin County Beekeepers Association spring school.

Preston is a recent graduate of the University of Kentucky, receiving the Master of Science in Entomology degree and a graduate certificate in applied statistics.

“I have been keeping honey bees on my farm in Anderson County for five years, and researching insects for more than 10 years,” Preston said. “I am highly interested in queen breeding and bee health.”

Preston said her goal for the KCHP is to educate beekeepers and the public on the benefits of recognizing and purchasing local honey.

“By joining the KSBA program or purchasing Certified Kentucky Honey, we can help to increase consumer trust in the honey industry throughout the state,” she said.

Preston will manage applications to the KCHP and assist with the sale of KCHP labels for certified local honey. Her other duties include coordinating event speakers, representing KSBA at scheduled events, assisting with promotional activities and website postings, maintaining the annual events calendar, and assisting KSBA and KCHP at bee schools, conferences, and the Kentucky State Fair.

“By joining the KSBA and becoming a Certified Honey Producer, we can increase consumer trust in the honey industry throughout the state,” said KSBA President David Shockey.

Move-in special

Troy Varner is an employee and beekeeper at East Kentucky Power Company (EKPC) in Winchester. This colorful photo he sent illustrates how easy it is to provide varied habitat for many of the 4,000 native bees in the United States.

Native bees provide almost $6 billion in pollination services for crops such as blueberries, strawberries, and apples. Native bees have different life cycles from honey bees. Some are ground-nesters, some prefer slender tube-like habitats. All are vulnerable to irresponsible sprays, regardless of whether in urban or agricultural environments. Below, pollinator habitat developed by EKPC.

This is a good time to register your apiary or native bee hotel on the KDA Pollinator Protection Plan app: kyagr-apps.com/Pollinator/. This service is free, anonymous, and typically takes less than five minutes.

Sarah’s email: kentuckycertifiedhoney@gmail.com
Swarming season

Helpful equipment list, and an Australian swarm-catching trick

By Tammy Potter, Kentucky State Apiarist

Swarming season will soon be here in Kentucky. It has already begun in Alabama.

I like to remind folks about the “three-step rule,” that no one should go above three steps on a ladder to catch a swarm, without first asking who will pay the ambulance bill.

Are your swarm tools in your vehicle? Here are some tools that I have found helpful:

- A corrugated nuc box with a frame of drawn foundation;
- A spray bottle with light sugar syrup;
- A “line throw,” available on Amazon.com for around $15, and a 50-pound line.
- A stepladder.
- Crawling insect repellent. Lyme disease is a serious threat. Swarms typically alight on trees and in forest areas, so if you are going into the woods to catch swarms, apply plenty of repellent on your ankles, around your waist and around your neckline. There is still no guarantee this will keep ticks out of your clothes, but it can help.
- A queen catcher. Sometimes it is handy to have a catcher holding the queen so you don’t damage or kill her.
- A set of pruners.

Tammy’s husband, Doug Potter, learned this “swarm catcher” technique from an Australian beekeeping site. Doug made a lure by mixing Nasanov pheromone and lemongrass oil, and dipped cotton balls into the mixture. He placed Australian pine limbs in PVC pipe, and then put the lures in the branches. The limbs that had lures on them collected swarms (about 20 before spring 2018 ended). The limbs that did not have lures did not collect any swarms.

(Photos: Tammy Potter)
**BEEKEEPER EDUCATION - APRIL**

- **April 6.** HoneyBear Farms Spring Bee School. Cedar Ridge Camp and Retreat Center, 4010 Old Routt Road, Louisville. 8 a.m.-4 p.m. Speakers: KSBA board members. No cost. Light breakfast and full lunch included.
  
  Joel Gonia, (502) 235-0727, or HoneyBearFarmsKY@gmail.com. RSVP at event page on HoneyBear Farms Facebook page.

- **April 6.** Beginners Beekeeping Basics. Simon Apiaries, 224 Martinsville Ford Rd., Bowling Green. 9 a.m. CDT. For individuals thinking about beekeeping. Basics of pests, equipment, nutrition, swarming and bee behavior. Cost $15, lunch provided.
  
  Andy Simon, (270) 991-1337, or Simon Apiaries Facebook page.

- **April 8.** “Beekeeping: D to Z (After the ABCs),” fourth of four courses. Pulaski Cooperative Extension Office, 28 Parkway Drive, Somerset. Coordinator Dorothey Morgan. Topics: keeping bees calm; lighting a smoker and using it correctly; methods other than smoke; re-queening demo. 6-8 p.m. EDT.
  
  Contact Beth Wilson: beth.wilson@uky.edu or (606) 679-6361.

- **April 6-8.** Kent Williams Bee School, hosted by Lake Barkley Beekeepers Association. Kent Williams apiary, 580 State Route 385 North, Wingo. Daily sessions 9 a.m.-5 p.m. CDT. Come for one day or all three. No registration necessary, no cost to attend. Lunch provided by Lake Barkley B.A., for donations. Daily classes on basic hive inspection, equipment assembly, pests and diseases, queen rearing (beginning and advanced), swarm trapping, dowsing for bees, sampling, value-added products from the hive, and nuc/package installation.
  
  More information: Chuck Collins, (270) 519-4772.

- **April 11-13.** Queen Rearing Basics. Andy Simon. Simon Apiaries, 224 Martinsville Ford Rd. Bowling Green. 9 a.m. CDT. Cost $25, lunch included. Limited to first 20 who sign up by registration deadline of April 6.

  Call or text Andy Simon, (270) 991-1337, or visit Simon Apiaries Facebook page.

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**Honey Sprouted Whole-Wheat Bread**

2 c. warm water
1-1/2 T. yeast
½ to 1 c. whole wheat flour
1/3 c. olive oil
1/3 c. honey
1 T. natural salt
Approximately 6 c. freshly ground flour

Start the bread-making process by using red and white whole wheat grain berries. Soak the grains in water until they sprout, then dry the grains in a dehydrator. Once fully dried, grind them in an electric grinder.

Add 2 c. warm water to a mixing bowl with 1-1/2 T. yeast and 1/2 to 1 c. freshly ground flour. Let proof for 10 minutes. Add 1/3 c. olive oil and 1/3 c. honey and let rest for 7 minutes. Now add 2 c. flour and mix. Continue adding flour and mixing until dough pulls away from sides of bowl. Add 1 T. salt and continue to mix. Continue to add flour until dough forms a smooth ball. Continue to mix for about 5 more minutes. Divide dough in half, place on oiled surface, roll into loaf shape, and place in greased bread pans. Put pans in warm oven at 145 degrees for 30 minutes. Once bread has risen, turn oven to 350 degrees and bake 30 minutes. Turn oven off and allow bread to rest in oven for 5 minutes. Turn bread out onto cooling rack. Now enjoy an extremely healthy honey and whole wheat treat!

— Victoria Bush, Louisville

**Vanguard apiarist and 21-year editor**

Observing Women’s History Month, BeeLines publisher and staff salute a pioneer professional apiarist-editor. ANNIE DOROTHY BETTS was an aeronautical engineer in England during World War I, and also began keeping bees during that time. She used to travel to her apiary inspections on a motorcycle, and while we couldn’t find a photo of her riding, we do have this portrait from her term as editor of *The Bee World* from 1929 to 1949. She wrote thousands of reports on other publications and 170 original articles in her 21 years editing that publication.
Can high-tech tools solve beehive thefts?

By Jodi Helmer
Modern Farmer, March 14, 2019

Beehive theft has become big business.

Thefts of hives are increasing in frequency and in hives stolen per theft. Many are connected with cross-country efforts toward pollinating California’s almond orchards.

It takes more than 1.5 million colonies of bees to pollinate the almond orchards in California, and beekeepers are paid an average of $171 to $200 per hive for pollination services. Thanks to high demand and increasing fees, beekeepers see the potential to earn bigger incomes by stealing hives and renting them out for pollination.

Law enforcement offices throughout southern California note upward trends in reports of stolen hives during February and March, peak almond pollination months.

Kentucky Beekeeping : A Guide for Beginners by Dr. Tom Webster of the Kentucky State University College of Agriculture, Food Science and Sustainable Systems, mentions the low-tech solution of branding wooden hive equipment with a branding iron available at bee supply companies. However, markings are simple to scratch out or paint over, and very creative thieves go as far as removing frames and putting them in unmarked hive bodies, according to a 2016 report from National Public Radio.

New high-tech tools have emerged to track stolen hives. Ellie Symes, CEO of The Bee Corp, has developed a Global Positioning System (GPS) solution that can track stolen hives. “Hiding a GPS device in a hive is similar to putting an alarm sign in front of a house,” Symes said.

Bee Corp managing director Darren Bainbridge says if a hive is moved, beekeepers receive cell phone notifications. In New Zealand, police made arrests at a beehive “chop shop” thanks to a similar tracking device that allowed beekeepers to lead police straight to the thieves.

However, the GPS tracker costs around $200 plus an annual subscription fee, so Bainbridge recommends setting only one or two tracking devices for every 30 hives — often enough to discourage thieves who these days are stealing entire apiaries.

Bainbridge says GPS hive-tracking tools are “a great idea” that should be encouraged, but for now The Bee Corp is not planning to develop new anti-theft devices. Beehive theft enrages the entire industry, “but is it enough of a problem to make it worth the cost to develop?” says Symes. “There are other, bigger issues facing bees.”

Modern Farmer magazine, a digital publication, is a great source of information on what and how we eat today. Visit modernfarmer.com.
**ARS: Colonies succeed better when foraging on non-crop fields**

By Kim Kaplan  
USDA Agricultural Research Service (ARS)  
March 20, 2019

TUCSON, ARIZONA — Honey bee colonies foraging on land with a strong cover of clover species and alfalfa do more than three times as well than if they are put next to crop fields of sunflowers or canola, according to a study just published in *Scientific Reports* by an Agricultural Research Service (ARS) scientist and colleagues.

Managed honey bee colonies placed from May until October next to land in the U.S. Department of Agriculture (USDA) Conservation Reserve Program (CRP) in North Dakota were more robust with better colony health, including higher numbers of bees and increased ability to turn nectar and pollen into vitellogenin.

**Vitellogenin for health**

The compound vitellogenin plays a number of roles, including serving as the base for producing royal jelly, the substance bees use to nurture larvae and turn larvae into queens.

ARS research microbiologist Kirk E. Anderson and his team found that higher levels of vitellogenin stores were the best predictor of colony size after winter. Higher levels also were associated with increased production of antioxidant enzymes, which reduce cell damage, and greater production of antimicrobial peptides, which assist disease resistance.

Vitellogenin also is a critical food storage reservoir for honey bee colonies, and a colony’s success in the spring depends on total vitellogenin reserves carried by specialized bees over the winter, the study said.

Vitellogenin prolongs the lifespans of queens and forager bees, as well as strongly influencing key behaviors that increase colony survival such as determining how old bees are before they begin foraging, and whether they tend to gather nectar or pollen.

**Stronger colonies are paid better**

After spending six months foraging on CRP land and then overwintering, more than 78 percent of the colonies were graded A, the highest level, commanding the highest price for pollination services in January. The A rating designates a colony with six or more frames well filled with bees, capped cells, and bee brood (larvae).

With colonies kept near intensely cultivated fields and then overwintered under the same circumstances to the CRP apiaries, only 20 percent could be rated grade A, and 55 percent were less than two frames or dead.

“California almond growers paid an average of $190 per grade A colony in the 2018 almond pollination season,” Anderson said.

**Locate hives near marginal farmland**

While the link between the quality of forage and colony health is generally known, this study highlights the value of agriculturally marginal landscapes for honey bee production.

The research could help beekeepers decide where to put apiaries for the summer and fall after crop pollination ends, so colonies will be in a position to build up robust healthy numbers in time for the next pollination season in the following February and early March, Anderson added.

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The Agricultural Research Service (ARS) is the chief scientific in-house research agency for the USDA. ARS focuses every day on solutions to agricultural problems affecting the U.S. ARS estimates that each dollar invested in agricultural research results in $20 of economic impact.