June 2014
Eugene Makovec
Editor
editor@mostatebeekeepers.org

Booth help needed!

Join us at the Missouri State Fair
August 7-17 in Sedalia

With the slogan, “Harvest the Fun!” the Missouri State Fair runs this year from August 7-17 in Sedalia. The 400-acre fairgrounds will present premier livestock shows and competitive exhibits, and first-class professional entertainment. Mark your calendar for the summer’s best family vacation experience!

The fair will showcase the best of Missouri agriculture; competitions from bull riding to tractor pulls; professional entertainment from Joan Jett and the Blackhearts, Sara Evans and many others; rural lifestyle experiences; hands-on science, technology and innovation; family-friendly amenities for everyone from infants to mature adults; and other action-packed activities.

The Missouri State Fair is the perfect blend of activities for a memorable family outing. The midway carnival includes games and rides for children and thrill seekers of all ages. The nighttime on the fairgrounds kicks up each evening with free music on the Budweiser Stage and music stars performing on the stage of the Pepsi Grandstand.

Admission at the gate: $8; age 60+, $6; ages 6-12, $2; 5 and under free. Tickets can be purchased in advance for a discount. See www.mostatefair.com for schedules and details.

Booth volunteers needed:
Please consider volunteering at our MSBA Booth this year. The booth is in the air-conditioned AG Building on the southeast side of the fairgrounds. (A fairgrounds map is available at http://www.mostatefair.com/wp-content/uploads/2014/01/2014-prem-guide-map-true-size.pdf.) If you sign up to help, your admission ticket can be picked up at the RED Caboose located on Hwy 65 (outside the fairgrounds), just North of Gate #11. Go onto the fairgrounds at this entrance and park your vehicle.

We need five to six people in the booth each day - 9 a.m. to 9 p.m. As always, we encourage local clubs to sign up to run the booth for a day, sporting their own club logo apparel if desired.

Call Dean Sanders (816-456-4683) or Steve Harris (314-805-6451) and sign up for as many hours/days as you can. Arrangement for overnight accommodations nearby is available for you to reserve dates of your choice.

Jobs in the booth include answering questions at our observation hive, selling honey, ice cream, honey sticks and other honey related products, plus educating the public about the Honeybee. If you’ve never worked at or been to the Fair, try it for a day. You get to meet and work with other beekeepers, and Dean and Steve or other experienced workers will be there to help answer any of your questions. See you at the Fair!

Enter your honey and other products:
Even if you are unable to help out at our booth, you can still participate in the Honey Competition. A list of products to enter are: Cut comb, bulk comb, light extracted, dark extracted, sealed honey frames, candied (creamed) honey, 3 lb beeswax cake, beeswax art design, beeswax candles and “the queen & her bees”. Judging of honey entries will include degree of density, moisture content, free from crystals, clarity, cleanliness of containers, flavor & aroma, color, appearance of containers, and uniformity continued on page 7

IN THIS ISSUE
From the President ............ 2
It’s swarm season!
Winter Loss Survey results ... 4
Numbers improved from 2013
“Are bees going extinct?” ... 5
It’s not the end of the world
Bees use mental maps ..... 6
Navigation not just by the sun
Honey Princess Report ..... 6
Honey Queen Report ....... 8
Local Associations .......... 9
Is there a club near you?
Membership application .. 10
Locally adapted is best 11
Directory of Officers ...... 13

BIP Results Encouraging
Winter Colony Losses Lower than in 2013
See article on Page 4
From the President  

by John Timmons

As I settle again at my downstairs desk to write this issue’s letter, I note the huge difference between what I see out the window today, as opposed to two months ago – it’s summer out there, folks! The entrance to each of my hives tells the story. The bees are just as happy as I, and working hard to catch up after the slow start to the season.

This is also that time of the year many beekeepers really look forward to - that being swarm season. In this part of the state, the swarm season is yet to make full stride, yet I sense that it’s going to be a big year for swarm catchers. The calls are beginning to come in at an ever-increasing rate and I’m getting reports of lots of supersedeure cells spotted. Perhaps it was the cool spring, or perhaps it’s the lunar cycle. Whatever the case, get your swarm equipment ready for the fun to begin.

And the timing is just right for plenty of swarms this season – there are lots of new beekeepers who are in need of bees to fill those brand new hives. Across the state, I’ve spoken with local association organizers who are quite worried about not being able to provide bees for all the new members they’ve spawned. There seems to be a limited supply of nucs and a limited supply of packages. The solution for most is to encourage their members to seek out swarms. Perhaps that has something to do with the fact that at my local club, Three Rivers Beekeepers, we have a swarm list well in excess of thirty.

Although most swarms will be used to make up for the high rate of winter losses this season, I encourage everyone to keep the new beekeepers in mind. Many have their first hive that needs to be filled with bees.

I’m also getting some encouraging whispers about an acceleration in the demand for raw honey – just like the beekeeper ordered! It seems that it’s no longer a small consumer segment that demands raw, unprocessed honey. It’s becoming a standard refrain amongst mainstream consumers, as well. The word is out – raw, unprocessed is better. As a result, we’re seeing prices creeping up to levels that are getting the attention of those who assumed the price would stay at around the four to five dollar per pound level. That’s just not the case anymore.

And the price of honey may continue to climb for more than domestic reasons. Kim Flottum reports in one of the recent issues of “Catch the Buzz”, that one of the results of the devastating drought in Australia is that thirty percent of their honey bee population has been wiped out. This has resulted in a halt to overseas honey exports. The year 2013 was Australia’s hottest year on record and “severely hampered honey flows for beekeepers”. Let’s hope that this can have some positive effects for beekeepers here in the States.

By the way, “Catch the Buzz” is a terrific email newsletter, arriving in my inbox several times per week. For those not yet subscribed, I encourage you to head over to www.BeeCulture.com/buzz/ and sign up for this free service.

Before closing, I want to remind everyone that we’re swiftly approaching time for the 2014 Missouri State Fair. Scheduled for August 7th through the 17th in Sedalia, it’s a “do not miss” event for me. And it’s an event not missed by the Missouri State Beekeepers Association, either. We are well represented every year with a prominent booth in the Agriculture Building. For those who haven’t visited the fair and stopped by the MSBA booth, I encourage you to do so.

There are lots of wonderful exhibits and lots of friendly faces to brighten your visit. Dean Sanders, the MSBA State Fair Coordinator, is already gearing up for a big year at the fair. In addition to the apiculture competition displays, there’s some fine honey-based ice cream to tempt the appetite. Assisting Dean every year is Steve Harris, along with representatives from clubs across the state. Be certain to contact your local club to see if they’ve signed up to help in the booth. Then, sign up yourself and join your club representing our organization at one of the largest state fairs in the country.

As always, I’ve waited until the last minute to get this letter off to our MSBA Newsletter Editor, Eugene Makovec. I can almost hear him tapping his foot behind me telling me to hurry up!

Here ya go, Eugene.

John
Winter Loss Survey 2012 – 2013: Preliminary Results
Honey bee colony losses in the United States, Winter 2012-2013

May 3, 2014

Note: This is a preliminary analysis. A more detailed final report is being prepared for publication at a later date.

The Bee Informed Partnership (http://beeinformed.org), in collaboration with the Apiary Inspectors of America (AIA) and the United States Department of Agriculture (USDA), is releasing preliminary results for the eighth annual national survey of honey bee colony losses. For the 2013/2014 winter season, 7,183 beekeepers in the United States (U.S.) responded. Collectively, they managed 564,522 colonies in October 2013, 21.7%[1] of the country’s 2.6 million colonies.

For the winter of 2013/14, 23.2% of managed honey bee colonies in the U.S. died. Nearly two-thirds of the respondents (65.4%) experienced winter colony loss rates greater than the average self-reported acceptable winter mortality rate of 18.9%. The 2013/14 winter colony loss rate of 23.2% is 7.3 points (or 23.9%) lower than the previous years’ (2012/13) estimate of 30.5% loss. (Figure 1) and is notably lower than the 8-year average total loss of 29.6%[2].

Preliminary results for the 2013/14 survey indicate that 20.0% of all colonies managed between April 1 2013 and Oct 1 2013 died. Responding beekeepers who managed bees over the entire April 2013 – April 2014 survey period reported losing 34.2% of the 670,568 colonies managed over this period. The annual loss differs from the sum of summer and winter losses reported above because the respondent pool differed as only respondents who reported for both the summer and winter period are included in the annual loss rate calculation.

The 2012/13 survey expanded beyond winter mortality estimates to improve our understanding of colony losses by collecting data pertinent to calculating summer and annual colony mortality rates. Results from the 2012/13 survey indicated that that summer colony losses (defined as the period of time between April 1 2012 and Oct 1 2012), were 25.3%. Loss estimate for the 12 month period last year was 45.2%. This survey was conducted by the Bee Informed Partnership, which receives a majority of its funding from the National Institute of Food and Agriculture, USDA (award number: 2011-67007-20017).

1. University of Maryland, dennis.vanengelsdorp@gmail.com, 717-884-2147
2. University of Tennessee
3. University of Illinois
4. Oregon State University
5. University of Georgia
6. University of Florida
7. The Pennsylvania State University – Hershey
8. USDA-ARS Bee Research Lab
9. USDA Animal and Plant Health Inspection Service
10. North Carolina State University
11. University of Minnesota
12. Appalachian State University

*Corresponding author, dennis.vanengelsdorp@gmail.com, 717-884-2147

[1] Based on NASS Honey report 2013 figures

Figure 1: Summary of the total overwinter colony loss (October 1 – April 1) of managed honey bee colonies in the US across the 8 annual national surveys (red bars). The acceptable range (blue bars) is the average percentage of acceptable loss declared by the survey participants in each of the 8 years of the survey.
Teachable moments ...

It’s not the end of the world? Community outreach in the age of CCD

by Eugene Makovec

One of the great things about belonging to a local beekeeping club is the opportunity it often gives for community outreach. Here at Three Rivers Beekeepers in eastern Missouri, we have three regular festivals we attend every year to promote bees and beekeeping to the public.

In early May I was working an event known as O’Fallon Founders Day - kind of a combination craft fair and folk-life festival. It’s always interesting, the questions we get from the public. Of course you have the usual, “Do you ever get stung?” Or as they say in Lincoln County where I live, “Y’ever get bit by them things?”

But some of the questions have changed over the past several years. With all the media hype about colony collapse disorder, nowadays you also hear, “Is it true that bees are almost extinct?” Or, “Did they ever figure out what’s killing the bees?”

Sometimes they already know the cause. They say things like, “I read all about how Monsanto is killing the bees.” Or better yet, “I signed that online petition to save the bees.” Really, save the bees from what? “Oh, you know, those new pesticides - those neo-nicantih-whatavers - the ones that are killing all the bees!”

And you know, this is frustrating to me as a beekeeper in my 20th year. Because you know, I was a beekeeper before beekeeping was cool. (I know, I’m still not that cool, but beekeeping has become, like, all fashionable and everything!) And while I think it’s great that everyone loves bees and beekeepers now, it bothers me that there’s so much misinformation out there.

Don’t get me wrong, part of me wants to just nod my head, shed a couple of tears, and maybe hold out a tin cup for donations. But then the good angel on my other shoulder tells me, No, this is a teachable moment. You have to set them straight.

Because the problem is, so much of what they’ve heard and read is wrong! Bees are NOT in fact going extinct. In fact, the numbers of managed colonies in the United States, on a year-to-year basis, have actually held pretty steady over the past decade. And worldwide they are rising, at least according to the UN’s Food and Agriculture Organization.

That is not to say we don’t have problems, and I always stress to people that it’s gotten a lot more difficult to keep bees compared with, say, 30 years ago. But when people hear on the news that beekeepers are losing 30 percent of their bees – every year! – they think that’s cumulative, that if I started with 100 hives, I dropped to 70 one year, then to 49, then 34 and so on, which by my calculations would bring me in 10 years from 100 hives all the way down to three!

They don’t realize that in most cases those bees are replaced every year, as beekeepers strive to continue to meet their demand for honey, pollination and so on. The sad thing is, I don’t think most of the so-called reporters doing these stories know that either.

Another statistic we see is that the U.S. had about 4.5 million managed colonies in 1945, and only 2 million today. But in the proper context, a different story is told. Beekeeping was subsidized during World War II, as sugar wasrationed and beeswax was used as a stabilizer in bombs. Secondly, the postwar years saw a massive population migration to cities, which unlike today were not home to a great many beekeepers. People also don’t realize that the 30 percent winter losses we’ve seen in recent years compare to around 20 percent a decade ago, and maybe 10-15 percent before the mites came along. Media reports give the impression that we went from zero to 30 faster than you could say neonicotinoid.

Feral bees are not immune, either. A study by Tom Seeley in upstate New York in the early 1980s (again, pre-varroa) found that new feral swarms had only a one in four chance of surviving for a year. No wonder they swarm so much!

I do tell people that yes, pesticides are a problem – they’ve always been a problem – but they’re not what’s driving the heavy losses, at least not primarily. Varroa is still our number one problem, and we’re still working on solutions. In the meantime, you can help by supporting your local beekeeper.

Now, some of you may think: Hey, who cares? People like us now, and if they think bees are an endangered species they’ll appreciate us even more, and be willing to pay more for our honey!

I disagree. It’s great that beekeeping is IN now, but there are plenty of reasons to promote honeybees and beekeeping without having to mislead people.

I don’t want people to take up beekeeping because they think they’re saving the world. And I certainly don’t want those new beekeepers to ignore problems like varroa and then blame Bayer, Syngenta, or anybody but themselves, when their bees die.

In April I was at a meeting of fellow home-brewers, and explained to a couple of people why I put honey in most of my beers. “You’re a beekeeper?” one fellow asked. “You must hate Monsanto!”

I gave him a puzzled look and said, “No … why?” But my look was not nearly as puzzled as the one I got in return.

Like I said, a teachable moment.

Diane Rehkop, left, of Three Rivers Beekeepers, educates a mother and daughter about bees at O’Fallon Founders’ Day on May 3.
Bees may build mental maps to get home
The insects rely on more than the sun as a compass

Jun 2, 2014 ScientificAmerican.com
By Jessica Morrison and Nature magazine

Bees, like birds and butterflies, use the Sun as a compass for navigation, whereas mammals typically find their way by remembering familiar landmarks on a continuous mental map. However, the latest research suggests that bees also use this type of map, despite their much smaller brain size. The work adds a new dimension to complex bee-navigation abilities that have long captivated researchers.

“The surprise comes for many people that such a tiny little brain is able to form such a rich memory described as a cognitive map,” says co-author Randolf Menzel, a neurobiologist at the Free University of Berlin.

The research by Menzel and his team, published today in the Proceedings of the National Academy of Sciences, demonstrates that bees can find their way back to their hives without relying solely on the Sun. Instead, they seem to use a ‘cognitive map’ that is made up of memorized landscape snapshots that direct them home.

The cognitive map used by mammals is thought to originate in the brain’s hippocampus. Humans employ such maps on a daily basis; for example, even in a windowless office, many people can point towards their home, orienting themselves in space based on knowledge of their location relative to the outside world.

“They can point to their home generally even though they can’t see it, even along a path through a wall that they haven’t travelled,” explains Fred Dyer, a behavioral biologist at Michigan State University in East Lansing, who was not involved in the research. The study authors argue that bees can do something similar, albeit on a much more rudimentary level.

Time shift
The authors tested their theory by interfering with the bees’ Sun compass: they shifted the bees’ internal biological clock by inducing sleep using a general anaesthetic. Once the bees had woken up, Menzel and his colleagues tracked them along a path of several hundred meters from a release site to their hive using harmonic radar, which detects and records movement based on transponders fixed to the bees.

When the bees were released from a site with which they were unfamiliar, they initially travelled in the wrong direction, flying away from their hive instead of towards it. With their internal clocks shifted, the bees still thought that it was morning — so they went the wrong way based on their sense of where the Sun should be. “But then they redirect, ignoring the information from the Sun,” says Menzel. “They refer to something else” — which he and his team think is a cognitive map.

Dyer says that Menzel and colleagues’ results provide good evidence that bees do not navigate by a type of vector addition, pegged to the position of the Sun. “It’s always progress when you can rule out a hypothesis,” he adds. And he applauds the work for its use of harmonic radar and anaesthesia to catch a glimpse of the cognitive lives of bees.

But Dyer is not yet convinced that bees navigate using a cognitive map. He thinks that the insects could be using features of the terrain independent of the Sun to navigate, similar to the way a mariner might use a beacon. This is not the same as a cognitive map, which allows an individual to head down an unfamiliar path towards an unseen goal without necessarily using a landmark.

Menzel now hopes to further characterize his findings. He thinks that bees use a type of cognitive map that does not store details, but instead lets them recall a coarse layout of the environment. He plans to place bees in mazes in the laboratory and record their brain signals as they negotiate an artificial environment, which he hopes will offer further clues about their cognitive and navigational abilities.

This article is reproduced with permission from the magazine Nature. The article was first published on June 2, 2014.

From the Honey Princess

Hello everyone, I hope all of your hives are flourishing!! Two of my three hives are doing wonderful. Unfortunately a few weeks ago I lost one of my hives. It made it through winter but slowly started declining. I tried to save it with sugar water but was unsuccessful. But I will accept a 66% success rate coming from winter, because many people weren’t as lucky.

I am currently getting ready to present to a group of children at the North East Kansas Beekeepers’ Association FunDay in Lawrence, Kansas. I plan on talking to them about the important role bees play in pollination. I am really looking forward to that event. I love working with young kids. You never know who you might inspire!

Happy Beekeeping to All!!
Erin Mullins, 2014 Missouri Honey Princess

Princess Erin
Join us at the Fair!
Hotel accommodations available nearby, or stay at adjacent campground
continued from page 1

of volume. Score Sheet for judging the other additional items and more specific guidelines plus an entry form can be found on the State Fair web site at http://www.mostatefair.com/premium-guide. Under “Agriculture and Home Economics” you will find “Agriculture Rules and Classes” (with Apiculture beginning on page 2) and the “Agriculture Entry Blank”.
Start planning now and decide what to enter. Get your jars selected (preferably glass, but not a requirement) and get your creamed honey started by early July. Even if you are just beginning your beekeeping adventure, please consider entering your honey products for judging. You get a score sheet for each item you enter and it’s a great way to see how you’re doing in preparing your honey for sale or even to give to your friends and neighbors.
If you are unable to deliver your entries to Sedalia yourself, maybe your local club can help find someone. Let’s fill up the showcase this year and let the public see our beautiful bounty from all over Missouri.
Note: We will match your winnings if you are a member of the Missouri State Beekeepers Association.

WEAVER’S FAMOUS QUEENS
And Package Bees
Buckfast & All-American
BEEKEEPING SUPPLIES AND BEGINNER’S KITS
THE R WEAVER APIARIES, INC.
16495 C.R. 319, NAVASOTA, TX 77868
Phone (936) 825-2333 FAX (936) 825-3642
EMAIL: rweaver@rweaver.com
WEBSITE: www.rweaver.com

HAPPY ANNIVERSARY!
isabees
HELP CELEBRATE
5 YEARS
Supporting Missouri Beekeepers
Visit the store and register to win
a Maxant 2-frame extractor
Model 3100H-2
Through July 15th, No purchase necessary.
Does not include shipping.

315 Lemay Ferry Road, #101  STL, MO 63125
314-894-8737 • isabees.com
Beekeeping Supplies and Instruction
From the Honey Queen

“Hello!” to all of the Missouri beekeepers! I hope that this spring finds you and your bees doing well! My April days were filled with home remodeling, school, and several family trips. Toward the end of April, my family and I took our usual trip to our favorite homeschool conference in Texas. While I was there, I had the pleasure of unexpectedly meeting the Texas State Honey Queen, Hayden Wolf! I was walking across the conference center and a girl stepped in front of me and said, “Are you Lauren Collins?” I replied, “Yes, I am!” She went on to say that she was the Texas Honey Queen and she had seen me the night before and recognized me from my Facebook photos. What a small world! It was so much fun to be able to talk to her about beekeeping, and the national and state honey queen programs.

As we’re moving toward summer, I’ve heard from quite a few beekeepers who have had a large increase in their colonies, whether it be from swarms or splits. My hive has been doing well, aside from the fact that they decided to swarm on a weekend when I was in Wyoming visiting family. They always pick the most convenient times to spread their wings and…fly! I still had a large amount of bees and several capped queen cells, so I decided to try my first split with the help of my friend, Dean Sanders. I’m now waiting to see if my queen will emerge and begin a successful new colony! I’m still amazed at the ins and outs of beekeeping. After three years, I still learn something new every time I go out to my bee yard. And, I suspect that the bees will still be teaching me lessons 30 years from now! Beekeeping is an adventure, and I’m glad to be on that adventure with all of you!

Lauren Collins, 2014 Missouri State Honey Queen

DRAPER’S SUPER BEE
We offer fast and courteous service to all beekeepers. We sell beekeeping supplies, containers, bee pollen and honey for those who run short. Order is shipped the same day as received in most cases.
Free catalog on request. Pick up orders at our warehouse must be pre-ordered and picked up by appointment only.

Business hours: Mon-Thurs 8-5, closed 12-1
Brenda and Larry Draper
Draper’s Super Bee
914 “S” Street, Auburn, NE 68305 402-274-3725

Walter T. Kelley Co.
Stand Out, Bee Beautiful.
See the wide range of containers and labels that we have to offer. No matter if your honey is sitting on a kitchen table, at a local restaurant, farmer’s market, or grocery store, we believe your honey should look as good as it tastes.

Item No.    As Low As*
220..............$.45 ea
221..............$.56 ea
222..............$.77 ea.

*Price each when bought by the skid. Also available by the dozen and case.

Walter T. Kelley Co.
807 W. Main Street
Clarkson, KY 42726
Phone: 1-800-233-2899

KELLEY BEEKEEPING
MISSOURI STATE HONEY QUEEN

Queen Lauren

Missouri State Beekeepers Association Page 8
Local Beekeeping Associations in Missouri

1 Beekeepers Association of the Ozarks
   4th Tuesday of each month, 7:00 p.m.
   Darr Ag Center, 2401 S. Kansas Expwy, Springfield
   Bruce Snively, President  417-732-5219
   cathymisko@earthlink.net

2 Boone Regional Beekeepers Association
   3rd Sunday of month, 3:00 p.m., Columbia Insurance Group, 2102 Whitegate Dr. (back door), Columbia
   President Jim Duever  573-254-3373
   www.boonebees.org

3 Busy Bee Club
   4th Tuesday of each month, 7:00 p.m., Cedar County Health Center, Owens Mill Road, Stockton
   Neal Lee 417-276-3090, Neil Brunner 314-276-4252

4 Eastern Missouri Beekeepers Association
   2nd Wednesday of each month, 7:00 p.m., location changes. Bob Sears, President  314-479-9517
   www.easternmobeekeepers.com

5 Golden Valley Beekeepers
   2nd Monday of each month, 7:00 p.m. (but varies)
   Henry County Courthouse, Clinton MO
   Tom McCormick, President  417-644-7507
tlmccormick@mccormickcos.com

6 Jackson Area Beekeepers
   4th Tuesday of each month, 7:00 p.m.
   First Pres. of Jackson, 206 E. Washington
   Contact Grant Gillard  573-243-6568
gillard5@charter.net

7 Jefferson County Beekeepers Association
   2nd Tuesday of each month, 7:30 p.m., Hwy B & 21
   Jefferson County Extension Center, Hillsboro
   Contact Marvin Hook  636-274-1759

8 Joplin Area Beekeepers Association
   Last Tue. of each month, 7 pm, SM Bank Community Building (7th and Duquesne Rd), Joplin
   Contact Dale Foley  417-850-0285

9 Mid Missouri Beekeepers
   3rd Sunday of each month, 2 pm, Old Train Depot, St. James.
   President Mat Woessner  573.308.7006
   matts@inv-rel.com

10 Midwestern Beekeepers Association
   Most meetings: Fellowship Hall at Graceway, 5460 Blue Ridge Cutoff, Kansas City, MO 64133
   Visit midwesternbeekeepers.org for calendar
   Cathy Misko, President  660-656-3485
cathy.misko@earthlink.net

11 Mississippi Valley Beekeepers Association
   Last Tuesday of Month in Quincy, IL
   Contact Bernie Andrew  217-938-4975

12 Missouri Valley Beekeepers Association
   3rd Monday of each month, 7:00 pm, Union Location varies, contact below if unsure
   President Calvin Brandt  cvbrandt@landolakes.com

13 Parkland Beekeepers
   3rd Tuesday of month, 7pm, Ozark Federal Savings
   President Gregg Hitchings  ghitch@hotmail.com

14 Pomme de Terre Beekeepers
   2nd Thursday of each month, 7 pm
   Missouri Extension Office, Hermitage
   Contact Bessi Shryer  417-745-2527

15 SEMO Honey Producers
   2nd Thursday of month, Church of Christ, Poplar Bluff
   Contact Cory Stevens  573-225-6935
   wells.ernie@gmail.com

16 South Central Missouri Beekeepers Association
   1st Friday of month, Howell Electric Coop, West Plains
   Monty Wiens, President  417-257-3994

17 Southern MO Beekeepers of Monett “MOBees”)
   3rd Tuesday of each month, 7:00 p.m.
   United Methodist Church, Hwy 37 NW of Monett
   Kevin Young, President  417-847-5464

18 Southwest Missouri Beekeepers Assn. of Neosho
   1st Tuesday of month, Neosho High School FFA Bldg
   President Roger Ross  417-472-3504

19 Three Rivers Beekeepers
   3rd Monday of month, University of Missouri Extension, 260 Brown Road, St. Peters, Missouri, 7:00 p.m.
   For info: Eugene Makovec 314-703-7650
   info@threeriverbeekeepers.com

20 Northwest Missouri Bee Busters
   1st Monday of odd months, 7:00 p.m.
   511 4th Street, Conception Junction, MO 64434
   Gerald Auffert, President  660-944-2535

21 Lake of the Ozarks Beekeepers
   3rd Saturday of month, 1:00 p.m.
   UMC Extension Office, 100 E. Newton, Versailles MO
   Contact Garrett Blackwell  573-374-7402

22 Northeast Missouri Beekeepers Association
   1st Friday of month, 6:30 pm Running Fox Elementary
   (3 miles south of Wayland) Actig President Randy Ewart  573-248-5561
   rewart@centurytel.net

23 Gasconade Region Bee Keepers
   2nd Tuesday 7:00, First State Comm. Bank, Owensville
   President Rod Weakley  573-746-0383
   gasconaderegionbeekeepers@hotmail.com

24 St. Louis Beekeepers
   4th Tuesday 6:30, Schlafly Bottleworks
   contact@saintlouisbeekeepers.com
   www.saintlouisbeekeepers.com

25 Western Missouri Beekeepers
   2nd Tuesday 6:30, Moor-View Community Room, Nevada
   Caroline Phillips, President  417-321-3587
   bcphillips81@gmail.com

26 Meramec Valley Beekeepers
   First Sunday 2:30 pm Bourbon, MO American Legion Hall
   Contact Sam Elia  573-732-5597

27 Quad County Beekeepers
   1st Tuesday, 7:00 pm, Missouri Extension Office, Troy
   Contact Fred Meder (573) 760-2574
   quadcountybeekeepers.com

28 North Central Missouri Beekeepers Association
   1st Monday, Area Career Center, Macon, 7:00 pm
   Contact Dan West (660) 651-7582, www.ncmobees.org

29 Bees Alive
   Springfield  Contact Kristi Mitchuson (417) 886-8585

30 Wright County Beekeepers
   2nd Thursday, Laclede Electric building, Hartville, 6:30 pm
   Rick Bledsoe, President  417-350-2257
   wrightcountybeekeepers@gmail.com

31 Rolla Bee Club
   4th Tuesday, Rolla Public Library, Rolla, 6 pm
   Contact Charlotte Wiggins 573-364-1908 evenings
   chargardens@gmail.com

32 Swarm Chasers
   % MO Dept. of Conservation, 701 McCarthy Dr., St. Joseph
   Contact Shannon Holcomb 816-261-8647
   holcomb_shannon@yahoo.com
Renew instantly online!
www.mostatebeekeepers.org
Use your credit card or PayPal!

Association Member Subscription
(Rates listed below are 25% below regular rates.)

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>Canada</th>
<th>Foreign</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Yr.</td>
<td>$21.00</td>
<td>$36.00</td>
<td>$45.00</td>
</tr>
<tr>
<td>2 Yr.</td>
<td>$39.75</td>
<td>$68.75</td>
<td>$85.75</td>
</tr>
<tr>
<td>3 Yr.</td>
<td>$56.25</td>
<td>$99.25</td>
<td>$123.25</td>
</tr>
</tbody>
</table>

Prices good through Dec. 31, 2014

Return white copy to: American Bee Journal, 51 S. 2nd St., Hamilton, IL 62341
Retain yellow copy for your records.

Subscriber’s Name ____________________________ Secretary’s Name ____________________________
Address ____________________________________ Address ____________________________
Address ____________________________________ Address ____________________________
City, State, Zip ____________________________ City, State, Zip ____________________________
Phone ____________________________ Email ____________________________

New Renewal

THE HAWLEY HONEY COMPANY
220 North Elm Iola, KS 66749
620-365-5956 (After 8 pm 620-365-7919)
White clover honey strained in 5-gallon buckets. We will pack it in your jars for an extra fee.
Bee Equipment - New and Used - Used Extractors
Corn syrup, sugar syrup and SUGAR Bees -- Frames of brood
Call for prices.
Can deliver to Kansas City, Joplin or Butler, MO

Femme Osage Apiaries
Ian & Pamela Brown
Certified Master Beekeepers
1407 Sneak Road
Foristell, MO 63348
636-398-5014
Pollination Service
Bees - Honey - Pollen
Wax - Supplies
IBRA report

Locally adapted bees perform best

Press Release, International Bee Research Association (IBRA), the world’s longest established apicultural research publishers

May 30, 2014

Honey bee genotypes and the environment

In recent years, much attention has been focused on the global problem of honey bee colony losses. Among the many explanations for these losses, variability in the genetic makeup and vitality of honey bee populations might help to explain some of the variability in honey bee colony losses experienced in different regions. This has led to the innovative honey bee Genotype-Environment Interactions (GEI) experiment carried out by members of the international honey bee research association COLOSS. The results are published today in a Special Issue of the Journal of Apicultural Research.

A total of 621 colonies of 16 different genetic origins were set up in 21 apiaries in 11 different European countries managed by 15 research partners. Each location housed the local strain of bee together with two of “foreign” origins. The colonies were set up in the summer of 2009 and were managed and evaluated according to a standard protocol used by all participants until 2012.

IBRA Science Director Norman Carreck says: “The results of these experiments show that the locally adapted strains of honey bee consistently performed better than the “foreign” strains. This may seem logical to many bee scientists, but may come as something as a shock for many beekeepers who believe that purchased queens are likely to be in some way “better” than the bees that they already have in their own hives. There is growing evidence of the adverse effects of the global trade in honey bees, which has led to the spread of novel pests and diseases. These papers which provide evidence that locally-adapted honey bee strains consistently perform better than imported strains may thus strengthen local bee breeding programmes, and encourage the use of locally bred queens over those imported from elsewhere.”
**Homing handstand:** Workers in a newly hived swarm (see page 2) expose their Nasanov glands and fan a homing pheromone to their airborne comrades. After hanging patiently for hours from a tree branch while scout bees scoured the neighborhood for nesting sites, they’ve just been unceremoniously dropped into an empty hive body.

In the ensuing confusion, hundreds of bees take to the air, and some return to the branch. But the queen and most of her colony remain in the box, and a few dozen take up stations at the entrance, where they broadcast the universal homing signal to bring the rest of the family, including returning scouts, back into the fold.

This newsletter is published six times per year, in even months. Submissions are due by the 15th of the month prior to publication.

The email edition is in color, and contains hyperlinks and bonus back-page material, while the print version is in black-and-white. If you are a member currently receiving the printed newsletter and you wish to upgrade, just send an email to editor@mostatebeekeepers.org with “email newsletter” in the subject line. I’ll reply with confirmation, and add you to my list.

**Advertising rates are as follows:**

- Business card size $15.00
- Quarter page $35.00
- Half page $50.00
- Full page $100.00

**Classified Ads:** Advertise one to three beekeeping-related items in a one-line ad at no charge. This service is for non-commercial MSBA members only, and is limited to one ad per item per calendar year.

**Honey Trading Post:** This is a free service to members wishing to buy or sell honey on a wholesale basis. Just email or call the editor with contact information and whether you are buying or selling. Pricing is between the interested parties.