Bayou Bee Bulletin Number 5 – September 2015

Greetings fellow beekeepers! I have heard rumors of a cold winter this year, so let us prepare accordingly. Our honey producing season is coming to a close so it is time to prep our hives to face and overcome one of their greatest challenges - winter. Here are a few things you can do to help your bees survive winter: do not take too much honey away, strive for strong/healthy colonies going into winter, and adjust for ventilation and drafts.

When pulling the final honey crop for the year, keep in mind that the bees will need about 90-100 pounds of honey over the winter season to live on. Pulling honey before the fall blooms have finished their last beautiful display will enable the bees to pack honey in corners and crevices of the brood chamber. After pulling honey, I go to the back of each hive and attempt to lift it up. If it is very heavy (unable to lift) then I am assuming there is enough honey. I also am looking into the bottom two brood boxes to evaluate their honey stores. If I come across a hive that is light weight it is either given extra food (sugar or honey) to make it through winter or put on a feeding schedule with a feeder throughout the winter. Without enough carbohydrates (sugars in honey) the bees are not able to maintain temperature and will die in the cold. You will find their heads stuck in the empty cells among the ball cluster of dead bees. Not what you want to find!

Winter bees have to live longer than their summer-time sisters. Your hive will have the advantage over ole' man winter if these bees are as healthy as can be. Varroa sampling and treatment should be addressed at this time. Many treatments that cannot be applied while honey (that you plan to harvest) is on the hive can be applied after your honey supers are pulled. Antibiotic should also be considered as it helps bees to gain weight and stave off stress pressures of viruses. Hive beetles are not as active as the weather turns cooler, but I also like to refresh my beetle traps so as to continue to kill as many adult beetles as possible though out the year. If I happen to come across a very weak hive (poor/drone laying queen, no queen, small population) then that hive is combined with a larger one. It is better at this point in the year to save what bees and comb you can and re-split to make a new hive in the spring.

Lastly, as I finish preparing my hive for the winter, I consider the hive's ventilation needs and positioning with a cold north wind in mind. Some hives that I have scattered around my yard will be moved to face south and placed behind a wind break. As the weather turns cooler, the entrance is reduced and excess summer time ventilation is sealed up. A small ventilation hole in the inner cover or upper brood chamber is useful in winter to help prevent a buildup of condensation. With a little preparedness on our part, hopefully we will give our bees the best chance we can to make it through winter snug as a bug.

Amy Weeks
In this newsletter:

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**Editor’s Comments**

The summer is almost over. In central Louisiana the season started out very wet, followed by an excessive heat wave starting in July that lasted for about two months. Now we are finally getting some cooler nights with tolerable days in the 90’s with high humidity. The golden rod and many of Louisiana’s fall flowers are in bloom. September is the time of my fall honey harvest and time to begin preparing the hives for the winter.

I received a call the other day from one of my clients who wanted a hive removed from within a pallet in their yard. What does one do with a late season hive or swarm capture? I present one method on how to do this without having to feed these bees and with the caveat of possibly coming away with two hives by spring.

The theme of this letter is twofold: “A different kind of bee” and “It’s all in the timing.”

**Dear Bee**

Information regarding input from the LBA

As of this BBB, no-one from the LBA membership has submitted any monthly gadgets, pictures, plans or anything they’d like listed to be sold. I also have not received a listing of beekeepers in the various areas of the state/clubs that would be willing/able to assist other beekeepers and create a forum for questions and answers section in the newsletter.

As such, I will be discontinuing this section of the newsletter.
Dates and Events to Remember

19th Annual LBA Field Day at the USDA Honey Bee Lab in Baton Rouge – Oct. 10, 2015

The USDA Honey Bee Breeding, Genetics and Physiology Laboratory and the Louisiana State Beekeepers Association will hold the 19th Annual Field Day on Saturday, October 10, 2015. The event will be held at the laboratory, located at 1157 Ben Hur Rd. This is near the intersection of Nicholson Drive (Hwy 30) and Brightside Dr., which is about two miles south of the LSU football stadium.

Gates will open at 9:30 a.m.; activities are scheduled from 10:00 a.m. to 3:30 p.m. A nonrefundable pre-registration fee of $30.00 is required for attendees 12 years of age and above. Children eleven and under, must stay with their parents at all times. You must pre-register by October 1, 2015. You may register online at labeekeepers.org and pay through PayPal or credit card or you may mail your registration form that is located on the labeekeepers.org web site and your check payable to the Louisiana Beekeepers Association to: David Ferguson, P.O. Box 716, Brusly, LA 70719. If you do not pre-register by October 1, 2015, the cost will be $40.00 per person.

The registration fee covers expenses including coffee, pastries and a great catered lunch that includes smoked pork in gravy, white rice, green peas, whole kernel corn, and garden salad with choice of 4 dressings, fresh baked honey wheat rolls, Mixed Emotions pudding and coke products.

The Field Day will include courses for beginners and more experienced beekeepers as well as workshops for those interested in a variety of topics. The beginning beekeeper course will begin with how to get started for those who do not yet own bees, then will progress to how to manage a few colonies. Topics will include equipment needs for the beginner, nectar producing plants, maintenance of colonies, pests, safety and etiquette in beekeeping, and hands on training in an active colony. The intermediate beekeeping course was a hit last year and it will be offered again with a variety of topics focused on the beekeeper with a moderate amount of experience that is now ready to take it to the next level. Topics will include bee removal, making splits and swarm catching. There will be a variety of focused workshops for those not attending the courses (typically the more advanced beekeepers), i.e., queen rearing, instrumental insemination and breeding basics. These workshops will represent both the USDA-ARS Bee Lab’s research and beekeeper experiences. Both the Intermediate and Advanced groups will come together at the end of the day to learn about breeding basics and a round table question and answer session.
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For additional information please contact Dr. Lanie Bourgeois (225-767-9299), Sandra Hineman (225-767-9280) or Joe Sanroma (318-346-2805). For questions regarding online registration, please contact David Ferguson (225-726-1664) or Robert Taylor (985-386-4647).


54th Louisiana Beekeepers Convention
The Louisiana Beekeepers Association (LBA) will hold their 54th annual convention on Friday, December 4th and Saturday, December 5th at the Hilton Garden Inn; 400 Mane Street, West Monroe, Louisiana 71292. A block of rooms will be held for LBA guests at a rate of $109.00 for a standard-double room (two queen beds) per night. Please make your reservations by calling 318.398.0653. Remember to mention the Louisiana Beekeepers Association to get the special rate.

Please join us for the latest research information from the USDA/ARS Honey Bee Breeding, Genetics & Physiology Laboratory. Also, some of the speakers are Chris Hiatt, Executive Board Member of American Honey Producers, Randy Oliver, Beekeeping through the Eyes of a Biologist, Dr. David Tarpy, Professor of Entomology and the Extension Apiculturist at North Carolina State University. There will be something for everyone from the small scale beekeeper to the lifetime beekeeper as well as the commercial beekeeper, so please join us in West Monroe. A registration fee of $20.00 per person or $30.00 per family is required if pre-registered* by November 13. You may register online at the LBA website: labeekeepers.org by using your credit card or PayPal or you may mail in the registration form that is located on the labeekeepers.org website and your check payable to the Louisiana Beekeepers Association to: David Ferguson, P.O. Box 716, Brusly, LA 70719. There will be a registration fee of $30.00 per person and $40.00 per family for those that register after the November 13 pre-registration cut-off date or at the convention.
* Banquet tickets are limited due to “limited seating in the banquet hall.” If you plan to attend the banquet be sure to purchase your tickets to this event while registering for the conference.

Please contact Joe Sanroma at 318-346-2805 or Amy Weeks 318-325-6614 for additional information.

Internet Sources you may find useful

http://news.bbc.co.uk/2/hi/science/nature/6084974.stm
Bee fossil, DNA generate a buzz
Scientists have identified the oldest known bee, a 100 million-year-old specimen preserved in amber. [SEE Articles of Interest below for story.]

Scientist finds 100 million-year-old bee
October 30, 2006
National Geographic Magazine – May 2015: Quest for a Superbee
Can the world’s most important pollinators be saved? How scientists and breeders are trying to create a hardier honeybee.

**Articles of interest for this BBB**

**Saving a late season small hive or swarm – how to do it without spending a lot of time feeding and caring for the bees**

I have a contract with a long-time paying client who finds a small hive at their business in a pallet. It is now early September and it is unlikely this hive will survive on its own for lack of food storage and exposure (location). The client wants it removed ASAP. I needed to address the client’s needs and didn’t want to kill the bees nor want to spend the winter months feeding them. I’d addressed the CENLA Beekeeping Club the night before, and told them to avoid collecting late season swarms, else plan of feeding them through the winter.

Well, thinking about what I now needed to do to save these bees, I came up with a method that had been used by not only me but many other beekeepers in the past. I had to clarify what I’d said earlier to the club members, that there is a way to save a swarm and a colony of bees such as described above, and avoid feeding them. I’d done this before and it can work out with the result that you will have two hives come spring from a successful merging of the small hive or swarm with an existing established hive.

**Here’s how it’s done.**

The strong hive had been treated for varroa mites using the biological technique of placing drone brood frames in the hive, then removing them when capped. The varroa mites tend to attack the drone brood 10:1 over the worker brood. I use this technique in the spring and fall.

Be sure to choose a strong hive with 40,000+ bees and at least one mostly-full to full super (though you could rob a super from another hive if needed). The one chosen was a hive I’d started this spring from a split made in May. It had filled out the two deep brood boxes and had almost completed filling the first super. The second deep was mostly honey with some frames of brood and pollen.

The small hive from the pallet had a queen with about 1000 bees and three leaves of comb – two loaded with new brood. During its capture the bees were sprayed with a honey and water mix.
The hive chosen has its super removed exposing the queen excluder. There were several hundred bees still in the super. These were left within the super. A sheet of paper is laid over the excluder and a deep with frames is placed on top of this. Between the frames the small hive’s comb(s) are placed and the bees from the swarm box are dumped into this deep brood box.
Note the comb laid between the frames. The young hives’ bees had been dumped into the brood box prior to the frames being replaced into the box. Now lay a sheet of paper over this and replace the super, attic board and cover.
NOTE: It is extremely important to monitor this hive and check on the comb from the young hive. Wax moths may attack this hive’s comb. If wax moth larvae show up in the small hive’s comb, pull it immediately. Also, with the extra empty frames there is ample hiding spots for the
small hive beetle. I plan on returning to this yard next week to harvest honey from the other hives so will have a chance to examine this one.

The bees from the large hive are now above and below the new hive and within a day or so will be eating through the paper and merging with the bees from the young hive. The two queens can’t get together and the queen from the young hive has a layer of honey above her. All the bees have adequate honey, pollen, room to expand and if all goes well the new hive will expand onto and through the deep above the queen excluder. If the fall months allow for additional nectar and pollen collection, well that’s all the better. If winter comes early then supplemental pollen patties and carbohydrates feeding may be in order. Monitor on a weekly basis for the next few months.

A Different Kind of Beekeeping Takes Flight
By DOUGLAS M. MAIN

http://green.blogs.nytimes.com/2012/02/17/a-different-kind-of-beekeeping-takes-flight/

Entrance to a nest of stingless bees known as little angels in a mango tree in Venezuela.

Much of the honey eaten in the United States and Europe comes from the European honey bee. But Apis mellifera and the handful of other species in the honey bee family aren’t the only ones that make this sugary treat. A much larger and more diverse group called stingless bees also produce honey — and they’re creating a stir among beekeepers and researchers worldwide as pollinators and as a newfound source of food and medicinal products.
Made up of more than 600 species, each of which makes its own version of honey, this tribe of bees lives throughout the world’s tropics. Like honeybees, they are social and form colonies with a queen and workers, many of which collect nectar from various flowers before bringing it back home to churn painstakingly into honey. Their foraging transfers pollen from one bloom to another, a service that many plants — and agriculture as we know it — could not survive without.

But stingless bees are pickier than their European counterparts about what flowers they visit, making them important for keeping certain tropical forests healthy.

Their honey, too, is different, containing more water — you would probably drink it as opposed to eating it with a spoon, said David Roubik, a bee expert with the Smithsonian Tropical Research Institute in Panama.

It’s also more difficult to get: a typical colony may only produce a couple of liters of honey per year, compared with 50 or more for honeybees. Their nests consist of many small “honey pots” instead of the honey bees regular combs. And as their name implies, they lack stingers and are generally less aggressive than honeybees, making them easier to raise; they’re kept as “pets” in many places and can often be tended to by children.

Because there are so many different species of stingless, or meloponine, bees, they produce a wide variety of honey. Its taste has been variously described as sweeter, more bitter or sharper than the honey bees product, often with a delightful floral aftertaste, said Stephen Buchmann, a native bee researcher at the University of Arizona. Dr. Buchmann, who has sampled hundreds of
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varieties, said the best-tasting honey comes from the royal lady bee, a stingless species that the Maya people of Mexico’s Yucatán Peninsula have cultivated for 2,000 years.

Stingless bee honey also has a variety of medicinal uses. Numerous reports attest to its antibiotic properties, no surprise to native people worldwide who use it to treat eye infections and wounds. A study to be published by the Journal of Experimental Pharmacology by the researcher Peter Kwapong found that this honey is slightly more effective than a store-bought antibiotic at treating eye infections in guinea pigs. And other studies have hinted that it might help deter cancer.

Aside from the Maya, though, few groups have worked out sophisticated methods for cultivating colonies of these bees in manmade structures, partly because of the insect’s tiny size, small colonies and many varieties. Most often, people merely harvest the honey from nests in forest trees and move on, Dr. Roubik said.

But that’s beginning to change. In Brazil, for example, the raising of these bees for their honey, called meliponiculture, is widespread. (The word comes from Meliponini, the taxonomic term for stingless bees.) In some areas, it’s even more common than the cultivation of honeybees known as apiculture.

Patricia Vit, a researcher at the University of the Andes in Venezuela, for example, took humorous issue with frequent references to the stingless bee’s product as the “other honey.” “In the forest, the ‘other honey’ is that of Apis mellifera,” or the European honey bee, she wrote in an e-mail.

From left to right, “uruçú” and “tiúba” honey from Brazil, Mexican “negrita” and Bolivian “suro negro.” Photographer: Patricia Vit

Indeed, many prominent meliponiculturists in Brazil and elsewhere have long waiting lists for purchasing their honey, said Breno Freitas, a researcher at the Federal University of Ceará in Brazil. This honey often sells for 10 times the price of honey bee honey.

Dr. Kwapong, an entomologist at Ghana’s University of Cape Coast, first learned about — and fell in love with — stingless bees at a conference in Brazil. When he returned to Ghana, he founded the International Stingless Bee Center, dedicated to studying and spreading meliponiculture of native bees throughout West Africa. Dr. Kwapong has helped train more than 200 people from around the region in the delicate trade.
The practice is also receiving growing recognition and study at institutions throughout Central and South America, Australia and elsewhere. In Japan, stingless bees are being cultivated to pollinate greenhouses, a feat at which they excel. Since they can’t survive in temperate areas, they cannot escape and interfere with local insect populations, a problem that has dogged the use of bumblebees for the same purpose.

Still, little is known about how to raise the vast majority of stingless bee species. That’s frustrating for would-be meliponine beekeepers; many give up on the idea because they cannot get the information they need, Dr. Freitas said.

Sam Droege, a biologist with the United States Geological Survey, said in a phone interview that the newfound interest in meliponiculture may be a harbinger of a revolution in animal husbandry. “In the sweep of history, we don’t often see new groups or classes of domesticated animals arising,” he said.

Of course, meliponiculture is nothing new for certain groups, most notably the Maya, who recorded their age-old craft in the glyphs in ruins throughout the Yucatán and in the Madrid Codex, one of the few surviving collections of Mayan hieroglyphics.

Yet the Mayan beekeeping tradition is in serious danger of dying out. Populations of the bee have declined with deforestation, and beekeepers are less frequently passing on the tradition to younger generations as they move to cities, Dr. Buchmann said. To counter this trend, he has taught a series of classes throughout the peninsula to encourage beekeeping and has published a meliponiculture manual in Mayan and Spanish.

While Dr. Buchmann is worried for the future in the Yucatán, he’s encouraged by the spread of meliponiculture elsewhere. But he doesn’t consider the bees a domesticated animal. “We just give them a place to live, and let them be,” he said.

Honey pots on the Paraguaná peninsula in Venezuela.
Geologic history leading to our present honey bee and a bit of classification information

Through the years I’ve been asked about the origins of the present-day honeybees. Insects caught in amber are rare but are invaluable sources of the historical record. Because of the present day association of present day honeybees and other insects’ interaction in pollination of flowering plants, we can look at fossilized plants to help piece together a timeframe around when and where pollinating insects occurred. With the fossil evidence available to us we have been able to make judicious conclusions on how the present day honeybees originated and what their precursors and predecessors looked like.

For most of Earth’s history, beginning with its creation something like 4500 + million years ago (mya), no life existed. With the formation of the first oceans about 4000 mya, the stage was set for the first life forms to develop {Precambrian Era/Archean Eon}– the Prokaryote unicellular life forms: Prochloraphycota, Cyanobacteria, Flavo bacteria and blue-green algae. These organisms were anaerobic, thriving in a non-oxygenated environment. The first chlorophyll incorporating plants didn’t appear until 1500-2000 mya {Precambrian Era/Proterozoic Eon}. A byproduct of photosynthesis carried out by these chlorophyll-incorporating organism is the production of oxygen. The atmosphere began converting from an anaerobic to an oxygenated one, thereby relegating the once-dominant anaerobic bacteria species to areas with no oxygen. Vascular plants appeared around 430 mya and colonized the land masses {Paleozoic Era/Silurian Eon}. The first of these were without roots or leaves but through the next 300 million years {Devonian, Carboniferous, Permian and Triassic, Jurassic and Cretaceous Periods} they evolved from the early mosses, hornworts, liverworts (420 mya), to the club mosses and scale trees (380 mya), the horsetails and rushes (370 mya), the ferns and seed ferns (360 mya) to the Coniferophyta (seeds not enclosed within an ovary) (320 mya) – this period includes the Coniferales (true conifers) such as the Yew and Sequoia. Around 150 mya {Mesozoic Era/Jurassic Period} the Angiosperophyta (Angiosperms) appeared (flowering plants and trees).

At the time of the appearance of vascular plants {430 mya} the Order Insecta also appeared. It wasn’t until 201.3 + 0.6 mya {Mesozoic Era/Upper Triassic Period} that the Hymenoptera (ants, bees and wasps) appeared. OF NOTE: This period is also known as the Age of Reptiles. It would be another 100 million years before we would see where a “quasi-wasp proto-honey bee” began to appear. The insect captured in amber on the next page, appears to have adapted to the use of pollen and nectar as a food source and was probably pollinating the floral sources available to it. The three articles presented below document the discovery. I share all three because as a group they provide a more-informative story line than any of them by themselves.

The first Apis bees appear in the fossil record at the Eocene-Oligocene boundary (~34 mya) {Cenozoic Era/Paleogene Period} in European deposits. Several pieces of literature indicated that no Apis species existed in North America prior to the introduction by colonists in the 16th century of Apis mellifera. However, one fossil species is documented from the New World, A. neactica, from a single 14 mya specimen from Nevada. (2)

At present, only seven species of honey bee are recognized with a total of 44 subspecies. These represent a fraction of the roughly 20,000 known species of bees. Here is the classification scheme of the Apis genus (honey bee) (2). The study of honeybees is Apiology.
Kingdom: *Animalia*;  
Phylum: *Arthropoda*;  
Class: *Insecta*;  
Order: *Hymenoptera*;  
Family: *Apidae*;  
Subfamily: *Apidae*;  
Tribe: *Apini* Latreille, 1802;  
Genus *Apis* Linnaeus, 1758.

**Three Articles describing the finding of a 100 million-year old bee specimen:**


**Bee fossil, DNA generate a buzz**

Scientists have identified the oldest known bee, a 100 million-year-old specimen preserved in amber.

![Bee fossil](image)

The discovery coincides with the publication of the genetic blueprint of the honey bee, which reveals surprising links with mammals, including humans.

The ancient insect, trapped in tree sap, is at least 35-45 million years older than any other known bee fossil.

It appears to share features with both bees and wasps, and supports theories of bee evolution. Experts believe pollen-dependent bees arose from carnivorous wasp ancestors.

With the arrival of pollinating bees, flowering plants blossomed on Earth. Prior to 100 million years ago, the plant world was dominated by conifers which spread their seeds on the wind. George Poinar, professor of zoology at Oregon State University, US, whose team reported the discovery in the journal Science, said: "This is the oldest known bee we've ever been able to identify, and it shares some of the features of wasps."
"But overall it's more bee than wasp, and gives us a pretty good idea of when these two types of insects were separating on their evolutionary paths."

**Remarkable preservation**
The amber specimen, from a mine in the Hukawng Valley of northern Burma, has been named *Melittosphex burmensis*. It has waspish features, such as narrow hind legs, but also branched body hair and other characteristics of bees.

The fossil bee is in remarkable condition, with individual hairs preserved on undamaged portions of thorax, legs, abdomen and head. Legs and wings are also clearly visible.

In terms of size it is tiny, measuring barely 3mm across. This is consistent with evidence that some of the earliest flowers were also small.

Professor Poinar added: "This fossil may help us understand when wasps, which were mostly just meat-eating carnivores, turned into bees that could pollinate plants and serve a completely different biological function."

There are now around 20,000 species of bees, which use pollen to feed their young.

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**Scientist finds 100 million-year-old bee**

October 30, 2006

PORTLAND, Ore. --A scientist has found a 100 million-year-old bee trapped in amber, making it possibly the oldest bee ever found. "I knew right away what it was, because I had seen bees in younger amber before," said George Poinar, a zoology professor at Oregon State University.

The bee is about 40 million years older than previously found bees. The discovery of the ancient bee may help explain the rapid expansion and diversity of flowering plants during that time.

Poinar found the bee in amber from a mine in the Hukawng Valley of northern Myanmar, formerly known as Burma. Many researchers buy bags of amber from miners to search for fossils. Amber, a translucent semiprecious stone, is a substance that begins as tree resin. The sticky resin entombs and preserves insects, pollen and other small organisms.
Also embedded in the amber are four kinds of flowers. "So we can imagine this little bee flitting around these tiny flowers millions of years ago," Poinar said.

An article on his discovery will appear Friday in the journal Science, co-authored by bee researcher Bryan Danforth of Cornell University.

In the competing journal Nature this week, there is an article about the unraveling of the genetic map of the honey bee. The recently completed sequencing of the honey bee genome already is giving scientists fresh insights into the social insects.

Poinar's ancient male bee, *Melittosphex burmensis*, is not a honey bee and not related to any modern bee family.

The pollen-eating bee has a few features of meat-eating wasps, such as narrow hind legs, but the body's branched hairs are a key feature of pollen-spraying bees.

The bee -- about one-fifth the size of today's worker honey bee -- has a heart-shaped head. But the ancient bee was probably an evolutionary dead end and may not have given rise to modern bees, scientists said.

"It's exciting to see something that seems so different from what we think of as modern bees," Danforth said. "It's not an ancestor of honeybees, but probably was a species on an early branch of the evolutionary tree of bees that went extinct."

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http://www.freerepublic.com/focus/f-chat/1728553/posts

**Scientist finds 100 million-year-old bee**

**Associated Press** | 10/30/06

Posted on **Monday, October 30, 2006 11:19:35 AM** by **presidio9**

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"Amber, a translucent semiprecious stone, is a substance that begins as tree resin."
It dries out and hardens. This keeps happening until what is left after the volatiles are gone is rock hard. Over 50 million years even the heavy volatiles evaporate. Also, there could be a setting up reaction like happens in concrete, polymer chains lengthen over time.

"...the ancient bee may help explain the rapid expansion and diversity of flowering plants during that time..."

References:
— (1) Pan Terra, Inc.; P.O. Box 556; Hill City, SD 57745
— (2) Wikipedia: wasps and honeybees
https://en.wikipedia.org/wiki/Honey_bee

http://news.bbc.co.uk/2/hi/science/nature/6084974.stm

Bee fossil, DNA generate a buzz

Biological clock
Scientists have also published the genetic blueprint of the western honey bee *Apis mellifera*.

The honey bee is the fourth insect to have its genome sequenced, after the fruit fly, mosquito and silk moth. Locked within bee DNA there are striking links with mammals and humans, scientists discovered.

Like humans, honeybees spread into Europe from Africa, making at least two ancient migrations. They split into two genetically different European populations which, according to DNA evidence, are more closely related to African honeybees than to each other.

Honeybees have an internal "biological clock" which is more like those of mammals than of flies, the research has revealed.

The clock governs many activities, including time sensing, navigation, labor division, and the famous bee "dance language" which the insects use to communicate information about food sources.

Another group of scientists from the University of Illinois found 36 genes in the honey bee brain, 33 of which were previously unreported.

They coded for 100 neuropeptides - organic molecules that control brain activity in both bees and humans, the researchers report in Science. In the bee brain, which is not much larger than a full stop (a period), they help to regulate around one million neurons. The honey bee was estimated to have around 10,000 genes in total, less than the fruit fly and mosquito. Honeybees have many more genes relating to smell than fruit flies or mosquitoes, but far fewer involved with taste.
PLEASE RENEW YOUR LBA MEMBERSHIP!

LBA memberships have almost doubled over the last two years. The LBA is excited about this growth and sincerely appreciates your membership support. If you have not completed and submitted your membership renewal for 2015, please use the membership application at the end of this newsletter and send your renewal to our treasurer as soon as possible. Please don’t delay any longer and renew your LBA membership today.

Please feel free to make additional copies of this Bulletin and provide them to others interested in beekeeping and our organization. Reading the information provided below by our membership chairman will help you join us in our recruiting efforts by participating in our “Member Get A Member Campaign.” Prizes are awarded to the top three recruiters annually! The new campaign begins November 1st, 2014 and ends October 31st, 2015.

There are many challenges facing beekeepers. Our organization provides a voice to Louisiana beekeepers and lets state government know that we are an important part of Louisiana’s agricultural industry. There is strength in numbers, so help us help you through your membership support!

To register or renew your membership, go to the LBA website:  http://www.labeekeepers.org/
On the left side of the page select the icon, "Join/Re-New the LBA".
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The Louisiana Beekeepers Association would like to thank all of our sponsors for their business advertisements. We encourage our membership and visitors to our web site to consider the fine products and/or services they offer when selecting a vendor to fulfill their business and/or personal needs.

Over the past five years the number of our newsletter advertisers has steadily increased. In appreciation for their support the LBA has offered vendor booths to these advertisers at our annual State Convention free of charge. Vendor displays have also increased, providing our guests with a convenient venue for purchasing the beekeeping products they might need. These vendors in turn contribute door prizes and auction items to the LBA, making the event more enjoyable for our guests. Those who pre-purchase supplies through the vendors can have them delivered and avoid shipping charges.
Advertising is an important marketing tool for beekeepers and your beekeeping business is important to the Louisiana Beekeepers Association. Give us an opportunity to provide a portion of your advertising needs in 2015.

Remember, for only $25.00 annually you can advertise your company products in six issues of the Bayou Bee Bulletin. Your business ad will also be carried on our web site, labeekeepers.org.

Remit your advertising fee to LBA Treasurer, Mr. David Ferguson, P. O. Box 716, Brusly, LA 70719 and forward your company’s camera ready, 4 inch by 3 inch jpeg ad image to Mr. Tim Haley, LBA Newsletter Editor, at tamh212@suddenlink.net.
# LOUISIANA BEEKEEPERS ASSOCIATION INC.
## OFFICERS FOR THE YEAR 2015

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Address</th>
<th>Phone</th>
<th>Email Address</th>
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<tbody>
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<td>PRESIDENT</td>
<td>Joe Sanroma</td>
<td>1062 Hwy. 1176 Bunkie, LA 71322</td>
<td>318/346-2805 (O)</td>
<td><a href="mailto:lajoeehc@aol.com">lajoeehc@aol.com</a></td>
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<td>VICE PRESIDENT</td>
<td>Jennifer Brown</td>
<td>1091 Beaver Run Road Amite, LA 70422</td>
<td>601/493-3447</td>
<td><a href="mailto:ashland6400@me.com">ashland6400@me.com</a></td>
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<td>Tam Corbett</td>
<td>4400 Hwy. 569 Ferriday, La 71334</td>
<td>318/757-6272</td>
<td><a href="mailto:tam@labeekeepers.org">tam@labeekeepers.org</a></td>
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<td>David Ferguson</td>
<td>P.O. Box 716 Brusly, LA 70719</td>
<td>225/726-1664 (C)</td>
<td><a href="mailto:dwferguson315@cox.net">dwferguson315@cox.net</a></td>
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<td>CORRESPONDING SECRETARY</td>
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<td>(985) 863-3641</td>
<td><a href="mailto:martzp@bellsouth.net">martzp@bellsouth.net</a></td>
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<td>Terry Overbey</td>
<td>211 South Weir St Bunkey, LA 71332</td>
<td>318-359-8657</td>
<td><a href="mailto:thedrifter1256@yahoo.com">thedrifter1256@yahoo.com</a></td>
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<td>1498 Mock Road West Monroe, LA 71292</td>
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<td><a href="mailto:chris.frink@yahoo.com">chris.frink@yahoo.com</a></td>
<td><a href="mailto:tamh212@suddenlink.net">tamh212@suddenlink.net</a></td>
<td><a href="mailto:myfavoritethoney@gmail.com">myfavoritethoney@gmail.com</a></td>
<td><a href="mailto:gfensminger344@hotmail.com">gfensminger344@hotmail.com</a></td>
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<td>Richard Hebert</td>
<td>Kevin Mixon</td>
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<td>1307 N. Florida Street</td>
<td>Ph: 318-235-8241</td>
<td>4456 Hwy 27</td>
<td>29909 Elmore McKigney Ln.</td>
<td></td>
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<tr>
<td>Covington, LA 70433</td>
<td><a href="mailto:brentgay1@yahoo.com">brentgay1@yahoo.com</a>.</td>
<td>DeRidder, LA 70634</td>
<td>Springfield, LA 70464</td>
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<td>Ph. 985/635-1440;</td>
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<td></td>
<td><a href="mailto:rphebert@hughes.net">rphebert@hughes.net</a></td>
<td><a href="mailto:komixon74@gmail.com">komixon74@gmail.com</a></td>
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