# Catch The Buzz

# Memphis Area Beekeepers Association

P.O. Box 38028, Germantown, TN 38183

www.memphisbeekeepers.com

Meeting Location: 7777 Walnut Grove Rd # C, Memphis, TN 38120

Meeting Date & Time: April 11<sup>th</sup> at 7pm

Bring your questions write your questions and put them in the box they will be answered.

**Things to do in April:** The objective is for all colonies to be queen-right, healthy, and well-nourished so they can build up to maximum populations for the major nectar flow. This all needs to be done while keeping a fine balance between the growing population and the amount of space available so that the bees do not have the chance to think about swarming. On a calm, warm day go through your hives and do a thorough inspection.

- Remove mouse guards and replace poor quality frames or brood frames with new comb or foundation.
- Move brood down (if you can), honey frames to the side, and empty comb over-head. Note: Both boxes will probably be filling up with brood by mid-April. In many cases, the queen may start heading down on her own to find more space to lay.
- Clean up bottom boards.

Is it time to make splits? Each split will require a new queen. Before your queen emerges, mature drones are needed. Drones are mature 8-10 days after they emerge and hang out on the edge of the brood nest. Queens prefer sunny, 75 degree days, with winds less than 10mph. Use the splits to replace winter losses or increase your hive numbers. If increasing your hive numbers, pick out your next location. Splits are a great way to create increase or replacement nucs. It also helps facilitate a robust honey crop and is a form of varroa control as it disrupts the brood.

Consider adding disease free dead-out brood boxes to booming two-story hives in anticipation of making splits with them when your new queens arrive. It will relieve congestion and give these overly populous hives something to use and will make an excellent split

If you already have queen cells, what kind are they: swarm, emergency, or supersedure? Note: This can also indicate the timing is right to start making queens. What will you do with the queen cells?

- Move them to make nucs or splits.
- Try to cut them all out and keep rechecking.
- Make a nuc with the gueen mother.
- Let the bees bee.

Place swarm traps around mid to late April. If you want to give your hives a boost, feed with equal parts sugar and water. DISCONTINUE simulative sugar feeding before supering.

The 'Rule of Thumb' for putting supers on hives is when the dandelions bloom.

Wax moth activity dramatically picks up when the temperature rises, keep an eye on your stored supers – especially ones that contained pollen or brood. Leftover honey frames should be adding in to live colonies, or frozen before small hive beetle (SHB) moves in and ruins them.

Adapted from: http://www.indianahoney.org/2016/03/Beekeeping-Tips-for-April.cfm

Participate in the Bee Informed Partnership Winter Loss Survey. The Bee Informed Partnership is an extension project that endeavors to decrease managed honey bee colonies. You can find the survey by going to:

https://beeinformed.org/2016/04/01/2015-2016-colony-loss-and-management-survey-is-live-take-the-survey-today/

#### CATCH THE BUZZ – Little Risk to Bees from Widely Used Insecticide, Reports Expert from The University of Arkansas.

A type of insecticide widely used to treat crops such as cotton and soy beans poses little risk to pollinators, including honey bees, an Arkansas-based researcher has concluded. Gus Lorenz, associate head of entomology at the University of Arkansas, said his research shows there is little risk to pollinators from neonicotinoids, including one of its class, the commonly used imidacloprids. Other research conducted by the University of Tennessee and Mississippi State came to the same conclusions, Lorenz said in a podcast for the Arkansas Farm Bureau, a lobby and support group for farmers in the state. "We have done a considerable amount of research on (neonicotinoid) treatments," Lorenz said. "Basically what we found is that the treatments have very little risk to pollinators like the honey bee."

Lorenz and his team treated plants in the field and studied what happened. "It became quickly apparently to us (that) by the time the plant begins to bloom there is very little expression of these insecticides on the plant," Lorenz said. "There are fairly high levels when the plant first comes out of the ground, but as the plant continues to grow and develop those residue levels go down very quickly." He said protection of the plant from insects runs out, usually after four to five weeks. "When we looked at the literature that first hit out there in the media, it was that these (bees) were coming to the flowers that had been treated with (neonicotinoids), and that they were getting a dose of these insecticides and carrying them back to the hive," Lorenz said. "That's not the case." Research . . . . But Lorenz argued, "It appears, by and large, if there's anything left by the time the pollen plant begins to bloom, it's generally way below levels that are toxic to honey bees." Lorenz said the value of crops such as

cotton, rice and soy beans to growers in Arkansas and the Mid-South is hugely important. "These classes of insecticides are extremely important to our growers to maintain their yield potential," Lorenz said. The Environmental Protection Agency (EPA) on Jan. 7 announced a preliminary pollinator risk assessment for the neonicotinoid insecticide, imidacloprid. It concluded there was a threat to some pollinators.

The EPA's assessment, prepared in collaboration with California's Department of Pesticide Regulation, stated that imidacloprid potentially poses a risk to hives when the pesticide comes in contact with certain crops that attract pollinators...

. . So, it seems, the jury is still out on this class of compounds. . . . *read more at*: <a href="http://www.beeculture.com/catch-the-buzz-little-risk-to-bees-from-widely-used-insecticide-reports-expert-from-the-university-of-arkansas/?utm\_source=Catch+The+Buzz&utm\_campaign=8ac85f6fbc-Catch\_The\_Buzz\_4\_29\_2015&utm\_medium=email&utm\_term=0\_0272f190ab-8ac85f6fbc-256261941\_

# CATCH THE BUZZ – Clemson Research on Watermelons and Wildflowers Gaining Some Buzz

Article from: http://www.beeculture.com/catch-the-buzz-clemson-research-on-watermelons-and-wildflowers-gaining-some-buzz/?utm\_source=Catch+The+Buzz&utm\_campaign=f91d5b9297-Catch The Buzz 4 29 2015&utm\_medium=email&utm\_term=0\_0272f190ab-f91d5b9297-256261941

# Jim M http://newsstand.clemson.edu/wp-content/uploads/2016/03/mimi.jpgelvin

Public Service Activities Wildflowers help to attract a wide range of beneficial insects, including (clockwise from upper left): Gulf Fritillary, domestic honeybee, bee fly, broad-winged skipper, fungus gnat, bumblebee, mining bee. *Image Credit: Photos by Merle Shepard / Clemson University – Bee fly photo courtesy of Keith McCullough* 

CHARLESTON – Besides adding beauty to a field of watermelons, colorful patches of wildflowers might also provide benefits that would improve the quality and increase the yield of one of South Carolina's most important vegetable crops. Ongoing studies based at <u>Clemson University's Coastal Research and Education Center</u> are investigating how a more diverse agroecosystem – swarming with native bees, wasps and other beneficial insects - might complement honeybees and enhance watermelon production.

"We've been surveying wildflowers for about three years and have a pretty good handle on most of the major native pollinators: bumblebees, carpenter bees, leaf-cutter bees, ground-nesting bees; there are a lot of different bees," said Merle Shepard, professor emeritus of entomology at Coastal REC and also chair of the agricultural committee for the Agricultural Society of South Carolina. "Habitat destruction, pesticides and diseases are contributing to a rapid decline in our bee populations, so we need to better understand the systems that help pollinators thrive. Because if we don't the situation will continue to worsen."

According to Shepard, native bees pollinate about 75 percent of all plants in the United States and are responsible for billions of dollars in agricultural production. Without proper pollination, plants often produce small or misshapen fruits, as well as poor yields.

"When our forefathers were cultivating crops there was no need for additional pollinating species because native bees were present in sufficient numbers to carry out the task," Shepard said. "The farms were relatively small, with lots of undisturbed habitat and a wide diversity of flowering plants and nesting sites. Unfortunately, there has been a serious decline in both cultivated honeybees and native bee populations. Today, the farm landscape is very different with large expanses of crop monocultures."

To make matters worse, Shepard said, most growers now "clean" the borders of their fields to slow the encroachment of weeds. But this causes a serious loss of plant biodiversity that once supported native pollinators. Urban sprawl is another major culprit, destroying plants and nesting sites.

"Agriculture's gotten bigger and bigger and we have these huge farms," Shepard said. "I understand the economics of all this. But without biodiversity, a single disease or certain kind of insect can wipe out an entire crop. There's a fundamental ecological principle that says 'diversity leads to stability.' And so, when you have one crop planted in a huge area, you're setting yourself up for trouble." . . . .

Most watermelon farmers ensure pollination by maintaining beehives on their properties, which can be expensive and labor-intensive. Though honeybees remain one of the world's most important pollinators, they tend to stay in their hives when it's cold or rainy, while many native bees will continue to work, regardless of the weather.

Since the mid-20<sup>th</sup> century, multiple problems have caused the honeybee population to dwindle, highlighted by a drastic decline around 2006. Relying on only a handful of managed species to provide the pollination services required for a third of the world's food supply can be risky and unsustainable.

"I think this is a great project that we're pleased to help support," said Mark Arney, executive director of the National Watermelon Promotion Board. "With the collaboration of Clemson University's Coastal Research and Education Center and the <u>U.S. Vegetable Laboratory</u>, as well as the excellent work being done at the <u>Edisto Research and Education</u> <u>Center</u> and other facilities around the state, it's not an exaggeration to say that South Carolina has become an epicenter of watermelon research."

For a list of EPA-registered Pesticide Products Approved for Use Against Varroa Mites in Bee Hives Click:

https://www.epa.gov/pollinator-protection/epa-registered-pesticide-products-approved-use-against-varroa-mites-bee-hives

#### SPLITS AND SPLTTING

**SPLITTING COLONIES** – **A NEW OLD MANAGEMENT TOOL** One big advantage of honey bee culture is the ability of the beekeeper to divide a colony into smaller units. There are many ways to "split" a colony of honey bees with relatively little effort. This has become a more-used <u>strategy</u> under current beekeeping conditions, beyond the traditional reason, preempting a colony casting a swarm. It provides a way to keep smaller colonies, nuclei ("nucs") in reserve to replace larger units that have suffered population loss through <u>stress</u> or <u>pesticide poisoning</u>.

It's relatively easy to divide the brood that is present, making two or more new colonies, then called nuclei or simply "nucs." The difficult part is ensuring that each resultant unit has an adequate population of adults. This is usually accomplished by putting more adults into the division that is moved to a new location, important because if not, many will fly back to their old nest and the new unit will then be at more risk of perishing than the parent. As a corollary, leaving the weaker half of the split colony at the old location will result in a larger population. Older foraging bees from the relocated part will fly back to their original location.

Anywhere from four to six frames of sealed brood are usually recommended to make new divides. Brood close to emerging can be placed in units where adult populations are low, because fewer nurse bees are needed, unless the nights are very cold and there is risk that it will chill and die. Emergence of this brood shortens the time before the new divide is at full strength.

If cold nights are a problem, a new divide can be established over an existing colony. It should be separated by a double screen and have a reduced entrance to the rear of the colony on which it is located. This way, heat from the colony below will help keep the brood in the new division warm and foraging bees will be less likely to enter the stronger bottom colony. When the top colony (new divide) is subsequently moved, however, the balance of bees could be upset. Those adults used to the location of the original colony will invariably be lost unless the colony is moved over two miles away.

In the final analysis, success in making divides depends on the beekeeper's judgement and experience. See a number of ways to make splits as found on the World Wide Web, as well as a discussion on this and queen rearing in a sustainable apiary. Something called a "walkaway split" is often used simply as a re-queening method. All this falls under the rubric of increasing colony count in the apiary. Mistakes will be made by even the most experienced operator in some years. However, in cases where bees are likely to swarm anyway, divisions becomes a good way to use the honey bee's reproductive instinct to the beekeeper's advantage. A key to making splits is to ensure replacement queens are available to the new units. It is possible simply to allow a new divide to rear its own queen if the proper-aged larvae are available, but this is extremely risky and often may result in failure of the new unit. Read more at: <a href="http://beekeep.info/modern-honey-bee-management-a-treatise/management-tools/splitting-colonies-a-new-old-management-tool/">http://beekeep.info/modern-honey-bee-management-a-treatise/management-tools/splitting-colonies-a-new-old-management-tool/</a>

#### Walk Away Split A method to increase colony numbers

READ MORE AT: http://www.bushfarms.com/beessplits.htm

"Walk away split" is an American term for splitting a colony and leaving it to raise its own queen. There are a number of ways of achieving this, but in simple terms a strong colony is split into two, with one part retaining the queen, the other part having eggs and young larvae from which the bees raise a queen by building emergency cells.

In the simplest form, and probably what happened originally, the two colonies are left alone for 4 weeks, after which the queenless part should have a laying queen, hence "walk away split".

By consulting literature or looking online you will find there are almost as many methods (and arguments!) as there are beekeepers. Some will simply split a colony into two, making sure both parts have eggs and young larvae. They don't even bother to find the queen, as they know that both parts are able to raise one from existing larvae. Other beekeepers will do it in a more controlled way, which probably gives better results. It doesn't seem to matter which part goes where. Some beekeepers move one part right away to another apiary, others keep both parts in the same apiary. Likewise, some put the part with the queen on the old stand, some put the part without the queen.

This simple method of increase has been used for a very long time. With little effort and cost it increases colony numbers and produces new queens to head them. When I started beekeeping in 1963 in Sussex, it was soon after the hard 1962/63 winter when many colonies were lost. Many beekeepers had good practical skills, but little knowledge. They had many hives to re-populate, so apart from catching and hiving swarms, this was their main method of making increase, but the term "walk away split" wasn't used.

I believe that walk away splits are more likely to be successful in countries where the climate is good, the foraging season long and the bees prolific, as in the U.S. If done early in the season, this gives both colonies the chance to build up quickly, so they both get a honey crop. We don't often get those conditions in the U.K. so I think this method is unlikely to be so successful. If anyone wishes to try it, I suggest leaving the queenless part on the old stand, so they retain the flying bees, making a stronger colony that will probably produce better queen cells. I would remove all queen cells bar one 8-9 days after splitting to prevent them swarming. This puts more control into the operation but takes away the meaning of

"walk away split". It is also little different from an artificial swarm. Although largely successful I prefer to use a more managed way of making increase, if possible by rearing queens from selected stock, so you don't rely on emergency cells.

#### Roger Patterson.

#### The concepts of splits are:

- You have to make sure that both of the resulting colonies have a queen or the resources to make one (eggs or larvae that just hatched from the egg, drones flying, pollen and honey, plenty of nurse bees).
- You have to make sure that both of the resulting colonies get an adequate supply of honey and pollen to feed the brood and themselves.
- You have to make sure that you account for drift back to the original site and insure that both resulting colonies have enough population of bees to care for the brood and the hive they have.
- You need to respect the natural structure of the brood nest. In other words, brood combs belong together. Drone brood goes on the outside edge of the brood and pollen and honey go outside that.

The old adage is that you can try to raise more bees or more honey. If you want both, then you can try to maximize honey in the old location and bees in the new split. Otherwise most splits are either a small nuc made up from just enough to get it started, or an even split.

# Kinds of splits

- An even split. You take half of everything and divide it up. Face both of new hives at the sides of the old hive so
  the returning bees aren't sure which one to come back to. In a week or so, swap places to equalize the drift to the
  one with the queen.
- A walk away split. You take a frame of eggs, two frames of emerging brood and two frames of pollen and honey and put them in a 5 frame nuc, shake in some extra nurse bees (making sure you don't get the queen), put the lid on and walk away. Come back in four weeks and see if the queen is laying.
- A typical split. Same as above, but you either introduce a queen you bought or walk away and let them raise their new queen. If you introduce a queen they will be three weeks ahead of the hive that is raising their own, so you will have to put them in a larger box than a nuc to start with.
- Swarm control split. Ideally you want to prevent swarming and not have to split. But if there are queen cells I usually put every frame with any queen cells in its own nuc with a frame of honey and let them rear a queen. This usually relieves the pressure to swarm and gives me very nice queens. But even better, put the old queen in a nuc with a frame of brood and a frame of honey and leave one frame with queen cells at the old hive to simulate a swarm. Many bees are now gone and so is the old queen. Some people do the other kinds of splits (even walk away etc.) in order to prevent swarming. I think it's better to just keep the brood nest open.

# **Unit Honey Prices by Month -**

Average Retail Price per Pound across all reporting regions - Data from Bee Culture magazine used by permission. Based upon average price across all reporting regions. Assumes various sizes sold at the same rate

# Retail

2016	Jan.	Feb.	March	Apr.
	\$6.74	6.91	6.79	6.79

<u>Average Wholesale Case Price Per Pound</u> Across All Reporting Regions. Data from Bee Culture magazine used by permission. Based upon average price across all reporting regions. Assumes various sizes sold at the same **rate**.

Wholesale	Jan.	Feb.	March	Apr.
2016	\$5.04	\$5.15	\$5.04	\$5.20

### Recipe Honey Kiwi-Raspberry Fruit Dip

1/2 cup – honey
 1/2 cup – unsweetened frozen raspberries
 --1 – ripe kiwi, peeled and diced
 --8 oz. – low-fat vanilla yogurt

• fresh fruit for dipping

In the bowl of a food processor, combine kiwi, rasp-berries and honey; puree. Stir in yogurt. Serve with sliced fresh fruit (strawberries, pineapple, watermelon, cantaloupe, honeydew melon, grapes, bananas, etc.). Makes about two cups.