

# Getting Ready

## Southern Style

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*It's been a tough Spring and Summer here in the southeast.  
Take special care getting ready for Winter.*

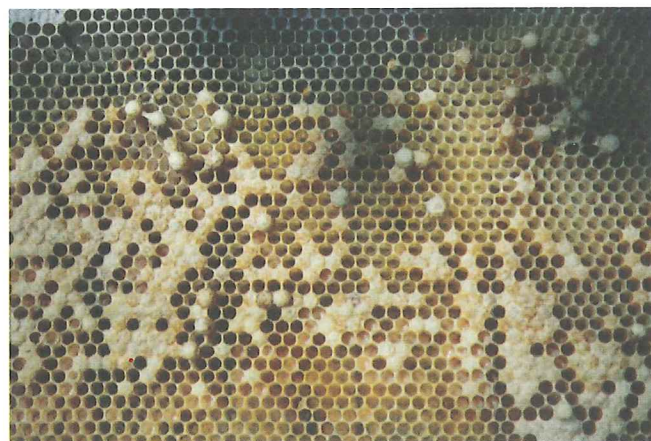
Growing up, I spent most of my Summer months at my grandparent's farm in Missouri. It was a kid's paradise. Open fields, farm animals, fishing ponds and barns to explore. After my few morning chores were complete, the rest of the day was mine to discover. Unbeknownst to me, this was a working farm and not just a personal playground. Being a working farm meant my grandparents struggled from year to year to make ends meet. Dry or wet springs could delay planting in the fields. Prices for seed, fertilizer, pesticides, herbicides, gas, and repairs could be manageable one year and then the next they could go sky high. Then to top things off, market prices plummet on crops before they're even out of the field. This would usually take the final bite out of the bottom line. However, some years all the ingredients fell into place and steak made its way to our table, but this was rare (ha!). Living off the land can be rough, especially when your mortgage depends on it. Beekeeping for a living is also no easy meal ticket. Milking each of those bees for that single drop of honey can be tough.

This year in particular has been hard for Georgia farmers, beekeepers included. The exceptionally dry spring not only postponed crops from being planted, but also severely impacted our major early nectar sources: gallberry, blackberry, Tupelo, and tulip poplar. Fields across the state turned into dust bowls as southern winds continually blew, sucking out all the remaining moisture. Dust devils were the only things visible in these parched fields. Then a late freeze with temperatures in the upper 20s for three nights wiped out peaches, blueberries, apples, and all newly formed vegetation. The freeze also affected the northern half of the Tupelo region. If that wasn't bad enough, drought-induced fires began raging in the southern part of our state. Hundreds of thousands of acres were consumed. Pine tree farmers watched from a distance as decades of work disappeared in minutes. Firefighters from across America descended to battle the fires that continued for months. Lack of rain and high winds fueled the flames which with each passing day became more and more out of control. Colonies sent south for the gallberry flow turned to ashes instantly as the fires whipped through apiaries. However, the flames weren't the only issue. Smoke produced from the fires created clouds so thick that interstates and roads were closed. Beekeepers were unable to retrieve threatened colonies so up in smoke they went. Week after week smoke from the

fires blanketed the region. What little nectar was available was unattainable due to the clouds of smoke so some colonies not consumed by the fires simply starved. Like I said earlier, this has been a hard year for all farmers in the south. However, there is a silver lining. Even though cotton was planted late this year, nectar yields were very good, especially on irrigated fields.

In our northern counties, sourwood finally bloomed with a vengeance. Early in July, the scale colony located at Brushy Mountain Bee Farm was making five pounds of this wonderful mountain nectar each day. Also, it has finally started to rain, if only a little. The south is still well below average on the rainfall scale but at least the clouds open up occasionally and this wet stuff falls from

*Check brood patterns, good (top) and bad (bottom) tell a story.*







Feeding may be necessary this Fall.

the sky.

Enough talk about things out of our control. Let's examine what chores we need to tackle at this point. Even though Summer temperatures are still lingering, it's time to begin preparing your colonies for their long Winter nap. Remember this – a good honey producer for an early Spring flow starts from a strong colony going into the Winter. Here in the south, red maple is blooming as early as January. Weak colonies limping along don't have the time to build up in time for such an early flow. Plus, weak colonies barely survive the Winter months, especially in the north. Therefore, I prepare my honey producing colonies in the late Summer and early Fall. I assess mite populations, inspect for disease, re-queen, feed, repair equipment and move colonies into good locations (for honey and wind breaks). Windbreaks are especially critical for you northern birds since your winds are truly "cold."

There are only a few tasks you need to complete before Winter but these are very important if you want your colony to survive. To make things easier, below is an example of a simple data sheet. We always use data sheets to keep track of our colonies. Even if you only have a few colonies, take the time and create a system that works for you.

Colony #	Queen Condition	Honey/Pollen Stores & Position	Condition of Brood & Bees	Condition of Equipment
1				
2				
3				
4				
5				

First and foremost you should check the viability of your queen. How does her brood pattern look? Are there skipped/open cells?

If so, you may also want to look for other problems such as disease or mite infestation instead of automatically assuming it's queen issues. Late Summer through early Fall is the time we usually re-queen our colonies. This way I don't disrupt the colony in the early Spring just as they are kicking into gear. If you find a queen that is failing and can't acquire another, your best bet is to combine that colony with a strong one. Weak colonies rarely survive the winter and if they do, they are usually not very good honey producers.

The next task is to assess the amount of honey stores.

Due to the lack of nectar in the southeast, feeding has become a priority. The commercial beekeepers to our south began pouring syrup into their colonies early in the Summer.

They rely heavily on the gallberry flow but with only about one-third of the total actually materializing, reliance on outside sources has become a must. Our central and northern counties were able to store enough cotton honey (and other crops) along with sourwood to hopefully make the leap through Winter. Also, with the goldenrod flow just around the corner, colonies will hopefully be able to pick up a few more pounds. Here in the piedmont region our goldenrod flow can be minimal, so we don't rely on it at all. Plus this honey tastes horrible (my opinion of course). When you open the colonies the smell reminds me of damp, stale laundry that you forgot to remove from your dryer several months ago. If food stores are low, (< 1 full medium super for the south: < 1 full deep super for the north) you need to start feeding sooner rather than later. Remember to think in terms of gallons not pints. Feed a heavy 2:1 sugar solution (two parts sugar to one part water) in whatever feeding contraption you may have.

A practice we have started here at the lab is to leave two full medium or shallow supers of honey on each colony. I've heard the argument before; "you make more off honey so it offsets the cost of feeding." Sorry, I just don't buy into it. The time and labor involved in feeding colonies, not to mention the cost of sugar, is just not worth the extra extracted pounds of honey. Call me crazy, but feeding hundreds of colonies is not my idea of fun. Now granted, I'm not a commercial honey producer in which every drop counts, so I am coming from this at a completely different angle.

Feeding this time of year can be tricky, so be careful not to trigger robbing. A single drop of sugar syrup clinging to the side of a colony will attract attention. Once they have their mind set on robbing it is impossible to change it. In July we talked about the importance of determining mite population levels. This is very important. Mite popu-







Fix or replace old equipment, below left, to keep out pests, and the weather.

lations have reached their highest peak by now. Don't wait till your colonies are crashing. Once the downward slide begins it is almost impossible for them to recover. Check those mite populations today!

Now it is time to examine the brood area for disease. Look for symptoms of AFB, EFB, chalkbrood and sacbrood. EFB, chalkbrood and sacbrood are more prominent in the Spring but can occur in the Fall. You want to see healthy, white larva in the cells. Also look for depressed cappings or ones with holes. Open these and inspect the pupae. Anything slightly off colored may be a sign of trouble (unless the pupa is in its later stage of development). If you see symptoms of EFB treating with Terramycin is an option. If you see symptoms of AFB you need to remove the infected frames and burn them or in bad cases, destroy the entire colony. There are no treatments available for chalkbrood or sacbrood. Chalkbrood problems can be reduced by providing better ventilation

in and around a colony. Poor air circulation creates the perfect damp conditions necessary for fungal growth. If your colonies are in a low spot, move them. Low lying spots in fields accumulate moisture which in turn collects in your colonies. Also, clear any brush or debris from around the entrance of the colony. This reduces air flow into and out of the colony which in turn causes moisture to build up. Also, the direction colonies face is important. You need to protect them from prevailing winds. Tree lines and fences work great as wind breaks.

Nosema has been a hot topic as of late. Here in the south we just don't see it all that often since our bees are not confined for months on end. However, if you are concerned feed your colonies Fumagilin®-B.

Finally, you need to inspect your equipment.

Replace old, decrepit frames, supers, lids, and bottom boards with newer equipment. Beehives don't have to be pristine, little palaces; however, they do need to be in good condition. Gaping holes not only allow access for critters to come and go but also the rain and wind. Mice have an easy enough time getting into colonies. They just love to make their homes in the corners after tearing apart several frames. A continual food supply plus a warm cozy environment make it a suitable dwelling. Use mouse guards to discourage these unwanted guests.

I don't know about you but I am ready for a break. Cooler temperatures and shorter days will be a welcomed change, just don't let it catch you off guard.

See ya! **BC**

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