

"Should one stop at the mill town and ask about the stench the response would be... 'It smells like money'. [Regarding the overpowering rotten-egg smell from the paper mill that once permeated Canton, NC]

-- Richard A. Bartlett, Troubled Waters: Champion International and the Pigeon River Controversy

A first-year beekeeper called me last week asking for advice. He was worried because his hive had a strong odor. Our conversation went something like this:

Beekeeper: "My hive smells really bad!"

Me: "Hmm. Does it smell like old socks?"

Beekeeper: "Yes, pretty much."

Me: "Is it just the comb that smells or can you smell it a good distance away, like ten or twenty feet from the hive?"

Beekeeper: "Oh, I can smell it away from the hive, definitely."

Me: "Wow, then you are really lucky! I wish my hives had a smell that strong right now!"

Beekeeper: "Are you feeling okay?"

The beekeeper had called because he had read that American Foulbrood (AFB) carries a strong odor. I did ask a few pointed questions to rule that out (see my [September 2015 article](#) for more information about AFB) and advised him to contact his local State Apiary Inspector if there was any doubt whatsoever about whether he has it. But then I explained why a hive worth having, in a world where everything is going our way, should be wonderfully stinky right now.

So what is that smell? The answer is that it is the curing nectar of fall-blooming asters. Once cured, the smell goes away.

So... what are asters? In Latin, aster means "star" (as in "asteroid"). Aster flowers are typically star-shaped: think daisies, zinnias, chrysanthemums and sunflowers. And there are 26,300 more species as well! That's why we just call them "asters".

In American Honey Plants (fifth edition), Frank Pellett quotes beekeepers' descriptions of



Browneyed Susan, one of my favorite fall asters, grows wild on my property.

asters' odiferous properties:

"When the bees are gathering this honey the hives give off a rank and somewhat sickening odor, which can be detected for quite a distance away. This odor disappears as the honey ripens and the flow ceases, but the strong taste never entirely disappears."

"The odor is not unpleasant, but is very noticeable when the bees are bringing much of it in, and it can be distinguished a considerable distance from the hives. The amount of 'smell' is such a good criterion as to the amount of honey that one can tell the quantity he is getting from these indications alone."

When we talk about fall flowers, there is another plant that is always paired with asters: goldenrod. Goldenrod typically starts blooming



There many varieties of goldenrod. This is one that I have at my place.



Another variety of goldenrod that is abundant near my property

a little earlier and is perhaps more visible, or at least more recognizable, than the asters. As with asters, there are many varieties of goldenrod and their nectar production varies with type and location. And guess what? Goldenrod nectar that is curing can stink too! In Honey Plants of North America (1926), John Lovell says, "While the bees are bringing in the [goldenrod] nectar the whole apiary is filled with a disagreeable sour smell, which on a calm evening can easily be perceived at a distance of one hundred feet." Since goldenrod and aster blooming times mostly overlap, it may be impossible to tell which is causing the most stink, but who cares? In this case, stinking is good regardless of which plant is responsible!

Fall harvest?

So what do we do with a bountiful fall honey flow? Around here, the amount of fall flow that we get is miniscule compared to the spring flow (see chart on next page). When all goes well, it typically is enough to abundantly



Ironweed, one of many plants in the Asteraceae family that bloom here in fall

provision a colony for the entire winter but not enough to yield a surplus for the beekeeper. And unfortunately, we often get a slim fall flow and so must feed to make up the shortfall. But that's okay -- people who do harvest fall wildflower honey often report that it isn't very good compared to spring honey anyway!

Beekeepers up North complain about goldenrod and aster honey as winter stores, saying that it has high ash content and therefore can cause dysentery-like symptoms when bees cannot make cleansing flights. They'll remove goldenrod/aster honey to prevent their bees from overwintering on it. However in Piedmont North Carolina, we never go for very long before daytime temperatures pop up into at least the upper 50s, so our bees don't have to "hold it" like Yankee bees do; they have frequent opportunities to fly out and relieve themselves. For us, goldenrod/aster honey is a blessing as wintertime bee food.

Others help too

Aster and goldenrod make up a huge portion of the fall nectar flow in our area, but they aren't the only thing of importance blooming in the Piedmont right now. I asked my buddy Geneva Greene, a professional

horticulturalist and Master Beekeeper, for a list of her favorite fall bee plants. She said, "My favorites are, of course, asters, goldenrod, and then New Jersey ironweed, bidens, perennial sunflowers like the woodland sunflower, swamp sunflower, etc., and smartweed, also called heart's ease or polygonum."

Regardless of the species, fall is a time to celebrate the colorful nectar-producing plants that are our good fortune. Stroll along the roadsides and see how many you can identify!

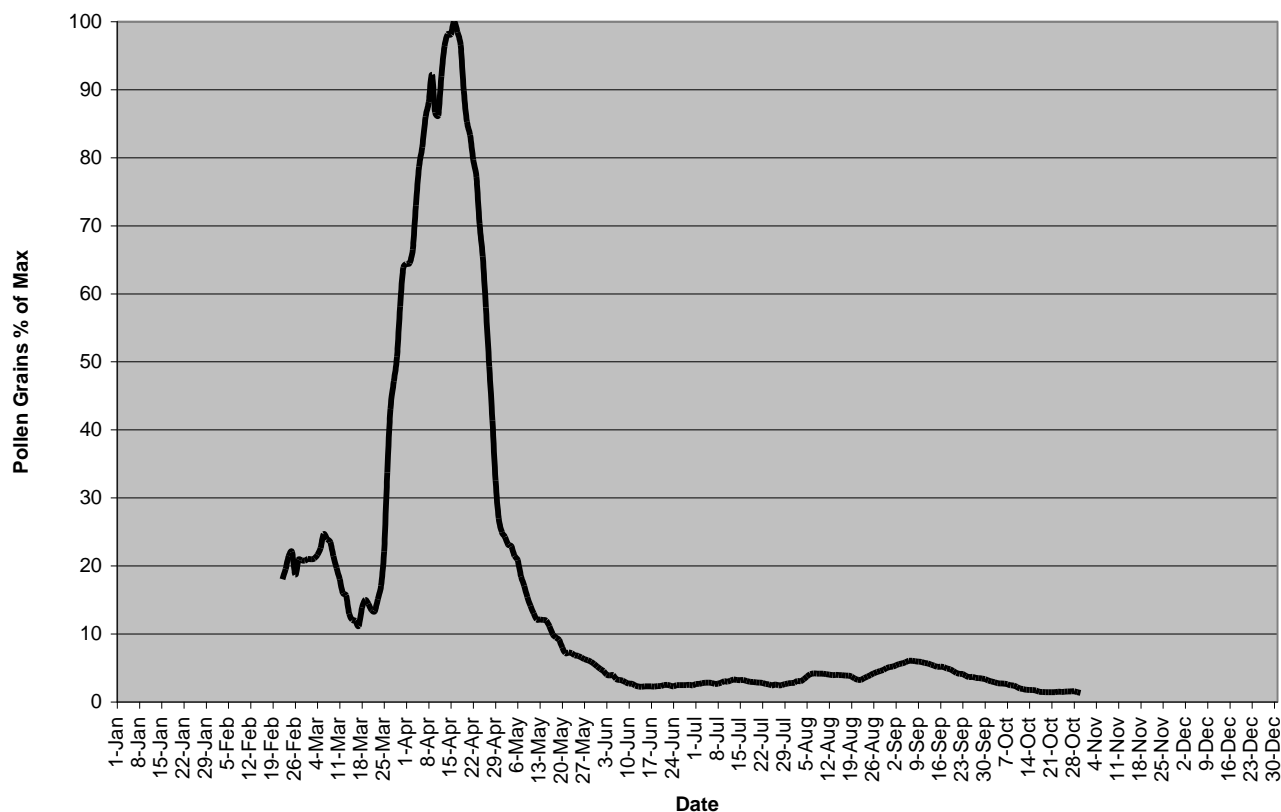
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ⁱ From <https://www.ncbeekeepers.org/honey/floral-sourceswhats-blooming>

<i>Average bloom times in Piedmont NCⁱ</i>			
Plant	Start	End	Length (days)
Heart's ease/ Smartweed	July 4	Nov 7	126
Goldenrod	Aug 8	Oct 14	67
Aster	Sep 25	Oct 30	35

Estimated Relative Pollen Counts, Hillsborough NC



Pollen count data illustrates the magnitude of overall pollen production by season, which is strongly correlated with nectar production. Note the extremely huge spring bloom (trees/shrubs) compared to a noticeable but small fall bloom (weeds/wildflowers). The large late winter bloom is primarily maples.