The Perfect Smoker Fuel?

By Gregg Hitchings, Southeast Region Director

The smoker is an essential tool for beekeepers. Sure, it's possible at times when conditions are perfect and the stars align to work very slowly and carefully without the use of smoke; this is easiest when checking nucs, smaller starter colonies and mating nucs. Generally, the larger the colony the more defensive behavior will be encountered. Those with bees can't always work under perfect conditions or slowly or only on hives with fewer bees, that's why a little puff or two of smoke can be oh so helpful.

The use of smoke provides two benefits. The smoke masks the alarm pheromone so it limits this type of communication among the bees. Additionally, it sets off an instinct which compels the workers to stock up on stores...suck up honey, perhaps in some sort of preparation in case abandonment of the hive is necessary. Workers, instead of reacting to your activities, get busy loading up, making working the hive much easier.

The type of fuel we use to feed our smoker is important and I've been in search of the perfect smoker fuel for decades. Everything I've used, and the list is substantial, has a drawback or two. We want a fuel which provides a cool, dense white smoke and we want it easy to light and hardy enough to keep burning so it is there when we need it. There is nothing more disconcerting than hearing the tone of the bees amping up and reaching for the smoker just to find after pumping the bellows several times... nothing.

Early May, I was assisting a new beekeeper in St. Francois County with inspections of his three hives. He was using crushed corn cobs for fuel and I was impressed not only with the smoke it provided but it's ability to recover with just one or two puffs after the smoker had been set aside for some time. He had found it at a local farm supply store being sold as animal bedding. Impressed, I immediately went shopping and bought a 40-pound bag for \$4.00. Crushed corn cobs have been my fuel now for a couple of months. It takes a wad of paper in the bottom to get



it properly lit but once that's done, you're in business for as long as you want to be. The smoke is dense and cool enough not to singe bee's wings if you are not paying attention and get the smoker too close. And talk about stubborn...in testing by setting a lit smoker aside, I've returned five hours later and revived the smoke with just a few puffs. The drawbacks? You'll notice a slight tendency to soot up. The soot can be reduced by immediately removing the lit contents and snuffing it out as soon as you no longer need it. It's the slow burnout process which feeds the soot problem. Also, you'll learn tipping the smoker forward to puff smoke deep between frames gives some of the smaller particles of crushed corncobs an opportunity to "escape." I've modified my approach and don't see this as much of a problem. I've also found it easier to add more fuel using a small scoop instead of my hands, less mess and less waste.

Could crushed corncobs be the perfect smoker fuel? I think so...at least until something more perfect comes along. Try it. You might agree.

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