Apis m. Esoteria 24

The Buzz about Bees, Beeswax, and Honey

This is some information about bees and the hard work they put into creating the beeswax we will use today.

An average beehive is home to at least 50,000 bees, mostly females. The bees are divided into "classes" by the jobs they do: worker (forager) bees gather the pollen, nectar, and water. Nurse bees care for the eggs and larvae. Mortuary bees and house cleaners keep the inside of the hive clean. Storage bees place the honey in the cells after adding the enzymes to the nectar to make honey. Wax builder bees convert honey into wax to make the comb. Attendant bees care for the queen. The young queen lays approximately 1500 eggs per day. In her second and third year of life she will lay 2500-3000 eggs per day. She can live up to 5 years! The queen's egg laying will diminish after 3 years. Male bees or drones comprise 10% of the bee population. Their only important task is to fertilize a virgin queen. Worker bees mature from eggs to adults in 21 days. Drones hatch in 26 days and Queens in 16. The average life span of worker bees (when collecting nectar and pollen) is 4-6 weeks; by that time their wings wear out from so much use and they crash and die.

Candle waxes are derived from three different sources: animal (beeswax, tallow), vegetable (bayberry, carnauba), and mineral (paraffin, microcrystalline). For centuries bees wax candles were available only to the church or the very rich, beeswax is the world's finest candle wax. It burns cleaner and longer than any other wax. Bees use the same amount of energy to produce one pound of wax as nine pounds of honey!

10 flowers can yield one drop of nectar

one bee can hold one drop of nectar per trip

10 drops of nectar yield one drop of honey

10 drops of honey yield one drop of beeswax

1000 flowers yield one drop of beeswax

“Busy as a bee” takes on a new meaning, eh?

Pollination is the primary commercial use for bees. The apple orchards in these mountains are a perfect example of an industry which benefits from honeybees. In the spring, beekeepers move their hives to these orchards so their bees can pollinate the blossoms. This must happen at the correct time, which is dependent upon weather and blossom maturity for the best pollination to occur to form the largest apples. The honey and beeswax produced as a “by product” of pollination are a side-line income to most commercial beekeepers.

The Flavor of honey and color of the honey come from the pollen that is inadvertently mixed with the nectar during processing inside of the hive. Honey varies by location. It should be marketed like fine wine. When you mix all the yellow, orange, red, and blue pollen you get brown honey. Hence, darker spring honeys. Spring honey also has a more robust flavor. Varietal honey is predominantly from one plant species (black locust, sourwood or orange blossom). These varietals have more specific flavors. Honey collected on the shady side of a valley will have a different flavor than honey collected on the sunny side because of different blooms available and sugar content.

You can market your honey based on these flavor nuances, the same as wine makers do.

You can try to divide your honey collection efforts into more specific flowers, (Tupelo, gall berry, orange, blackberry, kudzu, clover, etc.). When you process your honey, you can segregate it by shades of honey in the comb before extracting it to create light, amber and dark honey. This works best with very light-colored comb. Hold the frame up to a bright light and look at the color. With practice you can see the different shades of honey that we traditionally mix together.