My Maple Syrup Field Trip

One day our class went on a field trip to a town near ours that has a Maple Festival. I had never been to the festival before. Maple syrup and candy and food made from maple syrup were for sale everywhere. I'd never seen so many things made from maple syrup. We also visited a nearby maple syrup farm. Many people in our area make their own maple syrup, but this family has turned it into a huge business which includes not only selling their homemade syrup there and in grocery stores, but also a restaurant and gift shop, and tours where you can see the whole syrup-making process. We got to take the tour.

Maple syrup is made from sap found in maple trees. Sugar maple trees are used more often because the sap is sweeter and it runs longer. In late winter or early spring, a drill is used to make a 5/16" wide hole that's 1 ½ -2 ½ " deep into sugar maple trees. The sugar maple trees that are used are about 30 years old or older, at least 10" in diameter, and at least 4 ½ feet above the ground. Next a tap is put into the hole. Bigger trees can have more than one tap in them. There can be up to 4 taps in a tree. Each tap will give about 10 gallons of sap per season (or 1 quart of syrup). It takes approximately 40 gallons of sap to make 1 gallon of syrup. Tapping a tree does not do permanent damage to a tree. Some trees have been tapped for 150 years or more.

Some people hang clean buckets with lids or clean milk jugs to collect the sap from the taps. Because this farm is so big, they connect their taps with sets of pipes that runs the collected sap from the trees in the woods down to the collecting tank down by the sugar house. This saves time and work.

Making syrup is a long process. The sap coming out of the tree is a dilute liquid containing 1%-7% sugar. The amount of sugar in the sap varies from tree to tree, but the average sap has 2% sugar. Once the tanks are full of sap, they are hauled to the sugar house by wagon pulled by a tractor. It is then boiled. Most people would use stainless steel pans to boil the sap, but since the farm is so big, they use a huge stainless steel vat to boil down the sap. Boiling purifies and also thickens the sap by evaporating the water in the sap. The faster the sap is boiled, the higher the quality of the syrup. A

thermometer is used. Once the sap boils, it should boil some more until the temperature goes up another 7 ½ degrees. The temperature for finished thickened syrup should be about 219 degrees. It is important to make sure the sap doesn't boil over or scorch.

Once the sap is thickened into syrup, the syrup needs to be purified. This is done by pouring it through cheesecloth or something to strain out any impurities, debris, or crystallized minerals. The maple farm uses a machine called a filter press.

After filtering, the syrup is ready to use. The syrup is put into bottles and labeled. Some of the maple farm's syrup is kept to be served in their restaurant over homemade pancakes or sold in their gift shop. Some is used to make maple cream, maple sugar, or maple candy which they sell in their gift shop. Most of their syrup is shipped out to be sold in stores.

Our field trip ended with us getting to eat pancakes which we covered with the freshly made syrup. It tasted delicious! I was surprised to see it was thinner than the fake maple syrup my mom buys from the store. The color was also a little different. I thought it tasted a whole lot better.

I never knew making a bottle of syrup would take so much time and work. I totally think it's worth it though because real maple syrup tastes so much better.