



HUMBER ARBORETUM ECO CENTRE

MAPLE SYRUP HARVESTING



INTERESTING FACTS

- ✦ In the pioneer days, maple sap was always boiled down to make maple sugar. It was the staple sugar of the pioneers until cane sugar became more readily available at a more reasonable price. Maple syrup did not become popular until the late 1800's when sterile bottling techniques became more reliable and syrup could be stored in a cool place.
- ✦ It takes 40 litres of sap to produce 1 litre of syrup. The sap is boiled to evaporate the water and concentrate the sugar to make syrup. No other substances are added to the sap during the making of maple syrup; only the water is boiled away by evaporation.
- ✦ Syrup is labelled in different grades, light amber (fancy grade), medium amber and dark amber. This refers to the colour and the flavour and not the sugar content. All maple syrup is 66% sugar. Sap that is collected at the beginning of the season results in light coloured and light tasting syrup. Medium has a richer colour and stronger taste and is from sap that is collected at mid season. The darker syrup is from the late season harvest. The stronger flavour and colour is a result of additional substances that are produced to start the growth of the leaves.

COOL ACTIVITIES

Pancakes and Syrup

Why not make pancakes in class and have a taste testing event?

You can compare the flavours of real maple and artificially flavoured syrup. You can make pancakes from "scratch" or buy a prepared mix.

Following a recipe, measuring and mixing can be evaluated in mathematics and language (process writing) curriculum units.

Pancake Recipe

2 cups flour
2 1/2 tsp baking powder
1/2 tsp salt
1 egg, slightly beaten
1 1/2 cups milk
2 tbsp melted butter or oil
Mix flour, baking powder and salt in a bowl. Combine egg, milk and butter in another bowl. Add liquids to dry ingredients and stir batter until smooth. Cook on a hot greased griddle, using 1/4 cup batter per pancake. Cook until bubbles appear in pancake and then turn to lightly brown the other side.
Have the children do a comparison taste test between real maple syrup and artificially flavoured pancake syrup.

REVIEW QUESTIONS

1. What type of trees do we tap to make maple syrup? (ANS: Sugar Maple and Black Maple)
2. How large does the maple tree need to be before it is safe to tap it? (ANS: It must be at least 25 cm in diameter (distance across) which is at least 78.5 cm around the tree (the circumference). In this locality, that would be a tree that is about 40 years old.
3. What is the name of the device that is put into the tree after the hole is drilled? (ANS: The device is called a spile.)
4. Why do we put a lid on the bucket while it hangs on the tree collecting sap? (ANS: The lid keeps dirt and debris from falling or blowing into the sap. It also prevents animals like squirrels from getting into the bucket to take a drink. The lid also keeps rain or snow from getting into the bucket and diluting the sap.
5. Why is there sugar in the sap at this time of the year? (ANS: The sugar was produced by the tree last fall and stored in the roots. In the spring, as the tree awakens from its winter dormant period, the water and sugar travels up the tree to the top branches. The sugar in the sap is the source of energy that the tree needs in order to grow its new leaves.