

Tree of the Month, October 2015: Sugar maple (*Acer saccharum*)

In the Canadian Heritage Garden we have a little grove of sugar maples (*Acer saccharum*) planted in the 1990s to represent the forests of the Great Lakes and St. Lawrence region of Canada. Sugar maple is native to Eastern North America from Manitoba to Nova Scotia and south to Arkansas. In autumn its leaves turn various shades of golden yellow, orange and red.

Sugar maple leaves are five pointed, palmate and bright green during the growing season. Contrary to popular belief, the maple leaf on the Canadian flag is not a sugar maple, but a stylized maple leaf that was designed to be recognizable while flapping in the wind. The sugar maple leaf is, however, very similar to that stylized leaf.

The tiny, yellow-green flowers of sugar maple bloom in spring and are pollinated by the wind. In autumn, the winged seeds, called samaras, ripen.

Although there is a growing demand locally for syrup made from our native bigleaf maple (*Acer macrophyllum*), sugar maple is still the most popular maple species for making maple syrup; this is reflected in the name of the species – the specific epithet, *saccharum*, is Latin for “sugar”. The indigenous peoples of Eastern North America learned long ago how to collect the sweet sap from sugar maple trees by making gashes in the bark. They would pour the sap into large wooden troughs and concentrate the sugars by boiling the sap with hot stones or freezing it and removing the water in the form of ice. They taught this practice to European settlers, who began to make their own syrup using metal tools and cauldrons. Metal taps, also known as spiles, allowed for the removal of sap through a small hole in the bark, which could heal quickly; with this new technology, the same tree could be tapped many times over its lifespan, which can be over 400 years. Syrup production happens in late winter and early spring, when the sugar content of the sap is highest and the warming weather triggers the sap flow. It takes 40 litres of sap to make 1 litre of syrup.