

Sugar Maple (*Acer saccharum*)

Nebraska Forest Service

Sugar maple (*Acer saccharum*) is one of the most well known of the maple family. It is native of southern Canada and the northeastern United States. Its natural range goes as far west as the eastern edge of North Dakota, South Dakota, Kansas, and Oklahoma. The tree is not native to Nebraska. Sugar maple is the state tree of both Vermont and Wisconsin.

Sugar maple is a large tree and can attain heights of 80 feet or more in its natural range. The national champion is 223 inches in circumference and is 115 feet tall located in Lyme, Connecticut.

Sugar maple was so named because of the sweet sap that flows within its vascular system. Maple syrup is a product of that sap. According to information available from Cornell University, maple sugar and maple syrup have been made from the sugar maple's sap for hundreds of years. Early colonists learned the art of collecting and boiling sap from the Indians, who collected and boiled the sap in troughs made of elm bark or tree trunks.



"There is in some parts of New England a kind of tree...whose juice that weeps out of its incisions, if it be permitted slowly to exhale away the superfluous moisture, doth congeal into a sweet and saccharin substance, and the like was confirmed to me by the agent of the great and populous colony of Massachusetts." -*Robert Boyle, English chemist, 1663*

Sap is collected in early spring by inserting a tap into the wood of mature trees and collecting it in a bucket or a tub. It is then boiled down to varying consistencies to make syrup, maple sugar candy, and other maple sugar products. Forty gallons of sap boil

down to only one gallon of syrup. A gallon of REAL maple syrup is sold for about \$40. And you thought the price of a gallon of gas was high. If you want to learn more about maple syrup production log onto the Cornell University web site at

<http://maple.dnr.cornell.edu/>. Maple syrup is produced in Nebraska but mostly as a hobby.

But for Nebraska and most of the eastern half of the country, the real benefit of sugar maple is the fall color. The leaves can range from clear yellow to deep crimson to brilliant reds and oranges. Canada uses the sugar maple leaf as its national symbol.



The wood from sugar maple is very valuable and is used for flooring, paneling, butcher blocks, musical instruments, and fine furniture. The strength of this wood is reflected in the genus name, *Acer* (Latin for sharp), referring to ancient Rome's use of maple to make handles for spears; *saccharum* is the Latin word for sugar and refers to the high sugar content in this species' sap.

In eastern Nebraska sugar maple is widely planted in communities both on public and private property. The tree is somewhat adaptable but does not like to be on a south or west exposure where the sun and soils are hot. It prefers a well drained, rich soil and will not be happy in poorly drained clay soils. Sugar maple is shade tolerant so it can grow in a protected location. There are several varieties of sugar maple on the market that may be more tolerant of droughty sites.