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Maple Trees

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Maples are such sociable trees. They're always rustling and whispering to you. - Lucy Maud Montgomery, author.

Is there any tree so beloved and the symbol of so many things? The Canadian flag; a hockey team; towns; syrups; military insignia; songs, one being the maple leaf rag; streets; lakes; the list goes on and on.

There are 128 species of maple in the world, most are native to Asia and 14 of these are indigenous to the United States. Maples are probably the favorite shade and ornamental tree in the northern United States. As John Burroughs, naturalist and essayists, once said, "[I always feel at home where the sugar maple grows.... glorious in autumn, a fountain of coolness in summer, sugar in its veins, gold in its foliage, warmth in its fibers, and health in it the year round.](#)" In our part of the world maples are best known for their brilliant fall color and syrup.

As syrup makers in the Grand Rapids area know, the biggest bonus from growing sugar maples is the syrup. The flow of sap varies in early spring when warm temperatures in the morning follow a night of below freezing temperatures. The taps in the tree allow the sap to flow out which is then collected and slowly boiled down to produce 1 gallon of syrup from about 30 gallons of sap. Other products can also be prepared from maple syrup such as maple cream, maple candy, and coated nuts.

In Minnesota, most maple syrup is produced from the sugar maple, but also can be gotten from the red maple, silver maple, and boxelder or Manitoba maple. Sugar maple sap is preferred for making syrup because it has an average sugar content of 2 percent. Sap from other maple species is usually lower in sugar so approximately twice as much is needed to yield the same amount of syrup as from the sugar maple. However, syrup from the other maple species will still have a good flavor if carefully processed. Ornamental maples generally have a milky sap and cannot be used for syrup production.

Maples are easy to identify because of their opposite branching habit, leaf shape, and unique fruit called samaras. Following are descriptions of the four maples used for syrup production in Minnesota.

Sugar maple grows in most regions of Minnesota except in the extreme western counties. On good soils it attains a height up to 100 feet. The leaves are 3 to 5 inches long and turn shades of yellow, orange, and red in the autumn. The inconspicuous flowers are greenish. The fruit differs from other maples in that it matures in the fall and germinates the next spring. The bark on young trees is light gray to brown and smooth, later breaking into long irregular plates of bark that often loosen vertically along the side. The wood is heavy, hard, strong, close-grained, and light-brown to reddish, with lighter colored sapwood.

Red maple is common in the north central and northeastern portions of the state and is normally found growing in moist soils adjacent to wetlands and swamps. Red maple grows up to 60 feet high, is fast growing and makes a good shade tree when grown in light soils. Some varieties are cultivated for ornamental purposes. The leaves are 3 to 5 lobed, dull green above and whitish beneath, and turn bright red in autumn. Flowers appear before leaves as small, dense clusters that are conspicuous because of their red color. The fruit consists of winged seeds that germinate in the spring. The bark is smooth and light gray on young stems and dark gray and rough on old trees. The heavy wood, known commercially as soft maple, is light brown and close grained and used for furniture, woodenware, and fuel.

Silver maple, often called soft maple, grows naturally in most areas of Minnesota. It's commonly planted as a yard and boulevard tree and grows 60 or more feet high. The leaves have 3 to 5 lobes that end in long points with toothed edges separated by deep angular openings that extend nearly to the midrib. They are pale green on the upper surface and silvery white underneath. Flowers are greenish-yellow and appear in dense clusters in the spring before the leaves. The fruit consists of a pair of winged seeds that ripen in late spring. The bark is smooth and gray, becoming darker with age, furrowed, and separating into long flakes. The wood is hard, strong, close-grained, rather brittle, and pale brown with lighter-colored sapwood. Don't plant close to a house as trees tend

to form multiple trunks that may split in a storm. Prune regularly to promote one upright stem.

Boxelder is the only maple in Minnesota that has a compound leaf. It is the most widespread maple found in the United States and Minnesota. Boxelder prefers moist sites but adapts to a variety of conditions. It grows up to 70 feet high and 4 feet in diameter. It often divides near the ground into numerous branches that form a wide-spreading crown. Boxelder leaves are opposite, but with 3 to 9 coarsely-toothed leaflets on either side of the stem. The terminal leaflet is sometimes shallowly lobed. The small, yellowish-green, dioecious (male and female on different trees) flowers appear before the leaves. Drooping clusters of seeds remain on the tree throughout the winter, a favorite food of squirrels. The bark is pale gray or light brown, and deeply divided with broad scaly ridges.

Besides these four maples there are ornamental horticultural types that can also be found at Bloomers. The various Amur and Korean maples are generally about half the size or smaller than most other maples. They have incredible autumn colors but the Korean maple is rated only to USDA Zone 4 so care must be taken in site selection. The Amur Chokecherry has fragrant white flowers that turn into clusters of black fruits. The bark is a copper color and the leaves turn a "lemon" yellow in the autumn. This tree is a good bird attractant.

The Red Norway maple has attractive purple foliage and the Variegated Norway maple has attractive white variegated leaves. Autumn Blaze is a spectacular hybrid of silver and red maples with gorgeous autumn colors. Sienna Glen maple turns orange, red and burgandy in the autumn. Each maple variety is an attractive yard tree because of spectacular leaf color, summer and autumn, and plant form.

Maples can be transplanted any time the ground isn't frozen. New transplants should be mulched, and kept watered until freeze up. Since the bark of most young maples tends to be thin, it is advisable to wrap the stem with tree wrap in the autumn to prevent winter injury.