

## Maples - The Important Distinctions

	<b>Sugar Maple</b> <i>Acer saccharum</i>	<b>Silver Maple</b> <i>Acer saccharinum</i>	<b>Red Maple</b> <i>Acer rubrum</i>	<b>Striped Maple</b> <i>Acer pensylvanicum</i>
<b>B A R K</b>	Texture	Older trees: rough and deeply furrowed. Young trees: smooth and slightly fissured.	Older trees: somewhat furrowed, separates into thin plates. Young trees: smooth.	Marked with whitish stripes running lengthwise on trunk.
	Color	Gray on older trunks.	Dark gray with reddish tinge on older trunks. Gray on young trees.	Reddish brown or dark green.
<b>L E A V E S</b>	Lobes	3-5 lobes, sinuous, sides of terminal lobes flare outward, notches between lobes rounded.	5 lobes, rarely 3. Lobes long and narrow.	3 lobes, shaped like a duck's foot, thin.
	Margin	Sparingly toothed.	Irregularly and sharply toothed.	Edges finely and sharply toothed.
	Surface	Under surface pale green.	Under surface silvery white.	Under surface slightly white.

## Maples - The Important Distinctions (continued)

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<b>F</b> <b>U</b> <b>D</b> <b>S</b>	<b>FLOWER</b>	Greenish yellow, appears with the leaves.	Greenish yellow or pinkish, appears long before the leaves.	Scarlet or yellow-red, appears before the leaves.	Bright yellow, appears after leaves are full grown.
	Length	Terminal bud - 1/4 inch.	Terminal bud - 1/8 inch.	Terminal bud - 1/8 inch.	Terminal bud - 1/2 inch.
	Shape	Sharp pointed many scales showing.	Blunt pointed, slightly ridged.	Blunt pointed, about as long as broad.	Distinctly stalked with 2 scales showing.
	Color	Purplish brown to gray.	Bright red above, green below.	Dark red.	Bright red.
<b>F</b> <b>R</b> <b>U</b> <b>I</b> <b>T</b>	Shape	Paired and slightly divergent.	Paired, but with one usually abortive.	Paired, slightly divergent.	Paired and moderately divergent.
	Seed body	Baseball shaped.	Football shaped.	Oval in outline.	Large smooth depression in seed body.
	Wings	One inch long.	Strongly divergent, two inches long and hooked.	Reddish; 3/4 inch long.	Reddish-brown; 3/4 inch long.

Insufficient space in the key to include the native Mountain Maple (*Acer spicatum* Lam.) and the apparently exotic Boxelder (*Acer negundo* L.). See pages 86 and 87.

## SUGAR MAPLE

*Acer saccharum* Marsh.

Sugar, rock, or hard maple is found abundantly throughout the state on moist, rocky slopes, but grows best on moist, upland soils. In the forest it grows to 60-70 feet and to a diameter of 20-30 inches. The top is short and spreading. In the open, the branches begin 8-10 feet up, forming an egg-shaped head when the tree is young and a broad rounded top when older. It makes an attractive street or ornamental tree, but it is sensitive to road salt. Globe and columnar shapes are available at nurseries. Maple sugar and syrup are made largely from the sap of this tree, although sugar is present in the sap of all maples. **Bark** on young trees and large branches is smooth or slightly fissured and pale. Older trees are deeply furrowed and light to darker gray. **Leaves** are opposite, 3-5 lobed,



sparingly toothed, 3-5 inches long, dark green above, pale green below. Sides of the terminal lobe are parallel or divergent and notches between lobes are rounded. In autumn, leaves turn various shades of red, scarlet, orange or yellow. **Flowers** are pendulous, on long, slender, hairy

stalks, in clusters, greenish yellow, and appear with the leaves. **Fruit** is paired, baseball-shaped with wings about one inch long, slightly divergent. It ripens in the fall.

**Wood** is heavy, close-grained, strong, and hard. It is used for furniture, flooring, tool handles, veneer, railroad ties, novelties, dowels, woodenware, canoe paddles and pulp. "Birds-eye" and curly patterned wood is in high demand in the furniture industry.

## BLACK MAPLE

*Acer nigrum* Michx. f.

Black Maple is found in southern Maine, leaves are similar to sugar maple, but three-lobed and pubescent.

## SILVER MAPLE

*Acer saccharinum* L.

Silver maple is a common tree found throughout the state except along the coast and is abundant in some localities. It grows largely on sandy banks along streams. It usually grows to a height of 60-80 feet and a diameter of 2-3 feet. The trunk normally separates into 3 or 4 upright, secondary stems, destitute of branches for some distance. The branches are long and slender, often pendulous. The **bark** on young trees is smooth, gray, slightly tinged with red. On old trees it is furrowed, separated into large thin scales, and is reddish brown in color. Twigs are chestnut brown and shiny. The **leaves** are opposite, deeply 5 lobed and the edges are irregular and sharply toothed. The upper surface is pale green, the lower, silvery white. They turn a pale yellow in the fall. The **flowers** are on very short stalks and in clusters. They are greenish yellow or sometimes pinkish, opening early, long before the leaves appear. The **fruit** is paired, winged and ripens in the spring. Frequently, one of the pair does not fully



develop. The **twigs** are curved upward at the tip, orange or red-brown above and green below, slender, with a bitter taste and a rank odor when broken. The **wood** is softer than that of the hard maple, close-grained, not durable, and easily worked. It is used to a limited extent for pulp.

## CUTLEAF SILVER MAPLE

*Acer saccharinum* var. *laciniatum* (Carr.) Pax

Cutleaf silver maple varieties are very similar to the silver maple, but have a more deeply-lobed leaf and the branches and twigs are more droopy. These varieties are utilized mainly for ornamental and shade tree planting.

## RED MAPLE

*Acer rubrum* L.

Red, soft, or swamp maple occurs throughout the state. It is a rapid grower and the most abundant of the maples. It is typically found in swamps, and poorly drained sites, but also occurs elsewhere. The red maple is a medium sized, slender tree that becomes 50-60 feet high, and 1-2 feet in diameter. The branches are upright, forming a somewhat narrow head. Usually the trunk is not divided. The **bark** on young trees is smooth and light gray. On old trunks, it is dark-gray, ridged and broken into plate-like scales. The **leaves** are opposite, 3-5 lobed, margins irregularly double-toothed, 3-5 inches long, upper surface light green; lower surface is



white. The sides of the terminal lobe converge toward the tip, and the notches between lobes are V-shaped. In the fall, they turn scarlet and orange. The **flowers** are produced in clusters on stalks before leaf buds open. Males are yellowish-red while females are bright scarlet. The **fruit** is winged, ripens in the spring or early summer, and germinates as soon as it falls. Wings are only slightly divergent, about  $\frac{3}{4}$  inch long. The seed body lacks a depression. The **twigs** are straight, stiff, do not have a rank odor when broken, and are red in color on both surfaces. Buds are red and often clustered.

The **wood** is close-grained, heavy, moderately strong, and easily worked, not durable although it will take a good polish. It is used mainly for pulp, but

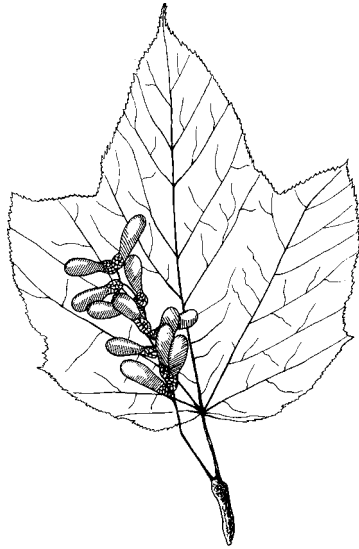
also for pallets, furniture stock, canoe paddles, and turnery products. As sugar maple becomes more expensive, more mills are using red maple.

## STRIPED MAPLE

*Acer pensylvanicum* L.

Striped maple or moosewood is common throughout the state. It is a shade-loving tree that is found growing with other hardwoods or occasionally with conifers on rich, moist soils or rocky slopes. It is of little value except for its beauty. It rarely exceeds a height of 25 feet and a diameter of 8 inches. The branches are slender and upright and the top narrow and often short.

The **bark** on the trunk is reddish brown or dark green and marked by whitish lines running lengthwise which turn brown after a time. The leaves are three-lobed toward the apex, resembling a goose foot, opposite, finely toothed, pale green, 5-6 inches long and about as broad. In the fall they become light yellow in color.



The **flowers** are bright yellow in slender drooping racemes opening the end of May or early June when the leaves are fully grown. The **fruit** is paired, with wings moderately divergent, fully grown in late summer. It has a smooth, oval depression in the seed body. The **twigs** are smooth, reddish or greenish; the buds are valve-like, stout, stalked, and without hairs.

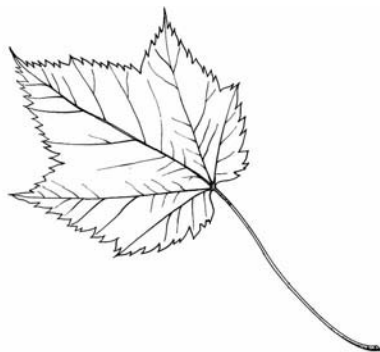


The **wood** is close-grained, light and soft. During the spring when the cambium layer is active, it is easy to make a whistle from the smaller branch sections.

## MOUNTAIN MAPLE

*Acer spicatum* Lam.

Mountain maple occurs throughout Maine and is especially common in the northern part of the state. It grows as a small bushy tree seldom over 30 feet in height. The tree at times forms fairly dense thickets due to its habit of growing in clumps. It grows best in a wet habitat or on damp, northern slopes. The slender twigs grow in a



somewhat upright position.

The **bark** is reddish brown to gray in color. It is thin and somewhat furrowed. The **leaves** are opposite, 3 lobed, shiny above, somewhat hairy below. They have rather coarse teeth and prominently sunken veins on the upper surface. The **flowers** appear in June in long, hairy, yellow-green clusters after the leaves are full grown. The **fruit** is paired, with wings slightly divergent, and occurs in ascending clusters. It has a wrinkled depression on the seed body and ripens in early fall. The **twigs** are hairy, green, red, or reddish brown, not striped, and the pith is brown. The buds are hairy, valve-like, green, and only slightly stalked, slender and pointed. The **wood** is close-grained, soft, and light.

## NORWAY MAPLE

*Acer platanoides* L.

Norway Maple is an exotic from Europe and Asia and is becoming a favorite for shade tree plantings. It resembles somewhat the sugar maple, but the leaves are larger, darker green, and the petiole gives off a milky juice when broken, which is not common to any of our native maples. The terminal buds are usually of a larger diameter than the end of the twigs. There are many varieties of Norway maple.

## SCHWEDLER MAPLE

*Acer platanoides*

Schwedler or red-leaved maple is a cultivar also common as a shade tree in Maine. The leaves are dark reddish-green turning to green later in the season.