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 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. Maple sugar and syrup are made largely from the sap of this tree, although sugar is present in the sap of all maples.

Historically, sugar maple was used to make parts for sleighs, sleds, pungs (low, one-horse box sleighs) and buggy shafts.
Bark on young trees and large branches is smooth or slightly fissured and pale. Some trees have oval light-colored blotches on the bark. Older trees are deeply furrowed and light to darker gray. Leaves are opposite, with 3–5 lobes, 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 U-shaped. In autumn, leaves turn various shades of red, scarlet, orange or yellow.

Flowers are greenish-yellow, pendulous, appear on long, slender, hairy stalks and in clusters, with the leaves. The fruit is paired, round with wings that are about 1 inch long and slightly divergent. It ripens in the fall. The twigs are brown with sharp-pointed brown buds.

The wood is heavy, close-grained, strong and hard. It is used for furniture, flooring, tool handles, veneer, railroad ties, novelties, dowels, woodenware, canoe paddles, firewood and pulp. “Birds-eye” and curly-patterned maple is in high demand in the furniture and veneer industry. Historically, sugar maple was used to make parts for sleighs, sleds, pungs (low, one-horse box sleighs) and buggy shafts.