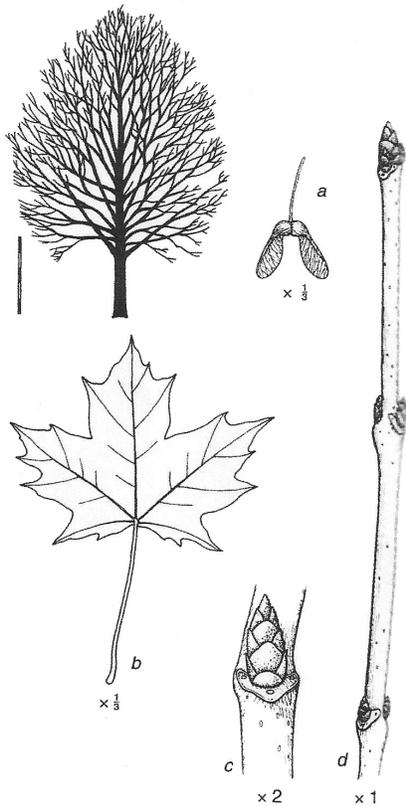


# SUGAR MAPLE (*Hard Maple, Rock Maple*)

## RECOGNITION

A large tree with a rounded crown, the sugar maple is often branch free for two thirds of its height in the forest. The leaves have 5 tapered lobes. Keys form in drooping clusters with slightly divergent wings.



a. Fruit. b. Leaf. c. Lateral bud and leaf scar.  
d. Winter twig.

## HABITAT

Native to broadleaf forests in Ontario, Quebec and the Maritimes, the sugar maple also extends into the United States as far south as Georgia and east to Kansas. This tree grows best on deep, fertile, well-drained soils. It also does well in the deep soils on the Canadian Shield. Sometimes it grows in pure stands, but is usually mixed with other broad leaf species, as well as with eastern white pine and eastern hemlock.

## SIZE AND FORM

This tree can grow more than 35 m in height and 90 cm in diameter making it one of the largest Canadian maples. In forests the trunk is straight with short sturdy branches supporting a narrow crown. In the open the trunk grows shorter and the crown may be large and rounded. Sugar maples may grow for over 200 years. The root system is deep and wide spreading.

## LEAVES

There are three prominent lobes from the five on this leaf. The colour is bright green with a paler green and hairless surface underneath. The leaves measure 8 to 20 cm long and have a slightly greater width. The central lobe is almost square and divided from the lateral lobes by wide rounded notches. The points of each lobe are blunt and the edges of the leaf are wavy and irregular on a 4 to 8 cm long stem. The sugar maple is popular for its brilliant autumn foliage displayed in masses of yellows, oranges, crimson and scarlet.

## BARK

On young trees the bark appears gray-brown in colour and is smooth in texture. As the tree ages vertical ridges appear and curl outward along one side creating irregular furrows. The bark of a mature sugar maple can be somewhat scaly. The twigs are shiny green to reddish brown in colour and slim.

## BUDS

The terminal bud is narrow and pointed with 6 to 8 pairs of slightly hairy scales. The overall length of the bud can be from 6 to 12mm long and medium to dark brown in colour.

## FLOWERS

Tiny bell shaped flowers grow from long stems. They appear in clusters at the same time as the leaves. Both kinds of flowers, male and female grow on the same tree and in the same cluster. The flowers have 5 yellow green sepals but no petals.

## FRUITS AND SEEDS

The keys have u-shaped wings as long as 35 mm. They hang in drooping clusters from slender stalks which are longer than the wings. The seedcase is plump, and while only one side produces a viable seed the keys are still shed as a unit upon maturity. The sugar maple will produce a heavy crop of seeds every 7 years but most years produce seeds.

## VEGETATIVE REPRODUCTION

If the tree is damaged or cut down, buds that normally lie dormant will sprout and grow rapidly. Buried stems can also produce roots for new trees.

## WOOD

Heavy, hard, and strong, the sugar maple is a viable Canadian hardwood. Light yellowish brown in colour the wood is used for furniture, flooring, toys, cabinetwork, veneer, plywood, turned woodenware, and cutting blocks. Some trees develop curly patterns in the grain suggesting the eyes of birds, hence the term 'bird's eye maple'. Such variations are in great demand.

## NOTES

Our national symbol and the centre of our Canadian flag is a stylish drawing of the sugar maple's leaf. In the spring, the sap of the sugar maple (sometimes known as sweet water) is collected and processed resulting in maple syrup and sugar. This process was taught to settlers by the Indians and recorded as early as 1684. 40 litres of sap are

required for 1 litre of syrup. Sugar maples are popular for shade, and ornamental plantings. The colours of the foliage are so spectacular that the tourist industry promotes bus tours of maple regions. Sugar maples enrich the soil as the decomposing leaves increase the mineral content and reduce the acidity.

Sadly, recent reports of the destructiveness of the Asian Long -Horn Beetle have caused concern as the maple tree seems to be this insects favourite food. Since September 2003, large numbers of infested and host trees are being destroyed in the greater Toronto area. Whether caused by air pollution, disease or weather conditions a second condition has been observed which is causing a progressive die back starting at the top of the tree.