



**A VIEW FROM THE WOODS**  
**The Sugar Maple**

Long before Europeans settled the area, the sugar maple (*Acer saccharum* Marsh) was an important part of life for all residents of Eastern Ontario.

Native people made use of the maple sap to produce sugar, since few other sources were available to them. In the spring, while the snow was still on the ground, cuts were made in the bark of sugar maple trees. The sap that flowed from these cuts was collected and boiled in large bark vessels. The end result of this operation was concentrated maple syrup or sugar, which was used in cooking.

This native activity truly amazed the European settlers. They too made use of this tree sap to produce their own sugar supplies. The high price and poor availability of cane sugar made the production of maple sugar a necessity. The settlers refined the sap collection techniques of the natives, moving to wooden spouts (or spiles) instead of slashes in the bark. The use of spiles meant increased sap flow and less damage to the tree.

The settlers generally saved a woodlot of 4 to 10 hectares when they cleared their properties. Many of these woodlots exist today, generally at the back of the family farm. These woodlots provided timber for construction, firewood for heating and maple sap for sugar.

By the mid 1800's, the production of maple syrup and sugar had become a viable business for farmers in southern Ontario, Quebec and parts of the Maritimes. In 1882, 371,867 kg (819,812 lbs) of maple sugar were produced in the United Counties of Leeds and Grenville, 16% of the provincial total.

As time progressed, the demand for maple products began to drop off. The main reason was the increased

availability and decreased cost of cane sugar. Poor woodlot management and a low profit margin also contributed to a decline in production. The maple industry experienced an upturn during World War 11 when cane sugar was once again in short supply. The situation has been improving steadily since then.

Today, the maple industry is big business. Canada produces 70% of the world's maple products. Ontario contributes 25% to that total. Research on production techniques and sugar bush management have helped to make the entire industry more profitable. It has been estimated that of the 70 million tappable maple trees in Ontario, only 2 million are actually being tapped. The potential for expansion exists.

**FEATURES**

What is it about the sugar maple that makes it such a special tree? The sugar maple is one of 150 species of maple found world wide. Seven species of maple occur in Ontario. The sugar maple and the relatively rare black maple (*Acer nigrum* Michx.) are commonly tapped for their sweet sap. The sugar content of maple sap ranges between 1 and 3%, higher than most other trees.

The silvics, or growing characteristics, of the sugar maple are such that it is easy to maintain a healthy maple cover. The mature trees produce large quantities of seed, leading to healthy natural regeneration. Saplings can survive in low light conditions, such as those found under the canopy of a mature sugar bush. These same saplings can respond

quickly to an increase in available light, filling any holes created by the removal of over mature trees. Trees of all ages also respond well to management. Sap production can be increased by careful thinning of a sugar bush. Thinning creates more growing space, and frees up additional water and nutrients. Through management, a sugar bush will produce better quality wood products in a shorter time, and an increase in sap sugar may occur. A slight increase in the sap sugar content will lead to a considerable increase in syrup and sugar. For example, if sap sugar content increased from 2% to 2.2%, the producer could expect a 10% increase in the yield of final products. The advantages of this are immediately obvious.

Ministry of Natural Resources staff are available to help identify potential crop trees and determine the sap sugar content.

The maple resource in Ontario is currently in distress. Years of mis-management, droughts

insects, disease and air borne pollutants have taken their toll. This is not to say that the resource will be lost to us. Maple decline is a cyclic phenomenon, as are many things in nature. As woodlot owners and managers, we can do our part to ensure that the resource is well managed. This will ensure that a future supply of some of the best furniture stock and firewood as well as our source of maple products is always available.

This article has been presented by the Private Land Forestry staff at the Brockville District office of the Ministry of Natural

Resources. A manual on the topic of syrup production entitled "SUGAR BUSH MANAGEMENT FOR MAPLE SYRUP PRODUCERS" is available from the District office nearest you. This manual outlines in greater detail subjects such as the criteria for crop tree selection, tapping technique and how to protect the sugar bush from damaging agents.



CANADIAN CANCER SOCIETY SOCIÉTÉ CANADIENNE DU CANCER

You're at greatest risk if...

- You work or play for long periods outdoors.
- You are a blond or a redhead who burns easily.



Fair-skinned people don't have enough colour pigment in their skin to stop the sun's burning rays.

That LOBSTER RED burn is a sign of skin damage. The damage doesn't go away but builds with each sunburn THAT CAN LEAD TO CANCER

PROTECTION It's easy to protect yourself...

- Wear a broad-brimmed hat



- And a loose-fitting long-sleeved shirt

- And long pants

USE A SUN SCREEN