

# Maple Moon: Sugar Making on the Escarpment 600 Years Ago

By Gary Hutton



Laura Crichton, interpreter, holds a sweetwater demonstration inside the reconstructed Native village with longhouses behind.

Ontario's Niagara Escarpment is a repository of some of the richest archaeological resources in Canada. And there is no better place that demonstrates this than the reconstructed Iroquoian village at the Crawford Lake Conservation Area in Milton.

The pre-historic village is the most accurately dated archaeological site in North America and the nucleus of hundreds of native settlements that dotted the Niagara Escarpment in this vicinity. Today visitors can step back in time for an intimate view of life as it was almost 600 years ago before the arrival of Christopher Columbus.

The village and spectacular conservation area are open year round and include educational programs that are themed around the seasonal calendar of the indigenous Iroquoian people. Early spring harkened the maple moon or sweet water season. It was a time when the magic of making maple sugar was an annual village pastime. Maple moon was also a time of great celebration. The rigours of winter were coming to a close as the sweet water season be-

gan. An ancient dance, dedicated to the maple, was performed in hopes that warmer weather would cause the sap to flow.

With imaginary moccasins, you can walk the forest trails at Crawford Lake and visualize the sugar camps where native families, donned in snowshoes, would be gathering sap in birch bark vessels. The sweet water was harvested by making crude V shaped slashes in maple trees. Flat pieces of wood or reeds were then wedged into the cuts to direct the sap to the bark pails placed on the ground. The sap would then be carried back to the camp or village to begin the timely process of boiling.

Not yet having metal pots, the Iroquoians poured sap into large hollowed-out logs. Hot rocks, repeatedly heated in nearby fires, would be picked up with forked sticks and dropped into the watery trough. After much sizzling and even

more steam, the water in the sap would evaporate and eventually transform into maple sugar. Large clay pots were also used for boiling sap.

From early historic accounts, there were three kinds of maple sugar made by native people. Grain sugar was coarse and granulated and looked a bit like brown sugar. Cake sugar was poured into wooden moulds to become hard blocks that were easy to store and transport. Wax sugar was made with extra thick syrup that was poured over snow. "Sugar on snow" or maple taffy is still made as a sweet treat by sugar farmers today.

Skilled interpreters at Crawford Lake demonstrate native sugar making in the village while providing intriguing information about these early Escarpment inhabitants including legends about how maple sugar was discovered. One legend tells the story of an Iroquoian chief



Cindy Palleck, interpreter, talks about the maple moon inside one of the reconstructed longhouses at Crawford Lake Conservation Area.

## Some Maple Syrup Festivals

**White Meadows Farms**, Pancake Weekends: full breakfasts plus numerous maple selections, from Jan. 9. Sugar Bush Adventure: self-guided tour of themed stations with staff in period costumes, from Feb. 13. Details: 905 862 0642.

**Conservation Halton**, Maple Syrup Time from Feb. 27. Crawford Lake, native-style sweetwater presentations (905 854 0234); Mountsberg, Maple Towne Sap to Syrup Story (905 854 2276).

**Westfield Heritage Village**, Sweet Taste of Spring Maple Syrup Festival from March 7. Maple syrup production demonstrations by methods of First Nations, 19<sup>th</sup> century pioneers and modern times. Details: 1 800 883 0104.

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who threw his axe into a maple tree one early March evening. When the axe was retrieved for hunting the next morning, a clear liquid was noticed coming from the cut in the tree. The chief took some home to his wife who added the liquid to venison that she was cooking. The family was delighted with the irresistible flavour of the meat.

Maple sugar was more likely discovered by native people eating 'sapsicles.' Icicles of frozen sap often form at the ends of broken twigs. As the ice forms, some of the water evaporates leaving a sweet treat hanging from the tree.

### Discovery of the Ancient Native Village

As an intriguing historical analogy, it was another frozen icicle of sorts that led scientists to the discovery of the Crawford Lake village



PHOTO BY MIKE DAVIS

Native sweet water harvest tools: forked stick, hollowed log, hot rocks.

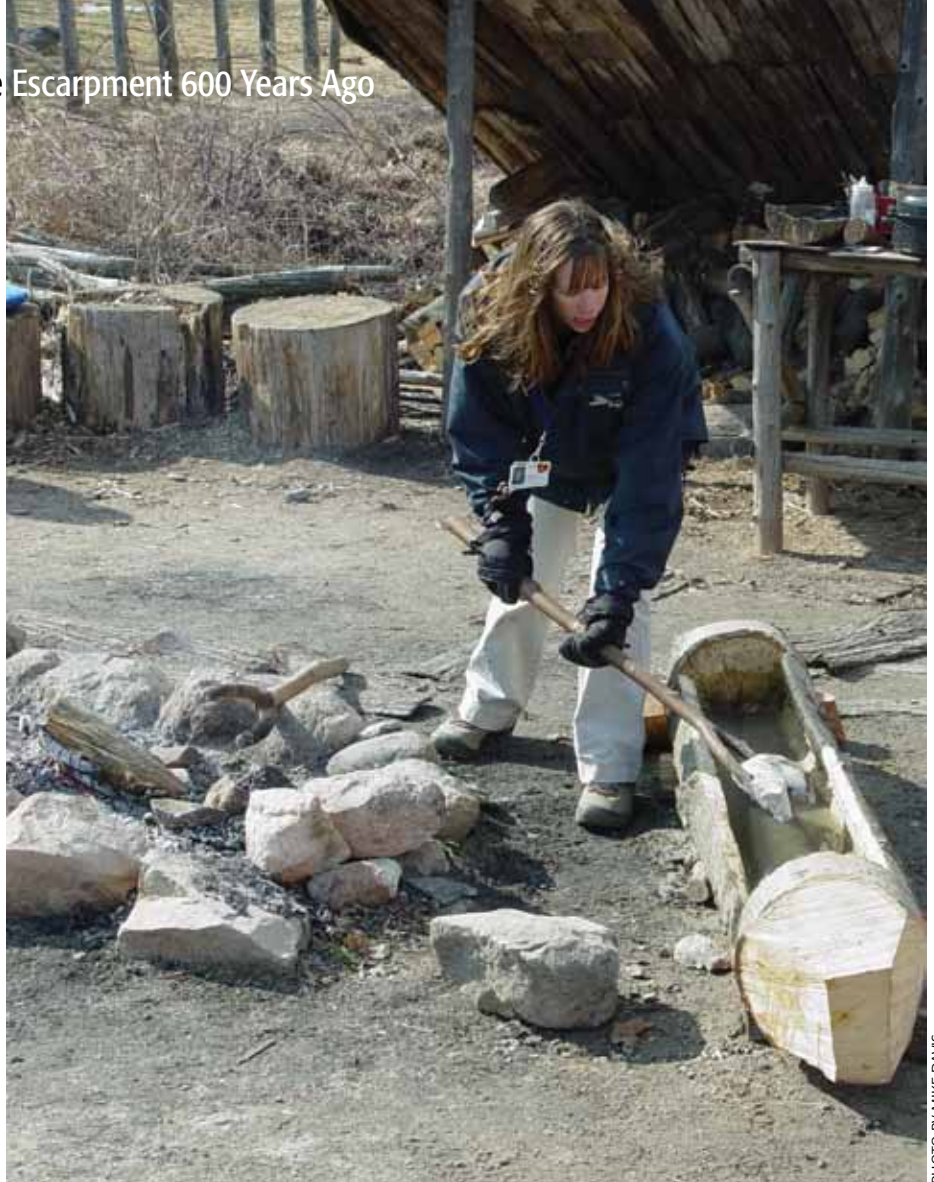


PHOTO BY BRANIMIR ZLAMALIK

PHOTO BY MIKE DAVIS

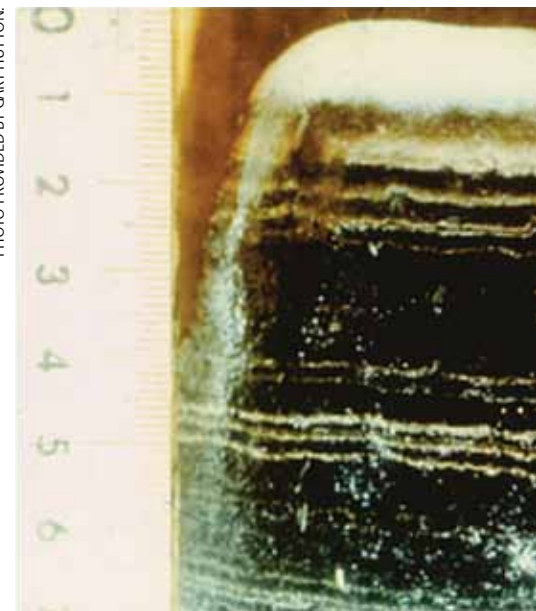
Laura Crichton, adds a heated rock to the log containing maple sap.

575 years later. In 1971, Jock McAndrews, a botanist from the Royal Ontario Museum, was taking core samples from the bottom of Crawford Lake by way of a fascinating tool called the "frigid finger." A long hollow tube filled with dry ice was pushed down into the lake bottom to capture undisturbed sediment that froze to the outside of the tube. The tube was weighted down and capped with a rubber glove, complete with missing finger, to allow carbon dioxide to escape from the dry ice.

Crawford Lake's unique geology makes it a natural time capsule. The lake is one of very few in Ontario that are known as meromictic. With a small surface area (2.5 hectares) and great depth (24 metres), the lower portion of the lake does not circulate. This results in constantly cold water that is oxygen poor. Everything that falls to the bottom, from leaves to pollen grains, remains perfectly preserved in alternating dark (fall sediment) and light (spring sediment) bands. These double



PHOTO PROVIDED BY GARY HUTTON



Scientists from the Royal Ontario Museum retrieve bottom sediment from Crawford Lake with Frigid Finger core sampler.



The Iroquoian village at Crawford Lake was reconstructed after scientific and archaeological discoveries in the 1970s.

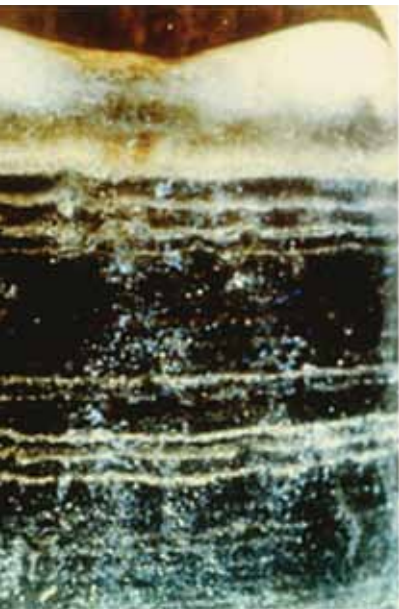


PHOTO PROVIDED BY GARY HUTTON.

A frozen sediment sample from the bottom of Crawford Lake shows alternating dark and light bands; each couplet represents one year of sediment fallout.



PHOTO PROVIDED BY GARY HUTTON.

Archaeologists uncover the outline of the first longhouse at the Iroquoian village at Crawford Lake.

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bands, called varves, can be counted like the growth rings of a tree to accurately date the sediment.

A heavy concentration of fossilized corn pollen was found in the varves dated between 1434 and 1459 suggesting that native corn fields were planted near the lake. The combination of scientific data from the lake and native artifacts collected from nearby farmers' fields, led archaeologists to the village site in 1973. During several digs more than 10,000 pieces of pottery, stone and bone tools and arrowheads were collected and studied. From cryptic traces of human activity concealed in the sediment of Crawford Lake, scientists pieced together an important fragment of the Escarpment's cultural history.

In the early 1980s, Conservation Halton, the local environmental agency and owner of the popular park, reconstructed the pre-contact village on its original site to protect a unique aspect of the Escarpment's human history. Two of the five longhouses, named turtle and wolf clan, were completely restored. Inside the turtle clan longhouse, animal hides, tools and the smell of wood smoke recall the daily existence of the Iroquoians. The wolf clan longhouse, which has

a simulated dig site and exhibits on native life, helps visitors understand the science of archaeology and the lives of the village's early people.

### The Spirit Sings

One of my most memorable experiences at Crawford Lake was spending an overnight in the turtle clan longhouse shortly after it was reconstructed. The adventure was part of an exercise by park staff to develop new education programs for students and families.

It was a moonlit night filled with excitement and great anticipation. The small group of people was about to spend an entire night in the exact location where prehistoric families lived and slept 550 years earlier. Adding to the intrigue were several accounts of park visitors having heard voices from the longhouse after it had been closed for the night. The mysterious sounds heard by different people at separate times, all came from the same location, the far north corner of the longhouse.

Not widely known at the time, this was the same location where the bones of a very young child were uncovered during the first archaeological dig. The Iroquoians believed

that this burial practice would enable a baby to be reborn in its mother's womb.

After much chatter by a crackling fire, we retired for the night to our sleeping bags that were placed on the cedar platforms lining both sides of the longhouse. Of course, our imaginations were running wild with thoughts of connecting with the ancient spirits of the original inhabitants. It was pure magic!

Even though expectations were high, the only sounds heard that night were a couple of chipmunks nibbling on the corn hanging high in the rafters and a fellow staffer snoring. An unforgettable experience, nevertheless, and one that also reflects the unique experience that people have when visiting the Iroquoian village.

The spirit still sings at Crawford Lake today. It sings for a time when early Escarpment dwellers lived in harmony with nature. Visiting the 15<sup>th</sup> century village during maple moon provides much insight into the lifestyle of Ontario's First People and the magic of making maple sugar in ancient times. ■

*Gary Hutton is the author of Halton Hikes and the former director of communications for Conservation Halton.*