

Ash to Cash:

Nature's Burnt Offering to Sutton's Settlers



Made at Les Forges du Saint-Maurice about 1840, this potash kettle is 43 $\frac{3}{4}$ inches wide and weighs 500 pounds. It is pictured with Harry Miller's granddaughter at his home in Sutton.

By Georges Létourneau

"The profits of a man are never greater than when he clears his land," wrote Judge William Cooper, founder of Cooperstown, New York. Sutton pioneers knew that. They cut down trees and burned trunks and branches to produce potash which sold at good profit. The demand for potash was very high then because it was used in many industrial operations.

Potash was, during the pioneer era, extracted from hard wood ashes, and rather easily produced. You leached one volume of ashes in two volumes of water, and boiled the water until you got a black cake of salts. These black salts could be sold as such, or baked into pearl ash (so called because of its white color) by heating the black salts to 1000 degrees Fahrenheit and boiling them to burn all impurities. Pearl ash was only made by asheries who had the more expensive kettle that could stand the necessary heat. To get more potash, some used boiling water at the beginning of the leaching, and others leached the same ashes twice.

A very ancient craft

The use of ashes goes back thousands of years. It is recorded that the Babylonians were making soap as early as 2800 BCE to clean wool in preparation for weaving. The first definite and tangible proof of soap making is found on a clay tablet from Mesopotamia, dated 2200 BCE, where an actual soap recipe is given. In Rome, Pliny the Elder described soap making from goat tallow and ashes. The ruins of Pompeii revealed a soap factory complete with finished bars. In Mexico, three thousands years ago, ashes were used when boiling maize to make hominy.

Close to us, in *Nouvelle-France*, the production of potash was promoted by Intendant Talon. In 1669, he gave to Nicolas Follin the exclusive right to produce potash from ashes collected from inhabitants of Québec. In 1671, Talon built a potashery in Québec that stopped production a few years after his departure.

The growing needs of English industries

The production of potash resumed with the arrival of the British. English industries needed potash to process tons of wool from Australia and tons of cotton from America. The British Empire was expanding too,

creating an ever larger clientele for British industries. Processing wool and cotton means washing, and the required soap is made with potash. Bleaching is done with potash, and dyeing also. England was producing much cheap glassware for the colonies, and making glass takes potash. In 1750, John Mitchell, a Cambridge professor, in a presentation to the *The Philosophical Transactions of the Royal Society*, concluded: "No nation can do without potash, an essential ingredient in soap, dye, bleach and glass, and England is a nation that does not know how to make it right."

There were no large forests in England, and what remained was protected, or used only to build ships, houses and furniture. (Heating was done using coal, not wood.) Aware of this, the Commerce Board continually asked Governors of colonies to promote the production of potash, but Governors always found excuses not to do so. The first few who tried were bankrupted because of lack of competence, and it was soon judged too risky.

Beginning of production

Finally, after the War of Independence, in northern New York and Vermont, where by 1780 thousands of farmers had settled, merchants started to buy ashes and make potash. Potash brought high prices, and the large quantity of cheap ashes meant huge profits, so many were motivated to go into potash production. At the same time, Americans, loyalists and others moved to Sutton and other townships, often after a stay in Caldwell Manor or St-Armand, and they brought potash production with them to the Eastern Townships.

Most merchants accepted black salt and ashes in exchange for goods; there was profit in reselling ashes and producing black salt. In her *History of the Eastern Townships*, Catherine M. Day noted that asheries were usually an appendage of a store.



Pioneers cut down trees and burned the trunks and branches to ash from which they produced potash. Prices were so good in the first half of the 19th century that some farmers did little else. (Photo not from Sutton).

The export demand

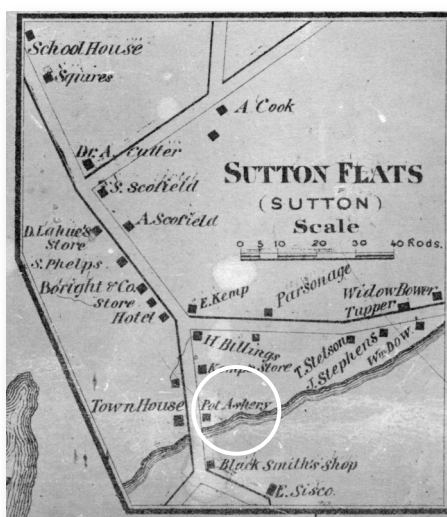
In Europe, The Napoleonic Wars (1799-1815) caused an increase in the North American potash trade. Between 1806 and 1808, the Continental Embargo proclaimed by France and its allies against England, the embargo by England against France, and the embargo of the United States against England, brought international commerce to a standstill. England had to rely entirely on its colonies for supply, and Canada was the only reliable supplier of potash. By 1809, the price of potash was so high that farmers became more interested in burning wood to make potash than anything else. Considerable quantities of potash were made in the Eastern Townships. Reverend Charles Stewart reported in 1815 that some farmers in fact do nothing else. This continued for many years.

The first export of potash to England was made in 1765, but it remained a low-key activity until 1800. Then, in the first half of the 19th

century, production escalated. By 1850 there were 519 asheries in Canada, and in the best years some 45,000 barrels of potash—520 pounds each—were exported. Potash making was the first major economic activity of the Eastern Townships; for many years the Townships and the Ottawa Valley were the most important centers of production.

In 1832, Joseph Bouchette, general surveyor of Lower Canada, published the *Topographical Dictionary of the Province of Lower Canada*. In it he records four potasheries and four pearl asheries in Saint-Armand,

three of each in Potton, three potasheries in Brome and Dunham, but none in Sutton. Solomon Sweet, who opened a store in North Sutton in 1841, was engaged in pot and pearl ashing, this according to Cyrus Thomas, who gives no details. One potashery was eventually built in Sutton Flats; it is shown in front of the City Hall, on Grey's 1864 map.

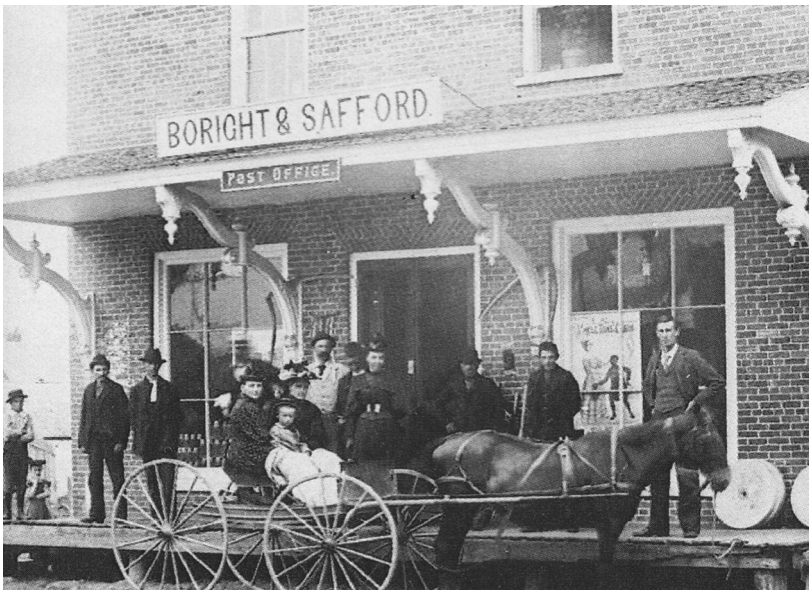


We don't know when it was

built, but certainly one important factor was the arrival of Irish and French Canadian settlers between 1840 and 1860, and the land they cleared for farming.

Potash at the heart of Sutton's economy

To well understand the importance of potash as a cash crop, one must compare the purchasing power of one dollar in those days to its 2011 value. In 1850, one dollar had the value of 25 dollars in 2011. A twenty



The Boright & Safford store, built in 1861, is a symbol of the economic prosperity potash brought to Sutton.

inch elm yielded \$200 of potash, which is \$5000 in 2011 dollars! The average farm revenue was then \$500 per year. A farmhand salary was \$12.50 a month, which often included room and board. A carpenter worked for \$1.40 a day. Thus it was that everybody who had a woodlot was burning wood and selling ashes or black salt. Poor settlers depended on black salt to have a decent living.

Some complained that farms were being neglected, but the farmers were being practical. They were able to buy what they no longer produced, and had money left over to improve their standard of living. Farmers with money to spend changed the economy of the region and the lifestyle of Sutton's citizens.

According to local historians, stores multiplied and villages prospered. A store opened by John Brewster in Abercorn in 1820 lasted



Farmers kept some potash for their own use. Most families made their own soap in their back yards, which they used around the house. (Photo not from Sutton).

four or five years. Major Royce from Richford opened another store in Sutton Flats in 1827, and soon had three competitors: G. Dyer in 1834, O.J. Kemp in 1848, and Boright in 1861. Salomon Sweet had a large store in North Sutton in 1841, and J.M. Ferres had one in Abercorn in 1848. The 1861 census shows ten stores in Sutton; two grist mills; a door, sash and blind factory; two tub factories; two planing mills; a shingle machine; some smaller mechanical works; and twelve sawmills. In the same period (1840-1870), four churches were built, three of them with a rectory. The City Hall and a hotel with a tavern were also built.

It seems that opening a business was the thing to do. We must conclude that there was money available to build these facilities and to keep them in operation. This increase in economic activity cannot be attributed to population growth alone (725 people in 1825 to 3151 in 1861.) In 1861, in Sutton, there were only 625 males over the age of 21, which was only 20% of the population. Sutton had 18 primary schools but just one secondary school, so there were many young children.

Many of those children were a financial burden, not an economic benefit. A farm could provide essential products for the family, but rarely much beyond. Any extra cash had to come from the export of goods, and they had little to sell. And even if they'd had, the lack of good roads made getting fresh produce to market problematic. Sutton was thought by people in adjacent townships to be an out-of-reach place. For the effort, potash was the only export that brought a decent return.

Sutton outgrows potash

By the middle of 19th century, roads were better, and markets were more accessible. Farms as large as 1000 acres had been cleared to make potash, and it was an important source of revenue. In 1865, butter, cheese and wool were also exported, along with large numbers of cattle, horses and sheep. With the arrival of the train in 1871, transport became cheaper and profits grew. While Sutton was mainly an agricultural township, it had important industrial activities too.

Catherine Day writes in 1869 that “during the last twenty years the material improvement in Sutton has been great.” Cyrus Thomas was of the same opinion: “The progress of this township in wealth, and in these things calculated to give importance, in the course of the last twenty years, has few, if any parallels in the Eastern Townships. The population has increased rapidly, business has been active, and at present time every part presents a thriving appearance.” He adds: “The writer well remembers how, when in early boyhood, he was an inhabitant of Richford Vermont; nearly every stranger with homespun garb, an old horse and rickety wagon, was styled “Suttonite”. Twenty years, however, have wrought great changes in the world; and it is evident that the good people of Richford are sensible to this change, from the contrast existing between their former and present opinion of Sutton and its inhabitants.”

Potash production, which once played a vital role in Sutton's development, soon disappeared. Harry Miller, a citizen of Sutton, did some elaborate research on the matter thirty years ago. He summarized the history of this primitive industry, once practiced on a large scale in the Eastern Townships, as follows: "a slow growth from the dribble of 1765 to the boom of the 1830-1850 period and then the slow decline into oblivion, and a forgotten industry and an historical curiosity." And so it was. ●

From Burning to Mining

And so it was for Sutton, but not for the rest of Canada. The production of potash has continued in Canada, with the development of important mines in Saskatchewan and in New Brunswick. It made news in 2010 when BHP Billiton, an Australian concern, attempted a hostile take-over of Potash Corporation, a move eventually blocked by the Canadian Government. Canada has a production estimated at 20 million tons a year, and is still the largest producer of potash in the world.

Sources

- Bouchette, Joseph. 1832. *A Topographical Dictionary of the Province of Lower Canada*. London.
- Cooper, William. 1810. *A Guide to the Wilderness*.
- Day, Catherine Matilda. 1869. *History of the Eastern Townships*.
- Miller, Harry. 1980. *Potash from Wood Ashes: Frontier Technology in Canada and the United States*, Technology and Culture, Vol. 21, No.2, Apr.1980.
- Miller, Harry. 1968. *Canada's Historic First Iron Castings*. Department of Energy, Mines and Resources. Ottawa.
- Pliny the Elder. (23AD-79AD) *Naturalis Historia*.
- Sesquicentennial of Sutton*, 1952. Album souvenir. Sutton.
- Stewart, Charles. 1815. *A Short View of the Present State of the Eastern Townships in the Province of Lower Canada*. London.
- Thomas, Cyrus. 1866. *Contribution to the history of the Eastern Townships*. John Lowell, Montréal.