STURBRIDGE — People give little to no thought about reaching into the freezer for an ice cube to cool down their favorite beverage. While it seems insignificant today, having ice to keep food and drinks cold was once a modern miracle that started on frozen lakes and ponds.

On Saturday, Jan. 26, visitors to Old Sturbridge Village (OSV) will have the opportunity to see how ice was harvested and stored long before the advent of refrigerators and freezers.

Dennis Picard and Thomas Kelleher have been harvesting ice for the past decade, using methods developed in the late 1800s.

Picard and Kelleher will portray ice-harvesting laborers working for 19th-century Boston merchant Frederick Tudor, who was dubbed “The Ice King.”

Tudor made New England’s ice harvesting a global business by shipping ice from a Lynn pond to the West Indies in 1805.

Picard has spent the last 30 years working in living history museums such as OSV, and ice harvesting, he said, “was one more trade I wanted to explore.”

In 1996, the Folk Lore Society of New York offered a class in harvesting ice, and Picard has been researching and documenting its history since then.

Business venture

According to Picard, the first patent for an icehouse was awarded by the British monarchy in the 1630s and covered all of New England.

“The earliest ice harvesting took place in New England in the 1700s,” he said. “Most ice was cut for taverns, large homes or plantations. The average person didn’t harvest ice until the end of the 18th century.”

By the 1790s, a number of businessmen attempted exporting ice, but it did not catch on until Tudor proved the export of ice could be successful and profitable.

“He became one of the, if not the first millionaire in the United States,” said Picard.

Tudor was originally from Boston and exported his ice from there, even though most of it was cut from ponds across eastern Massachusetts.

Today, said Picard, the wharf used by Tudor is now home to a hotel. A small plaque is all that reminds visitors of his enterprise.

Tudor, Picard added, had ties to Sturbridge as either owner or part owner of the lead mines in West Sturbridge where Lead Mine Park now stands.

In 1806, Tudor began exporting ice to the Caribbean, packed aboard ships in a large mass, which allowed the ice to maintain freezing temperatures longer. He also exported ice to South America, India and Europe.

There was, however, said Kelleher, a hitch buyers didn’t count on.
“The problem was people would buy ice and having never seen it, would leave it in the sun and it would melt,” he said.

Eventually, Tudor built icehouses in Cuba to store his frozen cargo.

“Icehouses were basically a house within a house, with straw, tan bark or sawdust as insulation between them,” said Kelleher, adding that ice stored in such houses could last until the following winter.

Early on, said Picard, it was kept in ice cellars, as the ancient Romans did. While temperatures were cooler in the cellar, they were not cold enough to maintain ice year round.

“Because they couldn’t get below freezing, they weren’t the best way to keep ice,” he said.

Moreover, enterprising businessmen such as Tudor created the demand for ice, even though it was basically a luxury, Kelleher noted.

“Once it’s there, people want it,” said Picard. “Tudor would show tavern keepers how to make iced drinks for free. Then, after creating the demand, Tudor would sell the ice to taverns.”

Early cartel?

Tudor’s market was the rich living in warm climates, and who could afford to buy ice.

“Ice could cost as much as 10 cents a pound in the Caribbean,” said Kelleher.

“Ten cents a pound was like more than an hour’s wage, to put it into context,” he added.

Tudor enriched himself further by obtaining a license that would essentially allow him a monopoly for selling ice anywhere he exported to.

By the mid-1800s, farmers would harvest ice and store it year round to make butter.

“In the heat of summer, you can’t let the cream rise unless you have a way to keep it cool,” Kelleher said.

Early on, it was a hit or miss thing, Picard explained.

“There were no specialized tools for it,” he said. “People would use axes to get chunks of ice for personal use or, perhaps, for taverns.

“A lot of farmers would cut ice during the winter for their own use,” said Picard. “What they would do to afford it, is use their own labor and perhaps buy the special tools necessary to cut their own ice.”

Nathaniel Wyeth, he noted, invented not only a technique for harvesting ice, but also the tools commonly used for harvesting the ice, such as an ice plow or ice saw and breaker bars.

Picard and Kelleher’s expertise in harvesting ice has been documented by the British Broadcasting Company (BBC).

The pair are featured in a segment on ice harvesting in an upcoming “Nova” documentary titled “Absolute Zero: The Conquest of Cold,” produced by the BBC. It will air various times during January on Public Broadcasting Service (PBS) stations. For information on dates and times, visit www.pbs.org/wgbh/nova/zero.

‘Absolute Zero’

The ice must be at least 12 inches thick and free of any snow. The ice is then marked into 2-foot squares, and separated with large-toothed ice saws, breaker bars and pikes. It was then either floated through a lane of open water or loaded on sleds to be stored in the icehouse with straw or sawdust for insulation.

Harvesting, Kelleher said, was typically done during daylight hours in the winter. It was also dependent on the weather.
“It varies from one winter to the next,” Kelleher said.

Ice harvesters would work until the job was done, rather than on an hourly basis.

Further, where the ice would be harvested depended on its proximity to roads and railways. Icehouses were built along the shores of the ponds or lakes.

Ice was harvested on the Wight Family Mill Pond at OSV, said Picard. After draining the pond several years ago, researchers found the remnants of a number of ice harvesting tools.

Remarkably, one person could harvest a significant amount of ice, approximately 15 tons, said Picard. “A single block weighs between 80 and 100 pounds depending on how dense the ice was.

“A full commercial crew could do 100 tons of ice a day,” he added.

Bruce Coulter may be reached at (508) 909-4138, or by e-mail at bruce@villagernewspapers.com.