

Otsego Lake Association Winter Update 2022

The Lake is Frozen!

This season the waters of Otsego Lake have frozen earlier than in recent years, with our Biological Field Station reporting official ice-in for 2022 on January 21st. Historically, records dating back to the 1840's show that the lake has been officially closed by ice every year-- until the 21st century. Now, in just a relatively short period of time, we've seen three of the past twenty winter seasons with open waters replacing inches or feet of solidly frozen ice. The lake tends to freeze later- and open sooner--than in years past, and the ice is usually not as thick as measured in the nineteenth or even twentieth century.

This trend has many implications for the future, including affecting the health of the lake waters. Of course this phenomenon certainly concerns scientists, but it also impacts those of us who enjoy winter activities on and around the lake. Many of us eagerly anticipate ice skating, cross country skiing, snowshoeing or ice fishing-- and look forward to annual community events such as Winter Carnival.

The quality and thickness of each season's ice is obviously very important to the safety of everyone who wants to enjoy time on our lake in the winter. On January 20th of this year, just before the lake was first declared ice-covered, an All Otsego article authored by Ted Potrikus questioned the safety of the ice at that time. Matt Albright from SUNY Oneonta Biological Field Station reported that venturing out when "the ice couldn't have been more than an inch thick in places" was "risky behavior." Mr. Albright also noted that the Field Station requires at least four inches of new, clear ice before students are allowed on the ice, while old, white ice needs to be at least six inches thick. Additionally, students must use an augur to check ice thickness when first venturing out.



Walking safely on 9-inch-thick "old" ice

Nineteenth century observations by Susan Fenimore Cooper

Although many Cooperstown residents and visitors are delighted when the lake ices over, some community members are apparently much more enthusiastic about *ice-out* than *ice-in*! One notable local resident, Susan Fenimore Cooper, made her views on lake ice quite clear over 170 years ago.

In her most notable work, **Rural Hours**, first published in 1850, Susan Cooper recorded this entry for Monday, January 8, 1849:

“Cold night. The lake is frozen. We have seen the last of its beautiful waters for three months, or more. One always marks the ice gathering about them with regret.” One week later, on January 17th, Cooper further opined that “there is a fixed, glassy look about the ice, which.....reminds one what a poor simile is that of a mirror for the mobile, graceful play...of the living waters in their natural state.”

Although Ms. Cooper clearly missed the warm, summertime waters of the lake, she also acknowledged that others were taking to the frozen ice, noting that even at “16 degrees below zero the fishermen have already taken possession of the ice, with their hooks baited for pickerel and salmon-trout,” and that there were “Troops of boys skating on the lake.” And on January 23rd Ms. Cooper wrote that she, herself, took a “Walk on the lake,” though she still seemed to find the appearance of ice on the lake somewhat less-than-desirable:

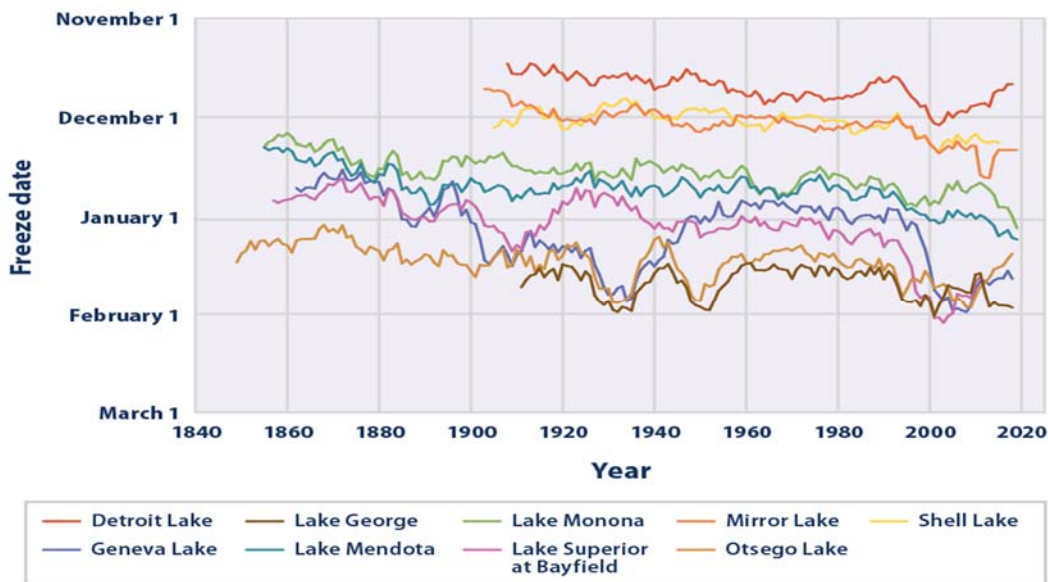
“the ice...is just now dark almost to blackness....we never saw it more dark ...of course it is the deep waters beneath, shut out from the light as they are, which give this grave color to the ice as you look down upon it.”

A Long History of Ice Records for Otsego Lake

Susan Fenimore Cooper was one early resident to observe lake conditions and to record ice data for future generations, but subsequently *The Freeman's Journal* and later the Biological Field Station collected and published “official” ice-in and ice-out dates each year. Those statistics were further organized and charted by Field Station researcher Holly Waterfield, Certified Lake Manager, and then in 2017 lake data was much expanded with the installation of the automated lake monitoring buoy, which was acquired by OLA Technical Advisor and SUNY-Oneonta Professor Kiyoko Yokota with support from the National Science Foundation. Now measures of more than 40 weather and water quality factors

can be recorded and transmitted to data centers in real time. Since Otsego Lake ice has been studied and its data consistently recorded for so many years, our lake’s ice-in and ice-out information has been analyzed by the Environmental Protection Agency, together with data from eight other North American lakes, to detect trends in ice formation and duration.

Not surprisingly, the EPA chart below, showing data for nine lakes from 1850--2020, indicates that these lakes are experiencing later ice-in dates over the decades. Otsego Lake is shown in light tan, towards the bottom of the chart, beginning in 1850 with dates near the January 1st mark. Over time, the trend for ice-in is closer to February 1, which the EPA finds significant.



This figure shows the “ice-on” date for nine U.S. lakes. The data are available from as early as 1850 to 2019, depending on the lake, and have been smoothed using a nine-year moving average.

The EPA reports that “changes in ice cover can affect the physical, chemical, and biological characteristics of a body of water.....Reduced ice cover leads to increased evaporation and lower water levels, as well as an increase in water temperature and sunlight penetration. These changes, in turn, can affect plant and animal life cycles and the availability of suitable habitat.”

Additional charts and information on the EPA lakes data can be found at:

<https://www.epa.gov/climate-indicators/climate-change-indicators-lake-ice>

Ice fishing on Otsego Lake

Beyond changes in the ice itself, there have also been many noteworthy modifications of our lake activities. In 1849, for example, Susan Cooper observed that local fishermen were baiting their hooks to catch pickerel and salmon-trout. At that time, holes in lake ice were commonly made with an axe, which preceded the use of a hand-held augur.

More recently, many of us fondly remember the twentieth-century colorful “permanent” ice fishing shanties, which were brought out onto the ice when it was deemed safe, and then laboriously removed and stored for another season. Some of these huts were very well-equipped and provisioned, with reports of ample heat and possibly even libations! The distinctive shanties pictured below were located near Lakefront Park, and were built to last—unless, of course, they were left out too long while the ice was melting....



Photo by Henry S.F. Cooper Jr. Circa 1962

Now, however, our fishing shanties are often pop-up structures, designed to be easily transported, assembled, and removed from the ice at the end of the day. We no longer bait our hooks for pickerel or salmon trout, but primarily for lake trout, walleye, and perch, and we fish through holes cut by powered augurs.



Headed out for a day of ice fishing 2022

Winter Carnivals on and around the Lake

Besides ice fishing, local residents and visitors alike have traditionally enjoyed our annual Winter Carnivals. These popular events have also changed through the years, in accordance with lake conditions and “the times.” In 2020, *New York Upstate* featured Cooperstown as one of the “Top Ten” winter carnivals to check out in our region. They recommended carnivals as a means to “break up the monotony of winter,” and ours was noted for its Medallion Search, ice skating, karaoke contest, “and more.”

Some of us recall very different events from earlier Winter Carnivals during the latter portions of the twentieth century. These Carnivals sometimes featured dog sled races which began in the Village and then proceeded to Lakefront Park and onto the frozen lake. There are also some local residents who recall auto races on the frozen waters, and there are reports that the Busch family’s Clydesdales ventured out on the ice when they were stabled in Cooperstown.

But perhaps the most historically consistent activities associated with Winter Carnivals were snow and ice sculpting. Even in 2021, when the Winter Carnival activities were somewhat curtailed and held virtually due to the pandemic, businesses, individuals, and families could design and build their own snow sculptures and then enter them in the Carnival contest. Looking back fifteen years, another notable event was in 2007, when Cooperstown hosted the New York State Annual Snow Sculpting Contest for the first time. Over two dozen New York artists created a great variety of ten-foot- high works of art from huge blocks of snow. Many tons of the frozen white stuff were hauled in for the competition, which was held in Lakefront Park. Teams worked on their sculptures for three days and nights, vying for the opportunity to represent New York in the National Snow Sculpting Championship.

And reaching back in history to the first half of the twentieth century, we find even more evidence of Winter Carnivals and sculpting. Each year, as the Otesaga Hotel morphed into The Knox School for Girls in the off-season, Winter Carnivals were a much-anticipated event. Indeed, in a 1941 advertisement for The Knox School in the *Smith College Alumnae Quarterly*, the featured incentives for enrolling at Knox included “four years college preparation, music, art, vocational

courses, and ***Winter Carnival.***” There were ice sculpting contests involved in the Knox School’s Carnivals, and blocks were also used to create a throne for the reign of the Ice Queen and her Court. A 1935 Press Photo portrays a large, and carefully constructed throne:



Ice throne, Knox School for Girls, Photo by Halbran

The source for all those blocks or cakes of ice was undoubtedly our own Otsego Lake, which hosted a thriving ice harvesting business during that time period. In fact, noted local resident Cliff Drake noted in his memoir ***As I remember It*** that his ice harvesting business had indeed provided the ice for the Knox School’s carnival and throne in the 1930’s.

Ice Harvesting on Otsego Lake

Mr. Drake noted that ice harvesting on Otsego Lake in the early 1900’s was “big business,” with “good money to be made.” He also observed that one benefit of ice harvesting was that it provided “work for all,” as many men who farmed or worked in the building trades in warmer months really needed employment during the winter. But ice harvesting was not a job for the faint-of-heart. Workers often toiled through ten hour days doing what many of us would consider “back-breaking” work, with very simple tools of the trade. And they also had to deal with the inherent dangers of working on the ice, which included not only injuries from large saws, jiggers, grappling hooks, and tongs, but also the ever-present danger of falling through the ice.

In **As I Remember It**, Mr. Drake reported that his first experience with ice harvesting was in 1926, when he was hired to cut ice on a farm pond located in back of Hartwick Seminary. Using hand saws, he was paid three cents per cake of ice cut and carried to the ice house for storage. The ice he helped to cut that season provided cakes for “3 to 4 farmers who each put in 200-300 cakes.” That appears to work out to a maximum take-home-pay of \$36.00 for the season, often in challenging and dangerous conditions. But Mr. Drake clearly used and expanded upon this early experience with ice harvesting when he purchased his own farm in 1929.

Known as the Hickory Grove Farms, and also locally as simply “the Drake Farm,” it was primarily a dairy farm, but also much appreciated for its ice harvesting. Mr. Drake went into quite a bit of detail about the ice business in his memoir, beginning with a narrative about all that was entailed in his enterprise. Their season began with cleaning out the ice house, removing all of the old insulating sawdust and any remaining bits of “old” ice. Then workers could begin cutting the season’s ice--once it was thick enough. Twelve inches was the preferred thickness, and Mr. Drake reported that once or twice he had to move his operation to Allen’s Lake, as the ice on Otsego that season was “only six or seven inches thick.”



Men and Horses Harvesting Ice for Drake Farm at Six Mile Point

from **As I Remember It**

Drake's ice cakes were each cut to be 12X16X22 inches, and he and his workers harvested approximately 3500 cakes each season. In addition to the ice he stored for his own or business use, he would also cut for others, charging five cents for each cake. But the cutting was just the beginning of the tasks involved in getting the ice into storage. Workers had to poke and prod the blocks into shore, where they were lifted from the channel with tongs, then moved with a jigger and ropes into horse-drawn cart—or in later years a truck. The cakes were then pulled or driven to the ice house, where they were stacked and insulated with about six inches of sawdust around them.



Taking the Cakes from Otsego Lake from As I Remember It

The Drakes furnished ice cakes not only to the Knox School, but to many other local residences and business as well. Mr. Drake recalled supplying the Anheuser Busch home with ice, noting that he filled several ice boxes in their barn to keep the beer cold." Local hotels and restaurants also benefitted from his services, including the Red Shingle Inn in Springfield. Observing that "there was good money to be made in the ice business," Drake cited the lake camps as a good customer base, as they needed ice to keep food from spoiling or to chill a drink. Drake recalled that some lake campers who arrived late at night would go directly

go to ice house for their cakes, but others apparently felt free to wake him to get their ice.

As with many other lake activities, ice harvesting evolved over time, with increased mechanization and more effective storage. But, as Mr. Drake noted, the business was “all over” by the 1940’s, when refrigerators supplanted the ice box and eliminated the need for ice harvesting. For some of us in lake camps, however, memories of that time lived on, as we so often heard our grandparents continue to refer to our refrigerators as “ice boxes.” Indeed, one grandparent was heard to refer to the lake waters as “cold as the ice box today.” That simile could be loosely translated as “only the grandkids would be crazy enough go swimming in that lake this afternoon.” And those words rang true--- as many of us who grew up to love our lake will tell you – that was indeed exactly what we all did.

Written with thanks to:

Lisa and John Drake, for sharing **As I Remember It**.

Elizabeth Cooper for permission to use her father’s photo of Ice Shanties.

The staff of Hanford Mills, who generously shared their time and very impressive expertise on “All Things Ice Harvesting.”

Finally, for those who share Susan Fenimore Cooper’s enthusiasm for Ice **OUT**:



SPRING IS COMING!