



# Historical Ice-Out Dates for 29 Lakes in New England

Open-File Report 02-34



U.S. Department of the Interior  
U.S. Geological Survey

Cover photograph: Ice-out on Sebago Lake, Jordan Bay, Spring 1985  
*By Glenn Hodgkins*

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By Glenn A. Hodgkins and Ivan C. James II

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GALE A. NORTON, Secretary

U.S. GEOLOGICAL SURVEY  
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## ABSTRACT

Historical ice-out dates for 29 lakes in New England were compiled and are presented in this report. The length of record for the lakes ranges from 64 to 163 years, with an average of 108 years. Many lakes in New England had their latest recorded ice-out date in 1888. Ice-out dates for lakes are an important hydrologic data series for climate researchers and other interested parties.

## INTRODUCTION

Changes (or lack of changes) in long-term hydrologic data series in New England and other regions of the world are documented for several reasons, including validation of global circulation models at a regional scale and analysis of the effects of climatic changes on regional ecosystems. One long-term hydrologic data series that has not been well documented for the six New England states in published reports is lake ice-out dates. Lake ice-out dates are the annual dates in the spring when winter ice cover leaves a lake. Lake ice-out dates have been historically recorded in New England for practical reasons such as lake transportation and out of general interest.

Long-term data were compiled for 29 lakes in New England from individuals, water companies, newspapers, State fisheries agencies, power companies, and others. This report makes these data available to researchers and other interested parties. This report would not have been possible without the collection, compilation, and archiving of lake ice-out dates by many people over the past two centuries, especially Charles B. Fobes of Portland, Maine. Mr. Fobes'

interest in lake ice-out dates extends back to the 1940's (Fobes, 1945). He recorded dates from observers at many lakes in Maine over the years and compiled older historical data at lakes. Much of the data presented in this report would have been lost or never collected without Mr. Fobes' work. Fifty-seven known individuals and organizations, and several unknown sources, contributed the data presented in this report. This study was funded by the U.S. Geological Survey Global Change Hydrology Program.

## COMPILATION OF LAKE ICE-OUT DATES

Records from all six New England states (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont) were searched for long-term lake ice-out dates. This was done primarily by calling town officials, lake associations, newspapers, and fisheries agencies and following up on leads. It was not possible to search for records on all lakes. Particular attention was given to large lakes and lakes with nearby towns. Long-term lake ice-out dates were found for 29 lakes in New England (fig. 1). Most of these lakes are in Maine, with a few in New Hampshire and Massachusetts. No long-term records were found in Vermont, Connecticut, or Rhode Island. The ice-out records range from 64 to 163 years, with an average length of record of 108 years. Five lakes in New England have more than 150 years of data, and 16 have more than 100 years of data. The oldest record, for Sebago Lake, starts in 1807.

Ice-out definitions for individual lakes can vary over time and between observers. The exact definition (including the observation location) is not known with confidence in most cases. For lakes with overlapping

data from more than one independent observer, the data that were judged to be most consistent over time with data from earlier and later time periods for that lake were used. No missing years of ice-out dates were estimated, and no adjustments to lake-ice observations were made, with the following exceptions: 19 years of data at Damariscotta Lake and 2 years at Cobbosseecontee Lake were filled in from a secondary observer and adjusted by the average difference in the dates between the primary and secondary observers; 1 year of data at China, Damariscotta, Portage, and Sebec Lakes and 2 years at Messalonskee Lake were not reasonable based on comparisons with other lakes in New England and were dropped from the dataset. Lake ice-out dates in Julian Days (January 1 of each calendar year is Julian Day 1, January 2 is Julian Day 2 and so forth) are given in tables 1 to 29. The latitude and longitude given in the tables are intended for general lake location only and do not necessarily represent the ice-out observation location. The geographic location of the 29 lakes are shown in figure 1. The numbers in figure 1 correspond to the table numbers for each lake.

## **EXTREMES OF LAKE ICE-OUT DATES**

The differences between the earliest and latest ice-out dates for most lakes in New England were between 35 and 55 days. Seven lakes had their latest recorded ice-out date in 1888. Most remaining lakes with data for 1888 were within a few days of their record. Seven lakes in northern and mountainous areas of Maine and New Hampshire had their latest recorded ice-out dates in 1972. Nine lakes, primarily in southern Maine, had their earliest recorded ice-out dates in 1981, and eight lakes in northern and mountainous areas of Maine had their earliest recorded dates in 1945.

## **REFERENCE CITED**

Fobes, C.B., 1945, The ice clearing dates of the Maine Lakes: Bulletin of the American Meteorological Society, v. 26, no. 8, p. 331-333.



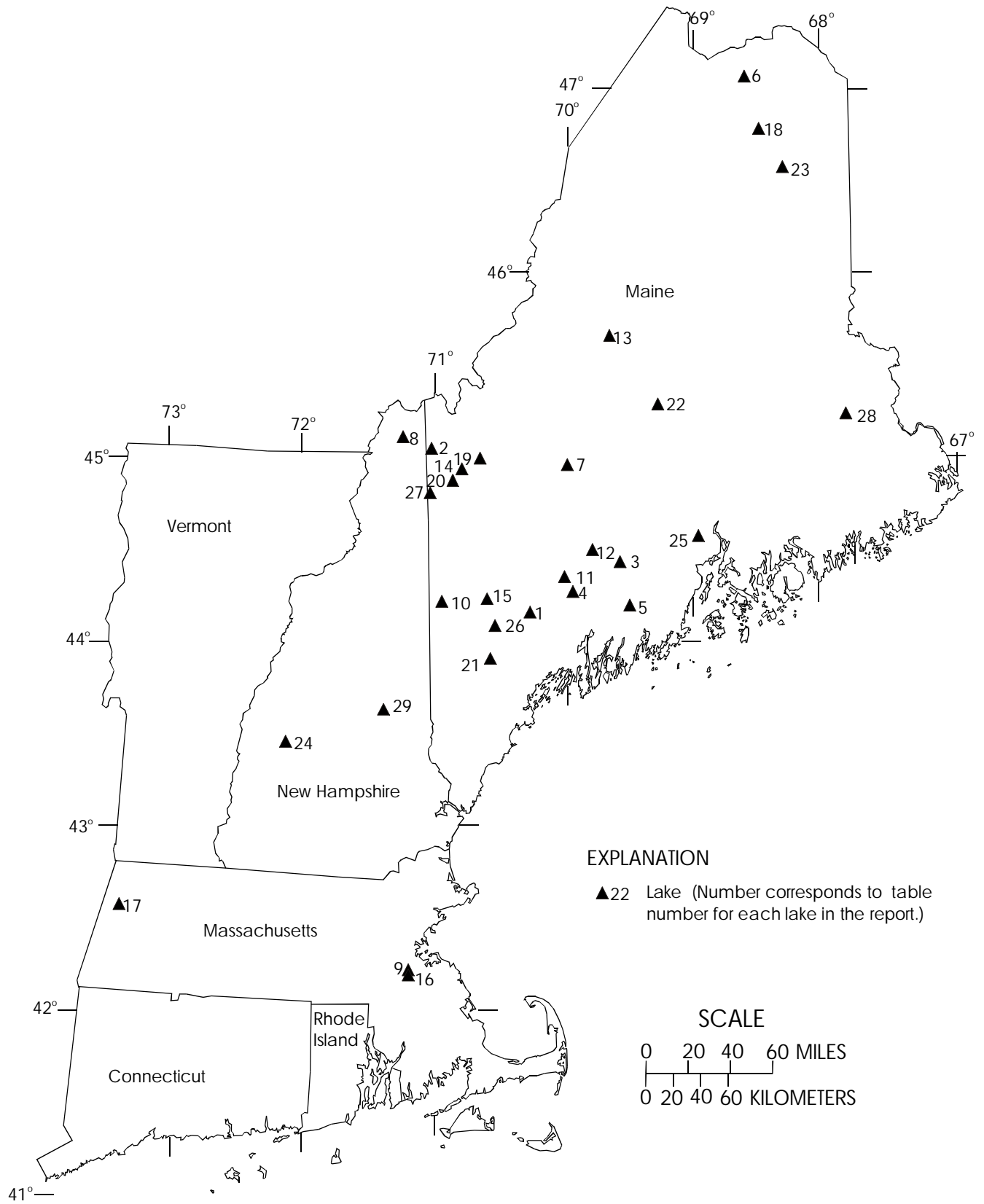


Figure 1. Location of lakes with long-term ice-out data in New England.

**Table 1.** Ice-out dates for Lake Auburn, Maine

[--, no data]

**Location of Lake.**—Lat. 44°08'40", long. 70°15'00".**Period of Record.**—1836 to 2000.**Years of Record.**—158.**Observers.**—Auburn Water District, Union Water Power Company, FPL Energy Maine, Lewiston Sun-Journal.**Earliest Ice-Out Date.**—1981: 89.**Latest Ice-Out Date.**—1874: 134.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	105	1885	118	1924	112	1963	110
1808	--	1847	130	1886	114	1925	99	1964	117
1809	--	1848	108	1887	126	1926	122	1965	112
1810	--	1849	104	1888	132	1927	106	1966	110
1811	--	1850	121	1889	107	1928	111	1967	119
1812	--	1851	111	1890	116	1929	113	1968	105
1813	--	1852	128	1891	117	1930	104	1969	114
1814	--	1853	112	1892	112	1931	101	1970	117
1815	--	1854	126	1893	125	1932	111	1971	121
1816	--	1855	125	1894	114	1933	112	1972	127
1817	--	1856	116	1895	113	1934	113	1973	107
1818	--	1857	111	1896	116	1935	115	1974	100
1819	--	1858	--	1897	116	1936	105	1975	119
1820	--	1859	120	1898	108	1937	117	1976	108
1821	--	1860	115	1899	120	1938	109	1977	109
1822	--	1861	115	1900	116	1939	126	1978	118
1823	--	1862	126	1901	105	1940	127	1979	113
1824	--	1863	123	1902	94	1941	104	1980	104
1825	--	1864	--	1903	94	1942	108	1981	89
1826	--	1865	--	1904	122	1943	117	1982	118
1827	--	1866	--	1905	113	1944	120	1983	97
1828	--	1867	--	1906	114	1945	93	1984	111
1829	--	1868	--	1907	120	1946	101	1985	94
1830	--	1869	--	1908	115	1947	108	1986	104
1831	--	1870	114	1909	110	1948	102	1987	102
1832	--	1871	106	1910	95	1949	100	1988	103
1833	--	1872	122	1911	119	1950	114	1989	112
1834	--	1873	121	1912	114	1951	99	1990	104
1835	--	1874	134	1913	108	1952	111	1991	98
1836	129	1875	126	1914	114	1953	91	1992	101
1837	120	1876	126	1915	103	1954	109	1993	111
1838	117	1877	110	1916	113	1955	107	1994	113
1839	108	1878	105	1917	117	1956	120	1995	104
1840	119	1879	128	1918	114	1957	108	1996	100
1841	120	1880	112	1919	101	1958	107	1997	114
1842	109	1881	113	1920	118	1959	114	1998	98
1843	126	1882	122	1921	93	1960	122	1999	97
1844	111	1883	121	1922	107	1961	121	2000	97
1845	122	1884	119	1923	118	1962	113		

**Table 2.** Ice-out dates for Aziscohos Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 45°01'16", long. 71°00'51".**Period of Record.**—1913 to 2000.**Years of Record.**—86.**Observers.**—Union Water Power Company, FPL Energy Maine.**Earliest Ice-Out Date.**—1945:104.**Latest Ice-Out Date.**—1972:141.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	130	1963	127
1808	--	1847	--	1886	--	1925	118	1964	128
1809	--	1848	--	1887	--	1926	136	1965	126
1810	--	1849	--	1888	--	1927	112	1966	137
1811	--	1850	--	1889	--	1928	135	1967	127
1812	--	1851	--	1890	--	1929	131	1968	114
1813	--	1852	--	1891	--	1930	125	1969	131
1814	--	1853	--	1892	--	1931	113	1970	136
1815	--	1854	--	1893	--	1932	129	1971	134
1816	--	1855	--	1894	--	1933	131	1972	141
1817	--	1856	--	1895	--	1934	--	1973	123
1818	--	1857	--	1896	--	1935	--	1974	135
1819	--	1858	--	1897	--	1936	122	1975	133
1820	--	1859	--	1898	--	1937	133	1976	118
1821	--	1860	--	1899	--	1938	120	1977	126
1822	--	1861	--	1900	--	1939	133	1978	136
1823	--	1862	--	1901	--	1940	136	1979	122
1824	--	1863	--	1902	--	1941	118	1980	125
1825	--	1864	--	1903	--	1942	125	1981	121
1826	--	1865	--	1904	--	1943	138	1982	130
1827	--	1866	--	1905	--	1944	132	1983	126
1828	--	1867	--	1906	--	1945	104	1984	123
1829	--	1868	--	1907	--	1946	122	1985	117
1830	--	1869	--	1908	--	1947	137	1986	116
1831	--	1870	--	1909	--	1948	116	1987	110
1832	--	1871	--	1910	--	1949	118	1988	120
1833	--	1872	--	1911	--	1950	128	1989	128
1834	--	1873	--	1912	--	1951	122	1990	124
1835	--	1874	--	1913	122	1952	121	1991	123
1836	--	1875	--	1914	128	1953	114	1992	135
1837	--	1876	--	1915	116	1954	128	1993	123
1838	--	1877	--	1916	129	1955	122	1994	131
1839	--	1878	--	1917	134	1956	134	1995	122
1840	--	1879	--	1918	119	1957	121	1996	131
1841	--	1880	--	1919	125	1958	127	1997	133
1842	--	1881	--	1920	131	1959	126	1998	113
1843	--	1882	--	1921	106	1960	123	1999	122
1844	--	1883	--	1922	123	1961	136	2000	122
1845	--	1884	--	1923	126	1962	129		

**Table 3.** Ice-out dates for China Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 44° 26'02", long. 69° 32'44".**Period of Record.**—1874 to 2000.**Years of Record.**—74.**Observers.**—The Town Line, Bill Foster, Captain James Allen, Theresa Plaisted.**Earliest Ice-Out Date.**—1981: 77.**Latest Ice-Out Date.**—1875: 126.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	--	1963	112
1808	--	1847	--	1886	--	1925	--	1964	112
1809	--	1848	--	1887	--	1926	--	1965	108
1810	--	1849	--	1888	--	1927	--	1966	108
1811	--	1850	--	1889	--	1928	--	1967	119
1812	--	1851	--	1890	--	1929	--	1968	104
1813	--	1852	--	1891	--	1930	--	1969	113
1814	--	1853	--	1892	--	1931	--	1970	113
1815	--	1854	--	1893	--	1932	118	1971	120
1816	--	1855	--	1894	--	1933	110	1972	122
1817	--	1856	--	1895	--	1934	119	1973	98
1818	--	1857	--	1896	--	1935	115	1974	92
1819	--	1858	--	1897	--	1936	95	1975	113
1820	--	1859	--	1898	--	1937	110	1976	102
1821	--	1860	--	1899	--	1938	110	1977	108
1822	--	1861	--	1900	--	1939	124	1978	111
1823	--	1862	--	1901	--	1940	--	1979	102
1824	--	1863	--	1902	--	1941	106	1980	101
1825	--	1864	--	1903	--	1942	--	1981	77
1826	--	1865	--	1904	--	1943	--	1982	112
1827	--	1866	--	1905	--	1944	--	1983	91
1828	--	1867	--	1906	--	1945	92	1984	108
1829	--	1868	--	1907	--	1946	--	1985	96
1830	--	1869	--	1908	--	1947	102	1986	98
1831	--	1870	--	1909	--	1948	99	1987	96
1832	--	1871	--	1910	--	1949	96	1988	97
1833	--	1872	--	1911	--	1950	104	1989	112
1834	--	1873	--	1912	--	1951	99	1990	101
1835	--	1874	112	1913	--	1952	110	1991	98
1836	--	1875	126	1914	--	1953	78	1992	106
1837	--	1876	121	1915	--	1954	109	1993	111
1838	--	1877	106	1916	--	1955	103	1994	110
1839	--	1878	102	1917	--	1956	118	1995	99
1840	--	1879	123	1918	--	1957	100	1996	96
1841	--	1880	112	1919	--	1958	106	1997	113
1842	--	1881	109	1920	--	1959	112	1998	99
1843	--	1882	--	1921	87	1960	112	1999	92
1844	--	1883	119	1922	--	1961	120	2000	95
1845	--	1884	--	1923	--	1962	110		

**Table 4.** Ice-out dates for Cobbosseecontee Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 44° 16'18", long. 69° 55'46".**Period of Record.**—1840 to 2000.**Years of Record.**—159.**Observers.**—Sara Farr, Mary Oatway, Bill Schenck.**Earliest Ice-Out Date.**—1981: 75.**Latest Ice-Out Date.**—1888: 130.**Comments.**—1974 and 1994 were filled in from a secondary observer and adjusted by the average difference in the dates between the primary and secondary observers.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	107	1885	119	1924	110	1963	111
1808	--	1847	128	1886	110	1925	96	1964	112
1809	--	1848	--	1887	127	1926	123	1965	109
1810	--	1849	--	1888	130	1927	106	1966	109
1811	--	1850	121	1889	105	1928	111	1967	119
1812	--	1851	111	1890	116	1929	111	1968	104
1813	--	1852	124	1891	118	1930	103	1969	114
1814	--	1853	110	1892	109	1931	102	1970	120
1815	--	1854	128	1893	124	1932	111	1971	120
1816	--	1855	115	1894	114	1933	109	1972	120
1817	--	1856	117	1895	111	1934	112	1973	107
1818	--	1857	107	1896	113	1935	115	1974	96
1819	--	1858	108	1897	114	1936	103	1975	115
1820	--	1859	120	1898	106	1937	113	1976	107
1821	--	1860	114	1899	119	1938	108	1977	111
1822	--	1861	115	1900	114	1939	124	1978	117
1823	--	1862	126	1901	110	1940	123	1979	107
1824	--	1863	122	1902	92	1941	102	1980	100
1825	--	1864	114	1903	95	1942	103	1981	75
1826	--	1865	103	1904	119	1943	116	1982	112
1827	--	1866	108	1905	111	1944	119	1983	100
1828	--	1867	117	1906	114	1945	93	1984	107
1829	--	1868	122	1907	121	1946	97	1985	95
1830	--	1869	119	1908	112	1947	104	1986	101
1831	--	1870	114	1909	109	1948	100	1987	101
1832	--	1871	99	1910	94	1949	101	1988	102
1833	--	1872	124	1911	118	1950	111	1989	113
1834	--	1873	122	1912	115	1951	96	1990	104
1835	--	1874	124	1913	107	1952	111	1991	97
1836	--	1875	122	1914	116	1953	87	1992	100
1837	--	1876	122	1915	104	1954	109	1993	111
1838	--	1877	108	1916	113	1955	106	1994	114
1839	--	1878	104	1917	116	1956	119	1995	99
1840	106	1879	125	1918	118	1957	103	1996	98
1841	118	1880	113	1919	100	1958	106	1997	113
1842	106	1881	111	1920	119	1959	112	1998	95
1843	125	1882	118	1921	91	1960	115	1999	94
1844	113	1883	121	1922	105	1961	120	2000	94
1845	122	1884	117	1923	116	1962	112		

**Table 5.** Ice-out dates for Damariscotta Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 44° 10'57", long. 69° 28'45".**Period of Record.**—1837 to 2000.**Years of Record.**—163.**Observers and Ice-Out Definition.**—Fred Jackson and family (three generations), James Birkett. Ice-out for most years thought to be observed from the northern end of the lake.**Earliest Ice-Out Date.**—1981: 72.**Latest Ice-Out Date.**—1888: 126.**Comments.**—1959, 1962-68, 1970-78, and 1997-98 were filled in from a secondary observer and adjusted by the average difference in the dates between the primary and secondary observers.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	100	1885	115	1924	109	1963	114
1808	--	1847	123	1886	114	1925	93	1964	112
1809	--	1848	102	1887	124	1926	122	1965	103
1810	--	1849	98	1888	126	1927	--	1966	110
1811	--	1850	118	1889	102	1928	103	1967	121
1812	--	1851	106	1890	112	1929	106	1968	104
1813	--	1852	118	1891	108	1930	100	1969	110
1814	--	1853	103	1892	102	1931	101	1970	112
1815	--	1854	124	1893	119	1932	103	1971	118
1816	--	1855	105	1894	110	1933	97	1972	115
1817	--	1856	117	1895	111	1934	107	1973	96
1818	--	1857	104	1896	110	1935	112	1974	77
1819	--	1858	119	1897	109	1936	92	1975	111
1820	--	1859	100	1898	102	1937	108	1976	99
1821	--	1860	116	1899	115	1938	100	1977	108
1822	--	1861	108	1900	102	1939	121	1978	116
1823	--	1862	122	1901	108	1940	118	1979	97
1824	--	1863	114	1902	86	1941	103	1980	97
1825	--	1864	110	1903	85	1942	100	1981	72
1826	--	1865	97	1904	117	1943	112	1982	112
1827	--	1866	106	1905	111	1944	114	1983	85
1828	--	1867	113	1906	111	1945	91	1984	103
1829	--	1868	122	1907	120	1946	90	1985	93
1830	--	1869	115	1908	107	1947	101	1986	96
1831	--	1870	108	1909	104	1948	95	1987	101
1832	--	1871	86	1910	92	1949	96	1988	97
1833	--	1872	124	1911	118	1950	108	1989	106
1834	--	1873	119	1912	110	1951	92	1990	100
1835	--	1874	116	1913	95	1952	108	1991	96
1836	--	1875	122	1914	111	1953	84	1992	100
1837	115	1876	118	1915	91	1954	99	1993	111
1838	110	1877	105	1916	109	1955	101	1994	106
1839	105	1878	97	1917	114	1956	117	1995	95
1840	103	1879	120	1918	114	1957	96	1996	98
1841	115	1880	108	1919	95	1958	99	1997	111
1842	107	1881	106	1920	114	1959	109	1998	73
1843	121	1882	115	1921	87	1960	111	1999	81
1844	105	1883	118	1922	102	1961	119	2000	94
1845	115	1884	115	1923	115	1962	104		

**Table 6.** Ice-out dates for Eagle Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 47° 02'54", long. 68° 35'07".**Period of Record.**—1922 to 2000.**Years of Record.**—67.**Observers.**—Maine Department of Inland Fisheries and Wildlife, Derwood Humphrey, S. C. Michaud, John M. Caron.**Earliest Ice-Out Date.**—1945: 104.**Latest Ice-Out Date.**—1974: 143.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	134	1963	--
1808	--	1847	--	1886	--	1925	124	1964	--
1809	--	1848	--	1887	--	1926	138	1965	--
1810	--	1849	--	1888	--	1927	122	1966	--
1811	--	1850	--	1889	--	1928	129	1967	--
1812	--	1851	--	1890	--	1929	127	1968	--
1813	--	1852	--	1891	--	1930	127	1969	134
1814	--	1853	--	1892	--	1931	114	1970	130
1815	--	1854	--	1893	--	1932	127	1971	138
1816	--	1855	--	1894	--	1933	128	1972	141
1817	--	1856	--	1895	--	1934	122	1973	129
1818	--	1857	--	1896	--	1935	126	1974	143
1819	--	1858	--	1897	--	1936	123	1975	135
1820	--	1859	--	1898	--	1937	127	1976	124
1821	--	1860	--	1899	--	1938	119	1977	131
1822	--	1861	--	1900	--	1939	132	1978	134
1823	--	1862	--	1901	--	1940	134	1979	124
1824	--	1863	--	1902	--	1941	128	1980	128
1825	--	1864	--	1903	--	1942	124	1981	122
1826	--	1865	--	1904	--	1943	138	1982	134
1827	--	1866	--	1905	--	1944	133	1983	125
1828	--	1867	--	1906	--	1945	104	1984	129
1829	--	1868	--	1907	--	1946	133	1985	128
1830	--	1869	--	1908	--	1947	140	1986	120
1831	--	1870	--	1909	--	1948	127	1987	109
1832	--	1871	--	1910	--	1949	123	1988	123
1833	--	1872	--	1911	--	1950	128	1989	125
1834	--	1873	--	1912	--	1951	117	1990	122
1835	--	1874	--	1913	--	1952	128	1991	--
1836	--	1875	--	1914	--	1953	126	1992	134
1837	--	1876	--	1915	--	1954	123	1993	124
1838	--	1877	--	1916	--	1955	124	1994	--
1839	--	1878	--	1917	--	1956	133	1995	125
1840	--	1879	--	1918	--	1957	128	1996	--
1841	--	1880	--	1919	--	1958	115	1997	125
1842	--	1881	--	1920	--	1959	128	1998	121
1843	--	1882	--	1921	--	1960	--	1999	124
1844	--	1883	--	1922	115	1961	--	2000	125
1845	--	1884	--	1923	128	1962	--		

**Table 7.** Ice-out dates for Embden Pond, Maine

[--, no data]

**Location of Lake.**—Lat. 44° 56'20", long. 69° 57'12".**Period of Record.**—1925 to 2000.**Years of Record.**—76.**Observer.**—Maine Department of Inland Fisheries and Wildlife.**Earliest Ice-Out Date.**—1981: 95.**Latest Ice-Out Date.**—1972: 133.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	--	1963	114
1808	--	1847	--	1886	--	1925	109	1964	120
1809	--	1848	--	1887	--	1926	127	1965	119
1810	--	1849	--	1888	--	1927	108	1966	122
1811	--	1850	--	1889	--	1928	128	1967	122
1812	--	1851	--	1890	--	1929	120	1968	113
1813	--	1852	--	1891	--	1930	113	1969	124
1814	--	1853	--	1892	--	1931	100	1970	124
1815	--	1854	--	1893	--	1932	112	1971	128
1816	--	1855	--	1894	--	1933	120	1972	133
1817	--	1856	--	1895	--	1934	114	1973	115
1818	--	1857	--	1896	--	1935	117	1974	115
1819	--	1858	--	1897	--	1936	115	1975	124
1820	--	1859	--	1898	--	1937	122	1976	114
1821	--	1860	--	1899	--	1938	114	1977	114
1822	--	1861	--	1900	--	1939	129	1978	125
1823	--	1862	--	1901	--	1940	129	1979	110
1824	--	1863	--	1902	--	1941	107	1980	111
1825	--	1864	--	1903	--	1942	118	1981	95
1826	--	1865	--	1904	--	1943	128	1982	122
1827	--	1866	--	1905	--	1944	126	1983	108
1828	--	1867	--	1906	--	1945	102	1984	118
1829	--	1868	--	1907	--	1946	107	1985	111
1830	--	1869	--	1908	--	1947	116	1986	110
1831	--	1870	--	1909	--	1948	106	1987	105
1832	--	1871	--	1910	--	1949	106	1988	112
1833	--	1872	--	1911	--	1950	120	1989	110
1834	--	1873	--	1912	--	1951	109	1990	117
1835	--	1874	--	1913	--	1952	118	1991	115
1836	--	1875	--	1914	--	1953	105	1992	121
1837	--	1876	--	1915	--	1954	117	1993	121
1838	--	1877	--	1916	--	1955	111	1994	124
1839	--	1878	--	1917	--	1956	125	1995	112
1840	--	1879	--	1918	--	1957	113	1996	115
1841	--	1880	--	1919	--	1958	113	1997	118
1842	--	1881	--	1920	--	1959	119	1998	105
1843	--	1882	--	1921	--	1960	120	1999	104
1844	--	1883	--	1922	--	1961	126	2000	107
1845	--	1884	--	1923	--	1962	113		



**Table 8.** Ice-out dates for First Connecticut Lake, New Hampshire

[--, no data]

**Location of Lake.**—Lat. 45° 05'18", long. 71° 14'55".**Period of Record.**—1920 to 2000.**Years of Record.**—81.**Observers.**—C. J. Carlson, PG&E National Energy Group, Fred T. Scott.**Earliest Ice-Out Date.**—1921: 99.**Latest Ice-Out Date.**—1972: 140.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	128	1963	126
1808	--	1847	--	1886	--	1925	113	1964	127
1809	--	1848	--	1887	--	1926	127	1965	128
1810	--	1849	--	1888	--	1927	113	1966	134
1811	--	1850	--	1889	--	1928	131	1967	128
1812	--	1851	--	1890	--	1929	129	1968	112
1813	--	1852	--	1891	--	1930	126	1969	131
1814	--	1853	--	1892	--	1931	105	1970	127
1815	--	1854	--	1893	--	1932	130	1971	132
1816	--	1855	--	1894	--	1933	127	1972	140
1817	--	1856	--	1895	--	1934	118	1973	120
1818	--	1857	--	1896	--	1935	130	1974	135
1819	--	1858	--	1897	--	1936	123	1975	132
1820	--	1859	--	1898	--	1937	128	1976	115
1821	--	1860	--	1899	--	1938	118	1977	126
1822	--	1861	--	1900	--	1939	131	1978	136
1823	--	1862	--	1901	--	1940	134	1979	119
1824	--	1863	--	1902	--	1941	115	1980	124
1825	--	1864	--	1903	--	1942	123	1981	118
1826	--	1865	--	1904	--	1943	138	1982	133
1827	--	1866	--	1905	--	1944	129	1983	124
1828	--	1867	--	1906	--	1945	103	1984	120
1829	--	1868	--	1907	--	1946	126	1985	129
1830	--	1869	--	1908	--	1947	137	1986	115
1831	--	1870	--	1909	--	1948	118	1987	110
1832	--	1871	--	1910	--	1949	113	1988	124
1833	--	1872	--	1911	--	1950	127	1989	132
1834	--	1873	--	1912	--	1951	119	1990	122
1835	--	1874	--	1913	--	1952	121	1991	121
1836	--	1875	--	1914	--	1953	104	1992	134
1837	--	1876	--	1915	--	1954	122	1993	122
1838	--	1877	--	1916	--	1955	118	1994	129
1839	--	1878	--	1917	--	1956	133	1995	125
1840	--	1879	--	1918	--	1957	121	1996	134
1841	--	1880	--	1919	--	1958	116	1997	132
1842	--	1881	--	1920	128	1959	126	1998	108
1843	--	1882	--	1921	99	1960	122	1999	124
1844	--	1883	--	1922	123	1961	135	2000	124
1845	--	1884	--	1923	127	1962	132		

**Table 9.** Ice-out dates for Houghtons (Hoosicwhisick) Pond, Massachusetts

[--, no data]

**Location of Lake.**—Lat. 42° 12'26", long. 71° 05'47".**Period of Record.**—1886 to 2000.**Years of Record.**—115.**Observer.**—Blue Hills Observatory.**Earliest Ice-Out Date.**—1981: 53.**Latest Ice-Out Date.**—1926: 104.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	97	1963	87
1808	--	1847	--	1886	86	1925	71	1964	85
1809	--	1848	--	1887	100	1926	104	1965	76
1810	--	1849	--	1888	100	1927	78	1966	83
1811	--	1850	--	1889	71	1928	87	1967	94
1812	--	1851	--	1890	71	1929	80	1968	89
1813	--	1852	--	1891	81	1930	68	1969	95
1814	--	1853	--	1892	94	1931	86	1970	80
1815	--	1854	--	1893	91	1932	89	1971	90
1816	--	1855	--	1894	71	1933	86	1972	89
1817	--	1856	--	1895	95	1934	91	1973	66
1818	--	1857	--	1896	93	1935	85	1974	63
1819	--	1858	--	1897	83	1936	81	1975	75
1820	--	1859	--	1898	74	1937	77	1976	60
1821	--	1860	--	1899	97	1938	77	1977	83
1822	--	1861	--	1900	80	1939	91	1978	92
1823	--	1862	--	1901	84	1940	97	1979	84
1824	--	1863	--	1902	76	1941	95	1980	78
1825	--	1864	--	1903	71	1942	68	1981	53
1826	--	1865	--	1904	95	1943	82	1982	80
1827	--	1866	--	1905	92	1944	86	1983	70
1828	--	1867	--	1906	94	1945	79	1984	56
1829	--	1868	--	1907	87	1946	73	1985	65
1830	--	1869	--	1908	86	1947	74	1986	72
1831	--	1870	--	1909	76	1948	85	1987	90
1832	--	1871	--	1910	83	1949	64	1988	84
1833	--	1872	--	1911	88	1950	89	1989	76
1834	--	1873	--	1912	90	1951	60	1990	54
1835	--	1874	--	1913	73	1952	85	1991	62
1836	--	1875	--	1914	92	1953	58	1992	68
1837	--	1876	--	1915	74	1954	57	1993	98
1838	--	1877	--	1916	97	1955	59	1994	95
1839	--	1878	--	1917	96	1956	98	1995	73
1840	--	1879	--	1918	92	1957	71	1996	84
1841	--	1880	--	1919	65	1958	73	1997	54
1842	--	1881	--	1920	96	1959	79	1998	55
1843	--	1882	--	1921	72	1960	55	1999	63
1844	--	1883	--	1922	87	1961	91	2000	68
1845	--	1884	--	1923	99	1962	86		

**Table 10.** Ice-out dates for Kezar Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 44° 11'04", long. 70° 54'12".

**Period of Record.**—1901 to 1999.

**Years of Record.**—99.

**Observers.**—Lovell Town Office, Advertiser Democrat, Arthur P. Stone.

**Earliest Ice-Out Date.**—1921: 93.

**Latest Ice-Out Date.**—1928, 1939, 1940: 126.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	113	1963	113
1808	--	1847	--	1886	--	1925	105	1964	119
1809	--	1848	--	1887	--	1926	123	1965	118
1810	--	1849	--	1888	--	1927	106	1966	113
1811	--	1850	--	1889	--	1928	126	1967	118
1812	--	1851	--	1890	--	1929	115	1968	107
1813	--	1852	--	1891	--	1930	104	1969	119
1814	--	1853	--	1892	--	1931	103	1970	123
1815	--	1854	--	1893	--	1932	119	1971	122
1816	--	1855	--	1894	--	1933	119	1972	124
1817	--	1856	--	1895	--	1934	114	1973	109
1818	--	1857	--	1896	--	1935	115	1974	116
1819	--	1858	--	1897	--	1936	113	1975	121
1820	--	1859	--	1898	--	1937	122	1976	110
1821	--	1860	--	1899	--	1938	110	1977	110
1822	--	1861	--	1900	--	1939	126	1978	122
1823	--	1862	--	1901	110	1940	126	1979	116
1824	--	1863	--	1902	103	1941	104	1980	111
1825	--	1864	--	1903	109	1942	114	1981	97
1826	--	1865	--	1904	123	1943	122	1982	120
1827	--	1866	--	1905	112	1944	123	1983	104
1828	--	1867	--	1906	98	1945	99	1984	112
1829	--	1868	--	1907	120	1946	100	1985	107
1830	--	1869	--	1908	120	1947	114	1986	107
1831	--	1870	--	1909	117	1948	105	1987	103
1832	--	1871	--	1910	97	1949	102	1988	108
1833	--	1872	--	1911	121	1950	117	1989	118
1834	--	1873	--	1912	116	1951	110	1990	113
1835	--	1874	--	1913	109	1952	114	1991	101
1836	--	1875	--	1914	116	1953	104	1992	116
1837	--	1876	--	1915	107	1954	112	1993	118
1838	--	1877	--	1916	113	1955	112	1994	118
1839	--	1878	--	1917	118	1956	122	1995	114
1840	--	1879	--	1918	113	1957	107	1996	111
1841	--	1880	--	1919	100	1958	110	1997	107
1842	--	1881	--	1920	120	1959	113	1998	114
1843	--	1882	--	1921	93	1960	115	1999	103
1844	--	1883	--	1922	107	1961	121	2000	--
1845	--	1884	--	1923	115	1962	114		

**Table 11.** Ice-out dates for Maranacook Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 44° 20'03", long. 69° 57'21".**Period of Record.**—1925 to 2000.**Years of Record.**—76.**Observers and Ice-Out Definition.**—Community Advertiser, John Neff, Roscoe Sprague, Roger Audette. Ice-out for most years thought to be observed from southern end of lake.**Earliest Ice-Out Date.**—1981: 84.**Latest Ice-Out Date.**—1939: 124.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	--	1963	111
1808	--	1847	--	1886	--	1925	105	1964	112
1809	--	1848	--	1887	--	1926	123	1965	114
1810	--	1849	--	1888	--	1927	120	1966	108
1811	--	1850	--	1889	--	1928	111	1967	118
1812	--	1851	--	1890	--	1929	110	1968	104
1813	--	1852	--	1891	--	1930	101	1969	115
1814	--	1853	--	1892	--	1931	101	1970	119
1815	--	1854	--	1893	--	1932	110	1971	123
1816	--	1855	--	1894	--	1933	109	1972	123
1817	--	1856	--	1895	--	1934	110	1973	107
1818	--	1857	--	1896	--	1935	107	1974	100
1819	--	1858	--	1897	--	1936	105	1975	118
1820	--	1859	--	1898	--	1937	116	1976	106
1821	--	1860	--	1899	--	1938	109	1977	108
1822	--	1861	--	1900	--	1939	124	1978	118
1823	--	1862	--	1901	--	1940	123	1979	107
1824	--	1863	--	1902	--	1941	102	1980	100
1825	--	1864	--	1903	--	1942	110	1981	84
1826	--	1865	--	1904	--	1943	116	1982	115
1827	--	1866	--	1905	--	1944	119	1983	92
1828	--	1867	--	1906	--	1945	104	1984	109
1829	--	1868	--	1907	--	1946	101	1985	97
1830	--	1869	--	1908	--	1947	109	1986	102
1831	--	1870	--	1909	--	1948	100	1987	102
1832	--	1871	--	1910	--	1949	100	1988	101
1833	--	1872	--	1911	--	1950	111	1989	114
1834	--	1873	--	1912	--	1951	97	1990	103
1835	--	1874	--	1913	--	1952	111	1991	97
1836	--	1875	--	1914	--	1953	89	1992	100
1837	--	1876	--	1915	--	1954	110	1993	110
1838	--	1877	--	1916	--	1955	105	1994	113
1839	--	1878	--	1917	--	1956	119	1995	100
1840	--	1879	--	1918	--	1957	105	1996	96
1841	--	1880	--	1919	--	1958	106	1997	115
1842	--	1881	--	1920	--	1959	111	1998	100
1843	--	1882	--	1921	--	1960	113	1999	99
1844	--	1883	--	1922	--	1961	121	2000	100
1845	--	1884	--	1923	--	1962	111		

**Table 12.** Ice-out dates for Messalonskee Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 44° 28'41", long. 69° 47'34".**Period of Record.**—1909 to 2000.**Years of Record.**—67.**Observers.**—Central Maine Morning Sentinel, Joyce Rushton.**Earliest Ice-Out Date.**—1985: 90.**Latest Ice-Out Date.**—1940: 128.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	111	1963	--
1808	--	1847	--	1886	--	1925	100	1964	--
1809	--	1848	--	1887	--	1926	123	1965	--
1810	--	1849	--	1888	--	1927	106	1966	--
1811	--	1850	--	1889	--	1928	120	1967	--
1812	--	1851	--	1890	--	1929	115	1968	--
1813	--	1852	--	1891	--	1930	113	1969	--
1814	--	1853	--	1892	--	1931	105	1970	--
1815	--	1854	--	1893	--	1932	113	1971	--
1816	--	1855	--	1894	--	1933	115	1972	--
1817	--	1856	--	1895	--	1934	114	1973	--
1818	--	1857	--	1896	--	1935	116	1974	--
1819	--	1858	--	1897	--	1936	107	1975	--
1820	--	1859	--	1898	--	1937	117	1976	--
1821	--	1860	--	1899	--	1938	110	1977	--
1822	--	1861	--	1900	--	1939	127	1978	--
1823	--	1862	--	1901	--	1940	128	1979	--
1824	--	1863	--	1902	--	1941	106	1980	--
1825	--	1864	--	1903	--	1942	112	1981	--
1826	--	1865	--	1904	--	1943	119	1982	--
1827	--	1866	--	1905	--	1944	119	1983	--
1828	--	1867	--	1906	--	1945	--	1984	--
1829	--	1868	--	1907	--	1946	105	1985	90
1830	--	1869	--	1908	--	1947	110	1986	--
1831	--	1870	--	1909	114	1948	107	1987	102
1832	--	1871	--	1910	95	1949	102	1988	101
1833	--	1872	--	1911	120	1950	113	1989	116
1834	--	1873	--	1912	115	1951	110	1990	109
1835	--	1874	--	1913	110	1952	114	1991	105
1836	--	1875	--	1914	120	1953	100	1992	113
1837	--	1876	--	1915	105	1954	113	1993	113
1838	--	1877	--	1916	--	1955	108	1994	116
1839	--	1878	--	1917	118	1956	122	1995	106
1840	--	1879	--	1918	114	1957	108	1996	108
1841	--	1880	--	1919	103	1958	108	1997	116
1842	--	1881	--	1920	121	1959	114	1998	100
1843	--	1882	--	1921	97	1960	119	1999	99
1844	--	1883	--	1922	105	1961	123	2000	99
1845	--	1884	--	1923	115	1962	113		

**Table 13.** Ice-out dates for Moosehead Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 45° 38'27", long. 69° 39'57".**Period of Record.**—1848 to 2000.**Years of Record.**—153.**Observers and Ice-Out Definition.**—Kennebec Water Power Company, Maine Department of Inland Fisheries and Wildlife. Ice-out definition for most years thought be date of open navigation from Greenville to Northeast Carry.**Earliest Ice-Out Date.**—1945: 104.**Latest Ice-Out Date.**—1878: 149.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	136	1924	130	1963	127
1808	--	1847	--	1886	122	1925	118	1964	128
1809	--	1848	121	1887	133	1926	138	1965	127
1810	--	1849	132	1888	143	1927	115	1966	126
1811	--	1850	129	1889	120	1928	133	1967	128
1812	--	1851	134	1890	129	1929	128	1968	116
1813	--	1852	138	1891	134	1930	125	1969	133
1814	--	1853	131	1892	125	1931	114	1970	136
1815	--	1854	140	1893	138	1932	126	1971	134
1816	--	1855	137	1894	121	1933	124	1972	143
1817	--	1856	130	1895	126	1934	124	1973	125
1818	--	1857	132	1896	129	1935	130	1974	136
1819	--	1858	133	1897	128	1936	123	1975	132
1820	--	1859	134	1898	124	1937	130	1976	122
1821	--	1860	132	1899	127	1938	119	1977	126
1822	--	1861	132	1900	131	1939	137	1978	135
1823	--	1862	138	1901	119	1940	138	1979	121
1824	--	1863	138	1902	118	1941	119	1980	123
1825	--	1864	127	1903	118	1942	125	1981	117
1826	--	1865	124	1904	131	1943	138	1982	133
1827	--	1866	131	1905	122	1944	135	1983	122
1828	--	1867	139	1906	133	1945	104	1984	127
1829	--	1868	139	1907	134	1946	126	1985	123
1830	--	1869	130	1908	132	1947	133	1986	118
1831	--	1870	124	1909	135	1948	125	1987	111
1832	--	1871	133	1910	110	1949	113	1988	124
1833	--	1872	132	1911	133	1950	127	1989	132
1834	--	1873	136	1912	129	1951	119	1990	127
1835	--	1874	146	1913	122	1952	121	1991	122
1836	--	1875	144	1914	135	1953	114	1992	134
1837	--	1876	144	1915	121	1954	122	1993	128
1838	--	1877	126	1916	125	1955	124	1994	131
1839	--	1878	149	1917	134	1956	136	1995	122
1840	--	1879	134	1918	121	1957	122	1996	126
1841	--	1880	127	1919	123	1958	122	1997	131
1842	--	1881	129	1920	135	1959	129	1998	117
1843	--	1882	138	1921	112	1960	127	1999	120
1844	--	1883	133	1922	121	1961	137	2000	121
1845	--	1884	129	1923	130	1962	138		

**Table 14.** Ice-out dates for Mooselookmeguntic Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 44° 54'25", long. 70° 48'40".

**Period of Record.**—1884 to 2000.

**Years of Record.**—99.

**Observers.**—Union Water Power Company, FPL Energy Maine.

**Earliest Ice-Out Date.**—1945: 104.

**Latest Ice-Out Date.**—1972: 143.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	130	1924	132	1963	125
1808	--	1847	--	1886	--	1925	118	1964	127
1809	--	1848	--	1887	--	1926	136	1965	127
1810	--	1849	--	1888	--	1927	117	1966	136
1811	--	1850	--	1889	--	1928	134	1967	129
1812	--	1851	--	1890	131	1929	128	1968	114
1813	--	1852	--	1891	130	1930	126	1969	132
1814	--	1853	--	1892	127	1931	116	1970	136
1815	--	1854	--	1893	141	1932	127	1971	133
1816	--	1855	--	1894	--	1933	127	1972	143
1817	--	1856	--	1895	--	1934	--	1973	124
1818	--	1857	--	1896	--	1935	--	1974	135
1819	--	1858	--	1897	133	1936	125	1975	133
1820	--	1859	--	1898	124	1937	133	1976	120
1821	--	1860	--	1899	128	1938	118	1977	125
1822	--	1861	--	1900	--	1939	135	1978	136
1823	--	1862	--	1901	--	1940	138	1979	122
1824	--	1863	--	1902	--	1941	117	1980	124
1825	--	1864	--	1903	--	1942	125	1981	119
1826	--	1865	--	1904	--	1943	140	1982	134
1827	--	1866	--	1905	--	1944	131	1983	127
1828	--	1867	--	1906	133	1945	104	1984	123
1829	--	1868	--	1907	--	1946	121	1985	128
1830	--	1869	--	1908	--	1947	134	1986	116
1831	--	1870	--	1909	--	1948	122	1987	111
1832	--	1871	--	1910	108	1949	118	1988	124
1833	--	1872	--	1911	130	1950	128	1989	130
1834	--	1873	--	1912	127	1951	122	1990	125
1835	--	1874	--	1913	124	1952	123	1991	121
1836	--	1875	--	1914	135	1953	113	1992	134
1837	--	1876	--	1915	119	1954	127	1993	123
1838	--	1877	--	1916	129	1955	120	1994	130
1839	--	1878	--	1917	137	1956	135	1995	125
1840	--	1879	--	1918	124	1957	120	1996	131
1841	--	1880	--	1919	123	1958	122	1997	131
1842	--	1881	--	1920	139	1959	127	1998	112
1843	--	1882	--	1921	105	1960	126	1999	123
1844	--	1883	--	1922	125	1961	135	2000	121
1845	--	1884	132	1923	129	1962	131		

**Table 15.** Ice-out dates for Pennesseewassee (Norway) Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 44° 13'34", long. 70° 34'43".**Period of Record.**—1874 to 1999.**Years of Record.**—125.**Observer.**—Woodman's Sporting Goods.**Earliest Ice-Out Date.**—1981: 91.**Latest Ice-Out Date.**—1874: 133.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	122	1924	112	1963	111
1808	--	1847	--	1886	114	1925	104	1964	118
1809	--	1848	--	1887	126	1926	123	1965	114
1810	--	1849	--	1888	131	1927	106	1966	113
1811	--	1850	--	1889	106	1928	118	1967	118
1812	--	1851	--	1890	116	1929	116	1968	105
1813	--	1852	--	1891	118	1930	104	1969	117
1814	--	1853	--	1892	109	1931	102	1970	121
1815	--	1854	--	1893	128	1932	112	1971	123
1816	--	1855	--	1894	114	1933	118	1972	126
1817	--	1856	--	1895	111	1934	113	1973	112
1818	--	1857	--	1896	118	1935	115	1974	111
1819	--	1858	--	1897	117	1936	112	1975	121
1820	--	1859	--	1898	108	1937	121	1976	109
1821	--	1860	--	1899	119	1938	110	1977	109
1822	--	1861	--	1900	119	1939	127	1978	123
1823	--	1862	--	1901	111	1940	128	1979	116
1824	--	1863	--	1902	106	1941	125	1980	104
1825	--	1864	--	1903	101	1942	111	1981	91
1826	--	1865	--	1904	124	1943	118	1982	120
1827	--	1866	--	1905	112	1944	123	1983	99
1828	--	1867	--	1906	116	1945	99	1984	112
1829	--	1868	--	1907	120	1946	100	1985	102
1830	--	1869	--	1908	117	1947	113	1986	107
1831	--	1870	--	1909	117	1948	101	1987	107
1832	--	1871	--	1910	96	1949	101	1988	101
1833	--	1872	--	1911	119	1950	117	1989	116
1834	--	1873	--	1912	116	1951	105	1990	101
1835	--	1874	133	1913	113	1952	111	1991	101
1836	--	1875	126	1914	116	1953	100	1992	113
1837	--	1876	132	1915	105	1954	113	1993	112
1838	--	1877	112	1916	112	1955	110	1994	116
1839	--	1878	102	1917	118	1956	123	1995	102
1840	--	1879	127	1918	114	1957	107	1996	--
1841	--	1880	113	1919	104	1958	109	1997	117
1842	--	1881	119	1920	124	1959	114	1998	110
1843	--	1882	121	1921	98	1960	116	1999	113
1844	--	1883	122	1922	109	1961	120	2000	--
1845	--	1884	117	1923	119	1962	113		



**Table 16.** Ice-out dates for Ponkapoag Pond, Massachusetts

[--, no data]

**Location of Lake.**—Lat. 42° 11'31", long. 71° 05'40".**Period of Record.**—1886 to 2000.**Years of Record.**—115.**Observer.**—Blue Hills Observatory.**Earliest Ice-Out Date.**—1953: 32.**Latest Ice-Out Date.**—1926: 100.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	96	1963	86
1808	--	1847	--	1886	86	1925	69	1964	77
1809	--	1848	--	1887	83	1926	100	1965	72
1810	--	1849	--	1888	89	1927	76	1966	80
1811	--	1850	--	1889	71	1928	85	1967	94
1812	--	1851	--	1890	71	1929	79	1968	86
1813	--	1852	--	1891	72	1930	67	1969	93
1814	--	1853	--	1892	93	1931	84	1970	76
1815	--	1854	--	1893	91	1932	89	1971	87
1816	--	1855	--	1894	71	1933	82	1972	83
1817	--	1856	--	1895	86	1934	88	1973	66
1818	--	1857	--	1896	93	1935	83	1974	63
1819	--	1858	--	1897	82	1936	80	1975	75
1820	--	1859	--	1898	73	1937	77	1976	60
1821	--	1860	--	1899	90	1938	77	1977	75
1822	--	1861	--	1900	79	1939	88	1978	92
1823	--	1862	--	1901	82	1940	97	1979	82
1824	--	1863	--	1902	73	1941	92	1980	71
1825	--	1864	--	1903	70	1942	68	1981	52
1826	--	1865	--	1904	94	1943	80	1982	74
1827	--	1866	--	1905	90	1944	86	1983	67
1828	--	1867	--	1906	90	1945	79	1984	52
1829	--	1868	--	1907	86	1946	68	1985	59
1830	--	1869	--	1908	77	1947	73	1986	66
1831	--	1870	--	1909	76	1948	84	1987	89
1832	--	1871	--	1910	81	1949	59	1988	70
1833	--	1872	--	1911	87	1950	83	1989	54
1834	--	1873	--	1912	82	1951	54	1990	41
1835	--	1874	--	1913	73	1952	85	1991	52
1836	--	1875	--	1914	90	1953	32	1992	58
1837	--	1876	--	1915	71	1954	53	1993	94
1838	--	1877	--	1916	96	1955	57	1994	93
1839	--	1878	--	1917	92	1956	72	1995	68
1840	--	1879	--	1918	91	1957	58	1996	57
1841	--	1880	--	1919	65	1958	69	1997	51
1842	--	1881	--	1920	94	1959	50	1998	43
1843	--	1882	--	1921	69	1960	54	1999	36
1844	--	1883	--	1922	85	1961	88	2000	63
1845	--	1884	--	1923	99	1962	84		

**Table 17.** Ice-out dates for Pontoosuc Lake, Massachusetts

[--, no data]

**Location of Lake.**—Lat. 42° 29'44", long. 73° 14'59".**Period of Record.**—1925 to 1998.**Years of Record.**—74.**Observer.**—Berkshire Eagle.**Earliest Ice-Out Date.**—1995: 85.**Latest Ice-Out Date.**—1940: 121.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	--	1963	106
1808	--	1847	--	1886	--	1925	92	1964	108
1809	--	1848	--	1887	--	1926	114	1965	108
1810	--	1849	--	1888	--	1927	98	1966	109
1811	--	1850	--	1889	--	1928	98	1967	110
1812	--	1851	--	1890	--	1929	97	1968	97
1813	--	1852	--	1891	--	1930	93	1969	106
1814	--	1853	--	1892	--	1931	100	1970	114
1815	--	1854	--	1893	--	1932	112	1971	115
1816	--	1855	--	1894	--	1933	107	1972	118
1817	--	1856	--	1895	--	1934	108	1973	90
1818	--	1857	--	1896	--	1935	100	1974	95
1819	--	1858	--	1897	--	1936	92	1975	112
1820	--	1859	--	1898	--	1937	105	1976	94
1821	--	1860	--	1899	--	1938	87	1977	104
1822	--	1861	--	1900	--	1939	113	1978	109
1823	--	1862	--	1901	--	1940	121	1979	111
1824	--	1863	--	1902	--	1941	105	1980	98
1825	--	1864	--	1903	--	1942	98	1981	92
1826	--	1865	--	1904	--	1943	116	1982	112
1827	--	1866	--	1905	--	1944	110	1983	92
1828	--	1867	--	1906	--	1945	89	1984	105
1829	--	1868	--	1907	--	1946	86	1985	92
1830	--	1869	--	1908	--	1947	104	1986	94
1831	--	1870	--	1909	--	1948	92	1987	95
1832	--	1871	--	1910	--	1949	87	1988	100
1833	--	1872	--	1911	--	1950	99	1989	88
1834	--	1873	--	1912	--	1951	100	1990	93
1835	--	1874	--	1913	--	1952	102	1991	86
1836	--	1875	--	1914	--	1953	86	1992	102
1837	--	1876	--	1915	--	1954	87	1993	107
1838	--	1877	--	1916	--	1955	105	1994	108
1839	--	1878	--	1917	--	1956	120	1995	85
1840	--	1879	--	1918	--	1957	90	1996	102
1841	--	1880	--	1919	--	1958	105	1997	99
1842	--	1881	--	1920	--	1959	108	1998	90
1843	--	1882	--	1921	--	1960	107	1999	--
1844	--	1883	--	1922	--	1961	111	2000	--
1845	--	1884	--	1923	--	1962	102		

**Table 18.** Ice-out dates for Portage Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 46° 46'17", long. 68° 30'04".**Period of Record.**—1925 to 2000.**Years of Record.**—75.**Observer.**—Portage Lake Town Office.**Earliest Ice-Out Date.**—1945: 104.**Latest Ice-Out Date.**—1926: 146.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	--	1963	131
1808	--	1847	--	1886	--	1925	130	1964	127
1809	--	1848	--	1887	--	1926	146	1965	124
1810	--	1849	--	1888	--	1927	120	1966	129
1811	--	1850	--	1889	--	1928	137	1967	127
1812	--	1851	--	1890	--	1929	130	1968	123
1813	--	1852	--	1891	--	1930	127	1969	131
1814	--	1853	--	1892	--	1931	121	1970	133
1815	--	1854	--	1893	--	1932	129	1971	133
1816	--	1855	--	1894	--	1933	127	1972	140
1817	--	1856	--	1895	--	1934	120	1973	127
1818	--	1857	--	1896	--	1935	132	1974	141
1819	--	1858	--	1897	--	1936	124	1975	135
1820	--	1859	--	1898	--	1937	133	1976	123
1821	--	1860	--	1899	--	1938	118	1977	132
1822	--	1861	--	1900	--	1939	133	1978	132
1823	--	1862	--	1901	--	1940	132	1979	123
1824	--	1863	--	1902	--	1941	122	1980	125
1825	--	1864	--	1903	--	1942	124	1981	121
1826	--	1865	--	1904	--	1943	139	1982	129
1827	--	1866	--	1905	--	1944	129	1983	121
1828	--	1867	--	1906	--	1945	104	1984	129
1829	--	1868	--	1907	--	1946	131	1985	126
1830	--	1869	--	1908	--	1947	138	1986	118
1831	--	1870	--	1909	--	1948	126	1987	110
1832	--	1871	--	1910	--	1949	124	1988	119
1833	--	1872	--	1911	--	1950	127	1989	125
1834	--	1873	--	1912	--	1951	119	1990	120
1835	--	1874	--	1913	--	1952	129	1991	125
1836	--	1875	--	1914	--	1953	125	1992	132
1837	--	1876	--	1915	--	1954	122	1993	123
1838	--	1877	--	1916	--	1955	123	1994	132
1839	--	1878	--	1917	--	1956	133	1995	124
1840	--	1879	--	1918	--	1957	122	1996	124
1841	--	1880	--	1919	--	1958	--	1997	126
1842	--	1881	--	1920	--	1959	129	1998	120
1843	--	1882	--	1921	--	1960	127	1999	123
1844	--	1883	--	1922	--	1961	135	2000	121
1845	--	1884	--	1923	--	1962	130		

**Table 19.** Ice-out dates for Rangeley Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 44° 56'41", long. 70° 41'54".**Period of Record.**—1880 to 2000.**Years of Record.**—121.**Observers.**—Union Water Power Company, FPL Energy Maine.**Earliest Ice-Out Date.**—1921, 1945: 104.**Latest Ice-Out Date.**—1882, 1972: 144.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	136	1924	131	1963	127
1808	--	1847	--	1886	124	1925	119	1964	127
1809	--	1848	--	1887	137	1926	138	1965	129
1810	--	1849	--	1888	142	1927	119	1966	137
1811	--	1850	--	1889	120	1928	134	1967	130
1812	--	1851	--	1890	129	1929	130	1968	116
1813	--	1852	--	1891	134	1930	126	1969	132
1814	--	1853	--	1892	130	1931	116	1970	135
1815	--	1854	--	1893	137	1932	127	1971	135
1816	--	1855	--	1894	122	1933	127	1972	144
1817	--	1856	--	1895	127	1934	125	1973	124
1818	--	1857	--	1896	131	1935	131	1974	135
1819	--	1858	--	1897	133	1936	125	1975	132
1820	--	1859	--	1898	125	1937	131	1976	119
1821	--	1860	--	1899	128	1938	119	1977	127
1822	--	1861	--	1900	136	1939	134	1978	137
1823	--	1862	--	1901	124	1940	140	1979	121
1824	--	1863	--	1902	118	1941	116	1980	126
1825	--	1864	--	1903	117	1942	125	1981	120
1826	--	1865	--	1904	135	1943	140	1982	133
1827	--	1866	--	1905	125	1944	132	1983	126
1828	--	1867	--	1906	133	1945	104	1984	125
1829	--	1868	--	1907	139	1946	122	1985	130
1830	--	1869	--	1908	131	1947	133	1986	117
1831	--	1870	--	1909	132	1948	122	1987	111
1832	--	1871	--	1910	109	1949	114	1988	126
1833	--	1872	--	1911	131	1950	128	1989	131
1834	--	1873	--	1912	130	1951	122	1990	125
1835	--	1874	--	1913	124	1952	123	1991	121
1836	--	1875	--	1914	141	1953	114	1992	133
1837	--	1876	--	1915	119	1954	126	1993	122
1838	--	1877	--	1916	129	1955	120	1994	128
1839	--	1878	--	1917	137	1956	136	1995	125
1840	--	1879	--	1918	123	1957	121	1996	130
1841	--	1880	134	1919	123	1958	127	1997	133
1842	--	1881	136	1920	140	1959	128	1998	113
1843	--	1882	144	1921	104	1960	125	1999	123
1844	--	1883	136	1922	124	1961	135	2000	121
1845	--	1884	134	1923	129	1962	137		

**Table 20.** Ice-out dates for Richardson Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 44° 51'23", long. 70° 51'56".**Period of Record.**—1880 to 2000.**Years of Record.**—119.**Observers.**—Union Water Power Company, FPL Energy Maine.**Earliest Ice-Out Date.**—1945: 104.**Latest Ice-Out Date.**—1888: 144.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	133	1924	129	1963	125
1808	--	1847	--	1886	122	1925	118	1964	127
1809	--	1848	--	1887	132	1926	135	1965	127
1810	--	1849	--	1888	144	1927	112	1966	129
1811	--	1850	--	1889	119	1928	132	1967	129
1812	--	1851	--	1890	131	1929	129	1968	114
1813	--	1852	--	1891	126	1930	125	1969	130
1814	--	1853	--	1892	127	1931	114	1970	134
1815	--	1854	--	1893	141	1932	125	1971	132
1816	--	1855	--	1894	121	1933	127	1972	141
1817	--	1856	--	1895	125	1934	124	1973	124
1818	--	1857	--	1896	130	1935	131	1974	133
1819	--	1858	--	1897	132	1936	124	1975	130
1820	--	1859	--	1898	121	1937	133	1976	116
1821	--	1860	--	1899	128	1938	--	1977	125
1822	--	1861	--	1900	130	1939	134	1978	136
1823	--	1862	--	1901	121	1940	--	1979	119
1824	--	1863	--	1902	113	1941	116	1980	124
1825	--	1864	--	1903	117	1942	123	1981	117
1826	--	1865	--	1904	130	1943	139	1982	131
1827	--	1866	--	1905	123	1944	130	1983	126
1828	--	1867	--	1906	136	1945	104	1984	123
1829	--	1868	--	1907	137	1946	122	1985	127
1830	--	1869	--	1908	128	1947	133	1986	115
1831	--	1870	--	1909	131	1948	117	1987	110
1832	--	1871	--	1910	107	1949	117	1988	120
1833	--	1872	--	1911	130	1950	127	1989	131
1834	--	1873	--	1912	128	1951	123	1990	125
1835	--	1874	--	1913	123	1952	121	1991	121
1836	--	1875	--	1914	136	1953	112	1992	134
1837	--	1876	--	1915	118	1954	122	1993	122
1838	--	1877	--	1916	129	1955	119	1994	129
1839	--	1878	--	1917	137	1956	135	1995	126
1840	--	1879	--	1918	120	1957	121	1996	129
1841	--	1880	129	1919	123	1958	122	1997	128
1842	--	1881	135	1920	138	1959	125	1998	109
1843	--	1882	141	1921	105	1960	122	1999	122
1844	--	1883	134	1922	124	1961	135	2000	121
1845	--	1884	133	1923	127	1962	129		

**Table 21.** Ice-out dates for Sebago Lake, Maine

[--, no data; NCIC, no complete ice cover]

**Location of Lake.**—Lat. 43°52'15", long. 70°34'01".**Period of Record.**—1807 to 2000.**Years of Record.**—160.**Observers and Ice-Out Definition.**—Maine Sunday Telegram, Carroll Cutting, Portland Press Herald. Ice-out thought to be observed on Big Bay for many years.**Earliest Ice-Out Date.**—1937, 1947, 1949, 1951, 1953, 1961, 1991, 1998, 1999: No complete ice cover.**Latest Ice-Out Date.**—1888: 129.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	127	1846	104	1885	116	1924	107	1963	105
1808	--	1847	--	1886	115	1925	94	1964	107
1809	--	1848	--	1887	121	1926	120	1965	104
1810	--	1849	119	1888	129	1927	105	1966	92
1811	--	1850	--	1889	102	1928	99	1967	100
1812	122	1851	110	1890	114	1929	100	1968	99
1813	--	1852	125	1891	113	1930	97	1969	111
1814	--	1853	110	1892	102	1931	102	1970	113
1815	--	1854	--	1893	124	1932	73	1971	122
1816	121	1855	117	1894	109	1933	100	1972	122
1817	--	1856	118	1895	111	1934	110	1973	100
1818	--	1857	104	1896	112	1935	107	1974	101
1819	119	1858	106	1897	112	1936	87	1975	88
1820	116	1859	--	1898	103	1937	NCIC	1976	94
1821	119	1860	--	1899	117	1938	92	1977	94
1822	102	1861	--	1900	116	1939	113	1978	104
1823	113	1862	119	1901	105	1940	124	1979	85
1824	108	1863	118	1902	89	1941	102	1980	102
1825	106	1864	--	1903	87	1942	98	1981	76
1826	108	1865	--	1904	114	1943	107	1982	111
1827	--	1866	108	1905	115	1944	115	1983	76
1828	--	1867	116	1906	112	1945	91	1984	107
1829	--	1868	--	1907	120	1946	85	1985	73
1830	--	1869	--	1908	116	1947	NCIC	1986	90
1831	--	1870	--	1909	105	1948	94	1987	88
1832	--	1871	95	1910	93	1949	NCIC	1988	92
1833	--	1872	125	1911	119	1950	107	1989	100
1834	104	1873	121	1912	114	1951	NCIC	1990	95
1835	--	1874	127	1913	99	1952	106	1991	NCIC
1836	--	1875	126	1914	110	1953	NCIC	1992	87
1837	121	1876	122	1915	102	1954	103	1993	109
1838	--	1877	113	1916	109	1955	--	1994	110
1839	--	1878	102	1917	114	1956	97	1995	77
1840	110	1879	125	1918	116	1957	99	1996	95
1841	119	1880	104	1919	91	1958	96	1997	104
1842	110	1881	114	1920	114	1959	96	1998	NCIC
1843	122	1882	109	1921	87	1960	--	1999	NCIC
1844	108	1883	119	1922	104	1961	NCIC	2000	89
1845	114	1884	117	1923	112	1962	100		

**Table 22.** Ice-out dates for Sebec Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 45° 16'58", long. 69° 16'45".

**Period of Record.**—1879 to 2000.

**Years of Record.**—120.

**Observers and Ice-Out Definition.**—Bill Elliot, Bill Larabee, Ruth Weatherbee. Ice-out definition for most years thought be date of open navigation from one end of lake to the other.

**Earliest Ice-Out Date.**—1902: 91.

**Latest Ice-Out Date.**—1972: 135.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	131	1924	120	1963	118
1808	--	1847	--	1886	122	1925	113	1964	122
1809	--	1848	--	1887	118	1926	130	1965	121
1810	--	1849	--	1888	133	1927	111	1966	116
1811	--	1850	--	1889	114	1928	129	1967	124
1812	--	1851	--	1890	--	1929	123	1968	119
1813	--	1852	--	1891	116	1930	121	1969	125
1814	--	1853	--	1892	121	1931	104	1970	127
1815	--	1854	--	1893	132	1932	118	1971	127
1816	--	1855	--	1894	118	1933	121	1972	135
1817	--	1856	--	1895	119	1934	116	1973	117
1818	--	1857	--	1896	125	1935	118	1974	121
1819	--	1858	--	1897	124	1936	119	1975	125
1820	--	1859	--	1898	118	1937	125	1976	119
1821	--	1860	--	1899	124	1938	117	1977	118
1822	--	1861	--	1900	121	1939	131	1978	128
1823	--	1862	--	1901	112	1940	131	1979	118
1824	--	1863	--	1902	91	1941	112	1980	115
1825	--	1864	--	1903	107	1942	119	1981	104
1826	--	1865	--	1904	--	1943	128	1982	126
1827	--	1866	--	1905	119	1944	126	1983	110
1828	--	1867	--	1906	128	1945	100	1984	119
1829	--	1868	--	1907	125	1946	117	1985	117
1830	--	1869	--	1908	126	1947	126	1986	114
1831	--	1870	--	1909	129	1948	121	1987	103
1832	--	1871	--	1910	110	1949	105	1988	115
1833	--	1872	--	1911	126	1950	122	1989	123
1834	--	1873	--	1912	125	1951	111	1990	121
1835	--	1874	--	1913	117	1952	115	1991	120
1836	--	1875	--	1914	129	1953	107	1992	128
1837	--	1876	--	1915	115	1954	120	1993	122
1838	--	1877	--	1916	116	1955	121	1994	122
1839	--	1878	--	1917	127	1956	127	1995	114
1840	--	1879	128	1918	116	1957	117	1996	117
1841	--	1880	127	1919	114	1958	114	1997	122
1842	--	1881	118	1920	129	1959	118	1998	108
1843	--	1882	128	1921	107	1960	123	1999	108
1844	--	1883	124	1922	111	1961	123	2000	111
1845	--	1884	119	1923	126	1962	124		

**Table 23.** Ice-out dates for Squa Pan Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 46° 33'21", long. 68° 18'24".**Period of Record.**—1930 to 1999.**Years of Record.**—64.**Observers.**—Maine Public Service Company, WPS New England Generation.**Earliest Ice-Out Date.**—1945: 103.**Latest Ice-Out Date.**—1972: 138.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	--	1963	126
1808	--	1847	--	1886	--	1925	--	1964	123
1809	--	1848	--	1887	--	1926	--	1965	122
1810	--	1849	--	1888	--	1927	--	1966	117
1811	--	1850	--	1889	--	1928	--	1967	--
1812	--	1851	--	1890	--	1929	--	1968	116
1813	--	1852	--	1891	--	1930	126	1969	125
1814	--	1853	--	1892	--	1931	112	1970	128
1815	--	1854	--	1893	--	1932	--	1971	132
1816	--	1855	--	1894	--	1933	125	1972	138
1817	--	1856	--	1895	--	1934	118	1973	124
1818	--	1857	--	1896	--	1935	--	1974	135
1819	--	1858	--	1897	--	1936	--	1975	132
1820	--	1859	--	1898	--	1937	123	1976	120
1821	--	1860	--	1899	--	1938	116	1977	126
1822	--	1861	--	1900	--	1939	131	1978	129
1823	--	1862	--	1901	--	1940	128	1979	119
1824	--	1863	--	1902	--	1941	121	1980	123
1825	--	1864	--	1903	--	1942	--	1981	119
1826	--	1865	--	1904	--	1943	136	1982	128
1827	--	1866	--	1905	--	1944	--	1983	116
1828	--	1867	--	1906	--	1945	103	1984	122
1829	--	1868	--	1907	--	1946	126	1985	119
1830	--	1869	--	1908	--	1947	132	1986	113
1831	--	1870	--	1909	--	1948	108	1987	107
1832	--	1871	--	1910	--	1949	114	1988	117
1833	--	1872	--	1911	--	1950	125	1989	123
1834	--	1873	--	1912	--	1951	115	1990	121
1835	--	1874	--	1913	--	1952	122	1991	123
1836	--	1875	--	1914	--	1953	116	1992	130
1837	--	1876	--	1915	--	1954	119	1993	122
1838	--	1877	--	1916	--	1955	120	1994	127
1839	--	1878	--	1917	--	1956	127	1995	122
1840	--	1879	--	1918	--	1957	124	1996	120
1841	--	1880	--	1919	--	1958	119	1997	125
1842	--	1881	--	1920	--	1959	128	1998	118
1843	--	1882	--	1921	--	1960	129	1999	120
1844	--	1883	--	1922	--	1961	136	2000	--
1845	--	1884	--	1923	--	1962	128		



**Table 24.** Ice-out dates for Sunapee Lake, New Hampshire

[--, no data]

**Location of Lake.**—Lat. 43° 23'45", long. 72° 03'11".**Period of Record.**—1869 to 2000.**Years of Record.**—132.**Observer.**—Argus Champion.**Earliest Ice-Out Date.**—1921, 1946: 88.**Latest Ice-Out Date.**—1888: 135.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	120	1924	110	1963	110
1808	--	1847	--	1886	114	1925	116	1964	119
1809	--	1848	--	1887	127	1926	124	1965	118
1810	--	1849	--	1888	135	1927	110	1966	116
1811	--	1850	--	1889	110	1928	121	1967	118
1812	--	1851	--	1890	116	1929	104	1968	105
1813	--	1852	--	1891	114	1930	107	1969	116
1814	--	1853	--	1892	107	1931	106	1970	121
1815	--	1854	--	1893	133	1932	117	1971	125
1816	--	1855	--	1894	109	1933	120	1972	127
1817	--	1856	--	1895	120	1934	114	1973	109
1818	--	1857	--	1896	119	1935	115	1974	110
1819	--	1858	--	1897	119	1936	105	1975	125
1820	--	1859	--	1898	108	1937	122	1976	107
1821	--	1860	--	1899	123	1938	108	1977	109
1822	--	1861	--	1900	120	1939	127	1978	121
1823	--	1862	--	1901	114	1940	128	1979	118
1824	--	1863	--	1902	102	1941	108	1980	111
1825	--	1864	--	1903	95	1942	109	1981	99
1826	--	1865	--	1904	122	1943	123	1982	118
1827	--	1866	--	1905	115	1944	122	1983	106
1828	--	1867	--	1906	119	1945	91	1984	112
1829	--	1868	--	1907	121	1946	88	1985	106
1830	--	1869	130	1908	117	1947	117	1986	105
1831	--	1870	130	1909	112	1948	99	1987	103
1832	--	1871	102	1910	96	1949	96	1988	107
1833	--	1872	124	1911	122	1950	116	1989	111
1834	--	1873	126	1912	117	1951	110	1990	106
1835	--	1874	129	1913	107	1952	111	1991	98
1836	--	1875	132	1914	121	1953	99	1992	114
1837	--	1876	132	1915	110	1954	106	1993	112
1838	--	1877	115	1916	122	1955	112	1994	110
1839	--	1878	108	1917	127	1956	127	1995	104
1840	--	1879	132	1918	116	1957	110	1996	117
1841	--	1880	111	1919	104	1958	114	1997	114
1842	--	1881	126	1920	120	1959	116	1998	103
1843	--	1882	119	1921	88	1960	115	1999	103
1844	--	1883	127	1922	96	1961	123	2000	100
1845	--	1884	123	1923	117	1962	116		

**Table 25.** Ice-out dates for Swan Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 44° 32'47", long. 68° 59'38".**Period of Record.**—1891 to 2000.**Years of Record.**—110.**Observer.**—The Republican Journal.**Earliest Ice-Out Date.**—1953: 86.**Latest Ice-Out Date.**—1939: 127.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	109	1963	112
1808	--	1847	--	1886	--	1925	94	1964	116
1809	--	1848	--	1887	--	1926	123	1965	111
1810	--	1849	--	1888	--	1927	107	1966	110
1811	--	1850	--	1889	--	1928	112	1967	121
1812	--	1851	--	1890	--	1929	111	1968	107
1813	--	1852	--	1891	109	1930	104	1969	115
1814	--	1853	--	1892	114	1931	103	1970	115
1815	--	1854	--	1893	124	1932	108	1971	121
1816	--	1855	--	1894	113	1933	108	1972	122
1817	--	1856	--	1895	112	1934	114	1973	106
1818	--	1857	--	1896	110	1935	116	1974	100
1819	--	1858	--	1897	115	1936	98	1975	116
1820	--	1859	--	1898	109	1937	106	1976	103
1821	--	1860	--	1899	117	1938	106	1977	109
1822	--	1861	--	1900	109	1939	127	1978	116
1823	--	1862	--	1901	112	1940	122	1979	95
1824	--	1863	--	1902	90	1941	108	1980	103
1825	--	1864	--	1903	92	1942	112	1981	88
1826	--	1865	--	1904	122	1943	114	1982	107
1827	--	1866	--	1905	110	1944	119	1983	97
1828	--	1867	--	1906	114	1945	93	1984	110
1829	--	1868	--	1907	120	1946	101	1985	97
1830	--	1869	--	1908	115	1947	102	1986	99
1831	--	1870	--	1909	108	1948	102	1987	106
1832	--	1871	--	1910	92	1949	99	1988	100
1833	--	1872	--	1911	120	1950	111	1989	110
1834	--	1873	--	1912	115	1951	96	1990	101
1835	--	1874	--	1913	99	1952	108	1991	99
1836	--	1875	--	1914	119	1953	86	1992	111
1837	--	1876	--	1915	101	1954	110	1993	114
1838	--	1877	--	1916	113	1955	106	1994	108
1839	--	1878	--	1917	118	1956	120	1995	104
1840	--	1879	--	1918	116	1957	104	1996	105
1841	--	1880	--	1919	98	1958	109	1997	113
1842	--	1881	--	1920	117	1959	112	1998	94
1843	--	1882	--	1921	88	1960	112	1999	89
1844	--	1883	--	1922	104	1961	123	2000	97
1845	--	1884	--	1923	119	1962	112		

**Table 26.** Ice-out dates for Thompson Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 44° 03'58", long. 70° 29'07".**Period of Record.**—1902 to 2000.**Years of Record.**—99.**Observers.**—Joseph M. Trebilcock, Richard Greenleaf, Thompson Lake Environmental Association.**Earliest Ice-Out Date.**—1981: 88.**Latest Ice-Out Date.**—1940: 128.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	110	1963	110
1808	--	1847	--	1886	--	1925	100	1964	118
1809	--	1848	--	1887	--	1926	123	1965	119
1810	--	1849	--	1888	--	1927	107	1966	112
1811	--	1850	--	1889	--	1928	112	1967	118
1812	--	1851	--	1890	--	1929	113	1968	107
1813	--	1852	--	1891	--	1930	114	1969	110
1814	--	1853	--	1892	--	1931	102	1970	118
1815	--	1854	--	1893	--	1932	112	1971	123
1816	--	1855	--	1894	--	1933	114	1972	127
1817	--	1856	--	1895	--	1934	113	1973	110
1818	--	1857	--	1896	--	1935	113	1974	106
1819	--	1858	--	1897	--	1936	104	1975	103
1820	--	1859	--	1898	--	1937	117	1976	107
1821	--	1860	--	1899	--	1938	107	1977	109
1822	--	1861	--	1900	--	1939	126	1978	121
1823	--	1862	--	1901	--	1940	128	1979	104
1824	--	1863	--	1902	107	1941	105	1980	103
1825	--	1864	--	1903	94	1942	108	1981	88
1826	--	1865	--	1904	121	1943	116	1982	118
1827	--	1866	--	1905	113	1944	120	1983	100
1828	--	1867	--	1906	113	1945	93	1984	112
1829	--	1868	--	1907	120	1946	96	1985	101
1830	--	1869	--	1908	116	1947	106	1986	102
1831	--	1870	--	1909	110	1948	100	1987	100
1832	--	1871	--	1910	95	1949	100	1988	102
1833	--	1872	--	1911	118	1950	114	1989	118
1834	--	1873	--	1912	94	1951	100	1990	105
1835	--	1874	--	1913	108	1952	111	1991	99
1836	--	1875	--	1914	113	1953	96	1992	101
1837	--	1876	--	1915	105	1954	110	1993	113
1838	--	1877	--	1916	110	1955	107	1994	114
1839	--	1878	--	1917	118	1956	123	1995	104
1840	--	1879	--	1918	114	1957	107	1996	106
1841	--	1880	--	1919	102	1958	109	1997	113
1842	--	1881	--	1920	116	1959	113	1998	99
1843	--	1882	--	1921	93	1960	116	1999	96
1844	--	1883	--	1922	107	1961	121	2000	99
1845	--	1884	--	1923	114	1962	113		

**Table 27.** Ice-out dates for Umbagog Lake, New Hampshire/Maine

[--, no data]

**Location of Lake.**—Lat. 44° 48'05", long. 71° 01'42".**Period of Record.**—1880 to 2000.**Years of Record.**—110.**Observers.**—Union Water Power Company, FPL Energy Maine.**Earliest Ice-Out Date.**—1910, 1921: 100.**Latest Ice-Out Date.**—1888: 144.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	124	1963	119
1808	--	1847	--	1886	--	1925	116	1964	123
1809	--	1848	--	1887	--	1926	129	1965	124
1810	--	1849	--	1888	144	1927	110	1966	123
1811	--	1850	--	1889	119	1928	130	1967	122
1812	--	1851	--	1890	131	1929	121	1968	110
1813	--	1852	--	1891	--	1930	122	1969	126
1814	--	1853	--	1892	--	1931	111	1970	130
1815	--	1854	--	1893	141	1932	121	1971	129
1816	--	1855	--	1894	--	1933	125	1972	135
1817	--	1856	--	1895	--	1934	116	1973	117
1818	--	1857	--	1896	123	1935	125	1974	130
1819	--	1858	--	1897	--	1936	121	1975	129
1820	--	1859	--	1898	--	1937	129	1976	113
1821	--	1860	--	1899	128	1938	117	1977	118
1822	--	1861	--	1900	--	1939	131	1978	132
1823	--	1862	--	1901	119	1940	131	1979	117
1824	--	1863	--	1902	112	1941	109	1980	117
1825	--	1864	--	1903	106	1942	121	1981	111
1826	--	1865	--	1904	114	1943	131	1982	127
1827	--	1866	--	1905	119	1944	126	1983	122
1828	--	1867	--	1906	131	1945	103	1984	121
1829	--	1868	--	1907	131	1946	116	1985	121
1830	--	1869	--	1908	122	1947	128	1986	110
1831	--	1870	--	1909	134	1948	115	1987	108
1832	--	1871	--	1910	100	1949	112	1988	115
1833	--	1872	--	1911	126	1950	126	1989	126
1834	--	1873	--	1912	124	1951	118	1990	118
1835	--	1874	--	1913	120	1952	118	1991	118
1836	--	1875	--	1914	130	1953	114	1992	130
1837	--	1876	--	1915	116	1954	122	1993	121
1838	--	1877	--	1916	125	1955	114	1994	125
1839	--	1878	--	1917	130	1956	128	1995	116
1840	--	1879	--	1918	118	1957	115	1996	125
1841	--	1880	129	1919	121	1958	122	1997	123
1842	--	1881	135	1920	129	1959	117	1998	109
1843	--	1882	141	1921	100	1960	119	1999	119
1844	--	1883	134	1922	117	1961	130	2000	113
1845	--	1884	--	1923	123	1962	122		

**Table 28.** Ice-out dates for West Grand Lake, Maine

[--, no data]

**Location of Lake.**—Lat. 45° 12'56", long. 67° 48'52".

**Period of Record.**—1878 to 2000.

**Years of Record.**—123.

**Observers.**—Marion Staples and family (three generations).

**Earliest Ice-Out Date.**—1999: 97.

**Latest Ice-Out Date.**—1918: 139.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	125	1924	128	1963	124
1808	--	1847	--	1886	123	1925	104	1964	124
1809	--	1848	--	1887	131	1926	134	1965	122
1810	--	1849	--	1888	138	1927	113	1966	115
1811	--	1850	--	1889	116	1928	124	1967	125
1812	--	1851	--	1890	128	1929	120	1968	112
1813	--	1852	--	1891	124	1930	117	1969	124
1814	--	1853	--	1892	121	1931	111	1970	121
1815	--	1854	--	1893	129	1932	116	1971	123
1816	--	1855	--	1894	120	1933	119	1972	135
1817	--	1856	--	1895	122	1934	115	1973	117
1818	--	1857	--	1896	120	1935	125	1974	112
1819	--	1858	--	1897	124	1936	107	1975	124
1820	--	1859	--	1898	117	1937	119	1976	111
1821	--	1860	--	1899	117	1938	115	1977	122
1822	--	1861	--	1900	119	1939	131	1978	127
1823	--	1862	--	1901	115	1940	129	1979	113
1824	--	1863	--	1902	98	1941	117	1980	109
1825	--	1864	--	1903	110	1942	120	1981	100
1826	--	1865	--	1904	126	1943	121	1982	124
1827	--	1866	--	1905	118	1944	123	1983	104
1828	--	1867	--	1906	125	1945	103	1984	121
1829	--	1868	--	1907	125	1946	117	1985	113
1830	--	1869	--	1908	121	1947	114	1986	113
1831	--	1870	--	1909	126	1948	116	1987	112
1832	--	1871	--	1910	100	1949	106	1988	111
1833	--	1872	--	1911	123	1950	120	1989	126
1834	--	1873	--	1912	128	1951	103	1990	117
1835	--	1874	--	1913	110	1952	120	1991	118
1836	--	1875	--	1914	130	1953	98	1992	124
1837	--	1876	--	1915	110	1954	118	1993	117
1838	--	1877	--	1916	118	1955	115	1994	122
1839	--	1878	116	1917	124	1956	126	1995	118
1840	--	1879	130	1918	139	1957	119	1996	115
1841	--	1880	123	1919	119	1958	115	1997	118
1842	--	1881	123	1920	125	1959	124	1998	107
1843	--	1882	126	1921	100	1960	122	1999	97
1844	--	1883	129	1922	108	1961	132	2000	100
1845	--	1884	121	1923	126	1962	119		

**Table 29.** Ice-out dates for Lake Winnepesaukee, New Hampshire

[--, no data]

**Location of Lake.**—Lat. 43° 35'56", long. 71° 19'21".**Period of Record.**—1887 to 2000.**Years of Record.**—114.**Observers and Ice-Out Definition.**—New Hampshire Office of Vacation Travel, Harry Daniel, Arthur Marshall, Bob Aldrich, The Lakes Region Association, The Classic Journey Company. Ice-out definition for most years thought be date of open navigation for the Mount Washington on its regular route, except for Meredith Bay.**Earliest Ice-Out Date.**—1921: 87.**Latest Ice-Out Date.**—1888: 133.

Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day	Year	Julian day
1807	--	1846	--	1885	--	1924	109	1963	110
1808	--	1847	--	1886	--	1925	100	1964	119
1809	--	1848	--	1887	127	1926	122	1965	112
1810	--	1849	--	1888	133	1927	103	1966	110
1811	--	1850	--	1889	104	1928	110	1967	110
1812	--	1851	--	1890	114	1929	108	1968	106
1813	--	1852	--	1891	113	1930	97	1969	115
1814	--	1853	--	1892	102	1931	101	1970	118
1815	--	1854	--	1893	130	1932	111	1971	126
1816	--	1855	--	1894	110	1933	115	1972	123
1817	--	1856	--	1895	116	1934	111	1973	106
1818	--	1857	--	1896	114	1935	111	1974	106
1819	--	1858	--	1897	113	1936	99	1975	115
1820	--	1859	--	1898	104	1937	115	1976	107
1821	--	1860	--	1899	122	1938	107	1977	113
1822	--	1861	--	1900	116	1939	124	1978	117
1823	--	1862	--	1901	110	1940	125	1979	116
1824	--	1863	--	1902	94	1941	106	1980	108
1825	--	1864	--	1903	92	1942	108	1981	95
1826	--	1865	--	1904	120	1943	120	1982	119
1827	--	1866	--	1905	114	1944	124	1983	100
1828	--	1867	--	1906	116	1945	91	1984	111
1829	--	1868	--	1907	119	1946	89	1985	104
1830	--	1869	--	1908	112	1947	114	1986	106
1831	--	1870	--	1909	109	1948	101	1987	102
1832	--	1871	--	1910	96	1949	108	1988	107
1833	--	1872	--	1911	122	1950	110	1989	115
1834	--	1873	--	1912	114	1951	104	1990	112
1835	--	1874	--	1913	107	1952	111	1991	98
1836	--	1875	--	1914	105	1953	93	1992	112
1837	--	1876	--	1915	114	1954	106	1993	112
1838	--	1877	--	1916	107	1955	109	1994	113
1839	--	1878	--	1917	118	1956	126	1995	105
1840	--	1879	--	1918	114	1957	93	1996	108
1841	--	1880	--	1919	104	1958	103	1997	114
1842	--	1881	--	1920	115	1959	116	1998	97
1843	--	1882	--	1921	87	1960	110	1999	98
1844	--	1883	--	1922	107	1961	117	2000	101
1845	--	1884	--	1923	114	1962	114		







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