

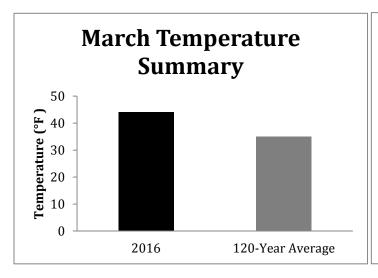
Daniel Smiley Research Center MOHONK PRESERVE Mohonk Lake, New Paltz, NY 12561

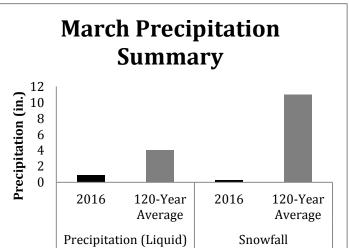
Natural Science Note No. 711-16

From records of the Mohonk Lake Cooperative Weather Station Established January, 1896

Weather Summary for March, 2016

| | 120-year average 1896-2015 | Actual This Year | Deviation from Average |
|-------------------------|-------------------------------|------------------|---------------------------|
| Temperature (°F) | 34.9 | 44.0 | +9.1 |
| Precipitation (in.) | 4.03 | 0.92 | -3.11 |
| Snow (in.) | 11.01 | 0.3 | -10.71 |





on the 9th 78°F Highest temperature:

on the 3^{rd} & 4^{th} 16°F Lowest temperature:

3 days (15th, 25th, & 28th) Fog: 2 days $(16^{th} - 17^{th})$ Thunder:

2 days $(17^{th} - 18^{th})$ Hail:

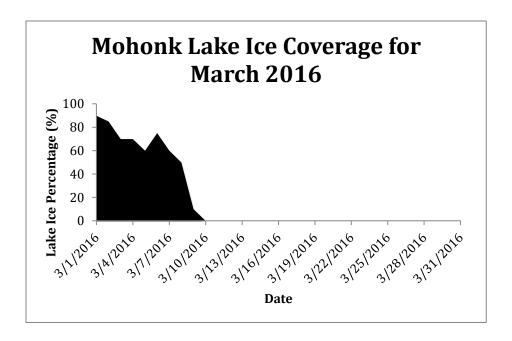
7 days $(4^{th}, 7^{th} - 9^{th}, 11^{th}, 24^{th}, & 31^{st})$ Haze:

Lake Ice:

10% Off on the 1^{st} , $15^{\%}$ Off on the 2^{nd} , 30% Off from the $3^{rd}-4^{th}$, 40% Off on the 5^{th} , 25% Off on the 6^{th} , 40% Off on the 7^{th} , 50% Off on the 8^{th} , 90% Off on the 9th, 100% Off on the 10th, and remained 100% Off for the rest of the month. For a

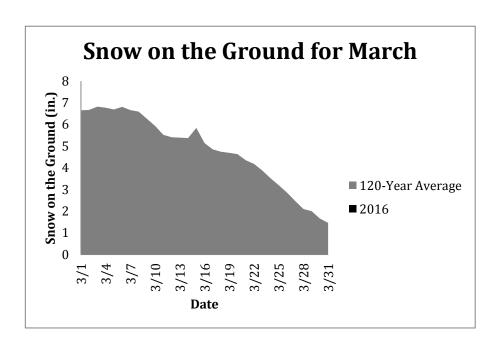
2015-2016 Lake Ice Season Summary, please see page 4.

MOHONK LAKE COOPERATIVE WEATHER STATION



Snow on Ground:

0 inches from the $1^{st}-3^{rd}$, T from the $4^{th}-5^{th}$, 0 inches from the 6^{th} through the remainder of the month



Precipitation pH:

5.92 (n= 9 of storms)

MOHONK LAKE COOPERATIVE WEATHER STATION

Summary

Temperature for March was 9.1°F above the 120-year average, marking this March the 4th warmest March on record (See Table 1). Two daily temperature records were set this month: on the 9th at 78°F (previous high maximum for the date was 66°F) and on the 10th at 77°F (previous high maximum for the date was 66°F). Precipitation was 0.92 in., 3.11 inches below normal, marking this March the 6th driest March on record (See Table 2). Monthly snowfall was 0.3 in., 10.71 in. below normal (marking 2016 the 12th least snowy March on record – See Table 3). There were 8 recorded days of measurable precipitation (Average is 10.9).

Table 1. Top 10 Warmest Marches

| Year | Temperature (°F) | Rank |
|------|------------------|------|
| 2012 | 47.9 | 1 |
| 1945 | 45.6 | 2 |
| 1946 | 45.5 | 3 |
| 2016 | 44.0 | 4 |
| 1903 | 43.5 | 5 |
| 2010 | 42.7 | 6 |
| 1921 | 42.5 | 7 |
| 2000 | 42.1 | 8 |
| 1936 | 41.5 | 9 |
| 1973 | 41.2 | 10 |

Table 2. **Top 10 Driest Marches**

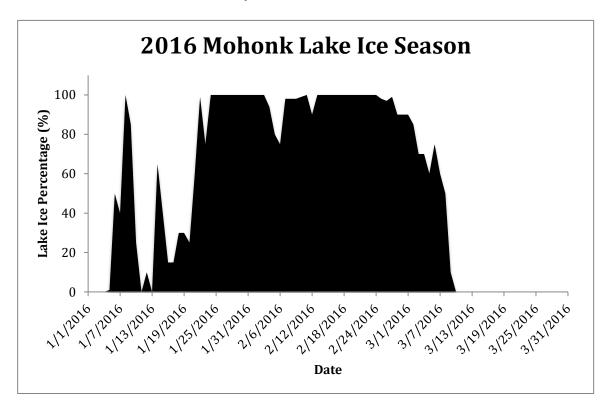
| Year | Precipitation (in.) | Rank |
|------|---------------------|------|
| 1915 | 0.28 | 1 |
| 1981 | 0.42 | 2 |
| 1931 | 0.60 | 3 |
| 1924 | 0.79 | 4 |
| 2006 | 0.91 | 5 |
| 2016 | 0.92 | 6 |
| 1910 | 0.98 | 7 |
| 1929 | 1.05 | 8 |
| 1988 | 1.16 | 9 |
| 1949 | 1.23 | 10 |

Table 3. Top 15 Least Snowy Marches

| Year | Snow (in.) | Rank |
|------|------------|------|
| 1910 | 0.00 | 1 |
| 1921 | 0.00 | 2 |
| 1931 | 0.00 | 3 |
| 1903 | T | 4 |
| 1930 | T | 5 |
| 1946 | T | 6 |
| 1953 | T | 7 |
| 1954 | T | 8 |
| 1987 | T | 9 |
| 2014 | 0.1 | 10 |
| 1973 | 0.3 | 11 |
| 2016 | 0.3 | 12 |
| 1899 | 0.4 | 13 |
| 1979 | 0.9 | 14 |
| 1898 | 1.0 | 15 |

MOHONK LAKE COOPERATIVE WEATHER STATION

2016 Mohonk Lake Ice Season Summary



This past winter season has definitely proved to be very interesting and atypical. In addition to warmer-than-average temperatures and lower-than-average snowfall, we also experienced unusual lake ice conditions.

Mohonk Lake's *Ice Over* is defined as the date when Mohonk Lake is at 100% lake ice coverage. Mohonk Lake experienced two ice overs this year: one beginning on 24 January and lasting until 3 February, and a second that began on 13 February 2016 and lasted to 24 February. *The second ice over on 13 February 2016 ice over date is the latest the lake has iced over in 81 years of records (previous record January 30, 1995).*

Mohonk Lake's *Ice Cover Season* is defined by the longest amount of days that there is shore to shore 100% lake ice coverage (without any thaws). The complete ice cover season only lasted 12 days (13 February 2016 – 24 February 2016). **2016's complete ice cover season broke our shortest ice cover season from 66 days (2 January 2002 – 9 March 2002) in our 80 years of records**.

Mohonk Lake's *Ice Out* is defined as the date when Mohonk Lake was completely 100% free of ice. Mohonk Lake iced out on 10 March 2016. *This is the second earliest date for Mohonk Lake to ice out (record set 9 March 2002)*.

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