



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

**Natural Science Note No. 708-15**  
 From records of the Mohonk Lake Cooperative Weather Station  
 Established January, 1896

**Annual Weather Summary for 2015**

**Part I: Summary of 120<sup>th</sup> Year: 2015**

Records Taken in Year            365                    Total Records to Date = 43,808

**Table 1. Annual Deviation from 119-Year Average**

	119-year average 1896-2014	Actual This Year	Deviation from Average
<b>Temperature (°F)</b>	48.4	50.1	+1.73
<b>Precipitation (in.)</b>	48.25	52.16	+3.91
<b>Snow (in.)</b>	59.4	54.2	-5.2

**Table 2. Monthly Deviation from 119-Year Average**

	Temperature (°F)			Precipitation (in.)			Snow (in.)		
	1896-2014	2015	Deviation	1896-2014	2015	Deviation	1896-2014	2015	Deviation
January	24.8	21.9	-2.9	3.47	3.41	-0.06	15.1	17.5	+2.4
February	26.1	16.5	-9.6	3.31	2.51	-0.80	15.1	24.1	+9.0
March	35.0	31.4	-3.6	4.05	1.99	-2.06	11.0	10.0	-1.0
April	47.0	48.7	+1.7	4.12	4.40	+0.28	2.9	2.0	-0.9
May	58.1	65.9	+7.8	4.17	2.04	-2.13	0.1	0.0	-0.1
June	66.3	64.3	-2.0	4.15	10.49	+6.34	0.0	0.0	0.0
July	70.9	72.4	+1.5	4.53	2.80	-1.73	0.0	0.0	0.0
August	69.0	72.2	+3.2	4.44	3.37	-1.07	0.0	0.0	0.0
September	62.2	68.2	+6.0	4.35	7.77	+3.42	0.0	0.0	0.0
October	51.8	51.4	-0.4	3.97	3.21	-0.76	0.3	T	-0.3
November	40.4	46.5	+6.1	3.76	4.35	+0.59	3.3	0.00	-3.3
December	28.9	42.2	+13.3	3.93	5.49	+1.56	11.6	0.60	-11
Year	48.4	50.1	+1.73	48.25	52.16	+3.91	59.4	54.2	-5.2

**Part II: Extremes for 2015**

**Temperature**

Highest Maximum	90°F	August 17 <sup>th</sup> and September 8 <sup>th</sup>
Lowest Maximum	-8°F	February 16 <sup>th</sup>

**Precipitation**

Greatest Rainfall, 24 hrs.	4.00 in.	September 30 <sup>th</sup>
Greatest Snowfall, 24 hrs.	9.6 in.	February 2 <sup>nd</sup>
Greatest Snow on Ground	20 in.	March 2 <sup>nd</sup> – 7 <sup>th</sup>
Average Annual pH	5.11	(n=91)



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

**Mohonk Lake**

Lowest Surface pH:	6.37	April 18 <sup>th</sup>
Highest pH:	7.65	June 20 <sup>th</sup> , June 26 <sup>th</sup>
Average pH:	7.26	+1.1 from Average
Ice Out/Off	April 17 <sup>th</sup>	11 days later in 120-year average
Ice Over	N/A	Did not ice over at the end of 2015
Height of Lake: Highest	-14.5	June 21 <sup>st</sup>
Height of Lake: Lowest	-33	March 24 <sup>th</sup>
Records Taken in Year	576	Total Records to Date = 22,969

**Frost**

Last Frost:	(29°F ) April 25 <sup>th</sup>	Average
First Frost:	(30°F ) October 18 <sup>th</sup>	4 days early in 120-year average
Length of Growing Season:	176 Days	4 days less in 120-year average

**Highlights:**

Temperature for the year was 1.73°F above average. This ranked 14<sup>th</sup> in our recorded history (see table on Page 3). Note all but three occurred since 1990 (Ranked Year #9 – 1949, Year #11 – 1953, and Year #13 - 1913). Precipitation was 3.91 above average. Snowfall was 5.2 inches below average.

2015 was marked by a number of notable monthly extremes.

- February ranked 6<sup>th</sup> coldest February on record.
- May ranked to be the hottest May on record.
- June was the 4<sup>th</sup> rainiest June on record.
- September was the warmest September on record.
- November was the 3<sup>rd</sup> warmest November on record.
- December was the warmest December on record



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

Top 14 Warmest Years

Year	Temperature (°F)	Rank
1998	52.0	1
2006	51.9	2
1999	51.5	3
2001	51.5	4
2002	51.5	5
1990	51.2	6
2010	51.2	7
2011	51.2	8
1949	51.1	9
1991	51.1	10
1953	50.7	11
2005	50.4	12
1913	50.1	13
<b>2015</b>	<b>50.1</b>	<b>14</b>

*Christy Belardo, Citizen Science Education Coordinator*  
*Elizabeth Long, Director of Conservation Science*  
*Paul Huth, Director of Research Emeritus*