

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

Natural Science Note No. 721-16

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

Annual Weather Summary for 2016

Part I: Summary of 121st Year: 2016

Records Taken this Year: 366 Total to Date = 44,173

Table 1. Annual Deviation from 120-Year Average

	120-year average 1896-2015	Actual This Year	Deviation from Average
Temperature (°F)	48.38	51.93	+3.55
Precipitation (in.)	48.27	40.64	-7.63
Snow (in.)	59.36	37.8	-21.56

Table 2. Monthly Deviation from 120-Year Average

	Temperature (°F)		Precipitation (in.)		Snow (in.)				
	1896- 2015	2016	Deviation	1896- 2015	2016	Deviation	1896- 2015	2016	Deviation
January	24.8	28.1	+3.3	3.47	2.34	-1.13	15.08	0.8	-14.28
February	26.0	31.8	+5.8	3.30	4.56	+1.26	15.17	5.5	-9.67
March	34.9	44.0	+9.1	4.03	0.92	-3.11	11.01	0.3	-10.71
April	47.0	47.5	+0.5	4.12	1.97	-2.15	2.87	7.1	+4.23
May	58.2	59.6	+1.4	4.16	3.14	-1.02	0.14	0.0	-0.14
June	66.3	68.8	+2.5	4.20	2.55	-1.65	0.00	0.0	0.00
July	70.9	74.3	+3.4	4.51	6.63	2.12	0.00	0.0	0.00
August	69.0	73.7	+4.7	4.43	4.32	-0.11	0.00	0.0	0.00
September	62.3	66.7	+4.4	4.38	1.57	-2.81	0.00	0.0	0.00
October	51.8	53.1	+1.3	3.96	3.81	-0.15	0.27	1.0	+0.78
November	40.4	44.3	+3.9	3.77	4.45	+0.68	3.26	5.3	+2.04
December	29.0	31.2	+2.2	3.94	4.38	+0.44	11.56	17.8	+6.24
Year	48.38	51.93	+3.55	48.27	40.64	-7.63	59.36	37.8	-21.56

Part II: Extremes for 2016

Temperature

Highest Maximum 91°F May 28 Lowest Maximum -9°F Feb. 14

Precipitation

Greatest Rainfall, 24 hrs. 3.02 in. Jul. 9 Greatest Snowfall, 24 hrs. 5.1 in. Nov. 20

Christy Belardo, Citizen Science Education Coordinator Elizabeth Long, Director of Conservation Science



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Greatest Snow on Ground	8 in.	Dec. 29
Average Annual Precipitation pH	5.24	(n=120)

Mohonk Lake

Lowest Surface pH: Nov. 16 6.9 Highest Surface pH: 8.51 Sept. 21

Average Surface pH: 7.39 Warmest Surface Temperature: 84°F

Ice Over for 2015 Jan. 24 – Feb. 3

Feb. 13 – Feb. 24

Latest date to ice over (Jan. 30, 1995)

Aug 14

2nd earliest date to ice out Ice Out Mar. 10

(Mar. 9, 2002) Dec. 16 16 days earlier than the

Ice Over for 2016 85-year average

Records Taken in Year Total = 23,555589

Frost

Last Frost: Apr. 27 2 days later than average First Frost: Oct. 26 4 days later than average Length of Growing Season: 182 days 2 days longer than average

Highlights:

Temperature for the year was 3.5°F above average. This ranked 3rd warmest year in our recorded history (See Table 1). Precipitation was 7.63 inches below average. This ranked 25th driest year in our recorded history. Snowfall was 21.56 inches below average. This ranked 21st least snowy in our recorded history.

2016 was marked by a number of notable monthly extremes in our 120-year records:

- 2nd Least Snowy January
- 12th Warmest February
- 14th Least Snowy February
- 4th Warmest March
- 6th Driest March
- 12th Least Snowy March
- 10th Warmest July
- 4th Warmest August
- 4th Warmest September



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Table 1. Top 10 Warmest Years

Year	Temperature (°F)	Rank
2012	52.53	1
1998	52.06	2
2016	51.93	3
2006	51.88	4
2001	51.53	5
2010	51.51	6
1999	51.48	7
2002	51.48	8
1990	51.23	9
2011	51.15	10