

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

### Natural Science Note No. 746-18

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

### **Annual Weather Summary for 2018**

Part I: Summary of 123<sup>rd</sup> Year: 2018

Records Taken this Year: 365 Total to Date = 44,903

### Table 1. Annual Deviation from 122-Year Average

	122-year average 1896-2017	Actual This Year	Deviation from Average
<b>Temperature</b> (°F)	48.4	50.4	+2.0
Precipitation (in.)	49.01	69.19	+20.18
Snow (in.)	59.15	63.75	+4.60

**Table 2. Monthly Deviation from 122-Year Average** 

	Temperature (°F)		Precipitation (in.)			Snow (in.)			
	1896- 2017	2018	Deviation	1896- 2017	2018	Deviation	1896- 2017	2018	Deviation
January	24.9	24.7	-0.2	3.47	4.61	+1.14	14.90	13.50	-1.40
February	26.1	34.0	+7.9	3.31	5.01	+1.70	15.11	12.10	-3.01
March	35.0	34.5	-0.5	4.83	3.76	-1.07	11.00	25.00	+14.00
April	47.0	43.9	-3.1	4.11	4.52	+0.41	2.88	3.45	+0.57
May	58.2	64.8	+6.6	4.17	3.60	-0.57	0.14	0.00	-0.14
June	66.3	67.9	+1.6	4.18	1.94	-2.24	0.00	0.00	0.00
July	70.9	74.9	+4.0	4.52	9.27	+4.75	0.00	0.00	0.00
August	69.1	73.5	+4.4	4.42	5.38	+0.96	0.00	0.00	0.00
September	62.3	65.0	+2.7	4.34	12.70	+8.36	0.00	0.00	0.00
October	51.9	51.2	-0.7	3.98	5.00	+1.02	0.28	0.00	-0.28
November	40.5	37.3	-3.2	3.75	8.15	+4.40	3.25	9.50	+6.25
December	29.0	33.2	+4.2	3.93	5.25	+1.32	11.59	0.20	-11.39
Year	48.4	50.4	+2.0	49.01	69.19	+20.18	59.15	63.75	+4.60

### Part II: Extremes for 2018

#### Temperature

Highest Maximum	93°F	July 2, July 3
Lowest Maximum	7°F	Jan. 6
Highest Minimum	75°F	July 1, July 2, and Aug. 29
Lowest Minimum	-4°F	Jan. 7



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## **Precipitation**

Greatest Rainfall, 24 hrs.	2.52.	Sept. 18
Greatest Snowfall, 24 hrs.	11.0 in.	Mar. 7
Greatest Snow on Ground	15 in.	Mar. 8
Average Annual Precipitation pH	4.76	(n=141)

## Mohonk Lake

ik Eake		
Lowest Surface pH:	4.99	June 1
Highest Surface pH:	7.25	July 4
Average Surface pH:	6.68	
Warmest Surface Temperature:	84.5°F	July 3
Ice Out	Apr. 11	5.5 days later than average
Ice Over for 2018	Dec. 12	11 days earlier than average
Records Taken in Year	309	Total = 24,248

#### Frost

Last Frost:	April 21	3 days earlier than average
First Frost:	Oct. 18	3.8 days earlier than average
Length of Growing Season:	180 days	average is 180 days

### **Highlights:**

Temperature for the year was  $2.0^{\circ}F$  above average. Precipitation was 20.18 inches above average, marking this the  $2^{nd}$  year for most precipitation. Snowfall was 4.60 inches above average.

**Table 3. Top 10 Years with the Most Precipitation** 

Year	Precipitation (in.)	Rank
2011	78.77	1
2018	69.19	2
1996	68.80	3
2005	63.23	4
1990	62.79	5
2003	62.54	6
1945	62.32	7
1983	62.19	8
1902	61.72	9
1901	61.03	10

2018 was marked by several notable monthly extremes in our 122-year records:

- 5<sup>th</sup> Warmest February
- 2<sup>nd</sup> Warmest May
- 9<sup>th</sup> Warmest July
- 5<sup>th</sup> Rainiest July

- 5<sup>th</sup> Warmest August
- 1<sup>st</sup> Rainiest September
- 4<sup>th</sup> Rainiest November
- 9<sup>th</sup> Least Snowy December

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