



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

Natural Science Note No. 811-2023

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

Annual Weather Summary for 2023

Part I: Summary of 128th Year: 2023

- Records Taken this Year: 365*
- Total to Date = 46,729

Table 1. Annual Deviation from 127-Year Average

	127-year average 1896-2022	Actual This Year	Deviation from Average
Temperature (°F)	48.6	53.0	+4.4
Precipitation (in.)	48.42	65.86	+17.44
Snow (in.)	58.31	34.02	-24.29

Table 2. Monthly Deviation from 127-Year Average

	Temperature (°F)			Precipitation (in.)			Snow (in.)		
	1896- 2022	2023	Deviation	1896- 2022	2023	Deviation	1896- 2022	2023	Deviation
January	25.0	35.6	+10.6	3.47	4.82	-0.58	14.74	5.02	-9.72
February	26.3	34.3	+8.0	3.33	2.40	+1.78	14.94	9.00	-5.94
March	35.2	39.3	+4.1	3.97	5.06	-1.08	10.87	20.00	+9.13
April	47.1	55.1	+8.0	4.14	5.46	+5.51	2.84	0.00	-2.84
May	58.3	60.0	+1.7	4.17	3.23	-0.88	0.14	0.00	-0.14
June	66.4	66.3	-0.1	4.12	5.18	-0.33	0.0	0.00	0.0
July	71.1	74.1	+3.0	4.53	9.01	-2.55	0.0	0.00	0.0
August	69.3	70.2	+0.9	4.45	6.40	-0.87	0.0	0.00	0.0
September	62.4	64.7	+2.3	4.43	9.00	+2.03	0.0	0.00	0.0
October	52.0	57.2	+5.2	4.05	4.26	+0.90	0.27	0.00	-0.27
November	40.5	40.3	-0.2	3.78	2.77	+0.92	3.25	T	-3.24
December	29.2	38.6	+9.4	3.98	8.27	+2.85	11.36	T	-11.35
Year	48.6	53.0	+4.4	48.42	65.86	+17.44	58.31	34.02	-24.29



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Part II: Extremes for 2023

Temperature

	Temperature (°F)	Date(s)
Highest Maximum	90°F	April 13, June 2
Lowest Maximum	15°F	February 4
Highest Minimum	71°F	July 29, September 7
Lowest Minimum	-7°F	February 4

Precipitation

	Precipitation (inches)	Date
Greatest Rainfall, 24 hrs.	3.36 in.	December 18
Greatest Snowfall, 24 hrs.	13 in.	March 14
Greatest Snow on Ground	17 in.	March 14

Mohonk Lake

In total, there were three ice on/off events for the 2022-2023 season. See table below for lake ice summary.

Ice on 1	December 22, 2022
Ice off 1	January 5, 2023
Ice on 2	February 2, 2023
Ice off 2	February 18, 2023
Ice on 3	February 25, 2023
Ice off 3	March 23, 2023

Frost

Last Frost	April 10	13 days later than average
First Frost	November 2	11 days later than average
Length of Growing Season	206 days	26 days longer than average

Highlights:

Temperature for the year was 4.4°F above average, marking this the second warmest year on record (Table 3). Precipitation was 17.44 inches above average, marking this the fourth wettest year in our recorded history (Table 4). Snowfall was 24.29 inches below average, marking this the 15th least snowy year in our recorded history.

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Megan Napoli, Associate Director of Conservation Science & Research



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2023 was also marked by notable monthly and seasonal extremes in our 127-year records:

- 2nd Warmest January
- 5th Warmest February
- 2nd Warmest Winter
- 2nd Warmest April
- 3rd Warmest Spring
- 7th Wettest July
- 9th Wettest Summer
- 9th Wettest September
- 7th Warmest October
- 2nd Warmest December
- 5th Wettest December
- 9th Least Snowy December

Table 3. Top 10 Warmest Years

Year	Temperature (°F)	Rank
2020	52.98	1
2023	52.97	2
2012	52.53	3
2021	52.30	4
1998	52.06	5
2016	51.93	6
2006	51.88	7
2022	51.84	8
2001	51.53	9
2010	51.51	10

Table 4. Top 10 Wettest Years

Year	Precipitation (in.)	Rank
2011	78.77	1
2018	69.19	2
1996	68.80	3
2023	65.86	4
2005	63.23	5
1990	62.79	6
2003	62.54	7
1945	62.32	8
1983	62.19	9
1902	61.72	10

*Due to intermittent malfunctioning of equipment, some temperature data was retrieved from the NYS Mesonet station in High Falls. All precipitation data is from the NOAA Mohonk Lake weather station equipment.

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