



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

Natural Science Note No. 772-20

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

Annual Weather Summary for 2020

Part I: Summary of 125th Year: 2020

Records Taken this Year: 365

Total to Date = 45,634

Table 1. Annual Deviation from 124-Year Average

	124-year average 1896-2019	Actual This Year	Deviation from Average
Temperature (°F)	48.5	53.0	+4.5
Precipitation (in.)	49.19	34.59	-14.60
Snow (in.)	59.06	22.50	-36.56

Table 2. Monthly Deviation from 124-Year Average

	Temperature (°F)			Precipitation (in.)			Snow (in.)		
	1896-2019	2020	Deviation	1896-2019	2020	Deviation	1896-2019	2020	Deviation
January	24.9	33.1	+8.2	3.50	1.47	-2.03	14.89	3.50	-11.39
February	26.2	33.2	+7.0	3.32	1.62	-1.7	15.04	3.00	-12.04
March	35.0	43.0	+8.0	4.79	2.34	-2.45	11.06	2.00	-9.06
April	47.0	45.9	-1.1	4.11	3.18	-0.93	2.86	Trace	-2.86
May	58.2	59.4	+1.2	4.18	1.52	-2.66	0.14	Trace	-0.14
June	66.3	70.6	+4.3	4.16	2.07	-2.09	0.00	0.00	0.00
July	71.0	77.1	+6.1	4.55	1.75	-2.80	0.00	0.00	0.00
August	69.1	73.8	+4.7	4.44	2.45	-1.99	0.00	0.00	0.00
September	62.4	64.8	+2.4	4.39	4.24	-0.15	0.00	0.00	0.00
October	51.9	54.0	+2.1	4.02	4.11	+0.09	0.27	0.00	-0.27
November	40.4	47.1	+6.7	3.77	5.31	+1.54	3.27	0.00	-3.27
December	29.0	33.7	+4.7	3.96	4.53	+0.57	11.53	14.00	+2.47
Year	48.5	53.0	+4.5	49.19	34.59	-14.60	59.06	22.50	-36.56

Part II: Extremes for 2020

Temperature

Highest Maximum	93°F	July 27, 28
Lowest Maximum	21°F	Jan. 18
Highest Minimum	75°F	July 28
Lowest Minimum	4°F	Feb. 15

Natalie Feldsine, Research Collections and Citizen Science Coordinator



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Precipitation

Greatest Rainfall, 24 hrs.	2.22 in.	Sep. 30, Nov. 30
Greatest Snowfall, 24 hrs.	12 in.	Dec. 17
Greatest Snow on Ground	13 in.	Dec. 17
Average Annual Precipitation pH	N/A	<i>annual pH unavailable</i>

Mohonk Lake

Lowest Surface pH:	N/A	<i>annual pH unavailable</i>
Highest Surface pH:	N/A	<i>annual pH unavailable</i>
Average Surface pH:	N/A	<i>annual pH unavailable</i>
Warmest Surface Temperature:	N/A	<i>annual temperature unavailable</i>
Ice Out	Mar. 11	<i>24 days earlier than average</i>
Ice Over for <u>2020</u>	N/A	<i>did not ice over at the end of 2020</i>
Records Taken in Year	TBD	<i>Lake data for 2020 were collected in collaboration with SUNY New Paltz. Data will be available in early 2021, upon request.</i>

Frost

Last Frost:	May 13	21 days later than average
First Frost:	Oct. 30	9 days later than average
Length of Growing Season:	170 days	Average is 180 days

Highlights:

Temperature for the year was 4.5°F above average, marking this the **warmest year on record (Table 4)**. Precipitation was 14.60 inches below average, marking this the 7th driest year on record (Table 5). Snowfall was 36.56 inches below average, marking this the 2nd least snowy year on record (Table 6).

2020 was also marked by notable monthly extremes in our 124-year records:

- 8th Warmest January
- 10th Warmest February
- 8th Least Snowy February
- 6th Warmest March
- 9th Driest May
- 8th Driest Spring
- 6th Warmest June
- 1st Warmest July
- 6th Warmest August
- 2nd Warmest Summer
- 7th Driest Summer
- 3rd Warmest November
- 4th Warmest Fall



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Table 4. Top 10 Warmest Years

Year	Temperature (°F)	Rank
2020	53.0	1
2012	52.5	2
1998	52.1	3
2016	51.9	4
2006	51.9	5
2001	51.5	6
2010	51.5	7
1999	51.5	8
2002	51.5	9
1990	51.2	10

Table 5. Top 10 Driest Years

Year	Precipitation (in.)	Rank
1964	28.10	1
1930	31.28	2
1924	32.92	3
1965	33.18	4
1946	34.33	5
1941	34.50	6
2020	34.59	7
1917	35.14	8
1957	35.57	9
2001	35.61	10

Table 6. Top 10 Least Snowy Years

Year	Snowfall (in.)	Rank
1913	20.50	1
2020	22.50	2
1898	26.00	3
1998	26.40	4
1919	27.60	5
1912	28.00	6
1899	28.90	7
1946	30.41	8
1921	31.00	9
1989	32.20	10

**Note that pH was not recorded for the precipitation events after March 14th due to the COVID-19 shutdown. In-person data collection is limited at this time but data is still being collected by two automated weather systems.