

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

# **Natural Science Note No. 621-09**

# **Annual Weather Summary for 2009**

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

Part I:Summary of 114<sup>th</sup> Year: 2009

**Table 1.** Annual Deviation from 114-Year Average.

	113-year average 1896-2008	Actual This Year	Deviation from Average
<b>Temperature</b> (°F)	48.3	49.3	+1.0
Precipitation (in.)	47.85	60.99	+13.14
Snow (in.)	59.1	47.6	-11.5

**Table 2**. Monthly Deviation from 114-Year Average.

	Ter	nperatu	re (°F)	Pre	cipitatio	on (in.)		Snow (	in)
	1896-			1896-			1896-		
	2008	2009	Deviation	2008	2009	Deviation	2008	2009	Deviation
Jan	24.8	20.5	-4.3	3.49	3.46	-0.03	15.2	19.1	+3.9
Feb	25.9	30.0	+4.1	3.29	1.33	-1.96	14.6	7.6	-7.0
Mar	34.9	38.2	+3.3	4.02	3.42	-0.60	11.3	2.3	-9.0
Apr	46.7	51.6	+4.9	4.14	3.00	-1.14	3.0	T	-3.0
May	58.0	59.3	+1.3	4.17	5.43	+1.26	0.1	0.0	-0.1
Jun	66.2	65.5	-0.7	4.07	13.66	+9.59	_	_	_
Jul	70.8	68.9	-1.9	4.52	7.68	+3.16	_	_	_
Aug	68.9	71.6	+2.7	4.36	8.02	+3.66	_	_	_
Sep	62.2	61.3	-0.9	4.32	2.04	-2.28	_	_	_
Oct	51.8	49.5	-2.3	3.91	5.14	+1.23	0.1	1.3	+1.2
Nov	40.3	45.7	+5.4	3.79	1.51	-2.28	3.3	0.0	-3.3
Dec	28.8	28.6	-0.2	3.90	6.30	+2.4	11.6	17.3	+5.7
YEAR	48.3	49.3	+1.0	47.85	60.99	+13.14	59.1	47.6	-11.5

### **PART II: Extremes for 2009**

### **Temperature**

Highest Maximum	91°F	25 April
Lowest Minimum	-2°F	17 January

## **Precipitation**

Greatest Rainfall, 24 hrs.	2.72 in.	30 July
Greatest Snowfall, 24 hrs.	7.6 in.	9 December
Greatest Snow on Ground	19 in.	3, 4 February
Average Annual pH =	4.63	(n=114)

#### **Mohonk Lake**

Ice Out	30 March	73-yr. average	7 April
Ice Over	none	70-yr. average	1 January

Height of Lake: Highest	$+1 \frac{3}{4} in.$	14 June
Lowest	-12 ¾ in.	25-27 January

### **Frost**

Last Frost: 13 April	(27°F)	113-yr. average	25 April
First Frost: 15 October	(31°F)	113-yr. average	21 October
Length of Growing Seas	on: 185 days	113-yr. average	180 days

## **Highlights**

Average daily temperature for the year, 49.3°F, was 1.0°F above normal. Two months ranked as some of the warmest on record: April was the 9<sup>th</sup> warmest on record and November was the 8<sup>th</sup> warmest. The two warmest days of 2009 occurred in April, the 25<sup>th</sup> at 91°F and the 28<sup>th</sup> at 90°F. Highest daily maximum temperature readings were set on: February 11<sup>th</sup> (56°F), April 25<sup>th</sup> (91°F), April 26<sup>th</sup> (88°F), and April 28 (90°F).

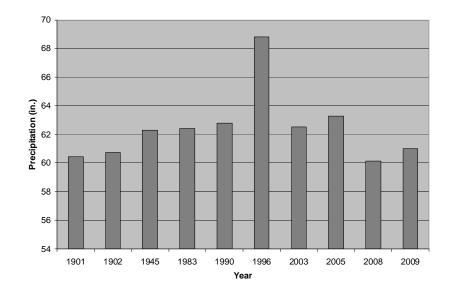
Although six months of the year recorded below average rainfall (including the 9<sup>th</sup> driest February), total precipitation for the year, 60.99 in., ranked this as the 7<sup>th</sup> wettest year in the 114 years of record (see table and graph on Page 3). The wettest June on record (13.66 in.), was the 6<sup>th</sup> wettest when compared to all months in the 114 years of record. June-August precipitation was 29.36 in., 129% above average, ranking this the wettest summer on record (see table and graph on Page 3). Daily rainfall records were set on four days, June 15<sup>th</sup> with 2.53 in., June 18<sup>th</sup> with 2.51 in., August 23<sup>rd</sup> with 2.41 in., and December 27<sup>th</sup> with 1.26 in.

Rare measurable October snowfall on October 15<sup>th</sup> (0.7 in.) and October 16<sup>th</sup> (0.6 in.) was followed by a total lack of frozen precipitation during November, one of only 13 snowless Novembers on record.

Paul C. Huth, Director of Research John E. Thompson, Natural Resources Specialist

# **Highest Yearly Precipitation**

Year	Precipitation (in.)	Rank
1996	68.80	1
2005	63.26	2
1990	62.79	3
2003	62.53	4
1983	62.41	5
1945	62.29	6
2009	60.99	7
1902	60.75	8
1901	60.43	9
2008	60.12	10



# **Highest Summer Precipitation**

Year	Precipitation (in.)	Rank
2009	29.36	1
1903	27.71	2
1928	26.9	3
1938	23.06	4
1945	20.82	5
1897	19.22	6
1990	18.93	7
1915	18.83	8
1902	18.18	9
1975	18.13	10

