



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

Natural Science Note No. 652-11

Annual Weather Summary for 2011

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

Part I: Summary of 116th Year: 2011

Table 1. Annual Deviation from 115-Year Average.

	115-year average 1896-2010	Actual This Year	Deviation from Average
Temperature (°F)	48.4	51.2	+2.9
Precipitation (in.)	47.95	79.31	+31.36
Snow (in.)	59.1	74.1	+15.0

Table 2. Monthly Deviation from 115-Year Average.

	Temperature (°F)			Precipitation (in.)			Snow (in)		
	1896- 2010	2011	Deviation	1896- 2010	2011	Deviation	1896- 2010	2011	Deviation
Jan	24.8	23.3	-1.5	3.48	2.94	-0.54	15.1	29.1	14.0
Feb	26.0	28.0	2.0	3.30	5.07	1.77	14.8	16.4	1.6
Mar	34.9	36.5	1.6	4.05	7.06	3.01	11.2	8.4	-2.8
Apr	46.8	49.2	2.4	4.11	6.94	2.83	2.9	2.4	-0.5
May	58.0	61.4	3.4	4.16	5.97	1.81	0.1	0.0	-0.1
Jun	66.2	68.8	2.6	4.06	5.29	1.23	–	–	–
Jul	70.8	76.0	5.2	4.49	2.45	-2.04	–	–	–
Aug	68.9	70.7	1.8	4.37	16.76	12.39	–	–	–
Sep	62.2	64.6	2.4	4.31	12.08	7.77	–	–	–
Oct	51.8	52.3	0.5	3.93	6.38	2.45	0.1	17.3	17.2
Nov	40.4	47.1	6.7	3.79	3.78	-0.01	3.2	T	-3.2
Dec	28.8	36.1	7.3	3.90	4.59	0.69	11.7	0.5	-11.2
YEAR	48.3	51.2	2.9	47.95	79.31	31.36	59.1	74.1	15.0

PART II: Extremes for 2011

Temperature

Highest Maximum	99°F	22 & 23 July
Lowest Minimum	-9°F	24 January

Precipitation

Greatest Rainfall , 24 hrs.	8.21 in.	28 August
Greatest Snowfall , 24 hrs.	10.6 in.	30 October
Greatest Snow on Ground	29 in.	3 February
Average Annual pH =	4.83	(n=108)

Mohonk Lake

Ice Out	10 April	74-yr. average	7 April
Ice Over		70-yr. average	1 January
Height of Lake : Highest	+5 ¾ in.		28 August
Lowest	-13 ¾ in.		27 August

Frost

Last Frost: 23 April	(32°F)	115-yr. average	25 April
First Frost: 27 October	(32°F)	115-yr. average	22 October
Length of Growing Season: 187 days		113-yr. average	180 days

Highlights

The year 2011 was marked by extremes in temperature, precipitation and snowfall. Average daily temperature for the year, 51.2°F, was 2.8°F above normal, the **8th warmest year on record** (see table and graph on Page 3). July ranked as the 4th warmest on record, November (47.1°F) ranked as the 2nd warmest and December (36.1°F) was the 5th warmest. Daily high temperature readings were set on five days: April 11th (78°F), June 8th (95°F), June 9th (93°F), July 22nd (99°F), and July 23rd (99°F). Highest minimum temperature readings were set on July 12th (73°F) and July 22nd (79°F).

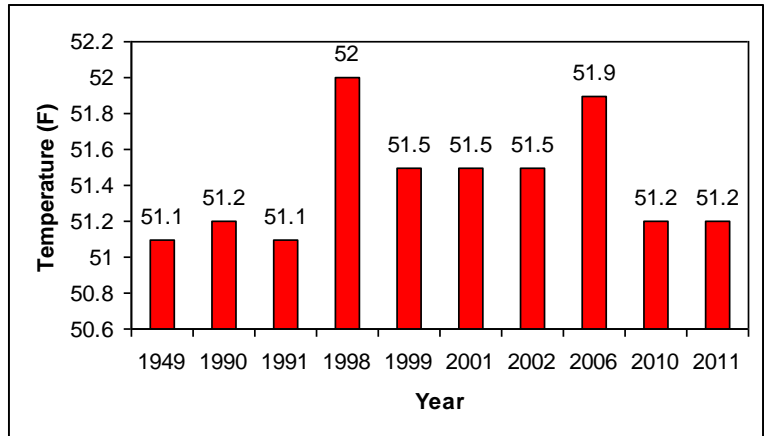
The 79.31 in. of precipitation (65% above average) ranked 2011 as the **wettest year in 116 years of record** (see table and graph on Page 3). August (16.76 in.) and September (12.08 in.) both were respectively the wettest months on record. The **highest daily precipitation record was set on August 28th with 8.21 in. of rain**, the highest amount of rain recorded on one day in the 42,354 days of record. Hurricane Irene also caused much tree damage, with many wind thrown mature trees on east-facing slopes. Daily precipitation records were also set on March 7th (1.91 in.), August 15th (1.86 in.), and September 8th (2.49 in.).

January (29.1 in.) ranked as the 10th snowiest and October (17.3 in.) ranked as the snowiest on record. Daily snowfall records were set on three days: October 28th (1.9 in.), October 29th (4.8 in.) and October 30th (10.6 in.). Daily snow on ground records were broken on four days: October 28th (1 in.), October 29th (6 in.); October 30th, (13 in.) and October 31st (7 in.).

John E. Thompson, Director of Conservation Science
Ethan M. Pierce, Conservation Specialist

Highest Yearly Temperature

Year	Temperature (°F)	Rank
1998	52.0	1
2006	51.9	2
1999	51.5	3
2001	51.5	4
2002	51.5	5
1990	51.2	6
2010	51.2	7
2011	51.2	8
1949	51.1	9
1991	51.1	10



Highest Yearly Precipitation

Year	Precipitation	Rank
2011	79.31	1
1996	68.8	2
2005	63.26	3
1990	62.79	4
2003	62.53	5
1983	62.41	6
1945	62.29	7
2009	60.99	8
1902	60.75	9
1901	60.43	10

