

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

Natural Science Note No. 605-08

Annual Weather Summary for 2008

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

Part I:Summary of 113th Year: 2008

Table 1. Annual Deviation from 113-Year Average.

| | 113-year average 1896-2008 | Actual This Year | Deviation from Average |
|-------------------------|-------------------------------|------------------|---------------------------|
| Temperature (°F) | 48.3 | 50.0 | +1.7 |
| Precipitation (in.) | 47.85 | 60.12 | +12.27 |
| Snow (in.) | 59.1 | 57.6 | -1.6 |

Table 2. Monthly Deviation from 113-Year Average.

| | | | | | <u> </u> | | | | |
|------|-------|---------|-------------------------------|-------|-----------|-----------|-------|------|-----------|
| | Ten | nperatu | ture (°F) Precipitation (in.) | | Snow (in) | | in) | | |
| | 1896- | | | 1896- | | | 1896- | | |
| | 2008 | 2008 | Deviation | 2008 | 2008 | Deviation | 2008 | 2008 | Deviation |
| Jan | 24.8 | 29.4 | +4.6 | 3.49 | 2.07 | -1.42 | 15.1 | 13.0 | -2.1 |
| Feb | 25.9 | 27.9 | +2.0 | 3.29 | 10.09 | +6.80 | 14.6 | 22.3 | +7.7 |
| Mar | 34.9 | 35.3 | +0.4 | 4.02 | 8.77 | +4.75 | 11.3 | 3.8 | -7.6 |
| Apr | 46.7 | 53.1 | +6.4 | 4.14 | 4.11 | -0.03 | 3.0 | 0.3 | -2.7 |
| May | 58.0 | 56.2 | -1.8 | 4.16 | 2.64 | -1.52 | 0.1 | 0.0 | -0.1 |
| Jun | 66.2 | 70.8 | +4.6 | 3.99 | 3.73 | -0.26 | _ | _ | _ |
| Jul | 70.8 | 74.0 | +3.2 | 4.49 | 4.91 | +0.42 | _ | _ | _ |
| Aug | 68.9 | 68.7 | -0.2 | 4.33 | 2.41 | -1.92 | _ | _ | _ |
| Sep | 62.2 | 64.2 | +2.0 | 4.34 | 6.05 | +1.71 | _ | _ | _ |
| Oct | 51.8 | 50.5 | -1.3 | 3.90 | 4.14 | +0.24 | 0.1 | T | -0.1 |
| Nov | 40.3 | 39.7 | -0.6 | 3.82 | 2.99 | +0.83 | 3.3 | 0.3 | -3.0 |
| Dec | 28.8 | 30.1 | +1.3 | 3.88 | 8.21 | +4.33 | 11.6 | 17.9 | 6.3 |
| YEAR | 48.3 | 50.0 | +1.7 | 47.85 | 60.12 | +12.27 | 59.1 | 57.6 | -1.6 |

PART II: Extremes for 2008

Temperature

| Highest Maximum | 95°F | 9 June |
|-----------------|------|--------|
|-----------------|------|--------|

Lowest Minimum 2°F 3 January, 11 February

Precipitation

| Greatest Rainfall, 24 hrs. | 3.42 in. | 13 February |
|----------------------------|----------|-------------|
| Greatest Snowfall, 24 hrs. | 7.3 in. | 22 February |
| Greatest Snow on Ground | 17 in. | 1, 2 March |
| Average Annual pH = | 4.52 | (n=115) |

Mohonk Lake

| Ice Out | 8 April | 73-yr. average | 7 April |
|----------|-------------|----------------|-----------|
| Ice Over | 22 December | 70-yr. average | 1 January |

Height of Lake : Highest -4 ½ in. 22 December

Lowest -29 in. 24 October

Frost

| Last Frost: 14 April | (32°F) | 113-yr. average | 25 April |
|-------------------------|--------------|-----------------|------------|
| First Frost: 19 October | (32°F) | 113-yr. average | 21 October |
| Length of Growing Seas | on: 188 days | 113-yr. average | 180 days |

Highlights

Average daily temperature for the year, 50.0°F, was 1.7°F above normal. April was the 3rd warmest on record. June was the 4th warmest on record, three highest maximum daily temperature records were set this month: on June 9th, at 95°F (previous high was 91°F in 2004); on June 10th, at 95°F (previous high was 92°F in 2000); and on June 11th, at 92°F (previous high was 90°F in 1997 and 2000). July was the 8th warmest on record. The highest maximum daily temperature reading on December 16th was set at 54°F (surpassing the previous high of 53°F in 1982 and 1987) and a daily maximum temperature reading was tied on the 28th (56°F ties the record set in 1949).

Total precipitation for the year, 60.12 in., ranked this as the 9nd wettest year in the 113 years of record. Wet months included the wettest February, the 4th wettest March, and the 5th wettest December.

A notable ice storm occurred on December 11th-12th, producing 5/8 in. of glaze and much tree damage above 900 feet elevation.

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 |
| 1902 | 60.75 | 7 |
| 1901 | 60.43 | 8 |
| 2008 | 60.12 | 9 |
| 1903 | 59.75 | 10 |

