

# Green Bay in the Late 1880s: It Really Snowed That Much!

## The Winter of 1887-88

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For many years, the seasonal snowfall records from 1886-87 to 1890-91 were not included in the official Green Bay Weather Book of Records. An initial glance at the seasonal snowfall totals included an astounding 125.2 inches during the winter of 1887-88, and 100.6 inches during the winter of 1889-90. For most at the Green Bay National Weather Service Office, these totals seemed improbable. Therefore, a study was conducted of the seasonal snowfall totals from 1886-87 to 1890-91. This study looked at each daily snowfall during each season at Green Bay and verified the total with surrounding sites.

Initially there was concern on where data would be found to support these totals? Surprisingly, there were many sources of information including: the Web Search Store Retrieve Data site (WSSRD now replaced with EV2 – EDADS Version 2) that contained observations from military fort sites across the Upper Midwest and western Great Lakes, Weather Bureau data stored at the National Climatic Data Center, the American Meteorological Society (AMS) Monthly Weather Review, Signal Corp Yearly Weather Review, HPC Daily Weather Map Project, the University of Wisconsin – Green Bay Cofrin Library, the Neville Museum in Green Bay and local newspapers from across north-central and northeast Wisconsin.

There were many twist and turns as the study progressed. Of great interest was the Weather Bureau data that changed over the years (especially March 1888 and the 1887-88 seasonal total). In the 1925 Green Bay annual meteorological summary, the publication indicated the monthly snowfall total for March 1888 was 27.2 inches and the 1887-88 seasonal total of 125.2 inches. The 1939 Green Bay annual meteorological summary indicated the monthly total was 48.2 inches and the seasonal total 147.5 inches. The mystery thickened as the American Meteorological Society (AMS) Monthly Weather Review Journals were reviewed. The journals provided a summary of the monthly snowfall totals across the country. The data was available many months before and after March 1888. However, March 1888 was nowhere to be found! Why was this month missing?

The military fort observations from the WSSRD, combined with local newspaper articles supported most of the daily snowfall totals at Green Bay except for a few minor amounts on a few days of each season. One of the most important omissions was Green Bay's all-time snowstorm record of 29.0 inches on March 1-2, 1888. An article in a Green Bay newspaper indicated, "Sergeant Schley makes affidavit that the snowfall during the twenty-four hours preceding this morning aggregated 27 inches on the level." This was more than enough to support the 29 inch snowstorm indicated in some of the weather records. After verifying all daily snowfall totals, it was discovered that the snowiest winter on record was now 147.7 inches in 1887-88, not the 125.2 previously reported. The winter of 1889-90 was adjusted upward from 100.6 to 103.6 inches and now ranks as the 2<sup>nd</sup> snowiest winter on record. Along with the new seasonal records, thirty-six new daily snowfall records were added to the climate records that were found in this study.