THE BLIZZARD OF '88 IN HISTORICAL PERSPECTIVE

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ABSTRACT

A search of the historical lore of the New York City area reveals no outstanding snowstorm in the seventeenth and eighteenth centuries that achieved a living fame of its own. During the period of historical weather records the winters of 1740-41 and 1779-80 were noted for depth of snow, but we have no accounts of individual snowstorms. On 26-28 January 1805, from 20 to 24 inches (51 to 61 cm) of snow fell in 48 hours. In the Great Snowstorm of 1831, 15 inches (38 cm) accumulated with much drifting. The Cold Storm of 18-19 January 1857 was a blizzard type with 12 to 15 inches (30 to 38 cm) reported. The Post-Christmas Storm on 26 December 1872 dropped 18 to 20 inches (46 to 51 cm). Since 1888, the Big Snow of December 1947 has been the most notable with 26.4 inches (67 cm) at Central Park. It appears the Blizzard of '88 was the 400-year storm for combination of snow, cold, and wind.

INTRODUCTION

"The Great Snow! How cheerful it is to hear of," exclaimed Henry Thoreau one day when at Walden Pond. He was referring to the Great Snow of 1717 which had long occupied a revered place in New England folklore. It had been enshrined in the colonial mind with the publication of Rev. Cotton Mather's letter giving some firsthand details in the Collections of the Massachusetts Historical Society. Thoreau, an indefatigable seacher for information on historic New England storms, filled his voluminous notebooks with much data on the Great Snow and severe winters of the past. Once upon getting no new material from conversation with a group of his elders, he complained: "What use is it to be old?"

During the last century the Blizzard of '88 has gained a reputation in the western New England-eastern New York region comparable to that long ago achieved by the Great Snow of 1717 in eastern New England. Both were unique in their sectors for the combination of gale-force winds, drifting snow, and low temperatures - the three ingredients of a true blizzard.

The Blizzard of '88 centered its fury in New England, west of the Connecticut River from Long Island Sound north to the Green Mountains of Vermont and also in the Hudson River Valley from the New York City metropolitan area northward to the foothills of the Adirondack Mountains. Though the New York City-northern New Jersey area has experienced deeper snowstorms, no combination of heavy snowfall, near-zero temperatures, gale-force winds has created such a business and transportation stoppage as occurred from 12 to 15 March in 1888. Nor has western New England and the Albany-Troy complex of New York State witnessed a single snowstorm bringing half as much snow as fell in forty-eight hours during the second week of March, nor have the railroads even in midwinter been so completely blocked as they were only a week before the arrival of the spring equinox in 1888.

PRE-1888 SNOWSTORMS

A search of the historical records of New York City's urban and suburban areas reveals no outstanding snowstorm in the seventeenth and eighteenth centuries that achieved a living fame of its own. Little historical information is available about the first century of New Netherland or New York Colony since the early Dutch settlers were not prone to keep personal diaries, no newspapers existed, and the later British officials were not accustomed to literary activity. The eighteenth century produced two outstanding severe winters of which we have adequate records to judge their rigor. The seasons of 1740-41 and 1779-80, referred to as "hard winters" by contemporaries, were the standouts. Snow depths were said to range up to three and four feet, but these resulted from the accumulation of several successive snowstorms rather than a single excessive fall.

Early in the nineteenth century, New York City and vicinity endured a single snowfall of forty-eight hours duration on 26-28 January 1805 which brought 20 to 24 inches (51 to 61 cm) of new snow and left a depth on the ground of about three feet (91 cm). The next of note was known as "The Great Snowstorm," which lashed the entire coastal plain from Georgia to Maine on 15-16 January 1831. It dropped 15 inches (38 cm) in New York City and as much as 36 inches (91 cm) in the New Bedford area and on Cape Cod. On January 9-10 1836, a very moist snow accumulated at 18 to 20 inches (46 to 51 cm) in New York City and up to 30 inches (76 cm) in the suburbs. Upstate from Albany west to the Finger Lakes, this was the heaviest then known with three to five feet (91 to 152 cm) resulting. Reports of four feet (122 cm) were common along the trained observers at the various state academies throughout the State. The Rome Observer told of five feet (152 cm) on the ground at the storm's conclusion, and the Utica observer measured 6.15 inches (156 mm) of melted precipitation, to give an idea of the moisture available for snowmaking.

The big storm of the midcentury occurred on 18-19 January 1857. This was a blizzard-type storm, though that excellent word as a descriptive of a severe snowstorm was not to come into use for another decade. With the temperature hovering just above 0°F (-18°C) and a north gale raging, the 12 to 15 inches (30 to 38 cm) of snow piled into mountainous drifts, blocking all transportation. Again the storm covered the length of the Atlantic seaboard from Georgia to Maine.

Railroad communication between Washington and Richmond was blocked for ten days. A storm of such severity had not been experienced since the introduction of railroads in the 1830s, and equipment and techniques to handle the immense drifts had not yet been developed. A similar storm over a much smaller area occurred on 17 January 1867, again tying up railroad movement in New York and New England.

The decade of the 1870s produced two heavy snowstorms, but neither was of blizzard proportions. The Post-Christmas Storm on 26 December 1872 dropped 18 to 20 inches (46 to 51 cm) inches and the Post-New Year's Storm on 2 January 1877 produced 15 inches (38 cm). Though the early 1880s witnessed a series of cold winters unmatched in the official Weather Bureau records, no big snowstorms occurred until 1888.

POST-1888 EVENTS

The greatest snow event in New York City since the Blizzard of '88 came with the Big Snow of 1947, when 26.4 inches (67 cm) buried the city as a Boxing Day present on 26 December. The bulk of the snow fell in the first seventeen hours from 3:20 a.m. to 8:00 p.m., sometimes in the afternoon at the rate of three inches (8 cm) per hour. Some suburban locations from Monmouth County in New Jersey to Westchester County north of the city reported totals of 30 to 32 inches (76 to 81 cm), amounts exceeding by nearly ten inches (25 cm) anything reported in New York City in 1888. Wind speeds were

low in the first part of the storm, but increased to a maximum of 38 miles per hour (61 km/h) in the late afternoon, yet drifting was minor compared to many lesser storms. Modern snow fighting equipment soon opened the principal lines of communication.

Since 1947, New York City's deepest snowfalls in single storms at the Central Park Observatory have been: 17.7 inches (45 cm) on 6-7 February 1978; 17.6 inches (45 cm) on 11-12 February 1983; 17.4 inches (44 cm) on 3-4 February 1961; 16.0 inches (41 cm) on 19-20 December 1948; 15.3 inches (39 cm) on 9-10 February 1969; and 15.2 inches (39 cm) on 11 December 1960 and 6-7 February 1967. At the city's airports in suburban areas, the storm on 3-4 February 1961 has been the greatest, Kennedy Airport receiving 24.0 inches (61 cm) and Newark Airport, 22.5 inches (64 cm), both all-time, single-storm records for the past forty years at these key transportation locations.

An interesting note in New England's snowfall history lies in the fact that since 1871 the Boston weather station had never experienced a snowfall in the 20-inch (51 cm) class until recently. Not until the One-Hundred-Hour-Storm on 24-27 February 1969, when 26.1 inches (66 cm) descended in an almost continuous fall, did the Hub City achieve the respectable level of 20 inches in a single storm, although some cities in the Deep South, such as Houston in Texas and Lake Charles in Louisiana, had done so years before.

The snowy winter of 1977-78 brought not one, but two record-breaking storms to Boston: 21.4 inches (54 cm) on 20-21 January and 27.1 inches (69 cm) on 6-7 February. The latter stands as the region's greatest modern snowstorm. Amounts up to 38 inches (97 cm) in northeast Rhode Island and 36 inches (91 cm) in southeast Massachusetts were reported. Governor Michael Dukakis of Massachusetts banned all automobile traffic in his snowbound area for five days.

THE FUTURE

After almost four hundred years of weather watching in northeastern United States, the Great Snow of 1717 for eastern New England and the Blizzard of '88 for western New England and eastern New York remain the most celebrated snowstorm for each region, not only in the realm of folklore but also in meteorological statistics. Hydrologists will call these 400-year storms, ie., the extreme conditions which might be expected to repeat once every 400 years. We shall have to wait another hundred years to see if they qualify for the ultimate - 500-year storms.

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