1816 - The Year Without a Summer

In the year 2000, the weathermen told us that we had emerged from the second-most coldest and wettest July in more than 100 years. While I haven't been around that long, this is one statement made by meteorologists that I will accept as factual without double checking.

We all are more aware of climate and local weather today than we were just a few years ago, probably due to the Weather Channel and radio weather reports every few minutes. It seems that everyone has one observation on the subject that all can relate to, and that is "With all the millions of dollars of sophisticated equipment available today, why is it that they still can't do better than the old fellow whose knee troubles him 24 hours before it rains?"

A few dates stand out as having meteorological events that we all relate to. The flood of 1955 is one, as is the hurricane of 1938. Many of us remember these, having lived through them. Tales our grandparents talked about, such as the blizzard of 1888 or perhaps the granddaddy of them all, the Year Without a Summer – 1816, has imbedded other events in our minds.

Eighteen Hundred and Froze to Death was the way many farmers referred to 1816. The major event behind this abnormally cold spell was the eruption in 1815 of Mt. Tambora on the island that is now part of Indonesia. This eruption was so powerful that it reduced the height of Mt. Tambora by some 4,200 feet and ejected some 25 cubic miles of rock, ash and dust into the atmosphere. Climatologists rank the eruption as the greatest producer of atmospheric dust between 1600 and the present. The dust circled the earth in the stratosphere for several years, reducing sunlight, which in turn lowered temperatures.

1816 in New England began with normal temperatures, but by May, farmers began to comment on the lateness of the spring. June began normally, but on the 6th, the first of three cold waves moved eastward into the northeast, leaving behind 6 inches of snow on the ground in northern New England. A second cold front on July 9th produced a killing frost, as did a third and fourth on August 21 and 30. All except the hardiest of grains and vegetables never made it to harvest time.

An apprentice clockmaker in Plymouth, Conn., Chauncey Jerome, wrote in his diary that as he walked to work on June 7th, dressed in thick woolen clothes and an overcoat, his hands got so cold that he had to lay his tools down and put on a pair of mittens.

There are many accounts of strange weather patterns that year, but having set the stage for you, so to speak, I would like to share with you some meteorological statistics from Sandisfield, Mass. kept by a farmer who lived just over the line past Prock Hill. Daniel Sears kept a running account of what he considered to be noteworthy weather events for a 17-year period from 1803 through 1820. He doesn't even mention 1816! While your first impression might be that he kept sloppy or inaccurate records, when you read what weather observations he did make, it becomes clear that at least for him in his geographical location, conditions for some reason or other were not quite as unusual as what occurred throughout much of New England. Here are some of those observations:

"8th of May, 1803, the snow fell six inches deep, and ice froze two inches thick. 1st of March 1804, the snow five foot deep. Stormed and blew so I could not water my

cattle for three days. 10 October 1804, the snow fell ten inches deep and lay four days. 20^{th} February 1806, the ground bare and all frost is out. So warm I heard frogs peep and cowslips as large as cents. [A cent in those days was a copper coin the size of a fifty-cent piece.] 16^{th} June 1806, the sun totally eclipsed and dark as night. Many stars to be seen at ten o'clock in the morning.

31 March 1807, a most tremendous snowstorm and lasted five days without intermission. Many buildings damaged with wind. 23 May 1807, severe hailstorm. Hailstones big as bullets [mothball size] and covered the ground. 25 May 1807. This season the coldest and wettest I ever knew. No corn planted, not much flax sowed. 30 May 1807. Sowed my flax and oats & dragged them in mud in the south mowing. No time to sow it sooner.

22 April 1808. Sowed my flax in the south mowing. 1809 – Cold, backward spring. Cold, cloudy summer. Crops small, all but grass. 4th November 1809, first snow. Ground froze, snow 3 inches deep. 1812, cold, backward spring. Cold, wet summer. Cold fall. No crops but grass. 1814, Sept. 6. Severe frost & cold, wet summer. Grass pretty good. 1820, cold winter. 20 April, ground settled. [The frost went out.] 1820, Nov. 13. Severe snowstorm. Snow 8 inches deep. Good sledding several days."

So you be the judge: if you had endured the types of weather that we had in the Colebrook-Sandisfield area during that time period, would you have taken notice of an "average" year which only produced a few scattered frosts?