

Climate Change and New England Agriculture: A Case Study

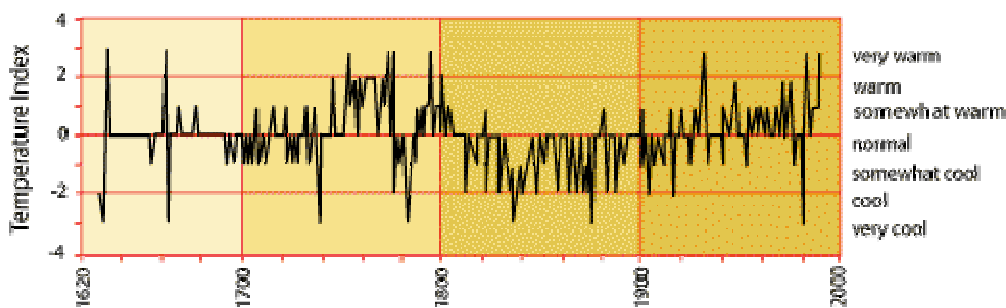


Figure 1. Temperature Index for Southern New England Fall Seasons, 1630-1990

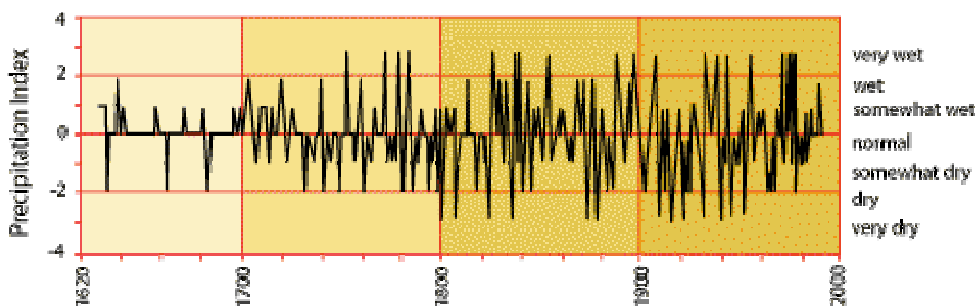


Figure 2. Precipitation Index for Southern New England Fall Seasons, 1630-1990

W.R. Baron, of the University of Northern Arizona, and David C. Smith, of the Climate Change Institute, developed a standard dictionary of weather and climate names and applied the results to obtain the longest records in graphs and plots which describe a virtually complete record in New England from 1640. Examples of these results are here on this poster. This methodology provides some startling results. The material can be analyzed by the month creating a very long record.

Other plots provide pictures of first and last killing frosts, (that is growing seasons), the dates of corn harvest, corn planting, data on oats, hay and apples, and other crops may be teased out from these data sets.

Selected References:

- Baron, W.R., and D.C. Smith, 1996. Growing Season Parameter Reconstructions for New England Using Killing Frost Records, 1697-1947. Maine Agricultural and Forest Experiment Station, University of Maine Bulletin 846.
- Baron, W.R., 1992. "1816 in Perspective: the View from the Northeastern United States." *The Year without a Summer? World Climate in 1816*, ed. C.R. Harington. Canadian Museum of Nature, Ottawa, 124-144.
- Smith, D.C., ed., 1986. *Climate, Agriculture and History*. Agricultural History Society, Washington, D.C..
- Bliege Smith, D.C., W.R. Baron, A.E. Bridges, J. TeBrake, H.W. Borns, 1982. "Climate Fluctuation and Agricultural Change in Southern and Central Maine, 1765-1800." *Maine Historical Society Quarterly*, 21 no. 4, 178-200.
- Baron, W.R., D.C. Smith, H.W. Borns, J. Fastook, and A.E. Bridges, 1980. *Long Time Series Temperature and Precipitation Records for Maine, 1808-1978*. Maine Agricultural Experiment Station Bulletin 771. University of Maine, Orono, 255pp.



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