
Climate change and the northwest Atlantic: driving force, supporting player, or background noise?

CATTO, NORM

*Department of Geography, Memorial University of Newfoundland,
St. John's, NL A1B 3X9*

The general pattern of climate change throughout the terrain, communities, and cultures surrounding the northwestern North Atlantic Ocean, involving warming ca. 600-1300 AD, cooling ca. 1300-1850, and subsequent warming, is generally well-known. Similarly, the geological impacts that climate change has had on societies in northwest Europe are very well known to Quaternarists, and are familiar concepts to many residents. However, on the North American side of the North Atlantic Ocean, the role of climate change in recent human history since ca. 1000 AD is much less clearly defined. The Viking settlements in Greenland represent the only case where climate change is frequently and explicitly cited as a significant factor in their demise, although it is generally considered as a 'supporting player' in a multitude of other factors. Climate change and resultant geological processes clearly affected the establishment and development of Early European settlements, notably those of Champlain (Port-Royal; Québec) and Calvert (Ferryland; Baltimore). These phenomena, however, were not recognized as climate change, being overshadowed by the differences inherent in climate between northwest Europe and North Atlantic North America.

After 1850, most areas in North Atlantic North America were marked by gradually ameliorating climate. Climate change effects are progressively more limited in coastal areas, with Newfoundland showing little influence of climate warming and coastal Labrador showing evidence of regional cooling in the adjacent Labrador Sea. The impact of individual weather events and decadal variations are locally significant, but in reality are superimposed on other political, socio-economic, and technological factors which are of greater significance. This is particularly evident for the communities most dependent on biological resources, which in theory should be most subject to stress from climate change. Although climate change happens everywhere, the local effects felt in much of the region are indirect results. In contrast to the geological evidence for climate change visible to residents of Europe throughout the past 400 years, there was a lack of demonstrated direct climate change impacts on the societies of eastern North America until very recently. With a temporally-limited written history of occupation, and no glaciers to observe in retreat, the visual impact of climate change is muted. This may in turn have an impact on views of the relevance of ongoing climate change to everyday life. In a society that has no collective negative experience of the events or consequences, climate change may simply be perceived as background noise.