

## RCC Research Projects:

### Alan MacEachern

**The Miramichi Fire.** The forest fire that burned across New Brunswick, Canada and Maine, USA in October 1825 is the largest ever recorded on North America's eastern seaboard, the foremost wildfire within the British Empire, and what fire historian Stephen Pyne has called "the first historic holocaust of the reclamation." Yet the Miramichi Fire has been largely ignored by historians, even regional ones. I am completing a book-length environmental history of the fire which argues that this historiographical silence is due to the fact that the forests of the Miramichi region were ecologically diverse, healthy, and resilient, and thus grew back so quickly and fully that by the twentieth century commentators assumed the earlier reports had been exaggerated. Unwittingly, they used nature's restorative power to discredit its destructive power.

I look at the fire from a variety of scales. It is by necessity a local study, exploring the micro-environments of the Miramichi region, the indigenous and recently-arrived European populations that experienced the fire, and the popular memory of the disaster that thrived long after history had forgotten it. It is also a borderlands study, showing that although Maine and New Brunswick shared similar ecological, geological, and climatological features and were at similar stages of settlement and industry, they were ultimately defined more by their constituency in different nation states, and as a result they essentially split the fire in two, developing their own distinct interpretations of the event. And it is an international study, tied to matters as diverse as the 1815 Tambora volcano that caused rippling global climatic and ecological effects in the late 1810s and into the 1820s, and the rise of nineteenth-century disaster charity across the Western world.

**Tracking Climate & Its Transformation: Phenology in Canada.** In 2014, I was successful in bringing a massive climate history archival collection of national, if not international, significance to my university archives. (See [here](#).) All of Environment Canada's extant meteorological observations between 1840 and 1960—the original forms that volunteers and paid observers had filled out, multiple times a day, across thousands of stations across Canada—were saved from the risk of deaccession and discard. Environment Canada had long ago extracted all of the quantitative data it wanted from these records, but had never extracted let alone utilized the qualitative data that, unsolicited, the observers had also supplied. Many had included phenological information: mention of recurring natural phenomena such as ice break-up, wildflower blooming, or the emergence of spring peepers. The study of phenology is a relatively unexplored area, but it is becoming more critical as historians and climate scientists attempt to verify meteorological observations and understand other ways of knowing climate.

Students and I have begun combing through the Environment Canada meteorological collection, building up a database of tens of thousands of observations related to the freeze-up and break-up of rivers and lakes, the spring appearance of flora and fauna, the planting and harvesting of crops, extreme weather events, etc. across Canada's vast expanse in the late nineteenth and twentieth centuries, as well as observations relevant to the institutional and technological history of Canadian meteorology itself. At the Rachel Carson Center, I will begin the long-term process of unpacking this database. This will involve determining not only what historical climatological findings the collection may reveal, but also how best to share these findings with scholars and the broader public. As an initial foray into the collection, at the Center I will write an article focusing on the rich vein of phenological observations relating to Prince Edward Island. PEI is Canada's smallest province and its share of the meteorological collection is a manageable six archival boxes, yet from the 1870s onward it possessed a cohort of observers who provided voluminous phenological information.