

**John McNeill**

## **A Global Environmental History of the Industrial Revolution, 1780-1914**

In my stay at the Rachel Carson Center, I will begin work on my next book in environmental history. Having read William Cronon's *Nature's Metropolis* and Andrew Isenberg's *The Destruction of the Bison*, it slowly dawned on me that the processes they wrote about in the context of the US Middle West and Great Plains unfurled on much larger scales with the onset of industrialization. In Isenberg's book, for example, he explains how the demand for bison hide to serve as leather strapping in textile mills contributed strongly to the near-extinction of that iconic animal by the 1880s. A fundamental ecological reorganization of the North American tallgrass prairie resulted in large part from an otherwise trivial fact: bison hide made the best leather belting in mills. Industrialization, 1780-1914, probably had many such powerful effects on the global scale. I intend to research six or eight linkages analogous to the one Isenberg revealed, perhaps including palm oil in West Africa, cotton in the US South and in India, copper in Chile, gutta percha in the Dutch East Indies, wool in New Zealand and Australia, tin in Malaya, and rubber in Brazil. I am open to including any of the fuels, fibers, ores or other ingredients in industrialization that came from afar. I might also include linkages connecting ecosystems on the peripheries of the world economy and consumers—rather than factories—in the industrial core regions. So, for example, I might include wheat production in Argentina, Australia, and the Canadian prairie, or ivory hunting in East Africa.

Industrialization had local ecological effects, as well. In the first place, many of the raw materials that fed the mills and factories came from nearby, especially coal. In the second place, industrialization conspicuously polluted air, water, and soil. I hope to write an overview of these changes in Britain, northern Europe, eastern North America, and insofar as I can, in Japan and Russia—that is, the parts of the world where industrialization had taken root by 1914.

My aim in choosing the period 1780-1914 is to treat the beginning of the industrialization process through to the point where it attained, in Britain at least, a certain stable maturity. I thus will be writing of a “long nineteenth century.” I also aim to bridge the span between John Richards' global environmental history of the early modern centuries (1500 to 1800) and my own global environmental history of the twentieth century.

I might conclude the book with an epilogue on the ecological ramifications of the East Asian industrialization since 1980, mainly that of mainland China, but also South Korea, Taiwan, and perhaps returning again here to Japan.

At the Center, I will be at the initial stages, and will be trying to make decisions about what to put in and what to leave out, based on my reading and discussion with (I hope) interested colleagues.