



**WHY IS AN ENVIRONMENTAL APPROACH TO
TEACHING U.S. HISTORY ATTRACTIVE?**

**An introduction to five professional development
modules for high-school history teachers**

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DISCLAIMER

While these materials attempt to give history teachers the background and grounding that they need to teach about important historical subjects within an environmental context, a comprehensive treatment that cover all wars, and all environmental impacts on the environment, or the people involved in conflict would be well beyond the scope of this project.

These materials have not been reviewed or approved by the entire Environmental Literacy Council, and may or may not conform to the individual viewpoints of the Council, Board, or ELC staff members on either historical events, or their impacts on the environment.

WHY IS AN ENVIRONMENTAL APPROACH TO U.S. HISTORY ATTRACTIVE?

The power of nature to shape human affairs remains greater than historians in the past have usually acknowledged. For example, Shay's Rebellion in the 1780s, which hastened the Constitutional Convention because of fears of a splintering nation, was in large part the result of three decades of extreme weather conditions that put the isolated farmers of western Massachusetts into deep debt. Climate, weather, soils, forests, grasslands, and access to water have been largely ignored in traditional U.S. history texts. One of the major recent trends in US environmental history is to recognize that Europeans did not enter vacant land, the so-called "empty wilderness," but regions already shaped by native peoples for millennia by clearing land, hunting and farming, promoting fires, and introducing new plants like corn.

A typical textbook may only have one map of the nation's geographical features and then ignore the subject. Yet the power of the 1930s Dust Bowl, to use the most obvious example, deeply affected American history. We now know that it was one of a series of major widespread droughts that continue today on a regular basis. Human impacts, such as industrial pollution, alter local and regional environments to have negative effects upon public health as well as the natural world. Lead and mercury are now recognized as serious poisons that have become widespread. Ingredients of man-made chemical pesticides like DDT, despite their beneficial effects, can also lead to cancer and devastating diseases. The more we have learned about such industrial pollutants from their histories in metropolitan regions like Pittsburgh and Chicago, the better we have become at protecting ourselves, and especially our children, from exposure. Chronic auto pollution has diminished health and lifestyles in cities like Denver and Los Angeles.

Not the least, an environmental approach also includes political, economic, and social dimensions. Thomas Jefferson's first draft of the Declaration of Independence said, "...life, liberty, and property," which he changed to "...life, liberty, and the pursuit of happiness" because the rebels were confiscating Tory property. Nevertheless the autonomy of private property, almost unique to the United States, was key to Jefferson and remains a linchpin in American society. Indeed, from an environmental perspective we learn that many immigrants came not only for the traditional religious or political liberty, but because the new geography offered economic opportunity and personal independence, particularly ownership of a piece of good land. Environmental history emphasizes the importance of land use in American history, a subject otherwise largely ignored. Farmers were lured into the West by the Homestead Act of 1862, the same year that millions of acres were also distributed to railroad companies to encourage four transcontinental lines to better link the newly expansive nation. An environmental approach also reminds us of the appearance since the 1870s of national parks like Yellowstone and Yosemite (called America's "crown jewels" by Europeans) for both environmental protection and public recreation. It is a telling statement that in some western states, such as Utah and Nevada, upwards of 80 percent of the land is still held in public trust, managed by agencies such as the Forest Service and the Bureau of Land Management.

The advantage of an environmental approach to US history is that it also introduces the natural sciences into the historical picture, including geology, hydrology, soil science, climate, and

particularly the life sciences. Environmental history, because of its inclusive nature, is attractive to both teachers and students because it can integrate and cross-reference their classroom work. These teaching guides are intended to help students see historical events and periods in new ways and to offer a new perspective on history, one that will enrich students' understanding of important historical concepts by examining how life was lived in the past. This perspective also helps students understand the connections between history and their own lives; many of the environmental issues we face today are the legacy of human activities and policies over the last three hundred years.

Infusing or contextualizing the study of history with environmental materials can enrich student interest in, and understanding of past periods. For many students, studying history in its own right can be too abstract - a collection of dates and terms to be memorized. Environmental history can engage students in an investigation of what life was like during past times and help them gain an appreciation of the context of historical events. Literature, original documents, and images of life in the past bring history alive and enrich students' understanding of the challenges faced by Americans in past historical periods. Rich collections, such as the Library of Congress's Voices of the Dust Bowl, evoke powerful visions of the period; images and maps can be used effectively to help students gain a new perspective of events and places, the hardships endured and the wealth generated.

An environmental approach to American history takes us into a new dimension, another level of perception. We arrive at the texture and spirit of our non-human surroundings and our built environments. We move beyond traditional American history tied to presidential terms, wars, and geographical expansion. The opportunity afforded by an environmental approach has been so recent that America's history, and our own personal histories, is still mostly an unknown in environmental terms. This includes the bold claim that no one knew what America's geography was truly like until ecologists began applying ideas of biomes, ecosystems, and interdependency to the landscape. Today no one knows this better than the unusual mixture of the nation's farmers and activists for land preservation. An environmental approach can also teach us humility about what we know today compared what future generations may know. We again become like Columbus as we enter an unsuspected New World that has always enveloped us. There is more to the natural setting for our lives, and all of American history, than we ever suspected.

This is not the place for another synopsis of American environmental history. Teachers are directed to several excellent resources that are each distinctive in their own ways:

Merchant, Carolyn. *The Columbia Guide to American Environmental History*. New York: Columbia University Press, 2002. This is the first encyclopedia of American environmental history, introduced by a brief but excellent historical overview. It also includes a resource guide of print publications, organizations, government agencies, and websites. Carolyn Merchant is Chaired Professor of Environmental History, Philosophy, and Ethics in the College of Natural Resources at the University of California, Berkeley.

Carolyn Merchant, *Major Problems in American Environmental History*. Lexington MA: D.C. Heath and Company, 1993. This is a wide-ranging selection of primary and secondary documents and analytical essays, each introduced by a brief interpretive statement by Merchant.

John Opie. *Nature's Nation: An Environmental History of the United States*. Ft. Worth TX: Harcourt/Wadsworth, 1998. This comprehensive textbook seeks to integrate an environmental perspective into the mainstream of American history. It covers both historical periods and geographical regions, together with cultural forces, social change, and particularly the rise of modern environmental politics and policies. John Opie is Distinguished Professor Emeritus of Environmental History and Policy at New Jersey Institute of Technology, founding president of the American Society for Environmental History and founding editor of its professional journal.

Anthony N. Penna. *Nature's Bounty: Historical and Modern Environmental Perspectives*. Armonk NY: M. E. Sharpe, 1999. This innovative text seeks to connect the values and behavior of the past with the practices of our contemporary world. It emphasizes woodlands, wildlife, clean water, and clean air as themes that shape American history. Anthony Penna is Professor of History at Northeastern University. He has received major funding from the Carnegie Corporation, the General Electric Foundation, the National Endowment for the Humanities, and the National Science Foundation, among others.

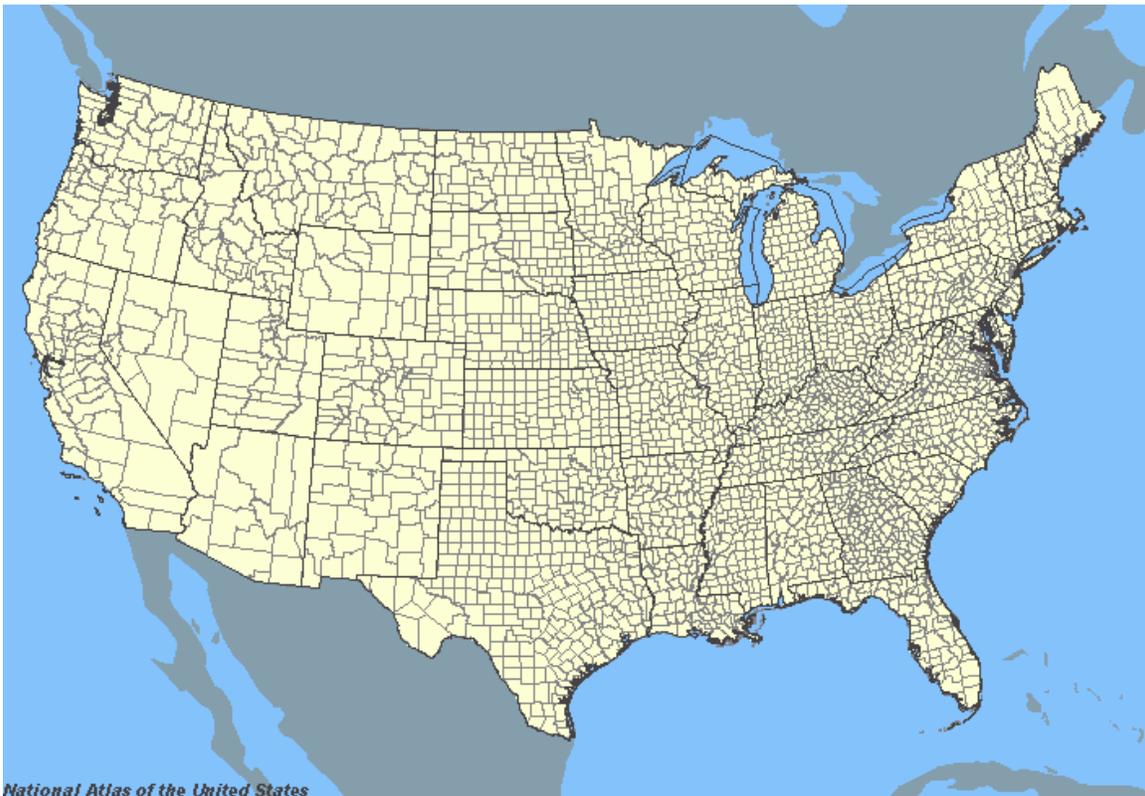
Ted Steinberg. *Down to Earth: Nature's Role in American History*. New York: Oxford University Press, 2002. Steinberg's award-winning text reconsiders the story of America to give the environment a key role in virtually every social, economic and political development. Steinberg highlights the ways in which we have envisioned nature and attempted to control it. Ted Steinberg is Professor of History and Law at Case Western Reserve University and is considered to be one of the most preeminent younger historians in the field.

Richard N. L. Andrews. *Managing the Environment, Managing Ourselves: A History of American Environmental Policy*. New Haven: Yale University Press, 1999. This comprehensive text focuses on the politics of environmental history. It focuses on historical precedents, the constitutional and legal framework, public management, industrialization and consumerism, and the shaping of a national environmental agenda. Richard N. L. Andrews is Professor of Environmental Policy in the Department of Environmental Studies and Engineering, in City and Regional Planning, Public Policy Analysis, and Ecology at the University of North Carolina. He has long been active in environmental policy on the state and national levels.

Environmental Mapping as an Alternative to Traditional Mapping of U.S. Geography: Comparing Counties and Watersheds.

Historian Dan Flores writes that, "the first step in writing environmental histories...is recognition that natural geographic systems: ecoregions, biotic provinces, physiographic provinces, biomes, ecosystems" are more appropriate than political boundaries to understand the connection between humanity and geography. Instead of property lines and the grid plan laid upon America's landscape, the concepts of "ecosystem" and "regionalism" are beginning to take hold.

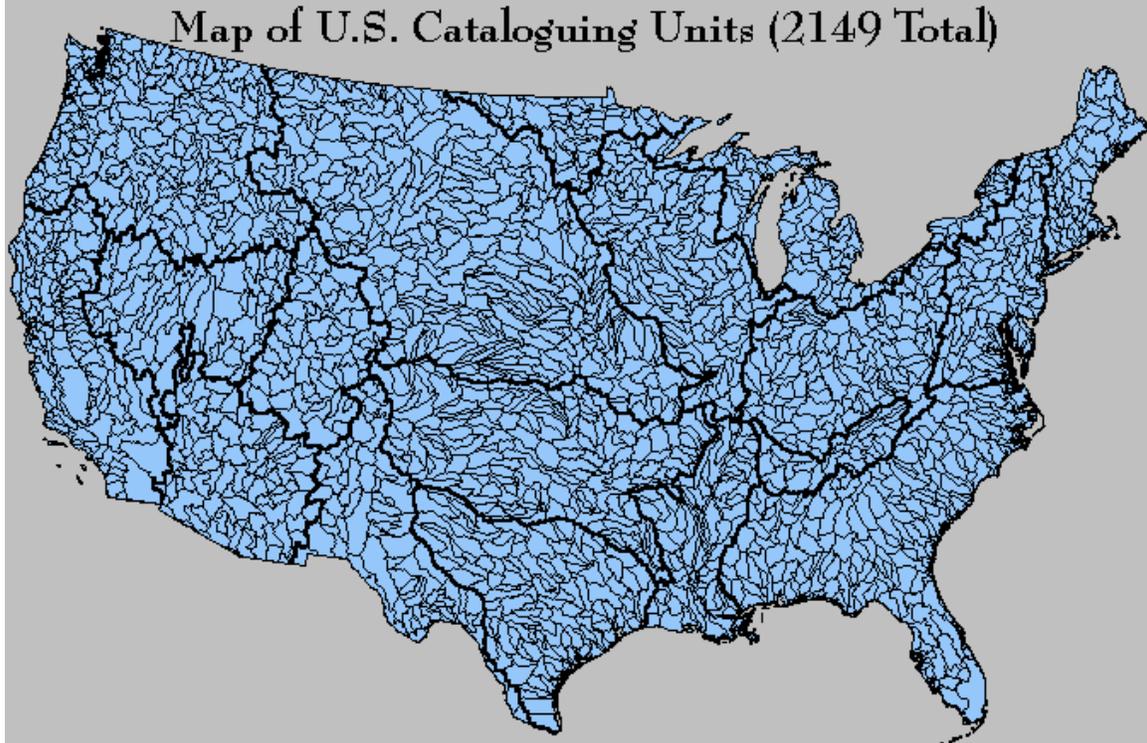
Below are two maps; the first displays the counties of the lower 48 states. This is the traditional map used for census data, economic reports, social conditions, and so on. Virtually every historian who works with data concludes that such information is flawed by these artificial boundaries since much human activity and most natural forces cannot be constrained to county lines. There could be many alternative maps, such as legislative districts, postal zones, land use, terrain, or even the interstate highway system.



See map of US counties: <http://nationalatlas.gov/mld/countyp.html>

In the second case, an environmental map tells a different story. It rarely is identical with the county maps, and provides different data. Below is the U.S. watershed map from the EPA (Environmental Protection Agency) website that depicts most of the nation's major and minor watersheds. Specific waterside web pages from the EPA offer environmental data and reflect economic and social conditions, now in a natural context.

See state maps of EPA watersheds: <http://cfpub.epa.gov/surf/locate/index.cfm>



EPA says:

“Increasingly, State and Tribal water resource professionals are turning to watershed management as a means for achieving greater results from their programs. Why? Because managing water resource programs on a watershed basis makes good sense - environmentally, financially, and socially. Because watersheds are defined by natural hydrology, they represent the most logical basis for managing water resources. The resource becomes the focal point, and managers are able to gain a more complete understanding of overall conditions in an area and the stressors which affect those conditions. Traditionally, water quality improvements have focused on specific sources of pollution, such as sewage discharges, or specific water resources, such as a river segment or wetland. While this approach may be successful in addressing specific problems, it often fails to address the more subtle and chronic problems that contribute to a watershed's decline. For example, pollution from a sewage treatment plant might be reduced significantly after a new technology is installed, and yet the local river may still suffer if other factors in the watershed, such as habitat destruction or polluted runoff, go unaddressed. Watershed management can offer a stronger foundation for uncovering the many stressors that affect a watershed. The result is management better equipped to determine what actions are needed to protect or restore the resource.”

ABOUT THE ENVIRONMENTAL LITERACY COUNCIL

No choices are more important than those we make about the environment - and few are more complex and challenging. Yet the actions we take can have a permanent, powerful impact, upon human well-being and the face of nature on earth.

The Environmental Literacy Council is dedicated to helping citizens, especially young people, participate wisely in this arena. An independent, non-profit organization, the Council gives teachers the tools to help students develop environmental literacy: a fundamental understanding of the systems of the world, both living and non-living, along with the analytical skills needed to weigh scientific evidence and policy choices.

The environmental sciences have become an integral part of the K-12 curriculum, and for good reason. Health, living conditions, transportation infrastructure, technologies, economic future, and our relationship with nature are all shaped by environmental actions.

If we are to protect the Earth and our future, we need to equip today's students to be tomorrow's environmental stewards. Our classrooms must become places where students achieve a deep understanding of complex environmental issues. A forest, for example, may be at one and the same time a place of great beauty; a natural resource critical to the health and well-being of neighboring communities; a local ecosystem, supporting rich plant and animal life; and a vital component in the planet's great biogeochemical cycles for regulating global climate. The Council seeks to help teachers and their students see this forest and its trees: to analyze and evaluate risk, and to understand the limits and impact of our actions.

Such an approach accepts that environmental issues involve many dimensions - scientific, economic, aesthetic and ethical. It recognizes that our knowledge is rapidly evolving and that scientific evidence is often uncertain. Above all, it acknowledges the critical importance of environmental literacy, not only to society, but to the environment itself.

We believe that teachers are the key to the quest for environmental literacy - and they need better resources. Towards that goal, the Environmental Literacy Council has assembled top scientists, scholars, economists and educators to provide direct support to local teachers. Our programs bring the best minds on environmental issues into individual classrooms across the country. Expert advisors provide practical teaching resources in a wide variety of projects, available both in print and online.