

Stealing and Selling Nature

Why we need to teach environmental history

by *Tim Swinehart*

In the wake of superstorm Sandy and a presidential election in which the candidates from both major parties essentially ignored climate change, it's time that our schools begin to play their part in creating climate literate citizens. Hurricane Sandy, and the superstorms that will certainly follow, are not just acts of nature—they are products of a massive theft of the atmospheric commons shared by all life on the planet. Every dollar of profit made by fossil fuel companies relies on polluting our shared atmosphere with harmful greenhouse gases—stealing what belongs to us all. But if we don't teach students the history of the commons, they'll have a hard time recognizing what—and who—is responsible for today's climate crisis.

Most U.S. and world history textbooks teach students to ignore the role of nature in history. But as environmental crises—climate, water, soil, and biodiversity—threaten the viability of life as we know it for future generations, we can no longer afford a no-nature social studies curriculum. Our students need to know the environmental history of our current crises, including how nature was turned into a commodity to be bought and sold, and used for private profit. They need to recognize that today's "enclosure of the commons" has a long history.

Early Resistance to Enclosure

In "The World Turned Upside Down," by Leon Rosselson, Billy Bragg sings:

In 1649, to St. George's Hill
A ragged band they called the Diggers
Came to show the people's will
They defied the landlords, they defied the laws
They were the dispossessed reclaiming what was theirs.
We come in peace they said, to dig and sow
We come to work the lands in common
And to make the waste ground grow
This earth divided, we will make whole
So it will be a common treasury for all.

Raj Patel defines the commons in his excellent book *The Value of Nothing*:

A commons is a resource, most often land, and refers both to the territory and to the ways people allocate the goods that come from that land. The commons has traditionally provided food, fuel, water, and medicinal plants for those who used it—it was the poorest people's life-support system.

If the commons is taught at all in history classes, it's likely as a passing reference to English enclosures—the process by which lands traditionally used in common by the poor for growing food, grazing animals, collecting firewood, and hunting game were fenced off and turned into private property. Some textbooks mention the peasant riots that were a frequent response to enclosures, or specific groups like the Diggers that actively resisted enclosure by tearing down fences and re-establishing common areas for growing food. But to students reading their world history texts, this doomed fight by the rural poor must seem tragically misguided—especially since it is buried amidst chapters that champion the innovation and progress brought on by the new economic order of industrial capitalism.

Some texts, like McDougal Littell's *Modern World History*, skip the peasants' resistance entirely, but sing the praises of innovative and enterprising wealthy landowners:

In 1700, small farms covered England's landscape. Wealthy landowners, however, began buying up much of the land that village farmers had once worked. The large landowners dramatically improved farming methods. These innovations amounted to an agricultural revolution.

After buying up the land of village farmers, wealthy landowners enclosed their land with fences or hedges. The increase in their landholdings enabled them to cultivate larger fields. Within these larger fields, called enclosures, landowners experimented with more productive seeding and harvesting methods to boost crop yields. The enclosure movement had two important results. First, landowners tried new agricultural methods. Second, large landowners forced small farmers to become tenant farmers or to give up farming and move to the cities.

This is a disturbing historical narrative, as much for what it leaves out as for what it gets wrong. Students could fairly assume that English enclosures involved a fair exchange between “wealthy landowners” and “village farmers,” not the sometimes violent evictions that removed peasants from land that their families had often worked for generations. Take for example, the account of Betsy Mackay, 16, whose family was evicted by the Duke of Sutherland in the late 18th-century enclosures in Scotland, referred to now as “the clearances”:

Our family was very reluctant to leave and stayed for some time, but the burning party came round and set fire to our house at both ends, reducing to ashes whatever remained within the walls. The people had to escape for their lives, some of them losing all their clothes except what they had on their back. The people were told they could go where they liked, provided they did not encumber the land that was by rights their own. The people were driven away like dogs.

The McDougal Littell version of history silences the voices of the poor, who struggled for centuries in England to maintain their traditional rights to common lands—rights enshrined in 1217 in the Charter of the Forest, the often-overlooked sister document to Magna Carta. But don't bother looking for the Charter of the Forest in the McDougal Littell text; although the book's prologue, “The Rise of Democratic Ideas,” praises Magna Carta for respecting “the individual rights and liberties” of nobles, the truly democratic Charter of the Forest didn't make the cut.

We need our history curriculum to provide a lens of justice and critical understanding for our students as they consider how to create a better environmental future than we now face—without this lens we

are apt to end up with the sort of “innovative,” profit-driven schemes that serve fossil fuel companies and financial institutions more than future generations. We need stories like those of Betsy Mackay, the Diggers, and the Charter of the Forest to get students thinking critically about how the natural world—the source of subsistence for all people in all times, including today—has been appropriated historically to serve the interest of a few at the expense of the many.

This history is, of course, not limited to land enclosures during the British agricultural revolution. Around the world, European colonizers spent centuries violently “enclosing” the lands of indigenous peoples throughout the Americas, India, Asia, and Africa. And the process continues today, described by Indian scientist and activist Vandana Shiva in her essay “The Enclosure of the Commons”:

The “enclosure” of biodiversity and knowledge is the final step in a series of enclosures that began with the rise of colonialism. Land and forests were the first resources to be “enclosed” and converted from commons to commodities. Later on, water resources were “enclosed” through dams, groundwater mining, and privatization schemes. Now it is the turn of biodiversity and knowledge to be “enclosed” through intellectual property rights.

The destruction of commons was essential for the industrial revolution, to provide a supply of natural resources for raw material to industry. A life-support system can be shared, it cannot be owned as private property or exploited for private profit. The commons, therefore, had to be privatized, and people’s sustenance base in these commons had to be appropriated, to feed the engine of industrial progress and capital accumulation.

The enclosure of the commons has been called the revolution of the rich against the poor.

When framed as a war of the rich against the poor, the story of enclosure is similar to Howard Zinn’s approach in *A People’s History of the United States*, in which he exposes the “fierce conflict of interest between conquerors and conquered, masters and slaves, capitalists and workers, dominators and dominated in race and sex.” The tremendous work of Zinn and other social historians has reframed how history is taught in classrooms across the country, a testament to Zinn’s belief that “in such a world of conflict, a world of victims and executioners, it is the job of thinking people, as Albert Camus suggested, not to be on the side of the executioners.” But to continue Zinn’s work in an age of environmental crisis, we must do more than tell the people’s history—we also need to tell stories that emphasize the vital relationships between people and the earth. In a world where corporate profits threaten the livelihood of future generations, it is the job of teachers to be on the side of those future generations.

Missing Nature in U.S. History

Current U.S. history curriculum contributes to an ecological illiteracy. When we’re not taught to understand the intimate and fundamental connections between people and the environment in our nation’s history, it should come as no surprise that we struggle to make these same connections today.

One of the few places where nature shows up in U.S. history courses is an explanation of how Native American and European concepts of land ownership differed. Here, for example, is Prentice Hall’s *America on the subject*:

One item that Native Americans never traded was land. In their view, the land could not be owned. They believed that people had a right to use land and could grant others the right to

use it, too. To buy and sell land, as other peoples have done throughout history, was unthinkable to them. Land, like all of nature, deserved respect.

By contrast, the Europeans who arrived on North American soil in the 1400s had quite a different idea about land ownership. They frequently did not understand Indian attitudes and interpreted references to land use as meaning land ownership. Such fundamental differences would prove to have lasting consequences for both Native Americans and European settlers.

“To buy and sell land, as other peoples have done throughout history”? All people? Every textbook I’ve seen presents the buying and selling of land as a normal—even inevitable—part of human history. This is an opportunity to explore a different version of history with students—a history that begins with the naked truth that land inhabited by Native Americans had to be stolen before it could ever become private property. Instead, we have this later section of America, titled “Conflict with Native Americans”:

Although the Native Americans did help the English through the difficult times, tensions persisted. Incidents of violence occurred side by side with regular trade. Exchanges begun on both sides with good intentions could become angry confrontations in a matter of minutes through simple misunderstandings. Indeed, the failure of each group to understand the culture of the other prevented any permanent cooperation between the English and Native Americans.

This is history of the worst kind, in which a misguided attempt at “balance” results in a morally ambiguous explanation for the dispossession and murder of millions of Native Americans. Zinn offers a different version of the same story: “Behind the English invasion of North America, behind their massacre of Indians, their deception, their brutality, was that special powerful drive born in civilizations based on private property.” For hundreds of years after the first contact between Europeans and Native Americans, the governments and laws of the colonizers worked, often violently, to imprint this notion of private property on the lands and peoples of the Americas.

Water and the Industrial Revolution

Although students often study the water cycle in biology, that very same water disappears from view when studying the industrial revolution in U.S. history. This historical omission creates at least two problems. First, it leaves us with the flawed understanding that our industrial economy was built through human ingenuity and technological advance, ignoring the exploitation of rivers, land, fossil fuels, and the atmosphere that were the basis for industrial growth. The textile mills that heralded the birth of the industrial revolution in the United States would have produced few products and little wealth were they not powered by the river systems of the Northeast. Second and perhaps even more significant for teachers and students, we lose sight of how the private appropriation—*theft*—of once public and common resources like rivers fundamentally changed the lives of people dependent on those resources for food and livelihood.

The story of early industrialization in the United States, as told in most textbooks, illustrates how the curriculum fosters ecological illiteracy. Prentice Hall’s *America* offers a prime example. After reading the section titled “Inventions and Innovations,” students are likely to come away thinking that industrialization was a process of witty and enterprising inventors using new technologies to revolutionize the way that goods, from cloth to guns, were produced in the nation’s burgeoning

capitalist economy. Nature is not entirely absent from the section. Students read a majestic description of New England's rivers, which "gathered strength as they descended from the mountains, surged through valleys, and plunged over waterfalls." It's as if the rivers of the Northeast were made to provide power, and were simply waiting to be harnessed by the new industrialists. America's discussion of nature and industrialization stops here, without a hint of how factory owners appropriated entire river systems, fundamentally transforming these ecosystems and decimating the fish populations that so many poor people depended on for food—a catastrophic story for those who weren't reaping the profits of the new industrial era.

America, like most texts, champions Samuel Slater, an immigrant who "smuggled" legally protected knowledge of textile machinery from Britain, in order to build the first textile factory in the United States. Students read about how Slater "reproduced the complex British machinery" in a clothier's shop in Pawtucket, Rhode Island, and with the help of business partners built "the nation's first successful water-powered textile mill in 1793":

Textile producers soon began copying Slater's methods. By 1814, the United States boasted some 240 textile mills, most of them in Pennsylvania, New York, and New England. Slater and other mill owners grew wealthy by filling the needs of the growing American population for more and more cloth.

Textbooks make industrialization seem like a process that benefited the entire population. Thanks to the work of Zinn and other social historians, stories of class struggle between factory workers and owners are now at least referenced in texts like America. But students also need to learn the history of the struggle over how nature would be used and who had the right to use it.

In *Down to Earth: Nature's Role in American History*, Ted Steinberg uncovers the story of how nature—from rocks, trees, and rivers to climate and soil fertility—factored into the classic struggles in U.S. history. He argues for a deeper understanding of how industrialization fundamentally changed the relationship between people and nature:

The industrial revolution meant more than simply the rise of factories, railroads, and new forms of work and social life. It brought about class conflict under the factory roof—strikes and walkouts over wages and hours—but it also involved a struggle over nature, over who would control it and for what ends.

Steinberg explains that, before the rivers of the Northeast were transformed into the "surging, plunging" sources of power described in America, they served a different purpose in colonial American society:

In the spring, when winter stores ran low, the colonists went fishing for shad, alewives, and salmon, species of fish that return from the ocean to freshwater streams to reproduce. Salmon were so plentiful during the colonial period that as late as 1700 they sold for only one cent a pound. The spring profusion of fish brought farmers descending on the region's rivers... securing an important supply of dietary protein at precisely the point in the seasonal cycle when they needed it most.

Learning about the dependence of colonists on these yearly fish runs is a valuable lesson in and of itself in an age when most of our students are hard-pressed to say where any of their food comes from, let alone seasonal variability of food in their region. But even more important lessons lie in the stories

of what happened to these fish runs, and the people who depended on them, when factory owners began appropriating the rivers for industrial production.

The dams built by factory owners like Slater and corporations like the Boston Associates became a tangible focus of anger and protest. Farmers in 1792 petitioned the Rhode Island General Assembly to remove Slater's dam, but were thwarted when one of Slater's partners preempted the petition through insider political connections within the legislature. In 1859 people in Lake Village, New Hampshire, took a more hands-on approach, attacking and attempting to destroy a dam owned by the Boston Associates:

The attackers included farmers angry over the flooding of their meadows to convenience out-of-state factories; upstream mill owners who resented being forced to follow the waterpower schedule of the lower Merrimack corporations; loggers who wanted the gates lowered to send timber downstream; and the poor and dispossessed, incensed that the economic transformation pulsing through the region had left them behind.

Water Becomes a Commodity

One of the most important innovations to create wealth for the Boston Associates was not a piece of mill technology but an idea—the “mill-power” concept. Steinberg explains the concept and its significance:

A mill-power equaled the amount of water necessary to drive 3,584 spindles for spinning cotton yarn—the capacity of one of the Boston Associates' earliest factories—plus all the other machinery necessary for transforming the yarn into cloth. The concept enabled the company to easily package water and put it up for sale. By the 1830s, companies at Lowell even purchased water without buying any land, breaking with past tradition. Water itself had become a commodity.

The story of how water was turned into a commodity by the Boston Associates represents one of the most important lessons environmental history can offer our students—the recognition that today's “private property” almost always hides a history of theft and dispossession. Steinberg sums it up well:

The mills along the lower Merrimack incorporated the natural wealth available in the countryside into their designs for production and in so doing produced more than just cloth. They generated a chain of ecological and social consequences that spilled out beyond the factories, affecting places and people more than 100 miles away in a completely different state. Nothing better demonstrates the ways in which industrialization led to a major rationalization and reallocation of natural resources, enriching some at the expense of others.

It is important not to romanticize traditional natural commons as completely democratic or sustainable examples of how people can subsist from the environment—the dispossessed Native American inhabitants of the Northeast who had little or no access to traditional fishing grounds, and the overfishing of some rivers by colonial farmers tell us otherwise. But we would be remiss not to ask questions about who benefited from the “progress” of the industrial era, and whether the new economy was always an improvement over the economy of the commons that preceded it.

Moving Nature to the Center

When we look at the Diggers' resistance to enclosure, Native Americans' resistance to land theft by European colonizers, or colonial-era farmers' resistance to the damming of rivers in 18th-century New England, a different historical narrative emerges: The growth of industrial capitalism has always been predicated on the private enclosure of the natural world. And these enclosures have always met with resistance. Learning this alternative narrative encourages critical conversation about the extent to which "economic growth" has been used to justify the private seizure of the earth's resources for the profits of a few—while closing off those same resources, and decisions about how they should be used, to the rest of us. Even more importantly, this conversation can help us understand today's environmental crises—from the loss of global biodiversity to superstorm Sandy—for what they really are: the culmination of hundreds of years of privatizing and commodifying the natural world.

The private enclosure of nature continues today; it's just hard to see. Like the proverbial fish surrounded by the water of the "free market," it's easy to assume that fossil fuel companies have some god-given right to profit from polluting our atmospheric commons. How are young people to recognize this atmospheric grab when the school curriculum has erased all memory of our collective right to the natural commons?

Reclaiming these commons means fueling students' knowledge about a past that has conveniently disappeared. Educators did not create the climate crisis, but we have a key role to play in alerting students to its causes—and potential solutions.

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<www.rethinkingschools.org/archive/27_02/27_02_swinehart.shtml>