## The Significance of Nature: a Historiographical Review of Environmental History

Benjamin Aberle

"Not all forces at work in the world emanate from humans." All historians would do well to remember this simple fact articulated by Donald Worster, one of the founding fathers of the growing field of

environmental history. But even though this is clearly true, that humans are inseparable from their environment, most of history remains a human story. The environment is just a setting for the human drama, a

stage.

For Frederick Jackson Turner, the wild American frontier provided the conditions in which the exceptional identity of Americans could be forged. Although the wilderness was central to Turner's story, it remained the backdrop for a narrative about the progress of democracy and the American nation. Turner's emphasis on environmental forces explains a lot about the time in which he wrote. The nineteenth century witnessed the rise of human awareness about the environment as a powerful entity. This can easily be seen through Charles Darwin's idea that natural selection is responsible for shaping the evolution of life or in the more spiritual outlook of Henry David Thoreau who said that "in wilderness is the preservation of the world."

Not coincidently, the progressive conservation movement gained momentum as Turner's frontier vanished. Many Americans awakened to the possibility that the nation's resources were limited and that their primitive wilderness areas were threatened. Activists such as John Muir fought to save natural areas such as Yosemite Valley for their intrinsic worth. Meanwhile, the federal government worked to conserve America's forests in the name of "wise-use" efficiency. This dichotomy of preservation and conservation became the lens through which environmental history first took form.

The publication of Samuel Hays's Conservation and the Gospel of Efficiency in 1959 and Roderick Nash's Wilderness and the American Mind in 1967 marked the beginning of a new history that celebrated the

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Benjamin Aberle is a graduate student in History. He is from Fairbury, Illinois and his interests are environmental history, nineteenth-century American history and baseball history. He wrote this paper in Fall 2011 for a Historiography seminar led by Professor Mark Hubbard.

<sup>&</sup>lt;sup>1</sup> Donald Worster, "Transformations of the Earth: Toward an Agroecological Perspective in History," *Journal of American History* 76, no. 4 (Mar., 1990): 1091.

environment as something to be valued.<sup>2</sup> Hays's study is primarily a political history concerned with the utilitarian conservation policies of Theodore Roosevelt's administration, including chief forester Gifford Pinchot. *Wilderness and the American Mind* is an intellectual history about the concept of wilderness as it has changed over time and place. The preservation-minded Henry David Thoreau and John Muir are the heroes of Nash's narrative. Together, these books formed a stark contrast between two poles of environmental thought, around which most histories of the environmental movement have gravitated.

However, these founding works are not in themselves environmental histories. In both of these studies, the environment remains a stage for the human story: the progress of environmentalists. How then, did these political and intellectual histories lead to the growth of an academic field in which one could claim that "the spread of potatoes and lazy bed cultivation certainly had a greater effect on the demography and the physical condition of actual Ireland than [Thomas Carlyle's] hero, Oliver Cromwell [?]" How could historians gain employment who thought, "the story of the prairie bluestem... or the smallpox virus, or the common barnyard pig, may be no less important than the story of a presidential administration or a war [?]"

It wasn't until modern environmentalism emerged in the 1960s and 1970s that the environment became relevant to historians' understanding of the world. One needed only to look at the smog surrounding America's cities or to read about the dangers of pesticides in Rachel Carson's *Silent Spring* to become concerned with the human impact on the environment.<sup>5</sup> Indeed, Richard White has asserted that "environmental history as a self-proclaimed new field emerged on the academic sense deeply involved with, if not married to, modern environmentalism." Even Nash claimed to be "indisputably lucky" in the preface to the 2001 edition of *Wilderness and the American Mind* because he "caught the wilderness wave as it began to crest and became the beneficiary of the very intellectual revolution [he] described."

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<sup>&</sup>lt;sup>2</sup> Samuel Hays, Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890-1920, (New York: Atheneum, 1959). Roderick Nash, Wilderness and the American Mind (New Haven: Yale University Press, 1967).

<sup>&</sup>lt;sup>3</sup> Alfred Crosby, "An Enthusiastic Second," *Journal of American History* 76, no. 4 (Mar., 1990): 1108. In reference to Radcliffe Salaman, *The History and Social Influence of the Potato* (Cambridge, Eng., 1985), 188-332.

<sup>&</sup>lt;sup>4</sup> William Cronon, "Modes of Prophecy and Production: Placing Nature in History," *Journal of American History* 76, no. 4 (Mar., 1990): 1122.

<sup>&</sup>lt;sup>5</sup> Rachel Carson, Silent Spring (Boston: Houghton Mifflin, 1962).

<sup>&</sup>lt;sup>6</sup> Richard White, "American Environmental History: The Development of a New Historical Field," *Pacific Historical Review* 54, no. 3 (Aug., 1985): 299.

<sup>&</sup>lt;sup>7</sup> Nash, Wilderness and the American Mind, vii.

Out of the desire to understand "the role and place of nature in human life" historians began to build on the ideas of Aldo Leopold, the famous conservationist and wilderness advocate who claimed that humans were only one part of an interdependent community that included "soils, waters, plants, and animals, or collectively: the land." This new field adopted a structure later expressed by Worster, who stated that environmental history "rejects the common assumption that the human experience has been exempt from natural constraints, that people are a separate and uniquely special species, that the ecological consequences of our past deeds can be ignored."

It was Worster who authored some of the pioneering works in the young field of environmental history. His *Nature's Economy: A History of Ecological Ideas* was published in 1977 and was followed in 1979 by *Dust Bowl: The Southern Plains in the 1930s*, winner of the Bancroft Prize in American History. <sup>10</sup> *Dust Bowl* provided the link between environmental and social change for which contemporaries were looking.

In Dust Bowl, Worster details how difficult it can be for people to live on the plains. In a region with little rain, the wind is "the one steady ingredient in plains weather—always ready to tear away whatever is not firmly rooted or nailed down."11 Moderating this effect of the wind were deep-rooted prairie grasses that held together the sod of the earth. A complex ecosystem evolved around these grasses that involved a multitude of species from bison and butterflies to prairie chickens and pronghorns. Indians became a part of this harmonious ecosystem, or "natural economy" as Worster put it, developing a way of life that could coexist with the harsh environment of the plains. According to Worster, they succeeded on the land because of their "full acceptance of the order [and] pattern of ecological restraint." "unwillingness to consider that any other relationship with the grassland might be possible" enabled them to survive in such a marginal, foreboding landscape. 12

Americans moving west in the 19<sup>th</sup> century did not see the plains this way. They saw it first as a barren desert and then, as the American frontier receded, a place of opportunity- a wilderness to be conquered. Railroads divided the great expanse, the US Army subdued the Indian

<sup>&</sup>lt;sup>8</sup> Worster, "Transformations of the Earth," 1088-1089. Aldo Leopold, A Sand County Almanac: And Sketches Here and There (New York: Oxford University Press, 1949), 204.

<sup>&</sup>lt;sup>9</sup> Worster, "Transformations of the Earth," 1089.

<sup>&</sup>lt;sup>10</sup> Donald Worster, Nature's Economy: A History of Ecological Ideas (New York: Cambridge University Press, 1977). Worster, Dust Bowl: The Southern Plains in the 1930s (New York: Oxford University Press, 1979).

<sup>11</sup> Ibid., 71.

<sup>12</sup> Ibid., 77.

nations, and cattle replaced the nearly exterminated bison. Eventually farmers settled the plains, embodying America's insatiable appetite for more land. In the years between 1910 and 1930 these American "sodbusters" tore up the land at an unprecedented rate. The surge in wheat prices, caused by the First World War, and the introduction of tractors encouraged farmers to cultivate more land than ever before. The native biodiversity of the plains was replaced by a monoculture of wheat. In this process of industrialization, subsistence farmers were squeezed out by large-scale commercial farms owned by absentee landlords who held "an exploitative relationship with the earth: a bond that was strictly commercial, so that the land became nothing more than a form of capital that must be made to pay as much as possible." 13

By the time that drought came in the 1930s, most of the native grasses were no longer there to protect the dry soil from blowing away in the wind. The farmland that plains families depended on was swept away in horrifying black blizzards and carried as far away as the Atlantic Ocean. The nation found itself suffering not only from economic depression but also the social and environmental catastrophe known as the Dust Bowl.

In Worster's judgment, the farmers who ripped up the native sod were not entirely to blame for this disaster. Conceding that although man is "forever capable of considerable violence toward nature, he is everywhere materialistic, and he has never paid much attention to the environmental consequences of his deeds" Worster asserts that the reason why plainsmen ignored their environmental limits must be "explained not by that vague entity 'human nature,' but rather by the peculiar culture that shaped their values and actions." A capitalist "ethos" was behind man's alienation of his ecological community.

The "ethos" was one in which "nature must be seen as capital... man has a right, even and obligation, to use this capital for constant self-advancement [and that] the social order should permit and encourage this continual increase of personal wealth." This culture "was ecologically among the most unadaptive ever devised." Indeed, he states that "some environmental catastrophes are nature's work, others are the slowly accumulating effects of ignorance or poverty. The Dust Bowl, in contrast, was the inevitable outcome of a culture that deliberately, self-consciously, set itself that task of dominating and exploiting the land for all it was worth."

<sup>13</sup> Ibid., 93.

<sup>14</sup> Ibid., 94.

<sup>15</sup> Ibid., 6.

<sup>16</sup> Ibid., 97.

<sup>&</sup>lt;sup>17</sup> Ibid., 4.

Dust Bowl may incite anger over America's ecological sins and passion about defending wild country from the excesses of capitalist culture. Worster's provocative message of reform reflects the energy behind environmental history's emergence as a field created out of a desire to inform and correct ongoing ecological concerns. Dust Bowl ends with a warning for agriculturalists who believe they can ignore the lessons of the past: "new ecological disasters can be created by man on the plains, and on a scale greater than anything experienced before... The Great Plains cannot be pushed and pushed to feed the world's growing appetite for wheat without collapsing at last into a sterile desert."18

Worster himself noted that his field was "born out of a strong moral concern."19 The emphasis on morality gave environmental history its initial shape. Following Dust Bowl was another declension narrative: William Cronon's Changes in the Land: Indians, Colonists, and the Ecology of New England. In his book, Cronon attempted to show how "European [trade and ] agriculture reorganized Indian relationships within both the New England regional economy and the New England ecosystem.<sup>20</sup> In doing so he contrasted Indians' and colonists' differences in agriculture, hunting, forest management, and ideas about property such as land boundaries and livestock control. Like Worster he concluded that the capitalistic culture of the English invaders—including the natives who tried to adopt it—was to blame for the rapid destruction of the native New England landscape and culture.

It makes sense that an academic field founded by environmentalists would rally against anything that threatens ecological balance. Declension narratives, such as Dust Bowl and Changes, rely on the concept that nature is inherently balanced and that humans destroy that balance when they refuse to adapt to nature's limits. They rest on a few assumptions about ecology, as explained here by Richard White: "complexity is good, simplicity is bad; natural systems seek equilibrium and battle disruption, there is an ideal balance in nature that, once, achieved, will maintain itself."21

These ecological assumptions date back to the 1920s, when ecologist Frederic Clements introduced the ideas of succession, and climax communities in nature. This was the accepted theory of ecology when environmental history first began. Historians like Worster and Cronon could confidently write their tales about a human departure

<sup>18</sup> Ibid., 239.

<sup>&</sup>lt;sup>19</sup> Worster, "Transformations of the Earth," 1089. <sup>20</sup> William Cronon, Changes in the Land: Indians, Colonists, and the Ecology of New England (New York: Hill and Wang, 1983), 103.

<sup>21</sup> Richard White, Environmental History, Ecology, and Meaning, Journal of American History 76, no. 4 (Mar., 1990): 1115.

from the natural ideal. Indeed, "Historians thought ecology was the rock upon which they could build environmental history," but as White wrote, "it turned out to be a swamp." That is because ecology has drifted away from the idea of climax communities and toward the idea that nature is always undergoing dynamic change.

White pointed out that the ecology that these historians depended on was already changing by the time these works were written. This presented a problem for environmental historians because they no longer had a clear standard of what a stable ecosystem should actually be. They could no longer be sure about using nature as a reference from which to judge human actions. The reformist passion and claim to superior knowledge that fueled the field's beginning works now became a stumbling block.

Another flaw to these works was their propensity to blame everything on capitalism. Cronon reflected years later, "We cannot simply label as capitalist or modern all forces for ecosystemic change, and as traditional or natural all forces for stability... Rather than benign natural stasis and disruptive human change, we need to explore differential *rates* and *types* of change." Colorfully explaining the need for complexity to replace morality, he asked, "Are capitalist pigs intrinsically more destructive than non-capitalist pigs?"<sup>23</sup> As Cronon suggested, universal laws about the destructive tendencies of capitalism should be avoided.

Yet another weakness in early environmental histories such as these was a narrow focus on local or regional history, or what can be referred to as bioregional histories. The narrow focus of these studies enabled their authors to write a declension narrative in which environmental deterioration was clear. Despite ecological uncertainty, the impact of environmental change can clearly be seen in the case of natural disasters like the Dust Bowl or in cross-cultural encounters like those between Indians and English colonists. However, the problem with this narrow scale is one that all local and regional histories share. White points out, "no matter how carefully bounded in place and time local studies are, they involve processes which originated in and involved much larger areas and groups of people. History provides few laboratories."24 Worster acknowledged that "the historical profession is full of narrow, empirical busyness" and that "the public is obviously and rightly bored by it." What was needed was an emphasis on "the larger issues of our time—the relation of nature and capitalism, the collective myths and

<sup>&</sup>lt;sup>22</sup> Ibid. An excellent summary of Clementsian ecology can be found in Donald Worster *Nature's Economy: A History of Ecological Ideas* (New York: Cambridge University Press, 1977), 205-220.

<sup>&</sup>lt;sup>23</sup> Cronon, "Placing Nature in History," 1128.

<sup>&</sup>lt;sup>24</sup> White, "American Environmental History," 323.

institutions of nations and civilizations, the workings of imperialism, the fate of the earth."<sup>25</sup>

Environmental histories being written were not limited to a regional focus. One early example of environmental history that was able to broaden the scope of environmental change was Alfred Crosby's Columbian Exchange: Biological and Cultural Consequences of 1492, first published in 1972. In it Crosby focused on the environmental impact that occurred in Europe, Africa, and the Americas as a result of the booming interaction between those continents during the Age of Discovery. Crosby improved upon this design in 1986 with Ecological Imperialism: The Biological Expansion of Europe, 900-1900 in which he showed how the European conquest of many colonies in the temperate zones of the world was due as much to biological co-invaders such as disease, flora and fauna, as it was to military might. It was Crosby who said that what environmental history needed was more "intelligent generalizers."26 These macrohistories owe something to the Annales School of history in which geographical patterns were emphasized over the accomplishments of political and military leaders. Therefore, mentioning Fernand Braudel in any conversation about the origins of environmental history is necessary.27

However, neither scale was able to diminish the most pressing problem facing environmental history. Environmental determinism remained the driving force behind most environmental narratives. Whether it was the overwhelmingly material emphasis of Cronon's New England changes or the superiority of biological factors in Crosby's tale of global conquest, there seemed to be little room for cultural or social influence. In discussing the problem of holism, Cronon admitted to environmental history's tendency to gloss over social divisions:

On the one hand, holistic analysis has the great attraction of encouraging historians to see nature and humanity whole, to trace the manifold connections among people and other organisms until finally an integrated understanding of their relations emerges. On the other hand, holism discourages us from looking as much as we should at conflict and difference *within* groups of people.<sup>28</sup>

Changes in the Land is perhaps the definitive example of holistic history: Cronon spent little time discussing social divisions (with the

<sup>&</sup>lt;sup>25</sup> Donald Worster, "Seeing Beyond Culture," *Journal of American History* 76, no.

<sup>4 (</sup>Mar., 1990): 1143.

<sup>&</sup>lt;sup>26</sup> Crosby, "An Enthusiastic Second," 1109.

<sup>&</sup>lt;sup>27</sup> Alfred Crosby, Columbian Exchange: Biological and Cultural Consequences of 1492 (Westport: Greenwood Publishing Company, 1972). Crosby, Ecological Imperialism: The Biological Expansion of Europe, 900-1900 (New York: Cambridge University Press, 1986).

<sup>&</sup>lt;sup>28</sup> Cronon, "Placing Nature in History," 1128.

exception of different labor roles for men and women) in a tale about two collective actors: Indians and colonists.

Taken together, all of these faults can appropriately be labeled as growing pains. As with many new disciplines, a few years were needed for the field to find its own identity and a promising direction. It was during this process when Richard White offered a few guiding suggestions in 1985 that helped the growing field to mature. Namely, he called for more interdisciplinary research and a fuller exploration of cultural attitudes about nature, encouraging an expansion beyond the narrow focus on influential thinkers such as John Muir and Aldo Leopold. More emphasis needed to be placed on the "political, social, and economic contexts" in which environmental change took place. Furthermore, a definition had to be found for "what healthy ecosystems are and what constitutes their decline." Generally, environmental history needed to get away from environmental determinism and incorporate social history. Yet, historians also had to be careful about losing the environment as their subject in their effort to connect it to larger social issues. White concluded, "It is in the midst of this compromised and complex situation—the reciprocal influences of a changing nature and a changing society—that environmental history must find its home."29

Since then, the field has improved in moving beyond narrow stories of environmental change into a broader range of social and cultural issues. A brilliant comparison of environmental history to social history can be found in an article written by Alan Taylor entitled "Unnatural Inequalities." In it Taylor recognizes that "environmental history mute[s] the subdivisions and conflicts that so interest social historians" but also considers it to be "fundamentally compatible and mutually reinforcing" with social history.30 Both have a "preoccupation with the common and the previously inconspicuous," focus on "the empirical examination of new sources" and have an "engaged political sympathy for the less powerful and most exploited."31 In some ways, the category of nature may be added to the list of "others" that constitutes social history: women, race, class, and ethnicity. Taylor pointed out the potential of studying the "social inequalities of environmental consumption" and that "inequality has had profound environmental consequences."32

This newfound emphasis on social divisions within an environmental framework has been one of the major improvements in

<sup>&</sup>lt;sup>29</sup> Richard White, "American Environmental History," 335.

<sup>&</sup>lt;sup>30</sup> Taylor, Alan, "Unnatural Inequalities: Social and Environmental Histories," Environmental History 1, no. 4 (Oct., 1996): 7.

<sup>31</sup> Taylor, "Unnatural Inequalities," 8.

<sup>32</sup> Alan Taylor, "Unnatural Inequalities," 11-15.

environmental history. Recent works include: Mark Spence's Dispossessing the Wilderness: Indian Removal and the Making of the National Parks, which views the creation of the national park system from the lens of the Native Americans who lived on those marginal lands before they were removed; Karl Jacoby's Crimes Against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation which makes a similar argument about how federal conservation pushed working-class people off the land; Carolyn Merchant's "Shades of Darkness," which examines the racial ideas of celebrated environmentalists such as Henry David Thoreau, John Muir, and Aldo Leopold; and Merchant's Ecological Revolutions which improved upon Changes in the Land in its treatment of class and gender issues. 33 Karl Jacoby, in an argument for reconciling social and environmental history, mentioned that what was needed was "a history that regards humans and nature not as two distinct entities but as interlocking parts of a single, dynamic whole." 34

For this idea Jacoby owed a lot to his dissertation advisor, William Cronon. The belief that nature or wilderness is something other than civilization began to crumble with the publication of Cronon's controversial article "The Trouble With Wilderness: Or, Getting Back to the Wrong Nature" in 1995. This article met much resistance from environmentalists for its perceived attack on wilderness. Richard White wrote that it "was like offering a scrap of meat to yellow jackets in the fall." In this article Cronon flipped a core concept upside down by arguing that wilderness is "far from being the one place on earth that stands apart from humanity, it is quite profoundly a human creation—indeed, the creation of very particular human cultures at very particular moments in human history." Cronon demonstrated this by tracing human definitions of wilderness from the biblical notion that wilderness was a place "to lose oneself in moral confusion and despair" to the early modern idea that "it might be 'reclaimed' and turned toward human

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<sup>&</sup>lt;sup>33</sup> Mark Spence, Dispossessing the Wilderness: Indian Removal and the Making of the National Parks (New York: Oxford University Press, 1999); Karl Jacoby, Crimes Against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation (Berkeley: University of California Press,2001); Carolyn Merchant, "Shades of Darkness: Race and Environmental History," Environmental History 8, no. 3 (Jul., 2003): 380-394; Carolyn Merchant, Ecological Revolutions: Nature, Gender, and Science in New England (Chapel Hill: University of North Carolina Press, 1989).

<sup>34</sup> Jacoby, Crimes Against Nature, xvii

<sup>&</sup>lt;sup>35</sup> Richard White, "Afterword Environmental History: Watching a Historical Field Mature," *Pacific Historical Review* 70, no. 1 (Feb., 2001): 104.

<sup>&</sup>lt;sup>36</sup> William Cronon, "The Trouble With Wilderness: Or, Getting Back to the Wrong Nature," *Environmental History* 1, no. 1 (Jan., 1996): 7.

ends" to the nineteenth century view of wilderness as a sacred "Eden" to be revered and protected.<sup>37</sup>

It was also during the nineteenth century that wilderness became a source of recreation to be consumed by "well-to-do city folks" and that "Country people generally know far too much about working the land to regard unworked land as their ideal." In this comparison of different class-based perceptions about wilderness Cronon shows how wilderness is mainly a cultural invention. This is especially clear when studying Native Americans' experience with the national park system. Cronon wrote that "The removal of Indians to create an 'uninhabited wilderness'—uninhabited as never before in the history of the place—reminds us just how invented, just how constructed, the American wilderness really is." Cronon reminded us that people have been manipulating the environment long before Americans ever considered it sacred. At one particularly abrasive point Cronon wrote:

The dream of an unworked natural landscape is very much the fantasy of people who have never themselves had to work the land to make a living—urban folk for whom food comes from a supermarket or a restaurant, and for whom the wooden houses in which they live and work apparently have no meaningful connection to the forests in which trees grow and die. Only people whose relation to the land was already alienated could hold up wilderness as a model for human life in nature, for the romantic ideology of wilderness leaves precisely nowhere for human beings actually to make their living from the land.<sup>40</sup>

He concluded that the dualism of wilderness versus humans must be abandoned in favor of a view that sees all places and all people as natural. This includes "the celebration...of the wildness in our own backyards" and humble landscapes such as marshes, or agricultural and urban landscapes as well. Indeed, he calls for an end to the perception of wilderness as "pristine" or "wild" or "other." Instead it must be seen as home. Cronon concluded with a moral plea: "If wildness can stop being (just) out there and start being (also) in here, if it can start being as humane as it is natural, then perhaps we can get on with the unending task of struggling to live rightly in the world—not just in the garden, not just in the wilderness, but in the home that encompasses us both."<sup>41</sup>

The Trouble With Wilderness is the keystone of the cultural turn in environmental history. It appeared as the headlining chapter in Cronon's collection of essays from environmental writers all concerned with nature's role in human culture. Though it met with initial controversy it

<sup>&</sup>lt;sup>37</sup> Ibid., 9.

<sup>38</sup> Ibid., 15.

<sup>&</sup>lt;sup>39</sup> Ibid., 15-16.

<sup>40</sup> Ibid., 17-18.

<sup>41</sup> Ibid., 22-25.

inspired a direction in which environmental history was able to connect to larger cultural patterns in history. Some examples of the new cultural-environmental history are Cronon's own Nature's Metropolis: Chicago and the Great West, a great example of how to do an environmental history of an urban landscape; Paul Sutter's Driven Wild: How the Fight Against Automobiles Launched the Modern Wilderness Movement, in which Sutter argues that Wilderness Society formed in response to the intrusions of the Civilian Conservation Corps and the increasingly mobile society in which nature became a product to be visited and consumed; and Christopher Seller's "Thoreau's Body: Towards and Embodied Environmental History" which argues that the human body should also be seen as nature.

Environmental history has followed the progress of its general discipline, albeit more quickly, in evolving from Whiggish tales of moral decline to Braudelian patterns of change and universal laws about capitalism, to scientific studies of the "other" in social history, and finally to a postmodern emphasis on culture. Where should it go from here? Paul Sutter offers the suggestion that US environmental historians would gain much by adopting a global perspective. Indeed, he has shown environmental movements have developed elsewhere in places such as India, where there is more of an emphasis on the state vs. marginalized people than there is on conservation vs. preservation. From Africa comes the concept of environmental control in which humans are a stable, rather than unstable, force in the environment. There should also be a greater attempt to reconcile science with environmental history. The "interdisciplinary balancing act" that has both supported and plagued environmental history can be achieved: see Benjamin Cohen's Notes From the Ground: Science, Soil, and Society in the American Countryside. 45 The greatest challenge is for historians to find a way to engage other areas in their discipline, to convince others of the environment's value and relevance, and to broaden their focus to capture a bigger public audience. They must remember Richard White's maxim that "Nature does not dictate, but physical nature does, at any given time, set limits on what is humanly possible" without forgetting that the most important thing is to study human relationships to nature. Otherwise,

<sup>&</sup>lt;sup>42</sup> William Cronon, Nature's Metropolis: Chicago and the Great West (New York: W.W. Norton and Company, 1991); Paul Sutter, Driven Wild: How the Fight Against Automobiles Launched the Modern Wilderness Movement (Seattle: University of Washington Press, 2002); Christopher Sellers, "Thoreau's Body: Towards an Embodied Environmental History," Environmental History 4, no. 4 (Oct., 1999): 486-514.

<sup>&</sup>lt;sup>43</sup> Cronon, "Placing Nature in History," 1122; Benjamin Cohen, Notes From the Ground: Science, Soil, and Society in the American Countryside (New Haven: Yale University Press, 2009).

how would historians be able to contribute to the central goal behind environmental history? The goal has not changed since Worster expressed it in 1990: "to deepen our understanding of how humans have been affected by their environment through time, and conversely and perhaps more importantly in view of the present global predicament, how they have affected the environment and with what results."

<sup>&</sup>lt;sup>44</sup> Worster, "Transformation of the Earth," 1089.