

UNST 124g fall 2011

the human footprint

1 introduction

Managing the effects of human activities on the natural environment is a long-standing concern. In 1079, King William I (William the Conqueror) claimed under royal protection 380 km² of the *Great Ytene Forest*. The resulting New Forest is now the largest remaining area of heathland and forest in southern England. King William's decree mirrors modern conservation struggles in two ways: the King's interest was primarily to preserve his hunting grounds, and forest residents who were forced to move out were not pleased with the change of circumstance. That is, the underlying motivations for conservation may have more to do with ecosystem products than with the ecosystem itself, and it is not always possible to meet every stakeholder's needs when decisions are made. Nevertheless, it is worth noting that nearly a millennium ago, the King of England was concerned about deforestation. Indeed, significant forest clearing was underway in Europe by 4500 B.C.E. and by the 13th century, almost all the forest that remained in southern England was under protection of the Crown in the New Forest (Williams, 2000).

Eight hundred years after King William I made his decree, European foresters were applying scientific principles to their work and European immigrants in North America were beginning to have their own realization about protecting natural resources. Gifford Pinchot, first Chief of the U.S. Forest Service, wrote in 1908

Once upon a time there was a young nation which left its home and moved on to a new continent. As soon as the people who formed the first settlements began to examine the value and condition of this new continent, they found it marvelously rich in every possible resource. The forests were so vast that, in the early days, they were not a blessing, but a hindrance. The soil was so rich and there was so much of it that they were able at first only cultivate the edges of their great property. It was quite plain to these people in the early time that, however much land they might cover, however much they might waste, there was always going to be plenty left. As time went on they discovered greater resources. They found wonderfully rich deposits of metallic ore; great oil and gas fields and vast stretches of the richest bituminous and anthracite coal lands; noble rivers flowing through broad expanses of meadow; rich alluvial prairies; great plains covered with countless herds of buffalo and antelope; mountains filled with minerals; and everywhere opportunities richer than any nation had ever found elsewhere before.

They entered into this vast possession and began to use it. They did not need to think much about how they used their coal, or oil, or timber, or water—they would last—and they began to encroach on the supply with freedom and in confidence that there would always be plenty. The only word with which they described what they had, when they talked about it, was the word “inexhaustible.”

(pp. 6-7). As is the case today, the motivations of early conservationists in the United States were both idealistic and utilitarian. Conservationists, like Pinchot and President Theodore Roosevelt, sought to preserve natural resources—both tangible and intangible—for themselves and for future generations while at the same time allowing commercial use of federal lands. Their strategy was to allow, but carefully manage, resource use.

Nineteenth and early 20th century environmentalists were more extreme than conservationists, insisting that as the perfect work of God, nature was the place where men could form deep insights and thus should be as lightly touched as possible. Naturalist and transcendentalist thinker Ralph Waldo Emerson wrote in his influential essay *Nature*, “In the woods, we return to reason and faith.” (p. 12) John Muir, who often carried Emerson’s essays with him on his mountain treks, began his essay *The American Forests* (1897)

The forests of America, however slighted by man, must have been a great delight to God; for they were the best he ever planted. The whole continent was a garden, and from the beginning it seemed to be favored above all the other wild parks and gardens of the globe. To prepare the ground, it was rolled and sifted in seas with infinite loving deliberation and forethought, lifted into the light, submerged and warmed over and over again, pressed and crumpled into folds and ridges, mountains and hills, subsoiled with heaving volcanic fires, ploughed and ground and sculptured into scenery and soil with glaciers and rivers, every feature growing and changing from beauty to beauty, higher and higher. And in the fullness of time it was planted in groves, and belts, and broad, exuberant, mantling forests, with the largest, most varied, most fruitful, and most beautiful trees in the world. Bright seas made its border with wave embroidery and icebergs; gray deserts were outspread in the middle of it, mossy tundras on the north, savannas on the south, and blooming prairies and plains; while lakes and rivers shone through all the vast forests and openings, and happy birds and beasts gave delightful animation. Everywhere, everywhere over all the blessed continent, there were beauty, and melody, and kindly, wholesome, foodful abundance.

Reviewing the wide variety of ecosystems he encountered during his travels, Muir concludes the Americas colonized by Europeans were pristine:

So they appeared a few centuries ago when they were rejoicing in wildness. The Indians with stone axes could do them no more harm than could gnawing beavers and browsing moose. Even the fires of the Indians and the fierce shattering lightning seemed to work together only for good in clearing spots here and there for smooth garden prairies, and openings for sunflowers seeking the light. But when the steel axe of the white man rang out in the startled air their doom was sealed. Every tree heard the bodeful sound, and pillars of smoke gave the sign in the sky.

I suppose we need not go mourning the buffaloes. In the nature of things they had to give place to better cattle, though the change might have been made without barbarous wickedness. Likewise many of nature’s five hundred kinds of wild trees had to make way for orchards and cornfields. In the settlement and civilization of the country, bread more than timber or beauty was wanted; and in the blindness of hunger, the early immigrants, claiming Heaven as their guide, regarded God’s trees as only a larger kind of pernicious weeds, extremely hard to get rid of. Accordingly, with no eye to the future, these pious destroyers waged interminable forest wars; chips flew thick and fast; trees in their beauty fell crashing by millions, smashed to confusion, and the smoke of their burning has been rising

to heaven more than two hundred years. After the Atlantic coast from Maine to Georgia had been mostly cleared and scorched into melancholy ruins, the overflowing multitude of bread and money seekers poured over the Alleghanies into the fertile middle West, spreading ruthless devastation ever wider and farther over the rich valley of the Mississippi and the vast shadowy pine region about the Great Lakes. Thence still westward the invading horde of destroyers called immigrants made its fiery way over the broad Rocky Mountains, felling and burning more fiercely than ever, until at last it has reached the wild side of the continent, and entered the last of the great aboriginal forests on the shores of the Pacific.

Pinchot and Muir recognized both tangible and intangible value in the undeveloped spaces of the north american continent. Their strategies for holding fast to that value in the land differed in degree, though not in kind, and both perspectives are reflected in the dialog regarding natural resources today. Where both Pinchot and Muir erred was in their understanding of the landscape European immigrants found upon their arrival. The land was not pristine, the forests were not unmanaged, and in some places, natural resources had been overtaxed centuries before “the steel axe of the white man rang out in the startled air” (p. 146).

2 assignment

Please read Charles Mann’s article *1491* and answer the following questions in preparation for a discussion in class. This article published in 2002 in *Atlantic Monthly* is a preview for Mann’s book of the same title. If you are interested in this material, I encourage you to read the book as well.

The article is available at the *Atlantic Monthly* website, linked at the class website. Print the article so that you are able to easily highlight or underline passages in the text and write notes to yourself in the margins. Your answers to the questions below do not need to be long but they should be written using complete sentences and correct grammar. Please type your answers and print them before you come to class. You may be asked to turn these in at the end of the discussion.

1. What was happening to north american forests when European colonists started moving west from the eastern seaboard?
2. Mann paraphrases archaeologist Clark Erickson, “the lowland tropical forests of South America are among the finest works of art on the planet.” What does Erickson mean by this?
3. How might Mann’s article cause you to reëvaluate Dan Flores’ (1998) claim that western desacralization of nature (on both religious and economic grounds) facilitated European “conquest” of the western frontier?
4. Charles Mann is careful in his writing to tell us what interpretations of the archaeological record are under dispute and to provide us with alternative views where appropriate. Why, in your opinion, might estimating the pre-Columbian population of the Americas be as contentious as Mann suggests?
5. Does the recognition that the Americas were not a pristine wilderness before the arrival of European immigrants mean, as Mann suggests, that in contrast to modern environmental sensibility, “anything goes?” How might Emerson or Muir answer this question? How would Dan Flores answer this question?

3 references

Emerson, R. W. (1836). *Nature*. Boston: James Munroe and Company.

Flores, D. (1998). *A sense of the American west*. Spirit of place and the value of nature in the American west (pp. 31-40) J.S. Sherow (Eds.). University of New Mexico Press.

Mann, C. (2002). 1491. *Atlantic Monthly*, 41-53. Retrieved from <http://www.theatlantic.com/magazine/archive/2002/03/1491/2445>.

Muir, J. (1897). The American Forests. *Atlantic Monthly*, 80, 145-157.

Pinchot, G. (1908). The conservation of natural resources. *Farmer's Bulletin*, 327. U.S. Department of Agriculture.

Williams, M. (2000). Dark ages and dark areas: global deforestation in the deep past. *Journal of Historical Geography*, 26 (1), 2846.