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STS.036 Technology and Nature in American History
Spring 2008

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STS.036
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Lecture outline

Conservation and the Scientific Management of Nature

1. Redefining wilderness
 - a. From wasteland to be conquered (through mid 19th c.) to Edenic landscape to be revered and protected (late 19th c.)
 - b. The closing of the frontier
 - i. Census of 1890
 - ii. Frederick Jackson Turner's frontier thesis
 - iii. Turner's American exceptionalism: the pioneer "transforms the wilderness, but the outcome is not the old Europe. ... The fact is, that here is a new product that is American."
 - c. Nostalgic lament over the loss of wilderness and pioneer values in a fast-paced modern urban-industrial society.
 - d. A national "cult of wilderness" by the early 20th c.
 - i. Boone & Crockett Club (est. 1888) by Theodore Roosevelt
 1. Motto: "Fair chase and conservation"
 - ii. Sierra Club (est. 1892) for the purposes of "exploring, enjoying and rendering accessible the mountain regions of the Pacific Coast." (John Muir, president)
 - iii. Boy Scouts of America (est. 1910) by wealthy newspaperman William Boyce, popular nature writer Ernest Thompson Seton, and others
 - e. Wilderness in the popular consciousness in the early 20th c.
 - i. Increasing association of wilderness with the frontier and pioneer traditions of America that were believed to be the source of national democratic character
 - ii. Belief that wilderness was a source of masculine strength, toughness, and primitivism—attributes that ensured survival in a Darwinian framework
 - iii. Ascribing aesthetic and moral value to wilderness landscapes, increasing emphasis on wilderness landscapes as sites of contemplation and worship

2. The publicizer of wilderness: John Muir (1838-1914)
 - a. Childhood and religious upbringing on the Wisconsin frontier
 - b. Education: "I was only leaving one University for another, the Wisconsin University for the University of the Wilderness."
 - c. Machine shop accident, an epiphany, and 1,000 mile trek from Indiana to the Gulf of Mexico (1867)
 - d. Arrives in San Francisco (March 1868)
 - e. Articulating a wilderness preservation agenda
 - i. Yosemite National Park (est. 1890)
 - ii. First president of the Sierra Club (est. 1892)

3. Creating national parks
 - a. First parklands created for wilderness recreation and hunting, not wilderness preservation
 - i. Yellowstone National Park (1872)
 - ii. Adirondack Forest Preserve (1885)
 - b. Scientific surveys and popular illustrations of the grandeur of the American West
 - c. Railroad backers: Jay Cooke of the Northern Pacific supported the formation of Yellowstone National Park
 - d. A new kind of tourism (railroads and mountain resorts)

4. Inventing Yellowstone National Park (est. 1872)
 - a. 2 million acres in a rectangular region overlapping Wyoming, Idaho, and Montana
 - b. “This will be the grandest park in the world—the grand, instructive museum of the grandest Government on Earth.”—*Nevada Territorial Enterprise*
 - c. “Advocates for Yellowstone may have thought they were preserving a wilderness area. But it is more accurate to say that they were inventing it. In Yellowstone’s case, creating wilderness meant rendering the Native Americans, who laid claim to the area, invisible when, in fact, they had long used it for hunting, fishing, and other means of survival. Preservation of the country’s national parks and Indian removal proceeded in lock-step motion.”—Theodore Steinberg, *Down to Earth: Nature’s Role in American History*
 - i. Reservations, treaties, executive orders all displaced Native Americans to make way for wilderness tourism
 - d. Criminalizing game hunting
 - i. Local land use (by Native Americans and rural whites)
 - ii. 1896 U.S. Supreme Court decision [7-1, *Ward v. Race Horse*] overturned the 1868 treaty that allowed Indians to hunt on unoccupied govt land and revoked their right to hunt game on federal lands.
 - iii. Hunting became poaching, foraging became trespassing, cutting trees became timber theft, and setting fires became arson.
 - e. Military order in Yellowstone
 - i. Cavalry presence from 1886 to 1916, when the National Park Service took over
 - ii. “Uncle Sam’s soldiers were the most effective forest police.”—John Muir
 - iii. Military management of the park
 1. Restricted entry
 2. Fire suppression
 3. Fencing
 4. Policing game poaching

5. Conservation and the gospel of efficiency
 - a. Efficiency imperative in the Progressive Era
 - b. Frederick Winslow Taylor and scientific management (beginning in the 1880s)

6. National forestry expert: Gifford Pinchot
 - a. Training: interdisciplinary study of forestry at Yale, then observation of sustained-yield forest management in France and Germany
 - b. Pinchot's critique of industrialists' careless depletion of natural resources in the U.S.: the nation was "obsessed...by a fury of development. The American Colossus was fiercely intent on appropriating and exploiting the riches of the richest of all continents—grasping with both hands, reaping where he had not sown, wasting what he thought would last forever."
 - c. Forestry within the federal government
 - i. Chief of the USDA's Division of Forestry (1898)
 - ii. Head of Bureau of Forestry (1901)
 - iii. Head of U.S. Forest Service (1905)
 - d. White House conference on conservation (1908)
 - e. Pinchot's principles of conservation
 - i. "The first principle of conservation is development, the use of the natural resources now existing on this continent for the benefit of the people who live here now."
 - ii. "The natural resources of the Nation exist not for any small group, not for any individual, but for all the people."
 - iii. "Forestry is handling trees so that one crop follows another."
 - iv. "The job was not to stop the axe but to regulate its use."

7. Ecological consequences of conservation
 - a. Forest management
 - i. Trees
 - ii. Insects
 - iii. Fire
 - b. Wildlife extermination
 - i. USDA's Predatory Animal and Rodent Control Service (est. 1915)
 1. Hunters in Wyoming killed 40,000 animals (coyotes, wolves, bears, bobcats, lynxes, mountain lions, prairie dogs, gophers, squirrels, jack rabbits) (1916-1928)
 - ii. Deer overpopulation in Grand Canyon National Game Preserve in Arizona (1906-1924)
 1. Federal hunters killed almost 5,000 coyotes, nearly 800 mountain lions, and over 500 bobcats (1916-1931)
 - iii. Mice infestation in Kern County, CA (1924)

8. Conclusion
 - a. Changing role of the federal government from donor of public land to private interests (19th c.) to overseer and regulator of large sections of public lands (20th c.)
 - b. Racial, class, and environmental politics
 - c. National parks as highly engineered environments
 - i. Management and conservation of game animals
 - ii. Tourism industry
 - iii. Attempted reintroduction of Native Americans and buffalo to Dot Island in Yellowstone National Park

For further reading

Karl Jacoby, *Crimes Against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation* (Berkeley: University of California Press, 2001).

Roderick Nash, *Wilderness and the American Mind* (New Haven: Yale University Press, 1967).