

*Wellman, J. (1987) Wildland Recreation Policy.
New York: John Wiley + Sons. (pages 25-65)*

CHAPTER 2

ROOTS OF POLICY: UTILITARIAN CONSERVATION

INTRODUCTION

Page 25

In 1864, amid the stress and confusion of the War Between the States, two significant events for wildland recreation policy occurred: George Perkins Marsh published his monumental treatise on the environmental impacts of human activities, and the federal government granted the Yosemite Valley and Mariposa Grove of sequoias to the state of California for "public use, resort and recreation." Marsh's book laid the foundation for utilitarian conservation, the wise use of natural resources for the benefit--especially the economic benefit--of mankind, while the Yosemite Grant was the first major action in federal wildland preservation for recreational purposes. The book and the grant signaled the start of a new era in American land policy, one in which abundant resources were no longer taken for granted, and in which active steps were increasingly taken to secure both economic and aesthetic benefits from our land.

The conflict between preserving natural resources for their intrinsic or noneconomic values and developing them for economic gain has been the primary motive force in the development of wildland recreation policy. The use/preservation conflict, while symbolized

Page 26

by Marsh's book and Congress' grant to California, did not begin with those events. The lines of contention were drawn from the beginning of white settlement of America.'

Over the years many individuals and groups have been found on one side or the other of the use/preservation conflict. But the struggle is both deeper and more complex than it sometimes seems to be. Marsh's book and the Yosemite Grant both demonstrate the ambiguity and complexity that make up the policy history of wildland recreation. Marsh's study, while strongly scientific and utilitarian, offers glimpses of nonutilitarian sentiment in its author. The Yosemite Grant was the product not only of nature love and democratic idealism, but of economic and political concerns as well.

EARLY AMERICAN ATTITUDES TOWARD NATURE

The views of nature held by the colonists cannot be characterized simply. A full range of feeling about the landscape can be found in their correspondence and journals. The attitudinal

framework for both economic and noneconomic resource policy actions existed from the beginning. What was not present until much later was a sense of alarm sufficiently strong to bring forth policy actions.²

The starting point for a discussion emphasizing the variability of colonial attitudes toward nature is the landscape itself. If the totality of American natural resources could be captured in a word, the word would be "abundance." European explorers and settlers were dazzled by the abundance of nature. First, and most important, was the land base itself. To men and women from lands long occupied and controlled, often by nobility, the vastness of available land was miraculous. From the first explorations until the latter half of the nineteenth century, the "myth of superabundance" of natural resources held sway. Value derives from scarcity, and it would take several centuries of accelerating exploitation until wildlife and woods, fisheries and fresh air would be sufficiently scarce to arouse the collective will to policy actions.

The story of our treatment of the deciduous forest, as told by Robert Petty, provides a capsule history of Americans' relationship with the land. The following selection vividly captures the sense of abundance and the challenge of taming nature.

Page 27

In the late 1700s, settlers reaching a crest of the Wilderness Road in a notch of the Cumberlands stood blinking into the western light across the greatest deciduous forest that ever was.

How do you make a cornfield out of a forest? How do you make a town? How do you clear away trees five feet through and towering one hundred and fifty feet? Forty acres, eighty, a section, a county-how do you "cut the top off" all the flat land between the Cumberlands and the Mississippi?

Our minds can only ache to comprehend.

Looking west from the Appalachians men spoke of an "ocean of trees" rolling on and on until it met a "sea of grass." There remains the image of a man cutting a tree in that green ocean-all around him is the damp hush when the wind dies into miles of towering shadows and green-filtered light. The ringing of his axe, his shout to no one, the creaking collapse and crash of the tree, the rustle of drifting leaves-all vanish into a sudden stillness that slowly yields to the late summer drone of insects. He squints at the immense circle of light as the silence rolls over him again. And again he is alone with the pounding of his heart and the noise of his own mind. He has marked the wilderness and he has heard its answer.

Oak and hickory; beech, maple and elm; poplar and walnut-chip by chip, the stutter of axes echoed in the winter hills. Year after year, men felled the small trees and girdled the barks of the larger ones to kill them. Eight trees to an acre was the average. First-year corn was planted under a lattice of dead branches, and remnant wild flowers crowded the stump-twisted rows. More winters, more trees girdled and some of the dead ones felled or burned where they stood; cold, seasoned wood was split into rails to fence the cattle out. With enough sons and neighbors a man might make a stumpland farm in a score of years, but battling the trees consumed three generations. Life was a long-handled axe and crosscut saw.

"Sugar and Walnut Land" read the plat books of the original land surveyors; it meant the soil was calcium-rich. The pragmatic frontier farmer quickly learned that sugar maple and walnut meant rich loam, prized as potential cropland. Government Land Offices set these sections of ground as much as fifty cents to a dollar higher per acre-which might double the price.

We can only imagine the confusion, the boisterous promise of those early days. We can hear the thudding of axes, the songs, the shouts of log-rolling fellowship around incessant fires.

For the rich, clearing crews "made land" and sold back timbers. Cabin logs were a penny a foot, hewn square. In time, water-powered sawmills would rip the trees to lumber. Yellow poplar, white oak, white ash and hickory - a wood for every need - for buildings, tools and wagons; for furnishings,

Page 28

maple, cherry and walnut; burnished "curly maple" for the stocks of the frontier rifles; oak, walnut and locust for fence rails - a wood for every purpose from cradles to coffins. Never had civilization been so rich in wood. By necessity, wood was used for every fashioned article of living. Even so, most of the trees were rolled together and burned. The greatest resource need was land for crops.

Like the first farmstead, towns of the frontier were built in stumpland meadows. The trees were gone. The civic landscapes sweltered in the sun. Never so quick an afterthought: fast-growing black locust trees were imported and planted everywhere, from college campuses to courthouse squares, to provide a promise of shade. What irony - the sons of the world's most incredible axemen planting seedlings in the shadow of stumps five feet across.⁴

Coupled with the cornucopia of natural resources was a set of social conditions which, taken together, worked strongly against any form of control over the exploitation of those resources.⁵ Above all was the widespread demand for land. Social norms favoring careful resource use were weak among the settlers, and the external controls that might have been imposed by a strong government were absent in those formative years. There was little inclination toward the creation of a strong central government, since escape from authoritarian central government led many to America in the first place and prompted our break from England. Not only were there few restraints on development, but there were strong incentives favoring rapid settlement, since powerful foreign countries were ready to fill any power vacuums. England was the most important threat, but France and Spain claimed vast tracts of land, and Russia maintained colonies in the Pacific Northwest.⁶

The fundamental conditions of available land and uncontrolled demand provided the background for a variety of ideological and attitudinal responses. Salesmen of the New World lured prospective European immigrants with descriptions of an earthly paradise, the realization of the ancient dream of a comfortable existence, free from want and from extremes of crowding and solitude.⁷ At the other end of the spectrum were the New England Puritans. They looked on untamed nature as a dangerous place, a moral vacuum where innate human sinfulness might burst forth.⁸ The Puritan's negative opinion of nature may have had functional value, as well; depicting their surroundings as threatening helped maintain focus

Page 29

on their mission and discipline for its accomplishment.⁹ Even among the Puritans, though, there was a diversity of opinion about nature; Jonathan Edwards, the prominent Calvinist pastor, delighted in nature throughout his life.¹⁰

The New World had political, as well as economic and religious significance. Thomas Jefferson was one of a number of thinkers who saw in the American land a unique opportunity to bring democratic idealism into reality. Jefferson sought policies which would transfer land from the federal government to small farmers, for he believed the democratic ideals of the new republic could best be nurtured by a nation of small, independent farmers with a strong commitment to the land. Jefferson feared the industrial capitalism he had watched begin to grow, of necessity, during the Revolutionary War, and he hoped Americans would leave future manufacturing, together with its urban masses dependent on the marketplace, to Europeans. His

vision was that individual independence and governmental permanence were of paramount concern, rather than economic development. At the same time Jefferson held his pastoral ideal in mind, he also recognized that America would inevitably develop its commerce and industry. Ironically, the only way to prevent economic growth of the sort Jefferson feared would be through a strong central government, something this man who so prized individual liberty feared even more than industrialism. Thirty years after a passionate defense of the plowman in his *Notes on Virginia*, Jefferson argued that changing conditions necessitated American economic development. The ideal of the sturdy, independent farmer served Jefferson as a model against which the events of the real world could be measured and judged.¹¹

Thus, the American landscape meant many things to many people. Common to all was the sense of opportunity it provided. Dreams could be realized in this new land, whether they were economic, religious, or political.

EARLY LAND-USE POLICIES

America in its early years was fabulously wealthy in land and resources, but correspondingly impoverished in manpower and capital. This situation encouraged free and wasteful use of resources, since it made no sense to expend scarce labor and money in order

Page 30

to carefully manage abundant land, timber, fish and wildlife. Nevertheless, since the means of getting resources to market were poor, local resource shortages existed or threatened almost from the out- set of white settlement and led to policies designed to curb exploitation. For example, only six years after its establishment in 1670, the Plymouth Colony passed a law which required the approval of the governor and the council for any sale or transfer of timber out of the colony. This policy action was meant to protect the colony against the future loss of readily accessible wood.¹²

In like manner, policy actions to protect local natural resources were taken throughout the colonial period. In addition to restrictions on cutting of accessible timber, fire control and timber poaching legislation was enacted in nine of the colonies by the time of the Revolutionary War, and a variety of measures were taken to protect uniquely important resources. The most notable effort to protect especially valuable resources was the Broad Arrow Policy, first enacted in 1691.¹³

The name of the Broad Arrow policy derives from the three blazes, symbolic of the British navy, used to mark potential mast trees. The navy was crucial to Britain's national security and imperial goals, and the navy needed masts. Before the opening of the North American colonies, Britain had relied on Scotch pine from northern and central Europe. However, the British were not happy with that source of masts because there was little reciprocal trade and because the supply of masts might be interrupted during war. The American colonies, with their rich timber resource, provided the answer to the British need for a secure source of masts--or so the British thought.

Ideal mast trees were 40 inches in diameter at the butt and 40 yards long. To assure future mast supplies, the Broad Arrow policy of 1691 reserved to the Crown all trees on public land in the Massachusetts Colony 24 inches or larger at one foot above the ground. Trees were marked and penalties for illegal cutting were established. Unfortunately for the British navy, the policy

largely failed. The colonists resented the distant authority and poached mast trees freely. Even the premium prices paid for intact trees did not overcome the special difficulties involved in felling and delivering such large timbers, and colonial loggers diverted many mast trees into other, less demanding uses. One estimate was that for every mast

Page 31

sent to England, 500 trees of equal value were cut for other purposes. The three-years supply of masts held by the British navy at the start of the Revolutionary War was not sufficient to prevent a number of naval breakdowns due to mast shortages.

Like the Broad Arrow Policy, measures were taken in the colonial period to protect oak for shipbuilding, pitch pine for naval stores, and mulberry trees for silk making. However, there is no evidence that these and other restrictions on resource use reflected a general awareness of broad-scale environmental or economic disruption due to uncontrolled exploitation. At the close of the Revolutionary War, the non-native American population consisted of approximately 4 million people living along the Atlantic Seaboard.¹⁴ To the west lay a vast wilderness, the claiming and subduing of which would occupy much of the nation's attention for the next hundred years. The rapidity and severity of resource exploitation during that time led eventually to Marsh's concerns expressed at the time of the Civil War and to the conservation actions taken around the end of the nineteenth century.

Within less than 100 years after the Revolutionary War, the nation had obtained control over more than 1.9 billion acres of land and water. Beginning with the cessions of the western lands claimed by the original 13 states following the Continental Congress of 1780, and continuing through the Alaska Purchase in 1867, the immense original public domain was acquired. From the first, the major topic of debate concerned how the land should be disposed of. To simplify a complex issue greatly, the essential question was whether the land should be sold or given away. Arguing for sales were those, like Alexander Hamilton, who saw land sales as the best way of raising revenues for the fragile new federal government. On the other side were those who, with Thomas Jefferson, believed that the first step toward national strength was to get settlers on the land.

Hamilton and his followers held sway at first, but the sales Policy failed either to provide much revenue or to regulate settlement. "Squatting," or illegal settlement, was commonplace. The practice was supported by much of the public and justified by Jeffersonian democratic idealism. Increasingly there was pressure for giving land to settlers. The efforts to transfer public land to small farmers culminated in the landmark Homestead Act of 1862. This

Page 32

law, described as "the common man's greatest day," provided that 160 acres of public domain land could be claimed for free by citizens who had lived on and cultivated the land for five years. In addition to sales and grants of land to settlers, there were grants to states to support public education and improve transportation, grants to railroads to encourage their development, grants to veterans in payment for their service, and miscellaneous other grants and sales. All told, these disposal policies transferred over 1 billion acres out of federal control.¹⁵

In the years between the Revolutionary and Civil wars, an immense land area was acquired and much of it was transferred into private hands. In particular, much of the land was conveyed in small parcels, since the prevalent ideology was to support the concept of Jefferson's

yeoman farmers. Resources were used and abused freely, under the guiding myth of superabundance. Much of the land abuse resulted from attempts to clear and farm land unsuited for agriculture. Resource abuse was especially prevalent in the period between 1840 and 1860, when the industrial revolution in America reached the "take-off" point.¹⁶ The extreme rapidity of resource development during those two decades set the stage for *Man and Nature*, the Yosemite Grant, and for the dramatic forest and park reservations that followed.

GEORGE PERKINS MARSH

Man and Nature: or Physical Geography as Modified by Human Action was Marsh's attempt to bring together the wisdom of the Western World concerning the unanticipated consequences of human activities, and to prompt concern and action toward better land use. Marsh himself was driven by a strong sense of alarm, and his writing is not a dispassionate academic review.

The earth is fast becoming an unfit home for its noblest inhabitant, and another era of equal human crime and human improvidence, and of like duration with that through which traces of that crime and that improvidence extend, would reduce it to such a condition of impoverished productiveness, of shattered surface, of climatic excess, as to threaten the deprivations, barbarism, and perhaps even the extinction of the species.¹⁷

Man and Nature is a long book, filled with scientific fact, theory, speculation and nomenclature. Yet it was immediately

Page 33

successful and within a decade had attained an international reputation.¹⁸ Part of the book's success stems from the keenness of Marsh's insight, the breadth of his scholarship, the clarity of his writing and the intensity of his concern. The other part of its success, at least in America, must stem from its timeliness. *Man and Nature* appeared at a time of extreme resource exploitation. White civilization had swept westward across the continent in a "first-come, first-served" spirit of personal and corporate freedom that we view today as incredibly exploitative and wasteful. New territory was attacked with new technology to produce what Stewart Udall has called "the Big Raid." By the time of the Civil War, enough resource abuse had occurred that the time was right for a thorough review of the dangers posed by the "myth of superabundance."²⁰ Marsh's book informed American readers of the hard-earned lessons of Europe and the Middle East. *Man and Nature* warned that America's growing national identity and strength might be short-lived if we continued our uncontrolled exploitation of our natural resources.

Who was this prophet whose words came "with the force of a revelation"? Marsh was a native Vermonter raised on a farm in the Green Mountains, and this rural setting provided him with an indelible interest in nature. In choosing a career, Marsh yielded to family pressure and became a lawyer and businessman. Among other things, he was for a time a lumber dealer. His restless intellectual energy, however, led him to read extensive numbers of great books and scientific papers, to master 20 languages by the time he was 30, and to probe the developments in European silviculture, among other pursuits. Based on his reading of history and science, together with his observations of the effect of misuse on land fertility in the valleys of Vermont, Marsh began to question the notion that our natural resources were inexhaustible.

Marsh was persuaded to run for Congress, won the election and went to Washington in 1842. There he was strongly influenced by John Quincy Adams, then serving in Congress after having been defeated by Andrew Jackson in the presidential election of 1828. In his belief that the public lands should not be transferred rapidly and indiscriminantly to private ownership, Adams ran against prevailing opinion. Adams sought an active government which would develop

Page 34

the public lands in a way to promote the general welfare. In those times of laissez-faire capitalism and minimalist government, his was a lonely position. It would be nearly 80 years before our collective sense of need for an active, positive government would be sufficient to prompt land use policy actions.²³ One of the most important forces in bringing about that revolution in thinking was Adams' young friend, George Perkins Marsh.

The major ideas of *Man and Nature* were in place 17 years before the book's publication. In 1847 Marsh delivered a paper before the Agricultural Society of Rutland County, in which he warned of the dangers of extensive forest clearing in Vermont.²³ In the 1850s Marsh served as Vermont's fish commissioner, and his official duties led him to conclude that deforestation was harming fish populations by causing extremes of stream flow and temperature and by reducing insect populations.²⁵ Marsh's ideas based on conditions in Vermont were supported by his observations abroad. He was appointed minister to Turkey, the first of a number of foreign assignments that gave him firsthand experience with problems caused by vegetation removal in Europe, the Middle East and Africa. Much of the power of his book came from these personal experiences.

One of Marsh's central tenets in *Man and Nature* is that humanity is not a part of nature, and does not act wholly according to nature's laws. Instead, as Marsh expressed himself:

The fact that of all organic beings, man alone is to be regarded as essentially a destructive power, and that he wields energies to resist which nature - that nature whom all material life and all inorganic substance obey - is wholly impotent, tends to prove that, through living in physical nature, he is not of her, that he is of more exalted parentage, and belongs to a higher order of existences than those born of her womb and submissive to her dictates.²⁶

Since humans are independent of nature and do not simply follow its rules, their actions toward nature have moral dimensions. Not only were people independent of nature in Marsh's view, but they were morally justified in changing natural features for their benefit.

man, the domestic animals that serve him, the field and garden plants the products of which supply him with food and clothing, cannot subsist and rise to the full development of their higher properties, unless brute and unconscious nature be effectually combated, and, in a degree, vanquished by human art. Hence, a certain measure of transformation of terrestrial surface, of suppression of natural, and stimulation of artificially modified productivity becomes necessary.²⁷

Page 35

Marsh went on to assert that humans had gone too far in changing nature to suit their needs. Although many of the destructive actions were accidental rather than deliberate, in their aggregate they threatened the earth and humanity's future. One reason for Marsh's sense of alarm

was his conclusion that since we were independent of nature, the natural balancing forces leading to a state of equilibrium would not operate to heal the wounds we caused.

Despite strong evidence about the mischief people caused when they had power to do so, Marsh did not favor turning away from the use of power. Marsh was excited by the prospects he imagined the future held for changing the landscape in beneficial ways.

Among the mysteries which science is yet to reveal, there may be still un-discovered methods of accomplishing even grander wonders ... Mechanical philosophers have suggested the possibility of accumulating and treasuring up for human use some of the greater natural forces, which the action of the elements puts forth with such astonishing energy. Could we gather, and bind, and make subservient to our control, the power which a West Indian hurricane exerts through a small area in one continuous blast, or the momentum expended by the waves, in a tempestuous winter, upon the breakwater at Cherbourg, or the lifting power of the tide, for a month, at the head of the Bay of Fundy, or the pressure of a square mile of sea water at the depth of five thousand fathoms, or a moment of the might of an earthquake or a volcano, our age-which moves no mountains and casts them into the sea by faith alone-might hope to scarp the rugged walls of the Alps and Pyrenees and Mount Taurus, robe them once more in a vegetation as rich as that of their pristine woods, and turn their wasting torrents into refreshing streams.²⁸

One can only imagine the astonishment, as well as the concern, Marsh might feel at the present-day embodiment of his dream. For example, in an effort to promote the peaceful application of nuclear power, in Operation Plowshare it was proposed that a sea-level canal be blasted across the isthmus of Panama.

It is Marsh's belief in the separation of humans from nature and his optimism toward using power to improve our lot on earth that most clearly establish him as the fountainhead of the progressive conservation movement. This movement would be most fully realized

Page 36

in the U.S. Forest Service under Gifford Pinchot. Conversely, it is the same set of beliefs that distinguishes Marsh and his intellectual heirs from the romantic preservation movement that reached institutional fulfillment in the National Park Service under Stephen Mather. The competition between the Forest Service and the Park Service that has been a major feature of wildland recreation over the years thus reflects Americans' fundamental ambivalence toward their land.

In establishing major themes, care must be taken not to overstate the case. Marsh's utilitarian beliefs did not mean he had no sympathy for the romantic perspective. Although most of *Man and Nature* repudiates the mystical feelings for nature Marsh expressed early in his career, there are some passages where his romantic side breaks through.²⁹ After dismissing the economic value of the small forest plants lost in converting forest to agricultural land, Marsh comments:

He whose sympathies with nature have taught him to feel that there is a fellowship between all God's creatures; to love the brilliant ore better than the dull ingot, iodic silver and crystallized red copper better than the shillings and the pennies forged from them by the coiner's cunning; a venerable oak tree than the brandy cask whose staves are split out from its heartwood; a bed of anemones, hepaticas, or wood violets than the leeks and onions which he may grow on the soil they have enriched and in the air they made fragrant-he who has enjoyed that special training of the heart and intellect which can be acquired only in the unviolated sanctuaries of nature, "where man is distant, but God is near"--will not rashly assert his right to extirpate a tribe of harmless vegetables, barely because their products neither tickle his palate nor fill his pocket; and his regret at the dwindling area of the forest solitude will be augmented by the reflection that the nurslings of the woodland perish with the pines, the oaks, and the beeches that sheltered them.³⁰

To this point I have concentrated on Marsh's philosophy, excluding his specific scientific knowledge. Yet *Man and Nature* overflows with state-of-the-art information on geology and ecology. Amidst the welter of fact and hypothesis, however, one subset of scientific knowledge stands out, both in terms of the prominent role it plays in the book and in terms of its impact on subsequent American science and land use policy. I refer to Marsh's treatment of the watershed problems caused by forest clearing in headwater regions.

Page 37

Marsh devoted the largest part of his book to the examination of the forest. Again and again he hammers home his theme of the evils of unregulated forest clearing. Rather than offering a synopsis of his watershed theory, it is best to let him speak for himself.

With the disappearance of the forest, all is changed. At one season, the earth parts with its warmth by radiation to an open sky-receives, at another, an immoderate heat from the unobstructed rays of the sun. Hence the climate becomes excessive, and the soil is alternately parched by the fervors of summer, and seared by the rigors of winter. Bleak winds sweep unresisted over its surface, drift away the snow that sheltered it from the frost, and dry up its scanty moisture. The precipitation becomes as irregular as the temperature; the melting snows and vernal rains, no longer absorbed by a loose and bibulous vegetable mould, rush over the frozen surface, and pour down the valleys seaward, instead of filling a retentive bed of absorbent earth, and storing up a supply of moisture to feed perennial springs. The soil is bared of its covering of leaves, broken and loosened by the plough, deprived of the fibrous rootlets which held it together, dried and pulverized by sun and wind, and at last exhausted by new combinations. The face of the earth is no longer a sponge, but a dust heap, and the floods which the waters of the sky pour over it hurry swiftly along its slopes, carrying in suspension vast quantities of earthy particles which increase the abrading power and mechanical force of the current, and augmented by the sand and gravel of falling banks, fill the beds of the streams, divert them into new channels and obstruct their outlets. The rivulets, wanting their former regularity of supply and deprived of the protecting shade of the woods, are heated, evaporated, and thus reduced in their summer currents, but swollen to raging torrents in autumn and in spring. From these causes, there is a constant degradation of the uplands, and a consequent elevation of the beds of watercourses and of lakes by the deposition of the mineral and vegetable matter carried down by the waters. The channels of great rivers become un-navigable, their estuaries are choked up, and harbors which once sheltered large navies are shoaled by dangerous sandbars. 'The earth, stripped of its vegetable glebe, grows less and less productive, and, consequently, less able to protect itself by weaving a new network of roots to bind its particles together, a new carpeting of turf to shield it from wind and sun and scouring rain. Gradually it becomes altogether barren. The washing of the soil from the mountains leaves bare ridges of sterile rock, and the rich organic mould which covered them, now swept down into the dank low grounds, promotes a luxuriance of aquatic vegetation that breeds fever, and more insidious forms of mortal disease, by its decay, and thus the earth is rendered no longer fit for the habitation of man.

To the general truth of this sad picture there are many exceptions, even in countries of excessive climates. Some of these are due to favorable conditions

Page 38

of surface, of geological structure, and of the distribution of rain; in many others, the evil consequences of man's improvidence have not yet been experienced, only because a sufficient time has not elapsed, since the felling of the forest, to allow them to develop themselves. But the vengeance of nature for the violation of her harmonies, though slow, is sure, and the gradual deterioration of soil and climate in such exceptional regions is as certain to result from the destruction of the woods as is any natural effect to follow its cause.³¹

The relationship between forest cover and streamflow, though not thoroughly tested and, in fact, challenged by numerous scientists and engineers, provided the constitutional lynch pin for the acquisition of the eastern national forests. If the destruction of forest cover in river

headwaters altered streamflow in such a way that interstate commerce might be harmed, the federal government was enabled, under the commerce clause of the U.S. Constitution, to intervene in what otherwise was considered strictly a state government matter. There has been controversy over the propriety of Forest Service scientists in urging the "sponge theory" (the idea that the forest absorbs moisture and releases it slowly) as justification for acquisition of the eastern national forests.³² Nevertheless, the 1911 Weeks Act and the 1924 Clarke-McNary Act, justified in part by the sponge theory, led to creation of the eastern national forests. These forests, once badly abused land, now constitute an extremely important wildland recreation resource.

Historian Thomas Cox credits *Man and Nature* with introducing science to natural resource management in America. Before Marsh, the two major concepts determining land use policy were agrarianism, based on Jefferson's ideas about the importance to democracy of small, independent farmers, and romanticism, a complex assemblage of aesthetic and religious ideas imported from Europe and transformed to fit the American landscape.³³

As Marsh's 1864 book laid the foundation for the utilitarian conservation movement, so did the Yosemite Grant in the same year provide the first major policy breakthrough for the romantic preservation movement. Just as Marsh brought together and sharpened preexisting ideas in a way that had great impact on the course of history, so the act granting the Yosemite Valley and Mariposa Grove to California brought years of preservationist thinking together in legislation that set precedent for the development of our wildland recreation system. And just as Marsh's book was not

Page 39

based on unalloyed utilitarianism, so the Yosemite grant was prompted by economic and political, as well as philosophical, concerns.

FOOTNOTES

1. Nash, *Wilderness and the American Mind*; Marx, *The Machine in the Garden*.
2. Nash, *Wilderness and the American Mind*; Huth, *Nature and the American*; Udall, *The Quiet Crisis*.
3. The expression "myth of superabundance" is Udall's, although many others have noted the belief that American resources were inexhaustible.
4. From *Wild Plants in Flower III: Deciduous Forest* by Torkel Korling, with essay by Robert O. Petty. Reprinted with permission of Robert O. Petty.
5. This synopsis of social conditions favoring resource exploitation is based on Prof. Lyle Craine's lectures in natural resource policy at The University of Michigan.
6. Hibbard, *A History of the Public Land Policies*, pp. 554-566; Dana, *Forest and Range Policy*, Chapters 1 and 2.
7. Marx, *The Machine in the Garden*.
8. Nash, *Wilderness and the American Mind*, pp. 34-40.
9. Marx, *The Machine in the Garden*, p. 43.
10. Huth, *Nature and the American*, pp. 7-9.
11. Marx, *The Machine in the Garden*, pp. 116-144.
12. Dana, *Forest and Range Policy*, p. 4.

13. Ibid., pp. 11-14.
14. Ibid., p. 18.
15. Ibid., pp. 18-45; Clawson and Held, *The Federal Lands*.
16. Marx, *The Machine in the Garden*, pp. 26-27.
17. From *Man and Nature*, by George Perkins Marsh, edited by Davis Lowenthal, copyright 1965 by Harvard University Press. Reprinted by permission.
18. Lowenthal, Introduction to *Man and Nature*, p. xxii.
19. Udall, *The Quiet Crisis*, p. 66.
20. Ibid., p. 20.
21. Lowenthal, Introduction to *Man and Nature*, p. xxii.

Page 40

22. Cox, "Americans and Their Forests."
23. *The Quiet Crisis*, p. 85.
24. Lowenthal, Introduction to *Man and Nature*, 1). xxii.
25. Cox, "Americans and Their Forests," p. 163.
26. Marsh, *Man and Nature*, p. 36.
27. Ibid., p. 38.
28. Ibid., p. 45.
29. Lowenthal, Introduction to *Man and Nature*, p. xv.
30. Marsh, *Man and Nature*, p. 249. The absence of unidimensionality in feeling and action toward nature is found throughout the literature. One of the most striking examples comes in John McPhee's account of the geologist Park who accompanies David Brower on a trip into a wilderness area rich with copper ore. At the same time Park relentlessly presses the utilitarian value of copper mining over wilderness preservation, his apparent interest in nature rivals Brower's; in fact, he is more adept at identifying the butterflies sighted on the trek than is the "archdruid" Brower. See John McPhee, *Encounters with the Archdruid*.
31. Marsh, *Man and Nature*, pp. 186-188.
32. Schiff, *Fire and Water*, Dana and Fairfax, *Forest and Range Policy*, 2nd ed., pp. 111-113.
33. Cox, "Americans and Their Forests."

ROOTS OF POLICY: ROMANTIC PRESERVATION

INTRODUCTION

Page 41

Just as there were utilitarian concerns with resource protection from colonial times onward, so also were there nonutilitarian concerns. Granted, neither concern was voiced by the majority eager to tame the wilderness, but both existed, and both found more and more receptivity as cities expanded, farmland was opened and we began more and more to dominate the landscape.

This chapter traces the growth of the preservation movement from colonial days to the 1864 Yosemite Grant. Building on the foundation developed in Europe, intellectuals developed a philosophy of nature appreciation with a uniquely American flavor. This philosophy was supported by growing American nationalism, which sought through the preservation of spectacular natural landscapes to demonstrate our country's equality with Europe. Frederick Law Olmsted, the driving force behind New York City's Central Park and chief architect of the Yosemite Plan, was instrumental in transforming the idea of nature preservation into the reality of national parks.

Page 42

THE INTELLECTUAL FRAMEWORK FOR NATURE APPRECIATION

Appreciation of untamed nature in the early days of this country was most evident, as it is today, among those farthest from it in terms of education and urbanism.¹ The intellectual framework for American nature appreciation was developed in Europe. Sixteenth and seventeenth century advances in science revealed a world and universe far more complex and harmonious than had been believed. One response to this new knowledge was the religious interpretation that only God could have created these wonders. In time, the religious significance of the planets was extended to aspects of the earthly landscape, as well. Features formerly ignored because humans could not use them or cursed because they blocked their desires came to be seen as evidence of God's handiwork. It followed that if God were evident in nature, the deity was most readily apparent in wild nature.

The flowering of European Romanticism early in the eighteenth century built on the new attitudes stemming from the religious interpretations of science. The romantics preferred "the strange, remote, solitary, and mysterious" for contemplation and escape from society. The New World was a perfect setting for the romantic imagination. European romantics were especially fascinated by the reports of American Indians. At a time when American pioneers feared the woods because they concealed dangerous Indians, European romantics like Montaigne and Rousseau were extolling the virtues of the noble savage uncontaminated by decadent society.

The new concept of nature also had a new aesthetic and a new vocabulary. Rebelling against the formality of the classical definition of beauty, thinkers like Burke and Kant ascribed beauty to vast and apparently chaotic scenes. Their view of nature was carried in the terms "sublime" and "picturesque." This vocabulary, and the attitudes toward nature it connotes, were widely shared by early American explorers, scientists and men of letters. Most adopted the rhetorical convention of the day and described the natural landscapes they encountered as "sublime" or "picturesque" and themselves as overwhelmed with feelings of awe, wonder and exaltation.

Page 43

By the early years of the nineteenth century many of the urban, educated elite shared positive feelings toward America's natural landscapes. The stage was thus set for the entrance of thinkers who brought new power and substance to the nature preservation movement. Ralph Waldo Emerson and Henry David Thoreau were the leading voices in a group of literary figures in England and America who established the intellectual framework for future nature preservation in this country.

EMERSON AND THOREAU

Emerson and Thoreau were the founders of a group that came to be known as the New England Transcendentalism. They believed that there was a reality higher than the physical reality that we see. For the transcendentalists, natural objects were important because they reflect, however imperfectly, universal spiritual truths. In natural areas, in contrast to the city, these spiritual truths were least blunted by human activity and therefore most easily perceived. The transcendentalists believed that the human soul enabled us to transcend our physical existence in the material world, and that intuition or imagination (as opposed to rigorous deductive logic) enabled us to penetrate spiritual truths.²

The transcendentalist philosophy was formally initiated in 1836 with the publication of Emerson's first book, *Nature*. The book was full of optimism, reflecting Emerson's belief in the possibilities of new lives in the New World:

Embosomed for a season in nature, whose floods of life stream around and through us, and invite us, by the powers they supply, to action proportioned to nature, why should we grope among the dry bones of the past, or put the living generation into masquerade out of its faded wardrobe? The sun shines to-day also. There is more wool and flax in the fields. There are new lands, new men, new thoughts. Let us demand our own works and laws and worship"³

Nature is one of America's fundamental cultural documents. It obtains its driving force from the elements of individualism, nature, and the future. These three elements particularly characterized America in Emerson's time, as we liked to see ourselves. They

Page 44

separated us dramatically from Europe, which we pictured as the home of long-tamed nature and huddled masses of people chained by the shackles of history.⁴ Emerson wove these elements into

a call for spiritual revitalization that drew many followers in his time and has resonated down through the history of wildland preservation.

A disaffected ex-minister of the Unitarian church, Emerson adopted as his life's mission to awaken his countrymen from their spiritual slumber.⁵ He urged his audiences to look on the world as children do.

To speak truly, few adult persons can see nature. Most persons do not see the sun. At least they have a very superficial seeing. The sun illuminates only the eye of man, but shines into the eye and the heart of the child. The lover of nature is he whose inward and outward senses are truly adjusted to each other; who has retained the spirit of infancy even into the era of manhood.⁶

Development of innate goodness and capacity for spiritual growth was best prompted by looking at nature with the openness of a child.

In the woods, too, a man casts off his years, as the snake his slough, and at what period soever of life is always a child. In the woods is perpetual youth. Within these plantations of God, a decorum and sanctity reign, a perennial festival is dressed, and the guest sees not how he should tire of them in a thousand years. In the woods, we return to reason and faith. There I feel that nothing can befall me in life,—no disgrace, no calamity (leaving me my eyes), which nature cannot repair. Standing on the bare ground,—my head bathed by the blithe air and uplifted into infinite space,—all mean egotism vanishes. I become a transparent eyeball; I am nothing; I see all; I am part or parcel of God. The name of the nearest friend sounds then foreign and accidental: to be brothers, to be acquaintances, master or servant, is then a trifle and a disturbance. I am the lover of uncontaminated and immortal beauty. In the wilderness, I find something more dear and connate than in streets and villages. In the tranquil landscape, and especially in the distant line of the horizon, man beholds somewhat as beautiful as his own nature.⁷

The closing lines of *Nature* capture the excitement and promise Emerson's vision of spiritual rebirth offered those independent and self-reliant enough to follow him.

All that Adam had, all that Caesar could, you have and can do. Adam called his house, heaven and earth; Caesar called his house, Rome; you

Page 45

perhaps call yours, a cobbler's trade; a hundred acres of ploughed land; or a scholar's garret. Yet line for line and point for point your dominion is as great as theirs, though without fine names. Build therefore your own world. As fast as you conform your life to the pure idea in your mind, that will unfold its great proportions. A correspondent revolution in things will attend the influx of the spirit. So fast will disagreeable appearances, swine, spiders, snakes, pests, mad-houses, prisons, enemies, vanish; they are temporary and shall no more be seen. The sordid and filths of nature, the sun shall dry up and the wind exhale. As when the summer comes from the south the snow-banks melt and the face of the earth becomes green before it, so shall the advancing spirit create its ornaments along its path, and carry with it the beauty it visits and the song which enchants it; it shall draw beautiful faces, warm hearts, wise discourse, and heroic acts, around its way, until evil is no more seen. The kingdom of man over nature, which cometh not with observation,—a dominion such as now is beyond his dream of God,—he shall enter without more wonder than the blind man feels who is gradually restored to perfect sight.⁸

Emerson's ideas were widely circulated among the intelligentsia of his time, but they were brought most fully to realization by his younger friend Henry David Thoreau. Through his life and writing Thoreau left his mark indelibly on American society, and his work has been one of the touchstones of the preservation movement through the years. In his lifetime, though, Thoreau would have been judged a failure. Making a living was a problem he never solved, and he never developed a close friendship or love. He died in 1862, at age 44, of tuberculosis, with few worldly possessions and scant recognition of the value of his thinking and writing.⁹

When Thoreau graduated from Harvard in 1837, his major career alternatives were the ministry, business, or a profession. With his contempt for business and his distrust of the church, he was left to choose a profession, and at that time the choice was limited to medicine, law or teaching. He had no interest in either of the first two, and so was left with teaching. He obtained a position in Concord, his hometown and that of Emerson, but resigned within a month because he did not believe in flogging the students and the school board did. From his first formal job experience, Thoreau demonstrated the importance he attached to moral principles and his willingness to accept the penalties that came from challenging authority.

Thoreau's libertarian views gave rise to some of his most powerful writing. In an early incident the state of Massachusetts

Page 46

attempted to extract from Thoreau payment to a clergyman whose sermons his father had attended. Thoreau, thinking it equally fair that the clergy be taxed to support his own lectures at the Lyceum, refused to pay, and in the process, publicly "signed off" from what he considered an unjust society: "Know all men by these presents, that I, Henry Thoreau, do not wish to be regarded as a member of any incorporated society which I have not joined."¹⁰ Later, he spent a night in jail for refusing to pay poll-taxes, and that experience led to his essay on "Civil Disobedience," a work which influenced Ghandi. Several years after the 1849 publication of "Civil Disobedience," Thoreau demonstrated his willingness to work more actively against, unjust authority; he became an active opponent of slavery, lecturing and writing for the abolitionist cause, including a ringing eulogy on the martyrdom of John Brown.

Thoreau worked at a wide variety of jobs in his life-teacher, lecturer, laborer, handyman, tutor, editor and pencil-maker-but his true, self-proclaimed calling was as a poet. Thoreau's conception of the poet's role was exalted; he wanted, in his life and writing, to lead the world to new philosophical and moral heights. The major difficulty was getting paid for this job. He tried lecturing, following Emerson's successful example, but he did not project well; a short, retiring person, he did not create much excitement in his presentations. Since he could not seem to enlarge his income, Thoreau decided to reduce his costs. His benefactor Emerson had some land on Walden Pond near Concord, and was willing to let Thoreau use it. So in the spring of 1845 Thoreau built a small and deliberately simple cabin there, and moved in to record the events and thoughts that led to his masterpiece.

Walden is Thoreau's record of his attempt to find the essence of life.

I went to the woods because I wished to live deliberately, to front only the essential facts of life, and see if I could not learn what it had to teach, and not, when I came to die, discover that I had not lived. I did not wish to live what was not life, living is so dear; nor did I wish to practice resignation, unless it was quite necessary. I wanted to live deep and suck out all the marrow of life, to live so sturdily and Spartan-like as to put to rout all that was not life, to cut a broad swatch and shave close, to drive life into a corner, and reduce it to its lowest terms, and, if it proved to be mean, why then to get the whole and genuine meanness of it, and publish its meanness

Page 47

to the world; or if it were sublime, to know it by experience, and be able to give a true account of it in my next excursion.¹¹

Walden is a profound source of preservationist philosophy. The wholesomeness of the simple life close to nature is set again and again in sharp contrast to the silliness and destructiveness of social and economic life, as illustrated by the following selections:

The indescribable innocence and beneficence of Nature-- of sun and wind and rain, of summer and winter-such health, such cheer, they afford forever! and such sympathy have they ever with our race, that all Nature would be affected, and the sun's brightness fade, and the winds would sigh humanely, and the clouds rain tears, and the woods shed their leaves and put on mourning in midsummer, if any man should ever for a just cause grieve. Shall I not have intelligence with the earth? Am I not partly leaves and vegetable mould myself? ¹²

Flint's Pond! Such is the poverty of our nomenclature. What right had the unclean and stupid farmer, whose farm abutted on this sky water, whose shores he has ruthlessly laid bare, to give his name to it? Some skinflint, who loved better the reflecting surface of a dollar, or a bright cent, in which he could see his own brazen face; who regarded even the wild ducks which settled in it as trespassers; his fingers grown into crooked and horny talons from the long habit of grasping harpy-like; so it is not named for me. I go not there to see him nor to hear of him; who never saw, who never bathed in it, who never loved it, who never protected it, who never spoke a good word for it, nor thanked God that He had made it. Rather let it be named from the fishes that swim in it, the wild fowl or quadrupeds which frequent it, the wild flowers which grow by its shores, or some wild man or child the thread of whose history is interwoven with its own; not from him who could show no title to it but the deed which a like-minded neighbor or legislature gave him--him who thought only of its money value; whose presence perchance cursed all the shore; who exhausted the land around it, and would fain have exhausted the waters within it; who regretted only that it was not English hay or cranberry meadow--there was nothing to redeem it, forsooth, in his eyes--and would have drained it and sold it for the mud at its bottom. It did not turn his moll, and it was no *privilege* to him to be-hold it. I respect not his labors, his farm where everything has its price, who would carry the landscape, who would carry his God, to market, if he could get anything for him; who goes to market *for* his God as it is; on whose farm nothing grows free, whose fields bear no crops, whose meadows no flowers, whose trees no fruits, but dollars; who loves not the beauty of his fruits, whose fruits are not ripe for him until they are turned to dollars. Give me the poverty that enjoys true wealth. Farmers are respect-able and interesting to me in proportion as they are poor-poor farmers. A

Page 48

model farm! where the house stands like a fungus in a muck-heap, chambers for men, horses, oxen, and swine, cleansed and uncleansed, all contiguous to one another! Stocked with men! A great grease-spot, redolent of manures and buttermilk! Under a high state of cultivation, being manured with the hearts and brains of men! As if you were to raise your potatoes in the churchyard! Such is a model farm. ¹³

Cultivate poverty like a garden herb, like sage. Do not trouble yourself much to get new things, whether clothes or friends. Turn the old; return to them. Things do not change; we change. Sell your clothes and keep your thoughts. God will see that you do not want society. If I were confined to a corner of a garret all my days, like a spider, the world would be just as large to me while I had my thoughts about me. ¹⁴

Still we live meanly, like ants; though the fable tells us that we were long ago changed into men; like pygmies we fight with cranes; it is error upon error, and clout upon clout, and our best virtue has for its occasion a superfluous and evitable wretchedness. Our life is frittered away by detail. An honest man has hardly need to count more than his ten fingers, or in extreme cases he may add his ten toes, and lump the rest. Simplicity, simplicity, simplicity! I say, let your affairs be as two or three, and not a hundred or a thousand; instead of a million count half a dozen, and keep your accounts on your thumb nail. In the midst of this chopping sea of civilized life, such are the clouds and storms and quicksands and thousand-and-one items to be allowed for, that a man has to live, if he would not founder and go to the bottom and not make his port at all, by dead reckoning, and he must be a great calculator indeed who succeeds. Simplify, simplify. In- stead of three meals a day, if it be necessary eat but one; instead of a hundred dishes, five; and reduce other things in proportion. Our life is like a German Confederacy, made up of petty states, with its boundary forever fluctuating, so that even a German cannot tell you how it is bounded at any moment. The nation itself, with all its so-called internal improvements, which, by the way, are 0 external and superficial, is just such an unwieldy and overgrown establishment, cluttered with furniture and tripped up by its own traps, ruined by luxury and heedless expense, by want of calculation and a worthy aim, as the million households in

the land; and the only cure for it as for them is in a rigid economy, a stem and more than Spartan simplicity of life and elevation of purpose. It lives too fast.¹⁵

Much of Walden consists of descriptions of the natural environment. In these descriptions, and in the commentary they frequently led him to, we see Thoreau's reverence for nature encapsulated in his famous dictum, "In wildness is the preservation of the world."

Our village life would stagnate if it were not for the unexplored forests and meadows which surround it. We need the tonic of wildness--to wade sometimes

Page 49

in marshes where the bittern and the meadow-hen lurk, and hear the booming of the snipe; to smell the whispering sedge where only some wilder and more solitary fowl builds her nest, and the mink crawls with its belly close to the ground. At the same time that we are earnest to explore and learn all things, we require that all things be mysterious and unexplorable, that land and sea be infinitely wild, unsurveyed and unfathomed by us because unfathomable. We can never have enough of Nature. We must be refreshed by the sight of inexhaustible vigor, vast and Titanic features, the seacoast with its wrecks, the wilderness with its living and its decaying trees, the thundercloud, and the rain which lasts three weeks and produces freshets. We need to witness our own limits transgressed, and some life pasturing freely where we never wander.¹⁶

Although he wrote that "We can never have enough of Nature," Thoreau's frame of reference was not the wilderness modern adventurers seek in remote and mountainous country, but the semi-domesticated nature of Walden Pond. In this Thoreau lived out Emerson's famous aphorism, "The inevitable mark of wisdom is to see the miraculous in the common." The wilderness ideal embodied in the 1964 Wilderness Act postulates vast areas of untouched nature meant to be appreciated in solitude. The landscape Thoreau wrote of at Walden had high-graded woods and abandoned farms and was populated with visitors from town, travelers, ice-cutters and other workers.¹⁷ It was on his trip to Maine in 1846 that Thoreau encountered something more nearly approaching today's wilderness ideal, and he found it overwhelming. His experience on Mt. Katahdin was anything but transcendent.

Aeschylus had no doubt visited such scenery as this. It was vast, titanic, and such as man never inhabits. Some part of the beholder, even some vital part, seems to escape through the loose grating of his ribs as he ascends. He is more alone than you can imagine. There is less of substantial thought and fair understanding in him, than in the plains where men inhabit. His reason is dispersed and shadowy, more thin and subtle, like the air. Vast, Titanic, Inhuman Nature has got him at disadvantage, caught him alone, and pilfers him some of his divine faculty. She does not smile on him as in the plains. She seems to say sternly, why come ye here before your time? This ground is not prepared for you. Is it not enough that I smile in the valleys? I have never made this soil for thy feet, this air for thy breathing, these rocks for thy neighbors. I cannot pity nor fondle thee here, but forever relentlessly drive thee hence to where I am kind. Why seek me where I have not called thee, and then complain because you find me but a stepmother? Shouldst thou freeze, or starve, or shudder thy life away, here is no shrine, no altar, nor any access to my ear.¹⁸

Page 50

Thoreau resolved the philosophical confusion into which his Maine experience had thrust him by insisting on the value of balance. He decided he wanted to be half-cultivated. Continuing the agrarian analogy, he viewed wilderness as a potent fertilizer to be added to cultivated soil. For Thoreau, one of nature's major benefits is the contrast it provides to daily life. This perspective on nature is expressed in Frederick Law Olmsted's ideas for parks, reviewed later in this chapter, and in much of the literature on wilderness, hunting, fishing and other outdoor

recreation.¹⁹ One philosopher, John Hammond, has astutely noted that we should not view cities and wilderness as unconnected and consider wilderness only as a place in which we can escape the oppressive city. He points out that the intellectual apparatus that enables us to enjoy wilderness--the aesthetic, scientific and philosophical foundations--was developed in urban areas.²⁰

AMERICAN NATIONALISM

By the time of the Civil War, the attitudinal foundation and much of the philosophical framework necessary for wildland preservation policy-making had been completed. Nature-love was still not a perspective shared by a majority of Americans, but it had permeated far enough into the urban-intellectual class to have an impact. Nevertheless, it would be an overstatement to claim that these ideas led to the Yosemite Grant of 1864. An equally important factor in fostering that action was American nationalism.²¹

The middle of the nineteenth century brought growing awareness of the environmental problems caused by settlement, industrialization and unregulated economic enterprise. The sense of nationalism was linked to this emerging environmental consciousness. Nationalism had been connected to nature since colonial times; for example, Thomas Jefferson asserted that viewing the Potomac Gorge and Natural Bridge were worth a trip across the Atlantic. Artists like Thomas Cole and Asher Durand of the Hudson River School had attempted in their landscape paintings to glorify the wild natural scenery so abundant in America. Their efforts did not always have the impact desired, however, as indicated by the following comment from John Ruskin, the leading English art critic of

Page 51

his day: "I have just been seeing a number of landscapes by an American painter of some repute; and the ugliness of them is wonderful. I see that they are true studies and that the ugliness of the country must be unfathomable."²²

The natural feature which drew the greatest number of European visitors was Niagara Falls, and commercial exploitation there had been a serious embarrassment to American intellectuals since the 1830s. Americans were striving for a sense of national identity and suffering from a cultural inferiority complex. We looked to Europe and saw the products of centuries of cultural attainment in their cathedrals, literature, painting and other arts and sciences. America, by contrast, was a fledgling nation with little to boast of save our natural resources. At Niagara Falls we had allowed one of our most magnificent natural landscape features to be turned into a mass of claptrap viewing stands and other commercial trappings designed to fleece the tourist, and the visitor had to pay the landowner for permission to view the falls.²³ The mid-century settlement of the West presented Americans with other magnificent scenic wonders in the Rockies and in California, and with them came an opportunity to redeem ourselves for the shame of Niagara Falls. The comments of the western publicists illustrate clearly the sense of nationalism in the appraisal of these western resources. According to Samuel Bowles, "only the whole of Switzerland" eclipsed Yosemite. Albert Richardson contended that "In grand natural curiosities and wonders, all other countries combined fall far below it (the American West)." And Clarence King offered his opinion that no "fragment of human work, broken pillar or sand-

worn image half lifted over pathetic desert-none of these link the past and today with anything like the power of these monuments of living antiquity (the Sierra redwoods).²⁴

PARKS PROPOSED AND PARKS REALIZED

Park proposals had been made for many years before the Yosemite Grant. The first call for a large, wildland park was made by George Catlin, a lawyer turned painter who traveled in the upper Missouri River area during the summers of 1829-1832. Catlin was fascinated by the American Indians. In 1832 on his trip to the headwaters of

Page 52

the Missouri River, Catlin witnessed Sioux Indians slaughtering buffalo in order to trade their tongues for whiskey. The waste of beast and man prompted him to consider ways of protecting the Indians and their land from advancing civilization. He proposed that the area he had traveled be made into a huge and magnificent national park that would preserve the Indian culture, together with their mainstay, the bison. Anticipating an argument critical to all wildland recreation reservations, Catlin justified this noneconomic action on the grounds that the land was "useless to cultivating man." He argued that the value of this proposed park would grow with time and the inevitable separation from nature that would come with progress.²⁵

Thoreau, too, advanced wildland park proposals. Unlike Catlin's grand scheme, Thoreau proposed small nature preserves located near where people lived. People could repair to these close-by preserves for temporary escape from urban-industrial stresses, for the enhancement of their physical, emotional and intellectual power, for companionate sharing of nature's benefits, for nurture of distinctively American individuality, and for relief from a materialistic society.²⁶

Curiously enough, it was an urban, not a wildland park, that may have been most important to the Yosemite Grant and the future national parks that the grant presaged. This is because that urban park provided one of America's great public servants his first opportunity at park design. The urban park was Central Park in New York City, and the man was Frederick Law Olmsted. Based on the development of his ideas during 10 year's work on Central Park, Olmsted became involved in the legislation leading to the Yosemite Grant and developed the first plan for the area. The physical legacy of his work is still found in parks throughout the United States, and his design and management philosophy is exciting renewed interest today.

FREDERICK LAW OLMSTED

Olmsted was born in 1822 in Hartford, Connecticut. At the time Hartford was a bustling small city surrounded by a charming rural landscape. Olmsted's father was a well-to-do businessman who

Page 53

loved and thoroughly supported him. One of Olmsted's parents' favorite activities was taking leisurely drives in the countryside. Vacations and holidays were often the occasion for foreign

travel. From these early recreational experiences Olmsted developed a love of quiet, pastoral scenery that defined his mature aesthetic sense and shaped his professional work.²⁷

Another formative element of Olmsted's early life was as negative as the country rambles were positive. Olmsted was enrolled from age 10 to 14 as a pupil of a minister who tutored Olmsted and three other students. The conditions of life and education were extremely rough, and included frequent beatings, hard work and primitive living conditions. Olmsted developed a lasting resentment toward his tutor, which grew into a lifelong dislike of authority figures? Later, at age 21, Olmsted shipped out in the China trade as an able-bodied seaman. He was impressed by the civility of the Chinese he met in Canton, and he was outraged by the absolute power of his ship's officers.²⁹ His experiences as a sailor joined with his experiences as a student to confirm Olmsted as a lifelong democrat. His belief in common people and his commitment to improving their lot are found throughout his life. In a journalistic analysis of slavery, for example, he concluded that the system was a failure because it treated people as animals and provided no incentive for productive work, while at the same time corrupting the masters with absolute power.³¹ His management of the work force at Central Park was marked by his respect for his subordinates and his willingness to entrust them with responsibility. Most importantly for our purposes, his writing about and planning for public parks was grounded in democratic idealism.

Olmsted's democratic idealism was of religious proportions, and such a strong faith demanded his service to his country. He was almost possessed by a sense of duty. Virtually every decision he made in his professional life was guided by his judgment of its value for the common welfare. Nor did he expect that government should watch quietly as economic forces decided the country's course of action; if he was going to give his life in public service, he expected that government should be an active force working for the improvement of life for its citizens. Not only was the improvement of life good for the citizens, it was necessary for the survival of the state. Olmsted believed that democratic government required

page 54

the "capacity for liberty" in its citizens, all of them. Therefore, democracy required that government bring all citizens to the level where they could contribute something positive. In these beliefs Olmsted ran a course absolutely contrary to the prevalent thinking of his day, which held that "that government is best which governs least."³¹

Olmsted's love of quiet nature and democratic idealism came together for him when he saw Birkenhead Park, in Liverpool, England. Built in 1844, Birkenhead was laid out as a rural park. In the original flat land a lake had been dug, and with the earth taken from it a gently rolling landscape had been created. Birkenhead Park reminded Olmsted of the restful Connecticut countryside he had enjoyed in his youth and of the rural England he loved from his travels. He was enchanted with the park. He saw in Birkenhead Park not only beauty, but the opportunity to enrich the lives of the poorer citizens of the area who used the park. Furthermore, since both the poor and the well-to-do used the park, Olmsted saw it as a vehicle for combating class definitions. In bringing people together in a beautiful setting, this quiet little park was a powerful engine of democracy.³²

Central Park

Several years after his return from England, during which time he pursued a career as a journalist, Olmsted was at a seaside inn in Connecticut, where he had gone to work on a book. At

tea one day he happened to meet a commissioner of the newly authorized Central Park in New York City. The commissioner lamented the poor quality of the candidates for park superintendent, a position they were to fill at their next meeting. He urged Olmsted to apply, and Olmsted, remembering his interest in the English urban parks, decided he would.³³ In this happenstance way, Olmsted became associated with Central Park.

In 1853 the New York legislature had authorized the city to acquire the land for Central Park. The action followed agitation for parks since 1785, but particularly since 1844 when William Cullen Bryant had taken on the task. In the years between the legislative authorization and Olmsted's arrival, the land had been acquired and a preliminary plan drafted, but development of the park was tied up

page 55

in political maneuvering. For a salary of \$1,500 a year, Olmsted was given this formidable job.³⁴

As his biographer Laura Wood Roper tells us, Olmsted took charge of the largest public works project in New York City at a time when the social order necessary for such an undertaking was "in dark eclipse."

(The social order) had been declining all through the 1840s when a million' and a half European immigrants had poured into the city, many of them to crowd and stagnate in its sordid and degrading slums. There gangs, native and foreign born, fought and slaughtered each other; in better neighborhoods footpads, pickpockets, prostitutes, and beggars operated busily; at fires, companies of volunteer firemen brawled with rival companies and other rowdies. Gang members, firemen, criminals, each with his vote to sell, had palpable influence in the political organization of the city, especially Tammany Hall, and were little disturbed by the police. The state government, moving finally in June 1857 to curb some of the local administration's much-abused powers, sought to replace the corrupt police with a new force under five commissioners appointed by the governor; and the governor appointed a new street commissioner. Lawlessness for a time increased: Wood (The Tammany-backed Mayor) and his police defied the new police commissioners and threw the new police commissioner out of City Hall. Even after the authority of the new police was established, order was not: on July 4 the Dead Rabbits, an east-side gang, attacked a Bowery saloon and precipitated two days of murdering violence in which other gangs and members of the old police enthusiastically joined; and less than two weeks later an armed mob, alleged to have been mostly recent Irish immigrants, attacked the police. In both instances the militia had to be called. These disturbances pointed to grievous conditions of dense ignorance, cruel poverty, reckless despair--conditions that were aggravated by a far-reaching catastrophe, which had been slowly building, the panic of 1857.³⁵

In these times Olmsted had ample opportunity to observe the effects of poverty and ignorance, and to further develop his thoughts on barbarism, civilization and democracy. These thoughts would help lead him to California and to Yosemite.

Despite the degraded and chaotic state of public affairs in New York at the time, there was political support for the development of Central Park. Taxpayers, having already sunk 5 million dollars into the project, wanted to see progress, and with the worsening economic situation, the working population was eager for the jobs Park construction would provide.³⁶

Page 56

When Olmsted first visited the park site, he found a mess. There were shacks, pigpens, slaughterhouses and bone-boiling works, situated on a difficult piece of land with thin topsoil, rock outcrops and bogs. The challenge was to create an area of charming scenery that related fully to the city developing around it. It was a task without precedent in this country. 37

Olmsted had been hired to supervise the park's construction, but he had to win a design competition in order to have his ideas realized. His opportunity came when landscape architect Calvert Vaux invited Olmsted to join him in preparing a plan. For Olmsted the partnership provided an opening into the design professions; for Vaux the partnership provided a first-hand, detailed familiarity with the site.

Vaux and Olmsted's winning plan called for the creation of "contrasting and varying passages of scenery, all tending to suggest to the imagination a great range of rural conditions."³⁸ To accommodate the passage of commercial traffic, as the competition required, the plan called for sinking four transverse roads below the level of the park; pleasure roads and trails in the park could then pass over these thoroughfares on bridges without interference. Sinking the business roads would also nullify their impact on the pastoral scenery within the park. Within the park, the same principle of reducing user conflict was applied; carriage roads crossed footpaths and bridle paths on bridges, and bridle paths and footpaths did not cross.³⁹ In their plan, Vaux and Olmsted reinterpreted landscape architecture from "a polite art oriented toward horticulture, which could be competently practiced by skilled and intelligent amateurs, to an exacting professional discipline embracing various aspects of the arrangement of land for human use and enjoyment."⁴⁰

It would take 40 years' work before the Olmsted-Vaux plan would be realized, and continuing efforts after that to protect the park's integrity from myriad public and commercial development schemes. Olmsted struggled with the task for a decade, during which time he stoically moved forward, carried by his democratic idealism in the face of innumerable personal and professional difficulties. His health was not good. He suffered chronically from insomnia and upset stomach; he was bedeviled by debts; he had to bear many family responsibilities; an accident on a horse broke his

page 57

leg and nearly killed him; his infant son died of cholera; and he was constantly vexed by the man who controlled the Central Park budget—a penny-pinching autocrat who crossed Olmsted at every turn and used niggling details to try to break Olmsted's spirit." Though he would suffer greatly in creating Central Park, in the end he was proudest of it among all his works, because it anticipated the growth of an immense urban population and provided for public needs that would not be recognized for many decades after the park was built.

With the advent of the Civil War, Olmsted pondered how he might serve his country in this crisis. Unfit for active duty as a result of his accident, he accepted the position of executive secretary of the newly-formed Sanitary Commission, with responsibility for improving general hygiene in the Union army. He brought to this important job the same administrative genius he had shown at Central Park. Nevertheless, after almost three years of intense effort, Olmsted was frustrated by the political aspects of the job. Returning to his post at Central Park was not inviting after his years of struggling with its money manager. He was in debt and poor health, and he felt the world did not listen to him as it should. Thus, when he was invited to California to manage the Mariposa Estate, a gold mining operation, he jumped at the chance.

The Mariposa Estate, encompassing 20 square miles of land in the western foothills of the Sierra Nevada Mountains, near what is now Yosemite National Park, had been founded in 1847 by the soldier-adventurer, John C. Fremont. 12 When Olmsted accepted the position of manager, the Mariposa Estate had a population of approximately seven thousand people, mostly men. It was truly a "wild west" environment. Managing this rough group of people was a severe

challenge for Olmsted. More challenging, and ultimately defeating, were the legal and financial tangles left from years of poor management.

Olmsted did not simply escape to California; he looked on the job as an opportunity to accomplish something tangible of value to society.⁴³ Olmsted wanted to refute the English critics who, favoring an aristocracy, believed the crudities observed in America were endemic to democracy. Olmsted felt these conditions were attributable not to our form of government, but to the pioneer conditions still found in much of the country. Along with Herbert Spencer

page 58

he believed in social evolution, but unlike the English philosopher who provided such comfort to the rich, Olmsted believed an active government could and should take steps to help the poor become more fit for a life of freedom. The primitive, law-less community at Mariposa provided Olmsted with an opportunity for "social engineering," a chance

to transfigure a semiarid, barbarous principality into a well-watered, fertile garden; to turn its economy from dangerous dependence on a single industry to thrifty reliance on diversified enterprise; and to shape from its transient and semi-barbarous population a stable and civilized community in which should prevail "an all-embracing relationship based on the confidence, respect and interest of each citizen in all and all in each."⁴⁴

Success did not come to Olmsted at Mariposa; the legacy of previous mismanagement undercut his vigorous effort at every turn. But his dream for Mariposa's transfiguration is instructive of the idealism underlying his park designs. His general social goal at Mariposa he called "communicativeness," a "combination of qualities which fit (a person) to serve others and to be served by others in the most intimate, complete and extended degree possible."⁴⁵ Similarly, encouragement of a sense of community--creating a healthy, democratic mixing of the social classes--was prominent in Olmsted's goals in Central Park. There, luxurious facilities were provided to attract the upper crust, who joined the poor in enjoying the park.⁴⁶

The Yosemite Grant

Working at the Mariposa Estate, Olmsted first saw Yosemite Valley in August 1864.

Photographs, sketches, the accounts of other travelers, nothing had adequately prepared Olmsted for the awesome, peaceful abyss. Its great cliffs, almost a mile high and backed by the vast Sierras, showed chalky in the morning light softened by the smoke of forest fires and by thunderheads in the east. Down their granite faces threaded the cascades, graceful ornaments to their grandeur. Far below in the serene meadows the green tracery of leaves alternated with grass, and the winking silver stream of the Merced rippled among ferns and rushes and willows. Olmsted thought he was seeing a glorious vision, too wonderful to be believed, a sort of scenic allegory in which the awfulness of the chasm was forgotten in the beauty in which it was clothed.⁴⁷

Page 59

Only a month before Olmsted first saw the Valley, President Abraham Lincoln had signed into law a bill granting to the state of California 20 square miles of the Yosemite Valley and 4 square miles containing the Mariposa grove of giant sequoias. The land was to be used for "public use, resort and recreation," and was to be held permanently by the state as long as specified conditions were met.

The bill Lincoln signed had been introduced by Senator John Conness of California, on behalf of gentlemen "of fortune, of taste and of refinement." In all likelihood, Olmsted was one of these gentlemen. Among the others--the leaders of San Francisco society⁴⁸--was a representative of the Central American Steamship Transit Company, who appears to have first suggested the grant to Senator Conness.⁴⁹

What prompted this policy proposal and enabled legislative action? The valley had first been seen by whites in 1833, when a party of trappers traveling westward across the Sierra Nevada under Joseph Walker's leadership viewed it from the rim.⁵⁰ The valley was first entered by whites in 1851, when a group of citizen-soldiers discovered it while pursuing Yosemite Indians who had been provoked into uprising by gold seekers. Journalists first arrived in 1855, and publicity of the valley followed rapidly.⁵¹

By the time of the 1864 grant, the beauty of the valley and the Mariposa Grove were well known. One of the factors that led to the grant was the fear that these natural wonders would be destroyed. In 1854, in fact, something had happened which made such fear credible. Several enterprising men stripped the bark from a sequoia and charged admission for viewing this wonder of nature, a tree which measured 116 feet to the first limb. The bark was shipped to England and exhibited there at London's famous Crystal Palace. Ironically, the British considered the whole thing impossible and discounted it as a fraud.⁵² Still, the affair was controversial, and like the entrepreneurial efforts at Niagara Falls, became a source of embarrassment to the elites struggling to establish America's cultural identity.⁵³ The publicity generated by the incident helped bring forth journalists, artists, and photographers (in 1859 stereoscopic slides of Yosemite were produced) and soon Yosemite and the threats to it were well known. As unreserved public land, it was open for entry under a variety of land disposal policies, and therefore

page 60

likely to be aesthetically damaged.

In Yosemite, America possessed a gem of nature equal to Niagara Falls, and it, too, was threatened by the quick-buck mentality. But threats to landscape beauty were not enough by themselves to prompt the Grant. Congressmen had to be persuaded that valuable land was not being lost. Thus, when Senator Conness introduced his bill, he specified, in language reminiscent of Catlin three decades earlier, that the area to be granted to California was worthless and contained nothing of value to the government.⁵⁴

Finally, as with virtually any federal policy action, we must account for the posture of major industrial and commercial interests. At Yosemite, apparently, politically strong exploitative interests were not present. Mining, hydroelectric power and forestry interests with political muscle did not seek to exploit the valley and grove resources.⁵⁵ The brittleness of the giant sequoia wood made it unattractive as lumber, and thus contributed greatly to forest preservation in the Mariposa Grove. On the positive side, as noted previously, it was a representative of the transportation industry who suggested the legislation, perhaps encouraged by the prospect of future tourism revenues.⁵⁶

Following the grant, Olmsted was installed as one of nine state commissioners charged with developing a plan for the new state park. Olmsted took the lead in this planning, and the plan strongly reflects his democratic idealism.⁵⁷ Olmsted's report was the first systematic argument in America favoring governmental leadership in providing parks for people." It linked democratic philosophy and Olmsted's theory of the benefits of encounters with nature. Olmsted

felt that the primary value of parks lay in the contrast they provided from people's everyday lives.⁵⁹ Rather than human-dominated environments where the individual's agenda was set by others, parks in Olmsted's conception provided a natural scene and permitted visitors to move through them at their own pace and with their own thoughts. Such a setting respected each person's individual responses in a way that packaged commercial recreation--like that found in Olmsted's day at Niagara Falls and in our day at Disney World--did not. Recognition of individualism was proper and, in fact, necessary in a democracy.

In his plan for Yosemite, Olmsted presented his theory of the psychological value of exposure to natural scenery. The temporary

Page 61

relief from workday pressures was not just fun, but a critical restorative for life in an industrial age. Olmsted lived at a time of rapid industrialization, and he feared the loss of such social anchors as the family, church, and tradition. If Americans were to govern themselves well, we needed a permanent standard of value against which our daily tasks could be measured. Ordinary citizens needed the opportunity to exercise the contemplative faculty, an inherent human capacity for absorbed attention. Exercise of the contemplative faculty would free one's mind, at least temporarily, from the achievement motives that typically dominate one's thinking. Natural areas were particularly conducive to contemplative recreation; the visitor's attention was arrested and preoccupation with daily affairs was removed. In Olmsted's words:

It is a scientific fact that the occasional contemplation of natural scenes of an impressive character, particularly if this contemplation occurs in connection with relief from ordinary cares, change of air and change of habits, is favorable to the health and vigor of men and especially to the health and vigor of their intellect beyond any other conditions which can be offered them, that it not only gives pleasure for the time being but increases the subsequent capacity for happiness and the means of securing happiness. The want of such occasional recreation where men and women are habitually pressed by their business or household cares often results in a class of disorders the characteristic quality of which is mental disability, sometimes taking the severe forms of softening of the brain, paralysis, palsy, monomania, or insanity, but more frequently of mental and nervous excitability, moroseness, melancholy or irascibility, incapacitating the subject for the proper exercise of the intellectual and moral forces.⁶⁰

In a democracy, Olmsted believed, natural scenery should be available to all the people. He did not agree with the apologists of aristocracy that working men and women were incapable of appreciating natural scenery and being improved by its influences. Therefore, in the United States it was the right and the duty of government to protect some natural areas and to make them readily available to all the citizens.

Men who are rich enough and who are sufficiently free from anxiety with regard to their wealth can and do provide places of this needed recreation for themselves. They have done so from the earliest periods known in the history of the world, for the great men of the Babylonians, the Persians and the Hebrews, had their rural retreats, as large and as luxurious as those of the aristocracy of Europe at present. There are in the islands of Great

Page 62

Britain and Ireland more than one thousand private parks and notable grounds devoted to luxury and recreation. The value of these grounds amounts to many millions of dollars and the cost of the annual maintenance is greater than that of the national schools; their only advantage to the commonwealth is obtained through the recreation they afford their owners (except as these extend hospitality to others) and these owners with their families number less than one in six thousand of the whole population. The enjoyment of the choicest natural scenes in the country and the means

of recreation connected with them is thus a monopoly, in a very peculiar manner, of a very few, very rich people. The great mass of society, including those to whom it would be of the greatest benefit, is excluded from it. In the nature of the case private parks can never be used by the mass of the people in any country nor by any considerable number even of the rich, except by the favor of a few, and in dependence on them.

Thus without means are taken by government to withhold them from the grasp of individuals, all places favorable in scenery to the recreation of the mind and body will be closed against the great body of the people. For the same reason that the water of rivers should be guarded against private appropriation and the use of it for the purpose of navigation and otherwise protected against obstruction, portions of natural scenery may therefore properly be guarded and cared for by government. To simply reserve them from monopoly by individuals, however, it will be obvious, is not all that is necessary. It is necessary that they should be laid open to the use of the body of the people.

The establishment by government of great public grounds for the free enjoyment of the people under certain circumstances, is thus justified and enforced as a political duty.⁶¹

At Yosemite, as elsewhere, Olmsted's idealism was far ahead of its time. His report was suppressed, apparently because of fear that the money he sought for implementing it would be diverted by the California state legislature from the Geological Survey, a representative of which served with Olmsted on the Yosemite Board of Commissioners. Olmsted returned to work on Central Park, and the Yosemite Park continued in an essentially unmanaged state for the next half century, with increasing visitation and abuse.

Thus, the Yosemite Grant represents only the start of a policy. It was a crucial breakthrough, though, and served as precedent for future park creation. Olmsted's plan, while not immediately implemented, helped provide the philosophical base for the creation of the National Park Service in 1916. Olmsted's ideas in his Yosemite

Page 62

plan and elsewhere have helped to shape the ongoing debate about the meaning and purpose of the national parks in American society.

FOOTNOTES

1. This section relies primarily on Nash, *Wilderness and the American Mind* and Huth, *Nature and the American*.
2. Nash, *Wilderness and the American Mind*, pp. 84-86.
3. From *The Portable Emerson*, edited by Carl Bode. Copyright 1946, renewed © 1974 by the Viking Press, Inc. Copyright © 1981 by Viking Penguin, Inc. Reprinted by permission of Viking Penguin Inc.
4. Noble, *The Eternal Adam and the New World Garden*.
5. Bode, *Introduction to The Portable Emerson*, p. xxix.
6. Emerson, *Nature*, p. 10.
7. *Ibid.*, p. 11.
8. *Ibid.*, p. 50.
9. The biographical background on Thoreau is largely from Bode (ed.), *The Portable Thoreau*, pp. 1-29.
10. Thoreau, "Civil Disobedience," p. 125.

11. From *The Portable Thoreau*, edited by Carl Bode. Copyright 1947 by the Viking Press, Inc. Copyright @ 1962, 1964, by the Viking Press, Inc. Copyright renewed C 1975 ny the Viking Press, Inc. Reprinted by permis- sion of Viking Penguin Inc.
12. Ibid., p. 389,
13. Ibid., pp. 444-445.
14. Ibid., p. 567.
15. Ibid., p. 344.
16. Ibid., p. 557.
17. From *FLO: A Biography of Frederick Law Olmsted* by Laura Wood Roper, pp. 130, 131, 257, 267. Copyright 1973 by Laura Wood Roper.
18. Thoreau, *The Maine Woods*, p. 249.
19. A thorough and interesting analysis of the idealized "middle landscape" is in Marx, *The Machine in the Garden*.
20. Hammond, "Wilderness and Life in Cities."
21. Runte, *National Parks*.
22. Huth, *Nature and the American*, p. 9.
23. Sax, "America's National Parks."

Page 64

24. Runte, *National Parks*, pp. 20-22.
25. Catlin, *North American Indians*.
26. Gilligan, "The Development of Policy pp. 14-15.
27. Roper, FLO, p. 6.
28. Ibid., pp. 7-8.
29. Ibid., p. 32.
30. Ibid., pp. 87-88.
31. Ibid., p. 86.
32. Ibid., p. 71.
33. Ibid., p. 124.
34. Ibid., p. 129.
35. Ibid., pp. 130-131.
36. Ibid., pp. 127-128.
37. Ibid., p. 136.
38. Ibid., p. 137.
39. Ibid., p. 138.
40. Ibid., p. 144.
41. Ibid., p. 150.
42. De Voto, *Year of Decision*, offers a frank and uncomplimentary view of Fremont's role in western history.
43. Roper, FLO, p. 235.
44. Ibid., p. 257.
45. Ibid., p. 253.
46. Ibid., p. 141.
47. Ibid., p. 267.
48. Sax, "America's National Parks."
49. Roper, FLO, p. 282.

50. Gilbert, *Westering Man*, pp. 135-136.
51. Huth, *Nature and the American*, p. 143.
52. Ibid., p. 142-143.
53. Sax, "America's National Parks."
54. Runte, *National Parks*, pp. 48-49.
55. Ibid., p. 49.
56. Huth, *Nature and the American*, p. 144.
57. Olmsted, "The Yosemite Valley and the Mariposa Big Trees."
58. Roper, *FLO*, p. 285.
59. Sax, *Mountains Without Handrails*, pp. 17-26.

Page 65

60. Olmsted, "The Yosemite Valley and the Mariposa Big Trees," p. 17. Olmsted's scientific facts are based on nineteenth century conceptions and are amusingly soft by today's standards. Nevertheless, scientific knowledge to support or refute the hypothesis that outdoor recreation promotes mental health has not advanced markedly beyond Olmsted's thinking.
61. Ibid., p. 21.