Some Historical Influences on Modern Views of Nature in America

Abstract Many widely accepted contemporary views of nature, which emphasize the idea that human interference in ecological processes is invariably harmful, stem from the historical circumstances under which the nature appreciation movement first arose in the late eighteenth and early nineteenth centuries. Nature was romanticized as the embodiment of perfection and a mirror of God, if not the literal dwelling place of God. What moved early nature admirers to seek out “wild places” was precisely the absence of man and the sense of solitude that conferred. This view, which persists today, has led many to ignore or denigrate the significant historical influence that the North American Indians had on their environment through extensive burning of forests and hunting of ungulates; and, further, to adhere to an ahistorical paradigm of strict nature “preservation” that opposes any active management by humans, even for nonexploitive, ecological goals.

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Francis Parkman, a great nineteenth-century popularizer of cowboys, Indians, mountain men, and sundry other icons of the romanticized American wild lands, portrayed the ancient forests of the New World as vast, dark, and untrodden. In “the depths of immemorial forests, dim and silent as a cavern,” “wrapped in the shadow of the tomb,” not a flicker of sunlight ever touched the ground; they were “ancient as the world,” to whose “verdant antiquity the pyramids are young.” Only where Europeans had intruded was it otherwise. Between the bits of rough civilization the settlers had carved out of the virgin land lay “a broad tract of wilderness, shaggy with primeval woods” (Day 1953). A squirrel, it was said, might in the days before the white man arrived have traveled from Maine to Louisiana never once setting foot on the ground, but leaping from tree to giant tree.
A very different metaphor came to the mind of more than one early explorer who actually set foot in America’s “primeval woods.” A stagecoach, said one, might be driven from the east coast to St. Louis without first clearing a road. “A man may gallop a horse amongst these woods any way, but where creeks or Rivers shall hinder,” agreed Captain John Smith of the Jamestown, Virginia, settlement. If there is one point on which the early European travelers and settlers who set down their observations of the New World agree, it is that the forests of eastern North America reminded them of nothing so much as the carefully tended parks of the great estates of their homelands. An explorer in 1607 observed the trees around present-day Portland, Maine, “growing a great space asunder one from the other as our parks in England and no thicket growing under them.” In the early days of the Plymouth colony the Pilgrims found the woods “thin of Timber in many places, like our Parks in England.” In New Jersey in the mid-seventeenth century, the woods were described as “but thin in most places, and very little Under-wood”; another explorer noted an abundance of high grass and trees that “stand far apart, as if they were planted.” In such open, parklike wood, deer and turkey could be seen a mile away, cattle three miles (Martin 1973; Pyne 1982:46–47).

Parkman romantically portrayed the sixteenth century Italian navigator Verrazano lying off the coast of New England spying one of his mighty literary forests, full of “shadows and gloom.” Yet Verrazano himself told of marching inland fifteen miles from Narragansett Bay, in what would become Rhode Island, and finding “open plains twenty-five or thirty leagues in extent, entirely free from trees or other hindrances.” Where the explorer did encounter forests, they grew so open and unencumbered by underbrush that they “might all be traversed by an army ever so numerous,” he marveled (Maxwell 1910, Day 1953).

The Europeans marveled at these open woods and meadows, but they did not have to search far for an explanation. If the land reminded them of carefully tended parks at home it was for a good reason. One of the earliest explanations was set down in 1632 by Thomas Morton, an English fur trader and adventurer who traveled the backwoods of eastern central Massachusetts and settled in what is now Quincy, Massachusetts. (He did not remain long. A free-thinker, he was always in trouble with the local authorities. After being repeatedly arrested, he was finally expelled for licentiousness, selling firearms to the Indians, and penning a satiric tract against the Puritans). Morton was a keen observer, and his travels off the beaten path gave him a first-hand knowledge of the ways of the Indians. He explained that it was deliberate management by the native inhabitants that kept the woods as they were:

The Salvages [sic] are accustomed to set fire of the country in all places where they come; and to burn it, twice a yeare, vix, at the Spring, and at the fall of the leafe. . . . The burning of the grasse destroys the underwoods, and so scorcheth the elder trees, that it shrinks them, and hindereth their growth very much. . . . And this custome of firing the country is the means to make it passable, and by that means the trees growe here and there as in our parks: and makes the country very beautifull, and commodious. (Bromley 1935)

The practice appears to have been extremely widespread. In Virginia, through a combination of burning and fuel-wood cutting, the Indians had managed to clear some thirty or forty acres of land per capita at the time the first Europeans arrived; three centuries later, although the total area cleared
was obviously much greater, it amounted to considerably less per capita—only six or seven acres of treeless land per person. The dominant nineteenth and early twentieth century view that the Indians were ragged bands of backward savages incapable of having any significant impact on the land—and the more recent view that they were intuitive ecologists whose religious respect for nature forbade them to tamper with it—is certainly called into question by the testimony of the early settlers.

Of course along with the open woodlands and meadows there were certainly stands of denser, older forest; the landscape was a shifting mosaic through time and space, the product of many competing forces. But the accounts of early travelers and other evidence suggests that Indian-set fires had a major effect in shifting the balance toward younger stands on a very broad scale. An analysis of early land surveys concluded that at the time the European settlers arrived in the Pacific Northwest in the nineteenth century, stands older than 200 years occupied only about 5 percent of southwest Oregon—hardly the "sea of old growth" that modern environmental activists claim once existed (Zybach 1994). Even supposedly uninhabited regions were frequented regularly by Indian war or hunting parties that left their mark. In southwestern Virginia William Byrd reported seeing the sky filled with smoke so dense that it blocked out the mountains. "This happened not from haziness of the sky," he said, "but from the firing of the woods by the Indians, for we were now near the route the northern savages take when they go to war with the Catawbas and other southern nations. On their way, the fires they make in their camps are left burning, which catching the dry leaves which lie near, soon put the adjacent woods in a flame" (Maxwell 1953). Other travelers reported finding vast, open savannas far inland from the heavily occupied eastern seaboard; the only trees that they found growing there were confined to low swamps or wet areas along streams, which escaped the flames. Fire scars left in the annual growth rings of old trees in New Jersey confirm the settlers' observations, testifying to fires every ten to fifteen years (Little 1974). Careful studies of the fire history of the Rocky Mountains offer convincing evidence for frequent Indian-set fires in that region, too. When tree rings of old-growth stands in western Montana were analyzed, it became clear that fires were much more frequent (once every nine years) in areas that had been heavily used by Indians, as compared to similar but more remote sites (every 18 years). And more frequent burning had major ecological implications: Stands that burn every seven years or so are dominated by tall ponderosa pines and a grassy undergrowth. Older stands, by contrast, become rapidly clogged with woody shrubs, an understory of shade-tolerant Douglas fir, and a build-up of insect and disease pests (Barrett and Arno 1982).

Perhaps the most telling evidence for the dominant role that Indian-set fires played in shaping the American landscape is what happened when the Indians were pushed off the land. One early Massachusetts settler observed that "in some places where the Indians dyed of the Plague some fourteen yeares agoe, is much underwood . . . because it hath not been burned" (Thompson and Smith 1970:259). One of the great ironies in the myth of the forest primeval is that the dense, thick woods that later settlers did indeed encounter and arduously cleared were not remnants of the "forest primeval" at all. They were the recent, tangled second growth that sprung up on once-cleared Indian lands only after the Indians had been killed or evicted and the Europeans began to suppress
fire. What later settlers took for the forest primeval was in fact much closer to being an abandoned ranch. “The virgin forest was not encountered in the sixteenth and seventeenth centuries,” writes one historian; “it was invented in the late eighteenth and early nineteenth centuries” (Pyne 1982:46–47).

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What, then, explains this late-eighteenth and early-nineteenth century urge to revise this history, to romanticize nature, to reinvent the American landscape as a virgin wildland and the Indians as ecological saints who trod softly on moccasined feet without snapping a twig?

The admiration for nature that has emerged as a prominent and broadly accepted feature of Western culture over the last 200 years or so finds little counterpart in the previous 2,000 years of Western civilization. Cultural beliefs of course rarely spring into existence fully formed; it is almost always possible to find hints and foreshadowings of any era’s characteristic sentiments, beliefs, and ideologies; indeed it is not uncommon to find certain beliefs and their antitheses coexisting for thousands of years, with one or the other predominating at different times. There is much enthusiasm among environmentalists today for tracing a human love of nature even to our genes—it is, we are told, a “biophilia” that reflects an evolutionary adaptation of stone age man. Maybe so, and likewise perhaps a love of freedom is in our genes, too. But that tells us nothing about why American democracy arose when it did after centuries in which kings and despots reigned. Similarly, however ancient the roots of modern affinity for nature may be, the fact remains that for most of recorded history, the dominant mode of feeling toward nature expressed in Western civilization was one of hostility.

Before the end of the eighteenth century, mountains, when they were commented upon at all, were generally described with abhorrence. They were “warts,” “wens,” “the rubbish of creation.” Dr. Johnson, in 1738, expressed the opinion that the Scottish hills “had been dismissed by nature from her care.” Other seventeenth and early eighteenth century writers were hardly less sparing in their censure of mountains: The Alps were “high and hideous,” “monstrous excrescences of nature,” the place where nature had “swept up the rubbish of the earth to clear the plains of Lombardy.” An early visitor to Pike’s Peak wrote, “The dreariness of the desolate peak itself scarcely dissipates the dismal spell, for you stand in a confusion of dull stones piled upon each other in odious ugliness” (Rees 1975).

The very word wilderness was a term of clear disapprobation. It meant an unimproved wasteland, a place devoid of value, a place to be shunned and hurried through. Mountains were places of wolves, bears, bandits, bad roads, and violent and unpredictable weather. The North American forests harbored wild animals and hostile Indians. To a farmer who needed to clear fields to feed his family and graze his livestock, the woods were a back-breaking obstacle; felling trees and pulling stumps was the most arduous job a settler faced.

In Medieval Europe, affection for nature carried with it the further suspicion of sacrilege; axe-wielding monks leveled forests to extirpate sacred groves or other sites of pagan nature-worship (Oelschlaeger 1991:70–72). Landing at Plymouth, William Bradford beheld the New World—and called it “a hideous & desolate wilderness, full of wild beasts & wild men.” The forests of New England were a “howling” and “dismal” place, gloomy and sinister, full of evils real
and spiritual. In 1653 the English historian Edward Johnson described the forests of North America as a “remote, rocky, barren, bushy, wild-woody wilderness,” and he was not being complimentary (Cronon 1983:5).

So, again, what explains the great change of heart between the eighteenth century and now? How did nature change from a place of chaos, ugliness, and evil to one of order, harmony, and beauty?

Rarely has there been such an abrupt and sweeping transformation in dominant social attitudes. Yet in its very abruptness lies the explanation of how an ecologically unsubstantiated and ahistorical belief in nature as perfect, orderly, harmonious, and separate from man came to be virtually synonymous with a love for nature, and why even today this special vision of the natural world holds such a grip upon us. Nature—or at least the Arcadian vision of nature as a place of towering, ancient woods, majestic beasts, and timeless hills, a place where man may enter only as an intruder, observer, or worshipper—was an invention of the imagination of man. To love nature, man first had to invent a nature worth loving. And in inventing nature he perhaps inevitably consulted the romantic yearnings of his soul, not the miserable experience of thousands of years of grim reality. It was “the literary gentleman wielding a pen, not the pioneer with an axe” who could afford to romanticize nature (Nash 1982:44).

For the early nature appreciation movement was both self-conscious and self-consciously elitist. Those eighteenth century aristocrats—for aristocrats they almost exclusively were—who suddenly and unexpectedly began to express an admiration of mountains and other natural scenery were explicit in their belief that the ability to appreciate such beauty was not innate, but acquired. Nature was something that only the cultivated, trained through an appreciation of fine painting and landscape gardening, could truly understand and value. It was a sort of connoisseurship; one could no more expect a ploughman to properly appreciate the Alps than one could expect him to appreciate a glass of fine old port. As late as 1844, the poet William Wordsworth was complaining in a letter to an English newspaper about a proposed railroad that was to be built to the Lake District. His concern was not, as a modern-day preservationist might expect, that the railroad itself would mar the countryside; the problem was rather that it would bring trainloads of untutored sightseers who were not equipped to value what they were seeing. “The perception of what has acquired the name of picturesque and romantic scenery,” he sniffed, “is so far from being intuitive that it can be produced only by a slow and gradual process of culture” (Rees 1975).

The tastes of the aristocratic nature lovers of the eighteenth and nineteenth centuries were perfectly revealed in the English landscape movement, which rejected the tame, artificial symmetry and formality of traditional gardens in favor of the wild and “natural.” But the flowing landscapes that replaced the rigid lines of trees in pots and clipped hedges were an invented nature, an aesthete’s nature. Every curve and vista was calculated to offer “insights” and “subjects of meditation”; streams were dammed to form poetic lakes, trees were set in artful clumps, and garden buildings were pressed into service as moral or philosophical allegories. There was a great truck in Classical and Gothic ruins, real and synthetic. “English landscape was invented by gardeners imitating foreign painters who were invoking classical authors,” mocks the character Hannah in Tom Stoppard’s play “Arcadia,” and she has it about right (Stoppard 1993:25).
The carefully crafted landscapes of ruined abbeys, jagged cliffs, unkempt trees ("everything but vampires," Hannah says) betrayed a motive that beclouds our thoughts about nature to this day. The natural world's ability to stir the soul, even fill it with terror, was the prime attraction. This was nature as escapism—the place that "can stir you up as you were made to be stirred up," as the Sierra Club's David Brower would still describe it two centuries later (Hamilton 1994). Much the same taste accounted for the popularity of the Gothic novel; indeed the English landscape garden was almost a Gothic novel come to life, in crags and unkempt trees and "druidical" huts. The eighteenth century English landscape architect William Kent went so far as to plant dead trees in Kensington Gardens "to give a greater air of truth to the scene." The idea was to create a garden that looked old, as if it had been neglected for centuries. In a few particularly wonderful instances the Gothic touches went completely over the top. The owner of Pain's Hill in Surrey had a hermitage, complete with resident hermit, installed on his redone grounds. The hermit signed a seven-year contract at £700; he was supplied food, hassock, and hourglass, and undertook not to cut his hair, beard, or nails and to eschew speech. It was perhaps only inevitable that he was caught sneaking down to the pub after just three weeks on the job (Elliott 1994; Johnson 1979:226–27).

By the end of the eighteenth century, the well-to-do English seekers of soul-stirring experience were beginning to venture forth from their libraries and gardens into the genuine "wilderness," too. They were doing what seems perfectly commonplace now, but what was an exceptional departure then. English tourists began visiting Scotland and its wild hills in significant numbers only around 1810; it was in 1818 that the first English-language guidebook to Switzerland and the Alps was published. The motive of these pioneering nature tourists was virtually indistinguishable from that of the landscape gardeners. In expressing a love of the natural world, both were expressing a hunger for heightened experience, and it was only a very particular and idealized conception of nature that could fit that bill—a nature vast, ancient, eternal, separate, and awe-inspiring, a nature that at least presented the illusion of being beyond the touch of man. Such a wilderness proved the "ideal stage for the Romantic individual to exercise the cult that he frequently made of his own soul," as the historian Roderick Nash put it. But it is telling that these connoisseurs of the "sublime"—an odd word that came to be used at the time to express the contradictory emotion of fear and thrill (the notion also crops up in a predilection for deliberately contradictory phrases such as "delightful horror," "terrible joy")—were as apt to visit coal mines and quarries as mountains to satisfy this penchant (Rees 1975; Worster 1977:81–83; Nash 1982:47).

Again, we are dealing with degrees, not absolutes. Not all of the early environmentalists were aristocrats; John Muir notably was of humble origins. But if one looks through the rolls of the nature preservation societies in Britain and America in the nineteenth century the pattern is undeniable (Lowe and Goyder 1983, Bramwell 1989).

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Indians only fit into the romantic picture of a wild, untouched wilderness to the extent that they could be seen as creatures of nature themselves, living in perfect harmony with nature's harmonious perfection. Many modern-day nature lovers assiduously perpetuate the myth of the noble savage in par-
allel to the myth of pristine nature. Ancient hunter-gatherers, who lived in a state of “balanced and harmonious” existence, altering “neither the natural firmament nor the animals and plants that share the land with them,” were the original lovers and worshippers of nature, writes the environmental historian and philosopher Max Oelschlager, for one (Oelschlager 1991:34).

Yet ecological and archaeological evidence strongly suggests not only that Indians practiced landscape management on a truly heroic scale with the use of fire, but also that they were perfectly capable of drastically altering the size and distribution of ungulate populations, and even hunting a number of species to extinction (Kay 1994). Estimates of the pre-Columbian population of America are notoriously uncertain, but credible calculations place the number of people living north of the Rio Grande as high as 12 million (Dobyns 1966, Denevan 1992). Far from being a small band of harmonious stewards of the land, they dramatically modified their environment. Camels, woodland musk oxen, mammoths, mastodons, stagmoose all vanished shortly after the first major occupation of North America by man, 12,000 years ago. All were species that had evolved for a million years in North America in the absence of human hunters; the species that survived, by contrast (moose, elk, caribou, deer), were all recent arrivals from Asia and whose evolutionary history included defensive adaptations to human predation (Pielou 1991:254–57).

The determination to ignore such uncomfortable facts and to idealize the Indians as precocious environmentalists remains strong and may explain the credulity with which many have accepted and propagated the now-famous speech of Chief Seattle, a nineteenth-century American Indian whose prophetic warnings of the coming ecological crisis first came to wide public attention when they were used to narrate a 1972 television movie about pollution, called Home. “This we know—the earth does not belong to man, man belongs to the earth,” the chief declares in one of the many versions of the speech that were subsequently reprinted. “All things are connected like the blood which unites one family. Whatever befalls the earth befalls the sons of the earth. Man did not weave the web of life; he is merely a strand in it. Whatever he does to the web, he does to himself.”

To a few experts on American Indians, this all smelled a bit fishy. The real Chief Seattle did make a speech in about 1855, which was recounted thirty years later in a newspaper article by an American who had been in the audience; but according to this account, Seattle merely praised the generosity of the “great white chief” for buying his lands and offered not a word of ecological insight. (Seattle was also known to historians for his dignified refusal to allow the grateful white settlers to name their town after him; he objected that his eternal sleep would be interrupted each time a mortal uttered his name. The objection vanished when the whites proposed levying a small tax on themselves to provide the chief with some advance compensation for his troubles in the hereafter.) Nowhere was there any record of Seattle as a prophet of environmentalism.

A little research eventually cleared up the mystery. The reason Chief Seattle’s speech sounded remarkably like the words of a twentieth-century, white, middle-class environmentalist, it turned out, was because they were the words of a twentieth-century, white, middle-class environmentalist. Ted Perry, a professor of film at the University of Texas at Austin, had written the script for the movie and had never claimed that the words he put in Chief Seattle’s mouth were
anything but fiction. But the truth has never quite managed to catch up, and even though the spuriousness of Chief Seattle’s speech has been widely publicized, Seattle’s anachronistic warnings about the fragile balance of nature continue to be reprinted and quoted in environmental magazines, sermons from the pulpit, classroom study kits, posters, textbooks, and bumper stickers. As a seemingly far-seeing anticipation of the central credo of modern environmentalism by a representative of an ancient way of life, Chief Seattle’s speech has attained the status of what one admiring environmentalist thinker—Theodore Roszak, a professor of history at California State University—has called “a piece of folklore in the making, a literary artifact mingling traditional culture with contemporary aspiration.” Roszak is aware that the speech is a twentieth-century concoction, and admits that he “initially had some scholarly qualms about citing the chief” in his writings, but decided to go ahead anyway: Seattle’s “semilegantary” words, Roszak explained, “have become precious to the environmental movement” (Murray 1993; Roszak 1993:50,338–39).

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There was another force that played a role of great importance in converting new followers to a love of nature in the late eighteenth and early nineteenth centuries, and that was religion. Petrarch climbed a mountain in 1336 and found himself “abashed” at taking pleasure in nature, fearing that to do so was sacrilege. Five centuries later the American theologian Jonathan Edwards proposed a different solution to the conflict between God and nature. Admiring nature was permissible, even admirable, he argued, precisely because nature was “God speaking to us.” The feeling of sublime terror inspired by wilderness was a reminder of God’s power and wrath. Even the dirt that covers everything and “which tends to defile the feet of the traveler” is a salutary moral lesson from God, a reminder that “the world is full of that which tends to defile the soul” (Albanese 1990:43–45). Others were less explicit about the precise moral lessons of nature and began to suggest simply that sublime landscapes were suitable objects of contemplation as stirring reminders of God’s magnificence and grandeur.

This was a significant departure from the recent Puritan past. The wild and terrible in nature was no longer the rubbish left over from the creation or the unenlightened province of the devil. It was a testimonial to the greatness of God. Climbing a mountain was no longer an act of sacrilege, but an act of moral instruction.

If it was not yet an act of worship, that was coming. To Henry David Thoreau, nature’s value was above all what it would do for man’s soul. “I derive more of my subsistence from the swamps which surround my native town than from the cultivated gardens in the village,” he wrote. “My spirits infallibly rise in proportion to the outward dreariness... When I would recreate myself, I seek the darkest wood, the thickest and most interminable and, to the citizen, most dismal swamp. I enter a swamp as a sacred place,—a sanctum sanctorum.” His motive was a “desire to bathe my head in atmospheres unknown to my feet” (Emerson and Thoreau 1991:94–100).

For Thoreau, nature’s chief value was that it was not the town. The woods were an escape from social corruption, or, more to the point, people. “Society is always diseased, and the best is the most so,” he wrote in The Natural History of Massachusetts. The conventions of social intercourse were stultifying. “Politics...are but as the cigar-smoke
of a man.” Commerce was frivolous. Labor was degrading, farming no better than serfdom. Even man’s amusements were nothing but a sign of the depths of his despair. “The greater part of what my neighbors call good I believe in my soul to be bad.” The word village, he said, comes from the same Latin root as vile and villain, which “suggests what kind of degeneracy villagers are liable to.” Thoreau wanted to “shake off the village,” where men spent empty, monotonous, vacuous, and spiritually impoverished lives. “I confess that I am astonished at the power of endurance, to say nothing of the moral insensibility, of my neighbors who confine themselves to shops and offices the whole day for weeks and months, aye, and years almost together,” he wrote. It was the freedom that nature had to offer that was its chief attraction. Thoreau went to live at Walden Pond, he said, “to transact some private business with the fewest obstacles.”

If nature’s value rested upon its being a spiritual refuge from the evils of society, then nature, by definition, meant its separation from man and the absence of man. It was the very fact that man and all his follies were not to be found there that made nature estimable. What Thoreau disliked about man’s presence was not that it would interfere with or degrade critical biological processes; what he disliked about man’s presence was its presence. Thoreau likewise disapproved of wealth, church, rules, voting, dinner parties, and young men not as smart as he who sought to join him on his walks. He would tell the latter that he “had no walks to throw away on company” (Emerson 1862, Stevenson 1880). The link between environmentalism and escapism is an enduring one, and Thoreau’s admiration of the wild as a place to turn one’s back on the town can be heard in the words of David Brower, Bill McKibben, and other nature writers of our day.

Thoreau’s declaration that “in wilderness is the preservation of the world” is one of the most quoted in modern environmental writing. Time and again it is cited in an utterly anachronistic fashion, however, wrenched from the clearly spiritual context of the passage in which it appears. When Thoreau was talking about “the preservation of the world,” he did not mean the physical or ecological world at all, but rather the spiritual world of man. Those who cite this passage to lend authority to modern calls for preserving tropical biodiversity are misunderstanding what Thoreau was saying.

Thoreau’s spiritual aversion to society readily explains some of the appeal that the woods held for him. But nature’s stock was rising at this time for other fundamentally spiritual reasons, too. Many of the early American nature worshippers, including Thoreau’s fellow townsmen in Concord, Ralph Waldo Emerson and Asa Bronson Alcott, were deeply involved in many reform-minded causes—temperance, abolition of slavery, dietary reform, alternative medicine—that were seen by their adherents quite explicitly as a moral and spiritual rejection of artificial evils and a return to the uncorrupted purity of nature. Just as “natural law” had shown Americans the falseness of monarchy, slavery, and other political systems that denied men their God-given rights, so natural foods and natural healing would show the falseness of alcohol and artificial medicines that denied men their God-given health. Rather than try to rise above nature and the “brute” or “animal” instincts, as Christianity had so long seemed to urge, the message of these “Christian physiologists” was that man must give up the sinful luxuries and excesses of civilization and return to nature (Albanese 1990:130–42; Furnas 1969:441–42).

The point is not to suggest that nature
lovers were cranks (though some certainly were). But it is crucial to recognize that the impulse that gave rise to such feelings for nature was fundamentally spiritual, not ecological. To these pioneering nature enthusiasts nature was but a means to an end. The spiritual ends they saw in nature were the justification for paying attention to nature at all. They were spiritual pilgrims first, birdwatchers second. And this attitude further drove home the conviction that nature—defined explicitly for this purpose as the world uncorrupted by man’s artificial evils—embodied God’s perfection. Thoreau was surely tongue-in-cheek when he and a few fellow drop-outs from Concord society formed the “Walden Pond Society” as an alternative church for Sunday morning meetings and proposed plucking and eating wild huckleberries as a substitute for the more conventional sacrament of communion. But there was no hint of irony in Emerson’s transcendental conviction that nature was the literal dwelling place of God: “The aspect of nature is devout. Like the figure of Jesus, she stands with bended head, and hands folded upon the breast. The happiest man is he who learns from nature the lesson of worship.” Emerson believed that nature was both a source of moral instruction and discipline, and the holy of holies where man would become “part or particle of God” himself (Emerson and Thoreau 1991:53,63–64; Alcott 1872:42).

Such feelings toward nature are real and earnest and genuine. Thoreau and Emerson and later, John Muir, struck a deep chord that resonates yet. Those who fight for more wilderness areas these days will speak of experiencing a sense of connection with something greater than themselves, something “primeval, threatening, and free of jarring reminders of civilization” (Mardon 1993).

Satisfying human needs, including a need for spiritual solitude, is a valid end. But what is good for the soul is not always what is good for nature. Some ecological goals are consistent with a goal of wilderness-as-solitude, but many are not. Setting a goal of providing the experience of solitude tells us nothing about what measures might be required to manage an ecosystem effectively to preserve endangered species, to reestablish disturbance processes that have been lost or suppressed by the advance of civilization, to restore vanished ecosystems such as the midwest oak savannas, to counter the effect of exotics, or to keep ungulate populations within the range of historical variation that had obtained since the end of the Ice Age—under the influence of heavy human predation—until the genocide of the Indians and preservationist policies allowed their numbers to explode.

Of course there has long been a wide spectrum of thought within the conservation and environmental movements, and paralleling the nature religion of Thoreau and Muir there early on arose a scientific and practical strand of thought represented by Theodore Roosevelt, Gifford Pinchot, and Aldo Leopold to name but a few. Many environmentalists and conservation biologists insist that environmentalism today has moved beyond romantic sentiment and simplistic formulations about the “balance of nature”; they insist that romanticism plays little part in modern, scientifically based advocacy for wilderness (Waller 1996). Unfortunately, one does not have to search very hard to find simplistic, romantic notions aplenty in contemporary debates over wilderness. Fundraising literature from mainstream environmental groups regularly invokes the theme that human intrusion is
wrong and unnecessary, that wilderness is a sacred concept, that excluding “jarring reminders of civilization” is indeed what it is all about. The “balance of nature” idea and simplistic, deterministic notions of succession and climax may be a dead letter among scientists, but it is very much alive among influential nature writers of our day. The environmental historian Donald Worster, for example, claims not only that nature literally has a set order and purpose that mankind has a moral duty not to interfere with; he goes on to make the purely political argument that scientists who point out the simplistic myths embodied in the notion of wilderness or the inherent balance of nature should not do so because they are thereby abetting “members of the Farm Bureau” and other such “fierce private property and marketplace advocates” who lack a proper “ethic of environmental restraint and responsibility” (Worster 1997). Worster elsewhere insists that ecologists must, on moral grounds, adhere to concepts such as climax and succession (which he sees as under siege by modern “permissive”—his word—concepts such as disturbance and patch dynamics) because to abandon “climax ecology” “would be to remove ecology as a scientific check on man’s aggrandizing growth” (Worster 1993; Worster 1977: ix-x, 240–42). The environmental writer Bill McKibben writes that man’s intrusion in nature destroys its very meaning, which is its “independence” (McKibben 1989:70,73,104). Others have criticized even ecological restoration on similar grounds, arguing that the value of nature rests solely and completely in its freedom from “the domination of human technological practice” (Katz 1992).

Such thinking has had very real effects on contemporary public debate and public policy. Land managers who have attempted to institute prescribed burns, carry out salvage logging to reduce fuel buildup, or, most controversially, cull ungulates can testify that nature romanticism is a force that is alive and well, with a vengeance. Even in large parks, forests, and wilderness areas, explosions of ungulate populations have wreaked havoc on rare songbird species, on endangered plant populations, and on forest regeneration, yet attempts to limit their numbers have been repeatedly met by opposition from environmental groups decrying any “intrusion” into nature—and such views increasingly prevail (McLaughlin 1993, Maryland Cooperative Extension Service 1994).

But even a number of prominent scientists who advocate expanded wilderness areas on purportedly scientific grounds frequently invoke romantic arguments to justify their position. The so-called “Wildlands Project,” an audacious proposal to convert as much as half the land area of large regions of the United States into protected wilderness, is based on a scientific analysis of land areas required to sustain minimum viable populations; yet these analyses contain huge uncertainties, and Michael Soulé, a biologist and project founder, has been quoted as defending the project’s basis and aims in explicitly spiritual terms—as providing people with the experience of “wildness,” “bigness,” and “fierceness” (Mann and Plummer 1993).

Likewise, Edward O. Wilson argues that biodiversity needs to be protected because it is critical for the human soul—that mankind supposedly has an instinctive need to bond with the rest of creation (Wilson 1991:350; Kellert and Wilson 1993). Indeed, a number of writers have recently argued quite explicitly that spiritual feelings of peace and solitude in undeveloped wilderness are the prime case for protecting biodiversity; indeed, that such spiritual feelings are one and the same with the scientific case for preserv-
ing biodiversity. Stephen Kellert, for example, equates his feelings of solitude and escape from civilization during a walk in the woods with a feeling of “intimate affiliation with living diversity.” (Kellert, 1996). Part of why this is so unconvincing is that the feelings these writers describe in such rich Thoreauvian prose have everything to do with the romantic yearning for solitude and essentially nothing to do with any actual feelings that people might be able to summon up for the insects, bacteria, fungi, parasites, and other interesting life forms that make up the overwhelming bulk of “living diversity.”

There are many valid and important ecological goals which require management practices that simply will not sit well with those who nurture the romantic yearning for “unspoiled” wilderness. Some of these management practices are ugly and intrusive and violent. Some of the important scientific goals of ecological management are simply not going to evoke feelings of reverence and “intimate affiliation” with nature. I personally believe that protecting even very ugly endangered species is an important goal, and would hate to have to rely on romantic or religious impulses to support it. As some astute critics have pointed out, there is a very grave danger of confusing goals here. Cloaking what is fundamentally a political, sentimental, or religious position in modern scientific trappings is ultimately corrupting to science (Cronon 1995).

A more pressing problem is that a goal of “protecting biodiversity” or creating “wildlands” tells us no more about how to set realistic ecological priorities than does a goal of providing people with opportunities to experience solitude. Wilson’s “theory of island biogeography,” a simple formula relating species diversity to land area, has been strongly criticized both for its biological fidelity and mathematical naïveté (Connor and McCoy 1979, Heywood and Stuart 1992, Budiansky 1994) and for diverting attention from the studies that are actually needed to help identify biodiversity hotspots and to set priorities. A significant point is that areas that people value for their “wilderness” often do not correspond well with biodiversity hotspots. Nor has a clear scientific case been made that vast contiguous “wilderness” areas are always required for preserving biodiversity effectively (Mann and Plummer 1995). Daniel Simberloff, a former student of Wilson’s who has conducted extensive research on this subject, has written: “It is sad that the unwarranted focus on island biogeography has detracted from the main task of refuge planners, determining what habitats are important and how to maintain them.” (Simberloff 1992). Indeed, the only specific recommendation that Wilson derives from his species-area analyses is a proposal to halt “all” further development of land in the world (Ehrlich and Wilson 1991).

This seems unlikely to happen. In the United States, which can afford to set aside far more land than arguably any country in the world, about 5 percent of land is in parks and wilderness areas; about 70 percent is in pasture, cropland, and producing forests (Waggoner, Ausubel, and Wernick 1996). Even under the most optimistic population control scenarios, world population is likely to reach about 10 billion sometime in the next century before leveling off (Bongaarts 1994). It seems clear that achieving the ecological ends that are widely shared today—such as preserving endangered species—will require active management of many land area that do not fit the definition of “wilderness.”

Far from being compatible with the scientific demands of ecological management,
the tenaciously lingering romanticism toward nature is often at odds with what is needed. True, if we could set aside half the United States as “wildlands,” size alone could accomplish a lot—it could allow for the establishment of large metapopulations, capture natural disturbance processes on a broader scale, and provide needed habitat for certain endangered species such as grizzly bears and wolves that need large individual ranges. But even then there would be problems that would demand active human intervention if our ecological goals are to be met. Disturbance processes upon which many species depend have been curtailed, if not within parks or wilderness areas, then in surrounding areas. Exotic species have intruded. Animals’ migration routes have been cut. And the part played by humans for ecologically significant timespans would still be eliminated from such “wild lands.” To have a “functioning ecosystem,” we would have to make it happen. Intrusion is ecologically sound policy; “wilderness” is not.

Yet the resilience of an artificial view of wilderness, with its deep historical roots, may well explain why “hands-on” management of ecosystems, even for the purest and noblest of environmental ends, so often meets harsh resistance from those who equate any intrusion of man with sacrilege against the credo of nature’s perfection, its unity, and its symbolic value as a critique of the shortcomings of human society.

**Literature Cited**


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