Aldo Leopold and Midwestern Pastoralism

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Ecologist Aldo Leopold (1877-1948) is best remembered as the author of A Sand County Almanac (1949), a classic of American nature writing primarily noted for the thesis of its capstone essay, "The Land Ethic": that society needs to expand its ethical boundaries to include "man’s relation to land and to the animals and plants which grow upon it."1 Leopold’s "land ethic" and the book which expresses it have profoundly influenced the modern environmental movement and new fields of study such as environmental history, environmental ethics, restoration ecology, and bioregionalism. As recent ecocritics have demonstrated, Leopold derived from and contributed to long standing traditions in Romantic literature, moral philosophy, and biological science. He is most often considered in the context of nature writing, a literary genre which tends to pose aesthetic, moral, and ecological alternatives to the economic, pragmatic, and human centered view of nature dominant in American society at large. But Leopold’s ecophilsophy and literary manner also had a decidedly regional dimension. He was by birth, outlook, and ultimate residence of the American Midwest, as influenced by his region’s landscape, culture, and history as Emerson and Thoreau were by their native New England. In attempting to mediate the perennial American conflict between holistic and materialistic attitudes toward nature, Leopold drew upon his Midwestern experience as well as the unique version of pastoral idealism evident in the region’s history and literature.2

Although urbanization and industrialization continue to claim much of the region’s landscape, the Midwest retains its perceptual identity as the national heartland of farms and small towns, "the ‘middle’ ground," according to James
R. Shortridge, “both figuratively and literally between the urbanized East and the western wilderness...”

This pastoral idealism is rooted in the region’s early history. Beginning with the upper Ohio Valley and proceeding to the Great Lakes and the Great Plains, the Midwest developed during the nineteenth century according to the vision of Thomas Jefferson, who favored an agrarian empire of independent land owners to counteract the rising power of Eastern industrialism. By means of federal ordinances, Jefferson sought to provide, as he wrote in 1785, “that as few as possible shall be without a little portion of land [because] small landholders are the most precious part of a state.”

To that end Jefferson promoted the Land Ordinance of 1785, which established a Cartesian survey system—a non-varying grid from which rectangular sections could be parceled and sold—and the Northwest Ordinance of 1787, which institutionalized Jeffersonian values of representative democracy, free labor, and public education. These measures were designed to empower Jefferson’s ideal citizen, the archetypal yeoman characterized by Henry Nash Smith as “the heroic figure of the idealized frontier farmer armed with that supreme agrarian weapon, the sacred plow.”

According to Jeffersonian (and thereby Midwestern) pastoral idealism, the yeoman farmer provided the basis for a truly democratic society because “the ownership of land, by making the farmer independent, gives him social status and dignity, while constant contact with nature in the course of his labors makes him virtuous and happy...”

The agrarian economy of the nineteenth century Midwest favored this idealization of rural virtue, and as Smith demonstrates, the yeoman farmer became a central symbol in American political discourse.

Despite its emphasis on the virtue of a life lived close to nature, Midwestern pastoral idealism did not necessarily imply an ecological consciousness. In Main Street on the Middle Border (1954), Lewis Atherton describes a Midwestern “cult of the immediately useful and the practical,” a utilitarianism that originated with the exigencies of frontier survival and matured in the market oriented society of small towns. This essentially middle class world view manifested itself in the emphasis on material arts and agriculture (what Jefferson termed “useful knowledge”) in state universities and a proprietary view of nature. Since land was plentiful and cheap, and natural resources—soil, water, timber—seemingly limitless, the wholesale destruction of forest and prairie ecosystems that occurred in the nineteenth and early twentieth centuries was probably inevitable. Nature was a commodity, and the function of democracy was to enable the human community to exploit the land for material gain. To Alexis de Tocqueville, who travelled from New York to Michigan in 1831, Americans seemed “insensible to the wonders of inanimate Nature”:

and they may be said not to perceive the mighty forests which surround them till they fall beneath the hatchet. Their eyes are fixed upon another sight: the American people views its own march across these wilds—drying swamps, turning the course of rivers, peopling solitudes, and subduing Nature.
Tocqueville neatly contrasts the two versions of pastoralism operating in America—one a Romantic search for a spiritual as well as a practical relation with nature, the other a conquering mindset, the “march across these wilds” also known as Manifest Destiny. Arguing for the accuracy of Tocqueville’s analysis of pioneer utilitarianism, Roderick Nash observes that it was the “children and grandchildren [of the pioneers], removed from a wilderness condition, who began to sense its ethical and aesthetic values.” Among these “children of the pioneers” were Midwestern poets and novelists of the region’s early twentieth-century literary renaissance. Authors such as Edgar Lee Masters, Sinclair Lewis, and Willa Cather were harshly critical of Midwestern society as it developed out of the agrarian age into the modern industrial order; their dismay at provincial and materialistic attitudes extended to the widespread lack of appreciation for native landscapes. Lewis’s best selling *Main Street* (1920), for example, famously satirized the conformity, priggishness, and materialism dominant in a small Midwestern town, the citizens of which Lewis also charges with “neglect of natural advantages, so that the hills are covered with brush, the lakes shut off by railroads, and the creeks lined with dumping grounds.” Cather, whose Nebraska novels depict immigrant pioneers transforming prairie homesteads into productive farms through a combination of Jeffersonian land stewardship and Romantic love for nature, has the villain of *A Lost Lady* (1923) drain a beautiful wetland simply out of spite, to obliterate “a few acres of something he hated, though he could not name it...the great brooding spirit of freedom...the space, the colour, the princely carelessness of the pioneer.”

This was the America and the Midwest that Aldo Leopold knew in his youth, a nation still conquering the territory it would develop. The man who would become a major figure in twentieth-century conservation was born and raised in Burlington, Iowa, on the Mississippi River. Like Mark Twain before him, many of Leopold’s first significant experiences of nature occurred near the greatest American river, the heartland stream memorialized by T.S. Eliot as “a strong brown god.” Enough wild country yet endured in the region for Leopold to know something of the pioneer experience: tramping through fields and woods, hunting or just observing wildlife. In this era before game laws, unregulated hunting for the commercial market was bringing wild bird populations to the verge of extinction, or beyond. In slaughtering the passenger pigeon and other species, the market hunter, as Leopold’s biographer Curt Meine writes, played the role “in the wildlife drama that the lumber baron played in the northwoods and the sodbuster on the plains: the reaper of the primeval crop.” Leopold had a role model for a more beneficent pastoralism in his father Carl, a prominent Burlington businessman who instructed his sons in outdoorsmanship on hunting trips to the Illinois side of the river. Carl Leopold had, as Meine recounts, “a well-developed personal code of sportsmanship” that included a personal bag limit and required a certain shot or none at all. He taught his sons to appreciate the beauty of wild places and to exercise forbearance when hunting. In admonishing Aldo to shoot
partridges in flight and never from trees (thereby reducing the likelihood of success by making the shot more difficult), Carl Leopold inculcated a basic conservationism in his son; Leopold would one day write that “to forego a sure shot in the tree in favor of a hopeless one at the fleeing bird was my first exercise in ethical codes.” In his essay “Red Legs Kicking,” Leopold remembers the shooting of his first partridge not as an exploit to boast about, but as a moment when he intensely appreciated the integrity and beauty of a wild place. “I could draw a map today,” Leopold writes, “of each clump of red bunchberry and each blue aster that adorned the mossy spot where he lay, my first partridge on the wing. I suspect my present affection for bunchberries and asters dates from that moment.”

Though Leopold favors such understatement where other writers would tend to employ a mystical tone, the partridge passage betrays his Romantic view of nature as a source of spiritual insight to which children are particularly receptive. Speaking of a child’s first experiences of nature and significant place, Paul Shepard argues that “territory and the sacred places within it orient the individual to topography, position him in the land and in the cosmos, an environmental gestalt of figure and ground.” A sudden realization of oneness with landscape—the Romantic epiphany of place—is an important motif in modern literature of nature. Ralph Waldo Emerson’s transcendentalist manifesto “Nature” (1836) provided the American prototype of this experience, famously described by the philosopher as a sublime “return to reason and faith” in the woods, where “all mean egotism vanishes” and one becomes “a transparent eyeball . . . part or particle of God.” In Midwestern literature, the sublime moment is perhaps most memorably evoked by Cather in *My Ántonia* (1918), when the narrator recalls himself as a child, sitting in his grandmother’s garden:

> I was something that lay under the sun and felt it . . . and I did not want to be anything more. I was entirely happy. Perhaps we feel like that when we die and become a part of something entire, whether it is sun and air, or goodness and knowledge. At any rate, that is happiness; to be dissolved into something complete and great.

It is during childhood that we acquire “topophilia,” as geographer Yi-Fu Tuan terms “the affective bond between people and place or setting.” All subsequent understanding of nature, be it scientific, historical, or literary, derives from this early emotional union with one’s environment, familiar to readers of Romantic literature such as Leopold, who alludes to Emerson on the first page of *A Sand County Almanac.*

But as Leopold observed, “One of the penalties of an ecological education is that one lives alone in a world of wounds.” While he was at college, “progress” consumed his sacred place, that little remnant of wilderness in the
agrarian Midwest, prompting Leopold’s “first doubt about man in the role of conqueror”—the role Tocqueville had described as typical of utilitarian Americans: “I came home one Christmas to find that land promoters, with the help of the Corps of Engineers, had dyked and drained my boyhood hunting grounds on the Mississippi River bottoms,” he wrote. “The job was so complete that I could not even trace the outlines of my beloved lakes and sloughs under their new blanket of cornstalks.” The conversion of this marsh to cropland was for Leopold a formative experience; his shock and “sense of loss” were such that he did not write about his former hunting grounds until late in his life: “my old lake had been under corn for forty years before I wrote “Red Legs Kicking.”

Aldo Leopold turned his sorrow to commitment, continuing his ecological education so as to help heal this “world of wounds” as a “doctor who sees the marks of death in a community that believes itself well and does not want to be told otherwise.” His special contribution to Midwestern pastoral literature, and to American nature writing as a whole, would be the conjoining of modern ecological science with the Romantic spirit of place.

As was the experience of the young Ernest Hemingway of Oak Park, Illinois, Leopold’s well-to-do family travelled by boat and rail each summer to a resort community in northern Michigan; Leopold’s first encounters with near-wilderness occurred at Marquette Island in the Les Cheneaux group in northern Lake Huron. Like Hemingway at Walloon Lake, Leopold was more interested in fishing, boating, and hunting than in social diversions available among the “summer people.” He explored Marquette Island intensely, drawing detailed maps of the well-forested terrain and continuing his special interest in ornithology. According to Meine, Leopold’s father maintained strict conservation rules while on vacation, seeing to it that “Aldo never kept a bass under a pound-and-a-half, nor a pike under three pounds.” Northern Michigan was, as Meine describes it, “a land rich in the raw material of adventure, and wild enough to inspire the imagination.” Though Leopold never fulfilled his dream of canoeing northward into wild Ontario toward Hudson Bay, his early encounters with the woods and waters of Les Cheneaux and the Michigan mainland instilled in him a love for nature in untrammeled expanses, and an ardent desire to see it preserved.

Leopold earned bachelor’s and master’s degrees in forestry at Yale, whose program had been founded by conservationist Gifford Pinchot in 1900. For Pinchot, the first U.S. Forest Service chief (under President Theodore Roosevelt), “the first principle of conservation [was] development, the use of the natural resources now existing on this continent for the benefit of the people who live here now.” Though Leopold did not at first significantly deviate from this reductively economic view of nature (it was many years, for example, before he decided that predatory animals deserve protection), he was from the beginning of his career interested in expanding the application of conservation principles beyond the Forest Service mandate for timber management. In his fifteen years as a forester
in Arizona and New Mexico, Leopold focused on issues relating to game protection, including the need for hunting laws and habitat preservation. His leadership among conservationists in the Southwest included playing a critical role in the establishment of the Gila Wilderness Area, the first tract to be so designated. Leopold learned during his Forest Service years to build community consensus for conservation measures. He wrote articles in popular and professional journals, and established rapport with ranchers and hunters as well as scientists and government officials. His final position with the Forest Service as Associate Director of the Forest Products Laboratory in Madison, Wisconsin removed Leopold from field work for four years. But he had returned to the Midwest, his home and the regional focus of his work during the last twenty-four years of his life.

Leopold’s first major project after leaving the Forest Service was a game survey of eight Midwestern states, sponsored by the Sporting Arms and Ammunition Manufacturers’ Institute. Between 1928 and 1931, Leopold gathered data relating to hunting laws and practices, habitat, and animal populations in Wisconsin, Minnesota, Iowa, Missouri, Illinois, Indiana, Ohio, and Michigan; this information went into his *Report on a Game Survey of the North Central States* (1931). “Affection born of nativity,” Leopold writes in the Report, “is probably in part responsible for my conviction that no region in the world was originally more richly endowed with game than [the Midwest]….” But decades of intensive commercial farming had decimated game populations by destroying their habitat, necessitating a new understanding between government, land owners, and the public. Laws, certainly, were needed to regulate hunting and other uses of land, but the success of game management rested with private landowners, particularly farmers. Leopold wrote his second book with that insight in mind; *Game Management* (1933) provided landowners, professionals, and bureaucrats alike with sound techniques for correcting the adverse conditions he had observed during the Midwestern survey. These two publications became essential to conservation research and public policy at mid-century, earning Leopold the title of “father of game management.”

Leopold’s appointment in 1933 as Professor in a new Department of Game Management at the University of Wisconsin provided him with a base to conduct further research and disseminate his philosophy. While maintaining his prominent role in the national conservation movement (he was a founding member of the Wilderness Society in 1935), Leopold applied himself most vigorously to conservation at the local level. He instructed young farmers as well as graduate students in game management theory and technique; he gave radio talks on conservation, addressing his commentary to the Wisconsin agricultural community; he helped establish a University Arboretum at Madison for educational, recreational, and research purposes; he served on the new Wisconsin State Conservation Department’s game and fisheries committees; he initiated cooperative ventures between farmers and sportsmen to improve habitat. Finally, and most significantly for Leopold’s enduring influence, he bought eighty acres of
land on the Wisconsin River in the sand country of central Wisconsin, a place where he and his family—wife Estella and five children—would enjoy close contact with wild nature and put game management theory to work in the field. Through each of these endeavors Leopold sought to reconcile democratic individualism with the lessons of ecology, to take Midwestern pastoralism beyond utilitarian considerations of “the immediately useful and practical” to encompass the long term health of the land. Leopold was, as Meine describes him, “an Anglo-Saxon midwesterner, nonpolitical, nondoctrinaire,” and more: he was an ecological Jeffersonian.28

The sand country of Wisconsin lies at the convergence of three biotic provinces: prairie, deciduous hardwoods, and northern coniferous forest. Though rich in biological diversity, the region was and is poor for intensive farming. Interestingly, two other major figures in American environmental thought spent significant portions of their lives in the area; frontier historian Frederick Jackson Turner and preservationist John Muir spent their boyhoods not far from the abandoned farm Leopold bought in 1935.29 Turner, who was briefly Leopold’s neighbor and acquaintance in Madison, grew up in Portage and studied at the University of Wisconsin; his famous “frontier thesis” originated with research into land-tenure patterns around his home town. Muir, who is most famous for his writings about the Sierra Nevada of California and his fight for wilderness protection in the West, came to the sand country with his family from Scotland in 1849. Muir experienced the Midwestern wilderness first hand, helping to turn a rugged forest into productive farm land. Whereas Turner celebrated the pioneer period for its supposed democratizing effect, Muir loved the Wisconsin landscape for its own sake, writing his memoir *The Story of My Boyhood and Youth* (1912) as a transcendentalist celebration of the wild nature he believed to be literally sacred, revelatory of God’s splendor. The sand country, as Muir’s account implies, was never cut out to be farmed. Overproduction of wheat, excessive grazing, clear-cut lumbering, and marsh drainage caused erosion, peat fires, and the creation of inland sand dunes. As environmental historian Susan Flader relates, the land Aldo Leopold bought in 1935 was hardly a mid-American Arcadia:

. . . less than half the land in any of the sand counties was in farms, and of that very little was actively cultivated. The rest was considered wasteland—weeds, brush, runty jack pine, scrub oak, and raw peat sprouting dense thickets of seemingly worthless aspen. Much of the land had reverted to the counties for nonpayment of real estate and drainage taxes. There it reposed, for few would think of buying it.30

Leopold, in fact, selected his farm “for its lack of goodness and its lack of highway; indeed my whole neighborhood lies in a backwash of the River
Progress.” Seeing the place as a living laboratory for applied ecology, Leopold set to healing the wounds inflicted on the land by a long history of abuse. In the terminology of contemporary bioregionalism, he “reinhabited” the country of Turner and Muir, finding that country “may be rich despite a conspicuous poverty of physical endowment, and its quality may not be apparent at first glance, nor at all times.”

For the rest of his life Leopold spent every weekend and moment he could spare at the farm, staying in the converted chicken coop affectionately known as the “Shack.” He and his family planted native trees and other vegetation, provided cover for wildlife, and kept a detailed record of their work and observations. By this time, Leopold was a convert from utilitarian, Pinchot-style conservation; he now embraced a holistic, ecological view of land management that considered the welfare not only of game animals, but of all creatures, including predators, within the context of the entire “land community.” He was still an avid hunter, but the chase had become just one of many possible outdoor activities. His motivation in owning and improving the land would transcend
diversion, research, or environmental restoration—the larger purpose was ultimately educational. Leopold meant to present his Sand Country experience as a model for others to follow, and to that end he wrote narratives about life at the shack for publications such as *Wisconsin Agriculturalist* and *Farmer* and *Aububon*. By 1941, Leopold was envisioning a book of collected essays balancing narrative description of what *is* in nature and current land use with ecological exhortation—a prescription of what *ought* to be the norm in human-nature relations. Until his death in 1948 (caused by a heart attack suffered while fighting a brush fire at the Shack), Leopold worked on the manuscript that his family and friends would edit and posthumously publish as *A Sand County Almanac*.

*A Sand County Almanac* is arranged into three parts. Part I, the “Almanac” itself, reflects the influence of Thoreau’s *Walden* in representing the passage of a full year’s cycle, January to December, at Leopold’s “week-end refuge from too much modernity: ‘the shack.’” Part II is concerned with “The Quality of Landscape” not only in the Midwest, but also across North America, as Leopold recounts episodes in his life that taught him vital lessons in conservation. Part III is titled “The Upshot” for its directly philosophical arguments concerning a “Conservation Esthetic,” “Wilderness,” and most importantly, “The Land Ethic.” This arrangement works to acquaint us with a man through his life and works before explicitly seeking to convert us to his way of thinking. By moving from the local to the universal, from natural history through autobiography to ecological theory, the structure of Leopold’s book creates, as John Tallmadge comments, “a climate of belief that will make us receptive to Leopold’s doctrine of land citizenship.” If Leopold changes his reader’s outlook, he has done so by first providing entertainment and instruction regarding ecological issues as they affect particular places and people. Like all good nature writing, *A Sand County Almanac* succeeds as both polemic and poetry, as science and literary pastoral.

Leopold’s philosophy centers on the concept of a “land community,” elaborated upon in “The Land Ethic.” There Leopold argues that Western culture has gradually expanded its definition of “community” by extending its range of ethical consideration. Having evolved from tribal obligations to a general humanitarianism, society needs to include nature itself in its ethical constructs. “The land ethic,” Leopold writes, “simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land.” It “changes the role of *Homo sapiens* from conqueror of the land-community to plain member and citizen of it.” Leopold’s use of the term “community” is consistent with early twentieth-century science, particularly as formulated by his friend, British ecologist Charles Elton, whose seminal *Animal Ecology* (1927) described nature’s “food chains,” in which organisms occupy “niches” in a “community,” much like humans in a socioeconomic order. (In avoidance of anthropomorphism, most scientists now prefer the term “ecosystem” to convey the concept of biological interdependence.) Leopold favored the cultural connotations of “community,” a word sacred to Romantics like Thoreau (who often
spoke of his place in a "society" of nature) and to American democrats since Jefferson. Thus from ecological and ethical values Leopold proceeds to aesthetics, employing a pastoral metaphor in asserting that "land yields a cultural harvest."36 This harvest includes works of art and literature such as *A Sand County Almanac* that celebrate and defend "the integrity, stability, and beauty of the biotic community."37

Leopold writes in a relaxed and conversational style, using "simple rhetorical figures" and "turns of phrase" to achieve what John Tallmadge calls the "memorable succinctness" of his prose.38 Figurative language is especially important in *A Sand County Almanac*, including the recurring metaphor of landscape as language and literature, as a book from which nature-literate people can read lessons in ecology, ethics, and aesthetics.39 "Every farm woodland," Leopold declares, "in addition to yielding lumber, fuel, and posts, should provide its owner a liberal education."40 Thus, "every farm is a textbook on animal ecology," and "he who owns a veteran bur oak owns more than a tree. He owns a historical library. . . ."41 This is the premise of "Good Oak," the essay for February in which Leopold tells of sawing down an old oak tree that had been killed by lightning. Leopold introduces an environmental history of Wisconsin by imagining his saw "biting its way, stroke by stroke, decade by decade, into the chronology of a lifetime, written in concentric annual rings of good oak." After "a dozen pulls of the saw to transect the few years of our ownership, during which we have learned to love and cherish this farm," Leopold cuts into "the reign of the bootlegger" who wasted the soil and burned the farmhouse; he then continues to saw progressively back into history.42 Some of the stories he reads in the wood grain are encouraging, such as John Muir's attempt to establish a wildflower sanctuary just thirty miles from Leopold's farm; according to Leopold, 1865, the year of Muir's effort, "still stands in Wisconsin history as the birthyear of mercy for things natural, wild, and free."43 Most of the history, however, is a continuum of environmental neglect and abuse, a chronology of years such as 1899, when "the last passenger pigeon collided with a charge of shot near Babcock, two counties to the north. . . ."44 Leopold concludes the essay by comparing the saw with the wedge and the axe as tools for splitting wood and as "an allegory for historians."45 The metaphor is also likely to appeal to people, such as farmers, who may be better convinced of an ecological argument if it is phrased in colloquial, commonsensical language. By speaking the vernacular of rural Wisconsin, Leopold creates for himself a persona, described by James I. McClintock as "a twentieth century variant of the mythic American yeoman farmer, the traditional repository of Jeffersonian virtue and homespun wisdom."46

Comments made by environmental historian Donald Worster touch on the colloquialism of Leopold's metaphorical language. Worster describes Leopold's interchanging use of the terms "mechanism" and "organism" to represent land ecology as a "vacillation between root metaphors . . . consistently identified with fundamentally antithetical world views."47 Worster's point is well taken; in "The
Land Ethic,” references to the “community clock” and the “biotic mechanism” supplant the organicism dominant in the book’s previous sections. Yet in concluding that Leopold’s land ethic is “in many ways . . . merely a more enlightened, long-range prudence: a surer means to an infinite expansion of material wealth,” Worster overstates his case, as in his claim that by Leopold’s use of “agronomic terms . . . the entire earth became a crop to be harvested, though not one wholly planted or cultivated by man.”

Leopold applied the word “harvest” to the cultural, rather than economic, rewards of prudent land management; he strenuously objected to those in his own field, forestry, who are “quite content to grow trees like cabbages, with cellulose as the basic forest commodity.” Such specialists feel “no inhibition against violence; [their] ideology is agronomic.”

Leopold’s ideology is pastoral, not agronomic, as Worster has it; his land ethic is practical rather than materialistic. A major cause of environmental distress in the Midwest (including erosion, water pollution, and habitat loss) was and is the kind of agriculture Leopold called “clean farming . . . a food chain aimed solely at economic profit and purged of all non-conforming links,” including native flora and fauna. Leopold abjured this “Pax Germanica of the agricultural world,” a bleak monoculture that he would replace with a simultaneously ecological and democratic diversity: “a food chain aimed to harmonize the wild and the tame in the joint interest of stability, productivity, and beauty.”

Far from advocacy of economic hegemony over nature, Leopold’s stated purpose was to encourage a “healthy contempt for a plethora of material blessings.” Rejecting Pinchot-style resource management as a “[hopelessly lopsided] system of conservation based solely on economic self-interest,” Leopold sought a balance between human needs and imperatives of ecology and aesthetics. But to initiate such a profound social change Leopold first needed to fit his style to his intended audience, the people whom he wished to convert from a utilitarian to an ecological perspective on land. Herein lies the subversive nature of Leopold’s ethic and rhetoric: he communicated a deeply radical proposition—that nature should have ethical standing in an expanded community—by coopting the archetypes and vernacular of his native region. Leopold’s idiomatic language and his personas as yeoman farmer, “intelligent tinkerer,” doctor to the land organism, or landlord to plant and animal tenants, gain a reader’s trust through their comfortable familiarity. That A Sand County Almanac is revered by state game officers, farmers, and high school biology teachers as well as conservation professionals in government and academia is testimony to Leopold’s success in articulating values that must operate locally if wider social objectives are to be achieved.

Leopold accepted that the Midwestern countryside, the most productive farm land in the world, would be cultivated and intensely managed. He desired, however, a stewardship that would work with rather than against ecology, that would allow for enclaves of wild nature. He observed that many such places had survived to remind observers of formerly intact ecosystems. Driving through
Illinois, for example, he saw that in "the narrow thread of sod between the shaved banks and the toppling fences grow the relics of . . . the prairie." As have many Midwestern writers (such as Willa Cather, Theodore Roethke, and James Wright), Leopold noticed that Midwestern graveyards often harbor native species of plants that have been extirpated elsewhere. "Every July," Leopold writes in "Prairie Birthday," I watch eagerly a certain country graveyard that I pass in driving to and from my farm":

It is extraordinary only in being triangular instead of square, and in harboring, within the sharp angle of its fence, a pinpoint remnant of the native prairie on which the graveyard was established in the 1840's. Heretofore unreachable by scythe or mower, the yard-square relic of original Wisconsin gives birth, each July, to a man-high stalk of compass plant or cutleaf Silphium, spangled with saucer-sized yellow blooms resembling sunflowers. It is the sole remnant of this plant along this highway, and perhaps the sole remnant in the western half of
our county. What a thousand acres of Silphiums looked like when they tickled the bellies of the buffalo is a question never again to be answered, and perhaps not even asked.\textsuperscript{54}

The flowers, whose description as “man-high” emphasizes their citizenship in the land community, are beautiful to Leopold for their own sake and because they constitute an important page in the history book of nature, a page which informs us about the great herds of bison that once roamed freely across the plains. Because Silphium is a long-lived plant, the specimen in the cemetery may have been a hundred years old; it may have “watched the fugitive Black Hawk retreat from the Madison lakes to the Wisconsin River... Certainly it saw the successive funerals of the local pioneers as they retired, one by one, to their repose beneath the bluestem.”\textsuperscript{55} When Leopold returned in August to find that a road crew had removed the fence and cut the Silphium, he was angered and hurt by this desecration of a sacred place—a desecration more offensive for being part of a well-intended, though misguided system of land management. Leopold emphasizes the spiritual as well as ecological dimensions of the loss by considering the nominal steward of the graveyard’s consecrated ground: “If I were to tell a preacher of the adjoining church that the road crew has been burning history books in his cemetery, under the guise of mowing weeds, he would be amazed and uncomprehending. How could a weed be a book?”\textsuperscript{56}

The commodification and abuse of Midwestern landscape results, in part, from an inadequate sense of the beautiful in nature. In his essay on “The Land Aesthetic,” J. Baird Callicott describes how the “prevailing natural aesthetic... is not autonomous but derivative from art,” particularly from eighteenth century notions of the “picturesque,” perspectives on nature that suggest pictures or paintings. The way most people look at nature is conventionalized, not well informed by the ecological and evolutionary revolutions in natural history; and it is sensational and self-referential, not genuinely oriented to nature on nature’s terms. In a word, it is trivial.

We appreciate rugged forests and sublime mountain landscapes because our culture conditions us to value them; our national park system, for example, originated as a means to preserve such places—Yosemite, Yellowstone, and so forth. Few have loved the grand American wilderness as much as Aldo Leopold, or worked so diligently for its preservation. But Leopold saw that historical and ecological ignorance leads to the aesthetic undervaluation and subsequent abuse of less obviously “beautiful” places like the sand country of Wisconsin. To counteract this harmful tendency in American culture, Leopold proposed an evolutionary land aesthetic, parallel and complementary to his land ethic. Leopold’s aesthetic, as Callicott notes, strives to extend human perception of
nature beyond the visual to include the other four senses, and, most importantly, "the mind, the faculty of cognition."57 To this effect Leopold suggests that the "ability to perceive quality in nature begins, as in art with the pretty. It expands through successive stages of the beautiful to values as yet uncaptured by language."58 Valuing nature for the integrity of its ecological processes enables one to "see America as history, to conceive of destiny as a becoming, to smell a hickory tree through the still lapse of ages. . . ."59

Such an ability to see into nature is especially important in a region like the American Midwest, where landscapes are often apparently prosaic and lacking in Romantic sublimity.60 In his essay "Country," as in "Prairie Birthday," Leopold invokes the memory of the American bison in respect to prevailing perceptions of Midwestern landscapes:

The taste for country displays the same diversity in aesthetic competence among individuals as the taste for opera, or oils. There are those who are willing to be herded in droves through "scenic" places; who find mountains grand if they be proper mountains with waterfalls, cliffs, and lakes. To such the Kansas plains are tedious. They see the endless corn, but not the heave and the grunt of ox teams breaking the prairie. History, for them, grows on campuses. They look at the low horizon, but they cannot see it, as [Spanish explorer Cabeza] de Vaca did, under the bellies of the buffalo.

Leopold learned to see nature in this way, "under the bellies of the buffalo," through long study of his sand country farm, where he discovered that in "country, as in people, a plain exterior often conceals hidden riches, to perceive which requires much living in and with."61 Among the most lyrical passages of the "Almanac" are descriptions of particular places that Leopold came to know intimately, such as a "streambank where hillside briars adjoin dank beds of frozen ferns and jewelweeds on the boggy bottom," and a fork in a river, "narrow, deep, and fed by cold springs that gurgled out under its close-hemmed walls of alder."62 These typically Midwestern places offer hidden riches of subtle beauty to the sensitive and discerning observer. A deeper-than-visual curiosity is required to apprehend their significance; the observer needs to enter the picture, figuratively and literally: "There are woods that are plain to look at, but not to look into," Leopold wrote. "Nothing is plainer than a cornbelt woodlot; yet if it be August, a crushed pennyroyal, or an over-ripe mayapple, tells you here is a place."63 Pennyroyal and mayapple dwell in this woodlot as members of the land community; Leopold's recognition of them by name serves as his passport into their domain. He achieved full naturalization (to complete the metaphor) as a citizen of the place by protecting and propagating these and other native life forms.

Recognizing that most people in the Midwest and elsewhere in America lack such an informed sense of place, Leopold proposed environmental education as
the best means of counteracting the materialistic view of nature. Such education must transcend ordinary injunctions to “obey the law, vote right, join some organizations, and practice what conservation is profitable on your land”; it must build “an ethical underpinning for land economics and a universal curiosity to understand the land mechanism.”

Leopold admitted an important role for government in conservation, but he felt that too many people wrongly delegate their responsibility for nature to bureaus and agencies. In the Midwest, where relatively little land is in the public domain, commitment on the part of private landowners and amateur naturalists (Jefferson’s favored land stewards) is essential to successful “revolt against the tedium of the merely economic attitude toward land.” Among Leopold’s heroes in this revolt were farmers he knew who reintroduced native tamarack trees on their land, “an industrial chemist who [spent] his spare time reconstructing the history of the passenger pigeon,” and an Ohio woman whose study of the common sparrow was recognized by professional ornithologists as a major contribution to the field. Such commitment to nature, in Leopold’s view, needs to be included in science curriculum, which typically emphasizes laboratory work like dissection at the expense of field work that will teach students to see their “native countryside with appreciation and intelligence . . . .” Like Leopold’s students at the University of Wisconsin, a college student in a class so designed could expect an examination such as the following, presumably tailored to fit his or her own state of residence:

We are driving down a country road in northern Missouri. Here is a farmstead. Look at the trees in the yard and the soil in the field and tell us whether the original settler carved his farm out of prairie or woods. Did he eat prairie chicken or wild turkey for his Thanksgiving? What plants grew here originally which do not grow here now? Why did they disappear? What did the prairie plants have to do with creating the corn-yielding capacity of this soil? Why does this soil erode now but not then?

Leopold asks, in effect, that we “read the land” for lessons in human history and the intrinsic order and beauty, or “poetry,” of nature. This kind of learning will in Leopold’s view help us overcome “the most serious obstacle impeding the evolution of a land ethic . . . . that our educational and economic system is headed away from, rather than toward, an intense consciousness of land.”

Leopold harbored no illusions about the enormity of this task, which in the Midwest required no less than a reform of middle-class, middle-brow values—such as Sinclair Lewis of Minnesota embodied in a character named Babbitt, in the eponymous satirical novel to which Leopold frequently alludes. In valuing wealth and social prestige above all else, Babbitt represents one polarity in the Midwestern mind; the other is the Jeffersonian yeoman farmer, personified by Leopold as an ecologist, hunter, and weekend bird watcher. These two archetypes
represent the division between materialism and idealism in Midwestern pastoral ideology. Since Babbitt prioritizes wealth, Leopold would transform our conception of wealth to include the intrinsic value of nature. To this end he occasionally resorts to humorously economic language: “If you are thriftily inclined, you will find pines congenial company, for unlike the hand-to-mouth hardwoods, they never pay current bills out of current earnings; they live solely on their savings of the year before.” Since Babbitt values his good reputation almost as much as wealth, we must also redefine civic virtue to include responsibility to the entire land community; there must be “social stigma in the possession of a gullied farm, a wrecked forest, or a polluted stream.” As Leopold wrote in the concluding paragraph of *Game Management*:

... twenty centuries of “progress” have brought the average citizen a vote, a national anthem, a Ford, a bank account, and a high opinion of himself, but not the capacity to live in high density without befouling and denuding his environment, nor
a conviction that such capacity, rather than such density, is the true test of whether he is civilized.

Leopold’s argument for land stewardship has a special resonance in the American Midwest because of his long and profound association with the region. His land ethic and land aesthetic are evident in the work of subsequent Midwestern naturalists, both literary and scientific. Janet Kauffman (of Michigan) and Scott Russell Sanders (of Indiana) allude to Leopold in their own essays on place and landscape. Jim Harrison, also of Michigan, has written numerous essays, novels, and poems exhibiting his preference for “places valued by no one else,” such as can be found in the state’s Upper Peninsula (beloved also of Leopold and Hemingway), a region lacking “the drama and differentiation favored by the garden-variety nature buff.” Another voice from and for northern Michigan is Stephanie Mills, an eloquent advocate of bioregionalism and restoration ecology. A pilgrimage to Leopold’s Wisconsin farm strengthened Mills’ commitment to her own damaged Midwestern acreage; she writes that “as a result of those days spent in the regenerating landscape at the Leopold Memorial Reserve, my own surroundings are beginning to tell more of a story, and its ending is no longer a foregone, or paltry, conclusion.”

Wes Jackson, founder of the Land Institute near Salina, Kansas, is the best contemporary exemplar of Leopold’s Midwestern topophilia in the service of science. Jackson’s life work is to replace corn and wheat agriculture—which requires intensive plowing, irrigation, and application of petrochemicals—with the cultivation of native perennial grasses. The “domestic prairie” toward which Jackson and his fellow researchers have targeted their experiments in selective breeding would offer high crop yields without the erosion, pollution, and aquifer depletion characteristic of modern farming on the Great Plains. Jackson’s argument for ecological education and commitment to the local community is distinctly Leopoldian, as is his caution for ecocritics and enviromental activists, whose treatment, according to Jackson, “of wilderness as a holy shrine and Kansas or East Saint Louis as terrain of an altogether different sort is a form of schizophrenia”:

Either all the earth is holy or none is. Either every square foot of it deserves our respect or none does. . . . It is possible to love a small acreage in Kansas as much as John Muir loved the entire Sierra Nevada. This is fortunate, for the wilderness of the Sierra will disappear unless little pieces of nonwilderness become intensely loved by lots of people.

Leopold’s appeal to these naturalists is his special genius for finding common ground for apparently irreconcilable perspectives—materialism and idealism, science and spirituality, domestication and wildness. Between these dualities lies the mythic pastoral middlescape for which Midwestern writers have
long yearned. Leo Marx speaks of such writers as proponents of a complex (as opposed to a sentimental) pastoralism that not only invokes “the image of a green landscape . . . as a symbolic repository of meaning and value,” but “acknowledges the reality of history” and “the forces which have stripped the old ideal of most, if not all, of its meaning.”

Leo Leopold abided by the optimistic, if pragmatic, pastoralism of Thomas Jefferson, whose “dialectical” politics, according to Marx, recognize “the constant need to redefine the ‘middle landscape’ ideal, pushing it ahead, so to speak, into an unknown future to adjust it to ever-changing circumstances.” In terms very similar to Marx’s, Leopold states that “We shall never achieve absolute harmony with land, any more than we shall achieve absolute justice or liberty for people. In these higher aspirations, the important thing is not to achieve, but to strive.” This typically Midwestern pragmatism inspired Leopold in his lifelong work as a conservationist, an occupation he defined as “one who is humbly aware that with each stroke he is writing his signature on the land.” With axe and shovel, Leopold wrote a bright new chapter in the often sad history of a remote Wisconsin county; with his expressive pen he wrote a book that makes that place a microcosm for a planet in need of love, respect, and understanding. His example is instructive for people in all places who seek to be better citizens of the earth’s diversely beautiful land communities.

Notes

2. Topographically, the Midwest may be described as the Interior Plains of North America, situated west and north of the Ohio River, south of Canada, north of the Ozark Plateau, and east of the 100th parallel of longitude, which John Wesley Powell designated as an approximation of the division between arid western lands and eastern lands receiving at least twenty inches of rainfall, the minimum for traditional Midwestern cultivation of corn and wheat. In The Great Plains (1931), historian Walter Prescott Webb uses the 98th meridian. Either meridian divides the states of North Dakota, South Dakota, Nebraska, and Kansas into semi-arid western and humid eastern sectors, the Western sectors’ economies dominated by cattle grazing, the Eastern (read: Midwestern) sectors by grain agriculture. States traditionally included in definitions of the Midwest are those where traditional (particularly corn) agriculture plays an important role in land use and economy. States with at least a partially Midwestern image and self-identification are Ohio, Indiana, Michigan, Illinois, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.
3. James R. Shortridge, The Middle West: Its Meaning in American Culture (Lawrence, Kansas, 1989), 28. The Midwest has, of course, had a strong urban dimension for over a century, and the region’s cities have also been portrayed in outstanding literature, from the Chicago Renaissance of Theodore Dreiser and Carl Sandburg to contemporaries like Gwendolyn Brooks and Jim Daniels. These authors, despite their urban focus, also feel the impact of pastoralism. Sandburg’s odes to Chicago, for example, yearn for the infusion of pastoral values (symbolized by the nearby prairie) into the tumultuous urban scene.
6. Ibid., 141.
7. Lewis Atherton, Main Street on the Middle Border (Bloomington, Indiana, 1954), 116.
15. Ibid.
16. Aldo Leopold, “Red Legs Kicking,” *A Sand County Almanac*, 121-122. Because of his belief that controlled hunting plays an essential role in land management, Leopold is disliked by proponents of animal liberation/rights, an ideology inconsistent with the modern science of ecology. Animal rights philosophy focuses on the psychology and well being of individual animals, while ecology is concerned with the survival of entire species and, especially, entire biotic communities. For the relation between Leopold and the humane movement, see Roderick Nash, “Aldo Leopold’s Intellectual Heritage,” in *Companion to “A Sand County Almanac”*, ed. J. Baird Callicott (Madison, Wisconsin, 1987), 63-88.
21. Leopold read Emerson, Thoreau, and other Romantic writers early and often. Thoreau’s *Walden*, the classic American pastoral, influenced Leopold’s philosophy and the style and organization of *A Sand County Almanac*. Emerson’s sense of a living earth is apparent from the first page of Leopold’s book, where he alludes to Emerson’s late essay “Civilization” in describing the track of a skunk leading “straight across-country, as if its maker had hitched his wagon to a star and dropped the reins” (Leopold, “January,” *A Sand County Almanac*, 3).
39. Tallmadge discusses this metaphor at length, drawing a parallel between the “book of nature” and the “cultural harvest” of Leopold’s land aesthetic. Certain figures of speech, such as Leopold’s reference to “the olfactory poems” written by animals (Leopold, *A Sand County Almanac*), “Great Possessions,” 43), thus evoke the “literary” quality of landscape. More explicitly illustrative of the land aesthetic are related metaphors of nature as art or artist: “I know a painting. ... It is a river who wields the brush” (“The Green Pasture,” 51); as music or musician: “The wind that makes music in November corn is in a hurry” (“If I Were the Wind,” 66); and as dance or choreographer: “The drama of the [woodcock] sky dance is enacted nightly on hundreds of farms, the owners of which sigh for entertainment, but harbor the illusion that it is to be sought in theatres” (“Sky Dance,” 34). Since “literature” has arguments to make about ecology, history, and ethics, Leopold’s “book of nature” metaphor also illustrates his land ethic.
42. Ibid., 16.
43. Ibid., 12.
44. Ibid., 16.
47. Ibid., 289.
48. Ibid., 289.
50. Leopold, “The Round River,” *Round River*, 164. My case for the regional nature of Leopold’s metaphorical language is further supported by the first and central image of “The Round River,” derived from the Midwestern folklore of giant lumberman Paul Bunyan. The Round River, according to Leopold, was one “of the marvels of early Wisconsin . . . a river that flowed into itself, and thus sped around and around in a never-ending circuit” (Leopold, “The Round River,” *Round River*, 158). Leopold uses this image to illustrate the cyclicity of all ecosystems. Since Paul Bunyan represents the aggressive, conquering attitude toward nature which led to the deforestation of Wisconsin and other Midwestern states with northern pine forests, Leopold’s archetypal cooption of this familiar folk hero is a particularly deft rhetorical strategy.
55. Ibid., 49.
56. Ibid., 46. Leopold’s metaphor of nature as a book that can be read by a sensitive and informed observer harkens to the Romantics, particularly Thoreau and Muir. Muir often referred to landscape as holy scripture or natural history text. The metaphor is frequently used by contemporary humanistic geographers like John Brinckerhoff Jackson and Donald W. Meinig, who treat landscapes, particularly developed ones, as “texts.” Essential readings are J.B. Jackson, *Discovering the Vernacular Landscape* (New Haven, Connecticut, 1984), and D.W. Meinig, ed., *The Interpretation of Ordinary Landscapes* (New York, 1979).
60. Recent ecocriticism, which Cheryll Burgess—qtd. in Glen A. Love, “Et in Arcadia Ego: Pastoral Theory Meets Ecocriticism,” *Western American Literature* 27 (Fall 1992), 196—has defined as the study of “interconnections between the material world and human culture, specifically the cultural artifacts language and literature,” has emphasized landscapes of the American West, where public rather than private domain is the rule, and wilderness protection is the first concern of environmentalists. This western bias can be explained by the preponderance of Westerners writing ecocriticism; they are naturally drawn to write about literary landscapes of their own region. Ecocriticism concerned with Midwestern literature will by necessity focus on wildness more than wilderness, on subtle beauty more than grandeur.
66. Ibid., 58.
67. Ibid., 62.
69. Leopold, “Pines Above the Snow,” *A Sand County Almanac*, 82.


75. Wes Jackson, *Becoming Native to This Place* (Lexington, Kentucky, 1994), 67. An excellent portrait of Jackson and the Land Institute can be found in Evan Eisenberg, “Back to Eden,” *Atlantic* 264 (November 1989), 57-89.


77. Ibid., 139.
