8. S. Yaffee et al., *Ecosystem Management in the United States: An Assessment of Current Experience* (Washington, DC: Island Press, 1996); G. Meffe et al., *Ecosystem Management: Adaptive, Community-Based Conservation* (Washington, DC: Island Press, 2002).
9. B. Minteer, "Regional Planning as Pragmatic Conservation," in *Reconstructing Conservation: Finding Common Ground*, ed. B. Minteer and R. Manning (Washington, DC: Island Press, 2003), pp. 93–113.

CHAPTER ONE

THIS PLACE IN TIME

Curt Meine

We head north at sunset through choppy waters along the east shore of James Bay. Fred guides our fleet of three fully loaded, twenty-foot freighter canoes though a labyrinth of islands, mainland points, and submerged granite ledges. Fred is the *ouchimaw* in this part of the Cree nation of Wemindji. Among the James Bay Cree, the *ouchimawch* serve (in the words of one student of their vital role) as "senior grassroots managers of this vulnerable ecosystem."[1]

We have spent several days at the community's annual gathering on Old Factory Island, forty miles downshore as the canoe glides (figure 1.1). Now we are heading back to the village, where the Cree relocated two generations ago, in 1959. Bouncing over the waves in the pink subarctic twilight, we pass islands crowned in dark spires of white spruce and balsam fir. One small island catches my eye. Beneath a rise of barren granite, a series of terraces steps down toward the chilly waters of James Bay. The land around the bay in Quebec and Ontario is rebounding. At the time of the last glacial maximum, twenty thousand years ago, this place lay buried under five thousand meters of glacial ice at the heart of the Laurentide Ice Sheet. The burden was so immense that it compressed the earth's crust. Over the millennia, as the great ice sheet melted back, the depressed land

entire community of "soils, waters, fauna, and flora, as well as people").[27] Lost in the post–World War II trend toward intensified, specialized resource development, that legacy from the 1930s and 1940s began to reemerge in the 1980s under the more scientifically sophisticated, globally relevant rubric of "sustainability." That dovetailed with the growing appreciation of conservation's intrinsic cultural dimension and the vital role of people and human communities in attaining—or undermining—conservation goals.

The evolution of conservation approaches, then, is a much more complicated story than we have generally accounted for. It is not a simple story of heavy-handed, top-down, command-and-control, governmental coercion; nor is it a simple story of progressive action realized solely through legislative initiative and legal decision. It is a more interesting story of constant change, occurring in different ways to meet different ends, involving a rich intermingling of social, economic, cultural, and environmental needs and hopes.

The evolution of conservation, of course, continues. It does so now amid sobering realities—realities that are converging in unprecedented ways. The greater context in which conservation exists is changing. In hindsight, we can view the conservation movement as the twin companion of the industrial age: It has grown as an idea, and a force for change and adjustment, within a time of cheap and abundant fossil fuels. We know that those energy sources are finite and that we may have already passed the point of peak oil. We know, too, that the exploitation of fossil fuels has had unintended consequences. Global warming is being experienced most directly by the land and creatures and people of the high latitudes (the Wemindji Cree among them), but no community on the planet will be immune to its impacts. To these forces of change we can add other global mega-trends: human population growth; the ever-increasing mobility and consumption of that human population; the spread of invasive species; the erosion of biological diversity; the increased incidence of emerging diseases; the rising demand for and consumption of freshwater; the degradation of the world's coastal and marine ecosystems. There was never a time like the one we have entered. If conservation is to answer effectively the call of these times, it will require unprecedented leadership, communication, and commitment.

It begins with us making connections; finding common ground; freeing our imaginations; and inventing new ways of thinking, being, and caring in the world.

It begins with us, here, now.

* * * * *

When I was first invited to Wemindji, I learned a Cree word, *Iyiyuuschii*, whose meaning I could not grasp. As I listened to those at Wemindji, it gained definition. I began to translate it in my own mind as "the land of the people." But such a word cannot be simply construed. As explained by the students working on the project, "Depending on the context, *iyiyuu* can represent the Cree people, all humans, or all life. *Ischii* can represent a hunting territory, Cree territory, the entire earth, or the soil. Together, *iyiyuu ischii* signifies interacting life on the land, with the perspective that the Cree people are not separate from the living land and their territory is not separate from the earth as a whole."[28]

What does this mean for my task at hand? What words can I possibly offer my Cree hosts? Leopold's land ethic is a complicated notion, representing a rich melding of western scientific knowledge, evolving ethical standards, and shifting definitions of community. Leopold offered his land ethic a little more than half a century ago. The James Bay Cree have had five millennia to distill their land wisdom. It is embedded in their *aatiyuuhkhn*, their sacred stories:

It is the responsibility of all peoples to protect and preserve the land.
Water is sacred and is life-giving.

All peoples must live in harmony with the natural order.
There is medicine on the land, where beauty and strength can be found.
Knowledge comes from the Creator through the land.
Life is tied to and connected to the land.
Peoples must acknowledge, give thanks for, and honor what is received and taken from the land.
Everything has a spirit.
Eeyouch and all the peoples of the world are connected to the spirit of the land.[29]

The Cree have endured upon this rich substrate of understanding. What can I possibly say, here, now, in *Iyiyuuschii*?

I begin by expressing my gratitude for the opportunity to be here and by invoking the great glaciers that once connected Wisconsin and Wemindji. Dorothy Stewart, who serves as the team's community liaison, steps up to translate my remarks for the benefit of the Cree elders and other community members. I hadn't thought about that! Immediately, I make adjustments. To allow time for translation, I cut my planned remarks in half. In fact, I pretty much dispense with my plan. This is not about explaining. This is about connecting.

I speak of geese. I was by now familiar with the vital role of the Canada goose in Cree culture. The goose has been described as a "cultural keystone species" for the James Bay Cree. The tails of the Air Creebec planes we flew in to Wemindji bear a goose logo. The stories of the people and the geese are thoroughly interwoven, as the Cree and the geese have continually adapted to each other and to the land. The Cree have modified certain wetlands in the rising land to attract and support geese during the spring hunt. The geese are an integral part of the story of change here, as they, like the people, have responded to the advent of guns, bush planes, roads, and hydropower development. Through it all, the Canada goose has remained at the very core of Cree culture.

I ask Dorothy if she might translate a small bit of Leopold's prose. It is not from "The Land Ethic" but from an essay called "The Geese Return." Dorothy effortlessly translates into rhythmic Cree text she had never even seen before. Leopold's theme was connection: "By [the] international commerce of geese, the waste corn of Illinois is carried through the clouds of the Arctic tundras, there to combine with the waste sunlight of a nightless June to grow goslings for all the lands in between. And in this unusual barter of food for light, and winter warmth for summer solitude, the whole continent receives as net profit a wild poem dropped from the murky skies upon the muds of March."[30] After she completes the passage, Dorothy turns to me and quietly remarks, "That's so beautiful."

Through all the changes in our lives, our times, and our places, amid all the dimensions that we must bear in mind as we chart our way forward together, there are those things that connect us: our humanity, the creatures and our stories about them, the beauty and the injury we bear witness to, the spirit that animates us, and the land that supports us all, everywhere, all the time.

Notes

1. G. Whiteman, "The Impact of Economic Development in James Bay, Canada," *Organization & Environment* 17 (2004): 425–448. An alternative spelling for the term is *uuchimaau*. The common English term is *tallyman*, a reference to the role of the *ouchimaw* in counting beaver lodges for the Hudson Bay Company within his hunting territory—part of the company's historic efforts to address declines in beaver populations.
2. E. Pielou, *After the Ice Age: The Return of Life to Glaciated North America* (Chicago: University of Chicago Press, 1991). The retreat of the glaciers and the subsequent rebound of the earth continues to shape landscapes and coastlines throughout the North. For example, Lakes Superior, Michigan, and Huron were a single Great Lake until the rising earth began to part the waters two thousand years ago. Because of the differential rate of rebound in the Great Lakes basin, Superior has been gradually tipping southwestward, sloshing toward Duluth.

3. The Web address of the Paakumshumwaau-Wemindji Protected Area Project is www.wemindjiprotectedarea.org.
4. For an anthology built around the critiques, see J. Callicott and M. Nelson, eds., *The Great New Wilderness Debate* (Athens: University of Georgia Press, 1998). See also M. Chapin, "A Challenge to Conservationists," *World Watch* 17, no. 6 (2004): 17–31; P. West et al., "Parks and Peoples: The Social Impact of Protected Areas," *Annual Review of Anthropology* 35 (2006): 251–277; and K. Redford et al., "Parks as Shibboleths," *Conservation Biology* 20 (2006): 1–2. Also see F. Mulrennan and F. Berkes, "Protected Area—Policy Framework," prepared for Paakumshumwaau-Wemindji Protected Area Project (July 2006).
5. The complicated story of change and adaptation among the James Bay Cree has been explored and debated widely over the last generation. See (among others) C. Martin, *Keepers of the Game: Indian-Animal Relationships and the Fur Trade* (Berkeley: University of California Press, 1978); A. Tanner, *Bringing Home Animals: Religious Ideology and Mode of Production of the Mistassini Cree Hunters* (London: Hurst, 1979); C. Bishop, "The Western James Bay Cree: Aboriginal and Early Historic Adaptations," *Prairie Forum* 8 (1983): 147–155; R. Brightman, "Conservation and Resource Depletion: The Case of the Boreal Forest Algonquians," in *The Question of the Commons: The Culture and Ecology of Communal Resources*, ed. B. J. McCay and J. M. Acheson (Tucson: University of Arizona Press, 1987), pp. 121–141; R. Brightman, *Grateful Prey: Rock Cree Human-Animal Relationships* (Berkeley: University of California Press, 1993); S. Krech, *The Ecological Indian: Myth and History* (New York: Norton, 1999); and F. Berkes, "Indigenous Knowledge and Resource Management Systems: A Native Canadian Case Study from James Bay," in *Property Rights in a Social and Ecological Context: Case Studies and Design Applications*, ed. S. Hanna and M. Munasinghe (Washington, DC: Beijer International Institute of Ecological Economics and the World Bank, 1999), pp. 99–109.
6. J. Milloy, *"National Crime": The Canadian Government and the Residential School System, 1879 to 1986* (Winnipeg: University of Manitoba Press, 1999).
7. See C. Meine, "Conservation Movement, Historical," in *Encyclopedia of Biodiversity*, vol. 1, ed. S. Levin (San Diego, CA: Academic Press, 2001), pp. 883–896.
8. See B. Minteer, *The Landscape of Reform: Civic Pragmatism and Environmental Thought in America* (Cambridge, MA: MIT Press, 2006).

9. See C. Meine, "Leopold's Fine Line," in *Correction Lines: Essays on Land, Leopold, and Conservation* (Washington, DC: Island Press, 2004), pp. 89–116.
10. A. Leopold, *Game Management* (New York: Charles Scribner's Sons, 1933), p. 422.
11. A. Leopold, "Coon Valley: An Adventure in Cooperative Conservation," in *The River of the Mother of God and Other Essays by Aldo Leopold*, ed. S. L. Flader and J. B. Callicott (Madison: University of Wisconsin Press, 1991), p. 218.
12. A. Leopold, "Engineering and Conservation," in *River of the Mother of God*, p. 254. The original address was delivered at the University of Wisconsin in 1938.
13. A. Leopold, *A Sand County Almanac and Sketches Here and There* (New York: Oxford University Press, 1949), p. viii.
14. For background on Leopold's concept of land health, see E. Freyfogle, *Bounded People, Boundless Lands: Envisioning a New Land Ethic* (Washington, DC: Island Press, 1998); A. Leopold, *For the Health of the Land: Previously Unpublished Essays and Other Writings*, ed. J. Callicott and E. Freyfogle (Washington, DC: Island Press, 1999); and J. Newton, *Aldo Leopold's Odyssey* (Washington, DC: Island Press, 2006).
15. The Web address of Chicago Wilderness is http://www.chicagowilderness.org. See R. Platt, "Chicago Wilderness: Flagship of the Urban Biodiversity Movement," remarks to the Chicago Wilderness tenth anniversary, May 17, 2006, at http://www.umass.edu/ecologicalcities/events/CWremarks.pdf. *Chicago Wilderness* magazine (http://chicagowildernessmag.org) provides continuing coverage of the consortium's work.
16. The Web address of the Quivira Coalition is http://www.quiviracoalition.org.
17. The Web addresses of these organizations are http://www.greateryellowstone.org and http://www.blackfootchallenge.org.
18. For a more complete and developed discussion of these trends in conservation, see B. Minteer and R. Manning, eds., *Reconstructing Conservation: Finding Common Ground* (Washington, DC: Island Press, 2003), especially its concluding chapter, "Finding Common Ground: Emerging Principles for a Reconstructed Conservation." See also G. Meffe et al., *Ecosystem Management: Adaptive, Community-Based Conservation* (Washington, DC: Island Press, 2002); and C. Meine, "The Once and Future Land Ethic," in *Correction Lines*, pp. 210–221.
19. C. Meine, "Conservation and the Progressive Movement," in *Correction Lines*, pp. 42–62.
20. G. Marsh, *Man and Nature; or, Physical Geography as Modified by Human Action* (Cambridge, MA: Harvard University Press, 1965; originally published 1864), p. 200.

21. In this context, see especially Leopold, "Coon Valley."
22. R. Brewer, *Conservancy: The Land Trust Movement in America* (Hanover, NH: Dartmouth University Press, 2003), p. 17.
23. Brewer, *Conservancy*, p. 32. The Nature Conservancy was founded in 1946 as the Ecologists Union and changed its name in 1950. Brewer notes, "Other well-known national land trusts were formed much later, the Trust for Public Land in 1972, the American Farmland Trust in 1980, and the Rails-to-Trails Conservancy in 1985" (p. 32).
24. G. Hardin, "The Tragedy of the Commons," *Science* 162, no. 3859 (December 13, 2009): 1243–1248.
25. See, for example, A. Leopold, "Helping Ourselves," *River of the Mother of God*, pp. 203–208. This was a significant theme in Leopold's work in the 1930s especially. He surveyed the movement in several papers, including "Farmer-Sportsman Set-ups in the North Central Region," *Proceedings of the North American Wildlife Conference*, February 3–7, 1936, Washington, DC (Washington, DC: Government Printing Office, 1936), pp. 279–85; and "Farmer-Sportsman: A Partnership for Conservation," *Transactions of the 4th North American Wildlife Conference*, February 13–15, 1939, Detroit (Washington, DC: American Wildlife Institute, 1939), pp. 145–149, 167–168. A particularly venerable example of cooperative wildlife management is Minnesota's North Heron Lake Game Producers Association, which has been meeting continuously since its founding in 1906; see http://www.nhlgpa.org.
26. See P. Annin, *The Great Lakes Water Wars* (Washington, DC: Island Press, 2006).
27. A. Leopold, "The Ecological Conscience," in *River of the Mother of God*, p. 345. See R. Knight, "Aldo Leopold, the Land Ethic, and Ecosystem Management," *Journal of Wildlife Management*, 60 (1996): 471–474; J. Callicott, "Aldo Leopold and the Foundations of Ecosystem Management," *Journal of Forestry* 98 (2000): 5–13; and Newton, *Aldo Leopold's Odyssey*.
28. Y. Shu et al., *Aa-Wiichaautuwiihkw: Coming Together to Walk Together. Creating a Culturally Appropriate Watershed and Marine Protected Area in Paakumshumwaau (Old Factory) James Bay, Quebec* (2005), p. vi. Available at http://www.wemindjiprotectedarea.org/assets/pdf/Aa_wiichaautuwiihkw_Report_2005.pdf.
29. M. Gnarowski, ed., *I Dream of Yesterday and Tomorrow: A Celebration of the James Bay Cree* (Kemptville, Ontario: Golden Dog Press and the Grand Council of the Cree, 2002), pp. 11–12. See also F. Berkes, "Environmental Philosophy of the Cree People of James Bay," *Traditional Knowledge and Renewable Resource Management in Northern Regions*, ed. M. Freeman and L. Carbyn (Edmonton, Alberta: Boreal Institute for Northern Studies, University of Alberta, 1988), pp. 7–21; and P. Brown, "A Gift from the North: An Ethic for the Ecozoic," paper presented at the meeting between the Wemindji Cree and McGill University mentioned in the text.
30. Leopold, *A Sand County Almanac*, pp. 22–23.

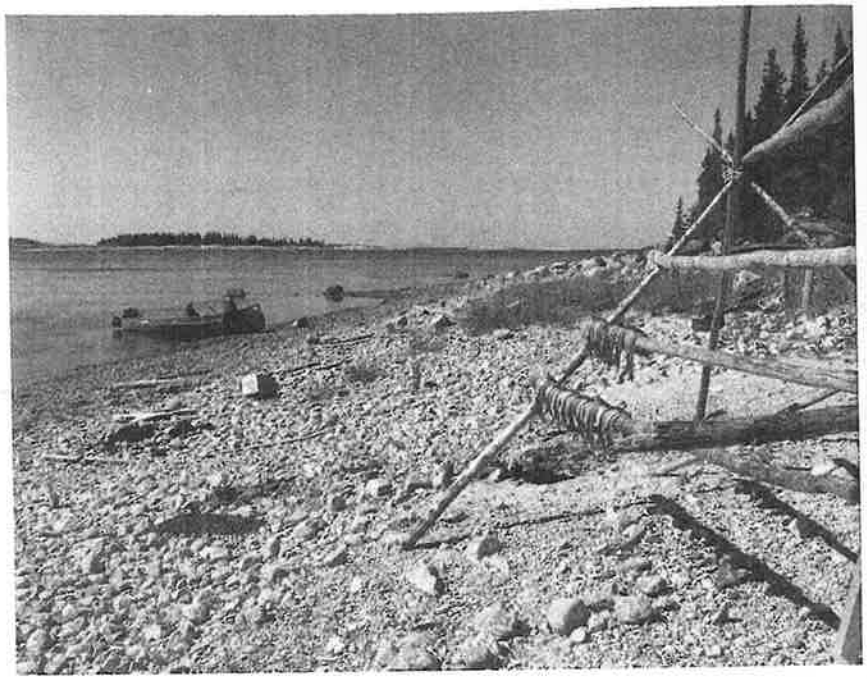

Figure 1.1 Old Factory Island, James Bay, Canada.

has sprung back. It is still rising. The geologist's term for the phenomenon is *isostatic rebound*.[2] The Cree speak of "the growing land."

The terraces on the small island are ancient beach ridges, each one marking a pause in time as the land has grown. The terrain at Wemindji has risen about seventy meters over the last six thousand years. It continues to rebound at the rate of about a meter per century—fast enough to outpace the rate of sea level rise that also came with the melting, fast enough even to be noted across a human lifetime. Wemindji's elders can tell you of places that have emerged from the waters, of plants and animals living differently here than they once did, of the Cree responding and adjusting.

My opportunity to be here has come through colleagues from McGill University in Montreal who have joined the Cree in an innovative partnership.[3] The academics and the Wemindji Cree are collaborating on a proposal

to establish a protected area that would embrace two entire watersheds feeding into James Bay. The proposed protected area would coincide closely with the hunting territory that Fred oversees in his capacity as *ouchimaw*. It is a creative proposal that defies traditional expectations—as well as recent criticisms—of protected areas as a conservation strategy.[4]

The twelve hundred Cree of Wemindji represent the latest generation to live upon, and with, the growing land. By almost any conservation standard they have lived well here and have done so for some five thousand years. Cree traditions and practices have served to reinforce a tight network of reciprocal relationships connecting the land, the water, the plants and animals, the people, and the spirit.

In the four centuries since the arrival of the Shaped-Wood People from Europe, the resilience of those relationships has been constantly tested.[5] Yet, even against the backdrop of those last four centuries, the rate of change in the last two generations stands out as remarkable. Transformation has come to the culture, economy, and landscape of the James Bay Cree in a series of cascades, one consequence after another: the forced relocation of Cree children to government-supported residential schools;[6] the movement toward permanent settlement in Wemindji; the loss of the age-old pattern of families living a subsistence life in "the bush" for half the year; the announcement in 1971 of the Quebec provincial government's vast plan for hydropower development in the Cree lands east of James Bay; construction of the paved Route de la Baie James to facilitate the hydropower plan. Now the pressure to open gold and diamond mines in Wemindji country is growing. And in this subarctic land, the impacts of global warming on the ice and wind, the plants and animals are noticed even by the younger Cree. The Wemindji Cree wonder, along with communities around the world, how changes in their land will result in changes in their identity—and vice versa—and how they ought to respond.

My academic colleagues and my new friends from Wemindji are gathered to review the progress of their partnership. My appointed task, the

reason for my even being here, is to offer a few relevant—I hope—words about Aldo Leopold and the land ethic in the land of the Cree. I am not at all convinced that this is possible.

The sun sets by the time Fred maneuvers our big canoe around the last spruce-studded point, into calmer waters, toward the lights of Wemindji.

* * * * *

As we may learn from the growing land, the *terra* is only relatively *firma*. Our science and our stories tell us that land changes and that human communities change. They change in different ways, at different rates. They change in response to each other. They change due to forces large and small, long-term and immediate, far away and close at hand. Amid such change, conservation aims to encourage ways of living by which we can meet our material needs, allow ourselves and our communities to flourish, express our human hopes, honor the beauty and mystery of the world, sustain its biological diversity, and promote its ecological health.

These are complex and interrelated aspirations. In pursuing them, conservationists have had to change, as the movement that first fully emerged a century ago has itself continually evolved. The story of conservation is one of shifting philosophical foundations, increasing scientific and historical knowledge, evolving public policy, and novel tools and techniques—all in dynamic interplay, occurring within a larger world of relentless cultural, economic, and environmental change.[7] To gain perspective as conservationists on our own place in time is no simple matter.

Conservation in its modern sense gained legitimacy and definition in the early 1900s, in the wake of an unprecedented, three-decade wave of private exploitation of North America's forests, prairies, rangelands, fisheries, and game populations. As conservation became official government policy under the leadership of President Theodore Roosevelt and his "chief forester" Gifford Pinchot, the utilitarian definition of conservation as the

"wise use" of natural resources held sway. That definition carried corollaries: Conservation ought to serve "the greatest good for the greatest number over the long run"; it aimed to produce sustained yields of particular commodities (timber, water, fish, forage, game); it would achieve those sustained yields through efficient, professional, scientific management; it would strive to ensure fair distribution of the wealth that flowed from resource development. Conservation was conceived with the Progressive Era's faith in the capacity of science, technology, economics, and government to correct the ills wrought by the unbridled abuse of natural resources.

Meanwhile, walking with Pinchot but whispering into Roosevelt's other ear was their contemporary John Muir, the voice of a wilder America, of the big trees and monumental landscapes, of that strain of conservationist that sought to protect the beautiful, the unique, and the sublime. The preservationists could make common cause with the utilitarians, sharing as they did an appreciation of science and a faith in government's potential for effective administration. But they parted ways when "wise use" undermined the aesthetic, restorative, and spiritual values of wild things and wild places. The friction between utilitarians and preservationists would provide the dramatic storyline for much of conservation's long political drama across the twentieth century.

Aldo Leopold and his generation of conservationists inherited this philosophical tension in the 1930s and 1940s.[8] It drove Leopold's own conceptual innovations and evoked his plea for a unifying land ethic.[9] He could not abide merely material definitions of progress or the economic determinism and "ruthless utilitarianism" that in his view had disfigured the American landscape and revealed flaws in the character of American culture. Neither could he abide that approach to conservation that segregated aesthetics, averted its eyes from unpleasant economic reality, and sought refuge in the "parlor of scenic beauty."[10] For all of its success in establishing

itself in the public mind and in government agencies, conservation had made scant progress toward reconciling its own multiple aims and achieving a more "harmonious balanced system of land use."[11]

Leopold once noted that our advanced technologies served to "crack the atom, to command the tides." "But," he continued, "they do not suffice for the oldest task in human history: to live on a piece of land without spoiling it."[12] That ultimate task could not be achieved simply by gaining new scientific knowledge or developing new tools; it required an *ethic* to better guide application of that knowledge and use of those tools. That ethic would avail itself of new ecological understanding and encourage new ways of valuing the nonhuman world. It would see land not merely as a commodity belonging to us, but "as a community to which we belong."[13] It recognized the interwoven history and destiny of people and land while demonstrating broad commitment to the common good. It called upon us all—as individuals and communities, producers and consumers, business owners and land managers, citizens and elected officials—to assume responsibility for the overall health of the land.[14]

Leopold gathered these ideas in "The Land Ethic," the capstone essay from his classic 1949 book *A Sand County Almanac*. The essay represented a bold advance in conservation, a leap beyond both the rationale and the tensions that had marked the young movement. In it, Leopold distilled the lessons acquired by an entire generation of conservationists. They had witnessed (and inevitably participated in) the mechanization and industrialization of the landscape; weathered the Dust Bowl, the Great Depression, and World War II; developed whole new fields and disciplines (including soil conservation, range management, and wildlife management); and, for the first time, brought findings from the emerging science of ecology into conservation practice.

"The Land Ethic" also anticipated the changes that would come with the rise of the environmental movement in the 1960s and 1970s. With its view of land not merely as a commodity but as "a community to which we belong" and its call to sustain "the integrity, stability, and beauty" of that community, "The Land Ethic" became a touchstone for subsequent generations of professional resource managers, landowners, and citizens alike as they confronted profound changes in social and environmental conditions.

Conservation evolved in divergent ways after World War II. On the one hand, it became a worldwide concern, and its professional ranks swelled. It absorbed revolutionary scientific findings in fields ranging from paleontology and geology to ecology and genetics. Its diagnostic and information technologies grew vastly in sophistication. It began to address a suite of concerns that accompanied the prosperity of the postwar years: the accelerated loss of wildlands; a growing list of threatened and endangered species; nuclear proliferation and the threat of atomic warfare; air and water pollution and other forms of environmental contamination; the development and indiscriminate use of new artificial chemical compounds; the triumph of the automobile culture; and the spread of suburbia.

On the other hand, conservation's ability to integrate new information and ideas, and to respond effectively to new threats, suffered in the postwar years. The conservation movement, as such, was fragmented among publics interested in various parts of the land (fish, game, soils, scenery, forests, rangelands, parks, rivers, wilderness, trails, etc.). Professional resource managers became increasingly specialized and focused on the output of their particular commodities (sport fish, game animals, commodity crops, visitor days, board feet, livestock forage, acre feet, kilowatts, etc.). The distinctions of *place* were overwhelmed by the need to get out the cut, meet the demand, enhance the visitor experience, maximize the output. Progress was measured according to raw economic and political benchmarks rather than any ethical one.

Along the way, conservation gave way to environmentalism. Environmentalism in the United States came of age along with the postwar, largely urban and suburban, baby-boom generation. Some older conservationists

became environmentalists; others did not. Some younger environmentalists appreciated the strengths (as well as the shortcomings) of the older conservation tradition; others did not. In any case, the transition from the older conservation movement to modern environmentalism left behind it a tumultuous wake washing up against a complex and rocky shoreline. We are still riding over the roiling waves, in heavily laden canoes.

Yet, in the aftermath of the environmental awakening of the 1970s, creative conservationists began to challenge the fragmented, overspecialized, output-driven approaches that dominated professional natural resources management through much of the twentieth century. Over the last three decades, conservationists have gone about exploring, and inventing, a new approach, one that seeks safe passage through the shoals of harsh political ideology, toward common ground. And in seeking to restore and sustain healthier connections between people and land, conservationists have contributed importantly to a still broader societal need: reclaiming the vitality of community life.

The experiment in partnership growing at Wemindji is but one example of this flowering. We can also find such innovation in the more than two hundred institutions and organizations that belong to Chicago Wilderness, an extraordinary regional consortium that is redefining the notion of conservation in urban settings.[15] We find it in the Quivira Coalition's conventional wisdom-defying efforts to bring western ranchers and diverse environmental interests together in the shared pursuit of land stewardship and sustainable communities.[16] We find it in charismatic mega-landscapes, through the work of groups like the Greater Yellowstone Coalition and the Blackfoot Challenge.[17] We find it as well in less celebrated places, through a vast, proliferating array of conservancies, alliances, land trusts, initiatives, coalitions, networks, projects, partnerships, councils, and collaboratives.

This still emerging approach seeks to work fluently across multiple spatial scales, from the local to the regional to the global. It seeks also to be

aware of multiple time scales, seeing its goals through varied layers of time and aiming to harmonize present and long-term needs. It sees land not as a collection of discrete parts, but as a complex, changing whole. It recognizes the need to work across disciplinary and jurisdictional boundaries and across entire landscapes. It appreciates degrees of human impact on the land and the intricate interrelationships between the natural and the cultural in any landscape. It aspires to sustain not merely *yields* but also the ecological functioning that underlies and defines land health. It recognizes the need to extend Leopold's notion of the land ethic to embrace aquatic and marine environments. It honors the bonds that link land to community life, economy, and identity. It acknowledges a hard reality: that all our places are weighed down by the overburden of past injustice and injury. It holds that the sustainability of human communities and economies cannot be defined apart from the land. It understands the necessity of community-based and participatory approaches in building the social foundations for effective conservation.[18]

These are hopeful signs, indications that, a century into the conservation-environmental movement, we might finally be getting the *scale* part, the *relationship* part, and the *integration* part of conservation right.

Although this movement-with-a-movement has been growing rapidly, its roots in conservation history reach deep. The standard narrative of environmental history has emphasized the expanding role of governmental agencies, wielding the stick of regulation and protecting public lands and other common resources through legislation and top-down management strategies. That narrative, however, misses the quieter, parallel development over the last century of progressive, participatory approaches to conservation based in local places and dedicated to what we would now call the sustainability of ecosystems, landscapes, and human communities.[19] It is a rich history that begs to be reclaimed. Examples of such approaches can be found in the following categories:

- *Watersheds.* Awareness of the fundamental significance of watersheds—as a geographical reality and as an organizing concept—dates to the very origins of the U.S. conservation movement. In his 1864 classic *Man and Nature*, George Perkins Marsh warned of "the great, the irreparable, the appalling mischiefs" that occur at the watershed scale due to destructive land clearing and ignorance of basic hydrological processes.[20] Marsh's work provided the rationale for whole fields of later conservation innovation: the landmark designation of the water-conserving forestland of New York's Adirondack Mountains in the 1870s and 1880s; John Wesley Powell's radical (and ill-fated) proposals in the 1890s to organize development of the American West along watershed lines; the designation of the early national forest reserves in the 1890s and 1900s to protect the headwaters of western streams. We can look back now upon the cooperative watershed restoration projects that began in the early 1930s as important antecedents of contemporary watershed- and community-based conservation projects.[21]
- *Land trusts.* As a force for private land conservation, the land trust movement in the United States has expanded phenomenally in the last several decades, with more than 1,700 land trusts now established across the nation. As a tool for land conservation, the land trust has been around for more than a century (with even older precedents in England and elsewhere). In 1891 civic leaders in Massachusetts advocated establishment of, and the state legislature chartered, the Trustees of Reservations. It was "the first private organization that included the essential features of a land trust: a mission dedicated to acquiring, holding, and maintaining natural, scenic, and historic sites."[22] The idea spread slowly in the decades that followed, with the incorporation of such small local organizations as the Connecticut Forest and Park Association (1895) and the Society for the Protection of New Hampshire Forests (1901). The full potential of the land trust concept would be realized only after World War II, with the creation in 1946 of The Nature Conservancy as the first national land trust.[23]

- *Cooperative resource management.* When Garrett Hardin published his classic essay "The Tragedy of the Commons" in 1968, he focused attention on the inherent challenge of managing common resources.[24] Often overlooked in the discussion that has ensued ever since are the precedents for cooperative management of natural resources that lie deep in the history of conservation. Indeed, they predate the conservation movement per se and include indigenous stewardship practices from cultures around the globe. In Europe, the establishment of town forests dates to the Middle Ages. In New England, town forests were created as early as 1711 (in New Hampshire) and were established in state law throughout the region by the early 1900s. In the early decades of the twentieth century, cooperative game protection associations and experimental wildlife management partnerships emerged as landowners and sportsmen-conservationists worked together to restore wildlife populations and habitats.[25] At the other end of the spatial scale, we can find such examples as the complex efforts of state, provincial, tribal, and national governments to comanage the Great Lakes, which date to the early 1900s.[26]
- *Ecosystem management.* The emergence of ecosystem management in the late 1980s and early 1990s was taken by some to be a radical and unnecessary departure from traditional, practical approaches to the management of natural resources. Others saw it as a false front for even more egregious expression of those hubristic, heavy-handed management approaches. An alternative view, however, recognized in ecosystem management at least the potential to reclaim the legacy of a better integrated, ecologically informed, and historically grounded stewardship of the *land* (in Aldo Leopold's sense of the term—the