Judging from photographs, it might be a stretch to imagine that Robert Marshall had a capacity for elegance, if by elegance we mean grace, subtlety, and stylishness. Marshall most often is remembered for his passionate commitment to wilderness preservation, as commemorated in the Bob Marshall Wilderness, a vast protected area in a remote stretch of the Rocky Mountains in western Montana. But elegant is not an adjective that comes to mind when looking at the snapshots that recorded his fleeting passage through this world. His body is lean and fit, but his bulging torso seems out of proportion to his limbs, giving him an ungainly appearance. Although his clothing is typical of an outdoorsman, his pants are torn and frayed, his shirts greasy. And oh, what a face: His smile radiates intelligence, warmth, and joy, but his eyes are pinched, his hair unkempt, his ears big and protruding, his front teeth gapped. Marshall elegant? Hardly.

Yet, as we know, appearances are deceptive. Beneath the surface—behind the wilderness machismo, in back of the greasy jeans and tin pants, underneath the dirty work shirt, and between the elephantine ears—is another reality and another story in which Marshall is not the antithesis of elegance, but its epitome. If elegance also means the ability to see the world whole, to understand every thing in relation to all others, to imagine the consequences of one’s actions forward in time, to tread lightly and humbly
among people and on land, to empower the downtrodden and the marginalized, and to
find simple, workable solutions amidst the complexity, then Marshall, despite his all-
too-human and predictable imperfections, intellectual and cultural as well as physical,
asks us to reconsider our initial judgment of him. Was he elegant? Indeed he was.

Rediscovering the elegant Marshall offers important rewards. It opens a window onto the past that enables us to see the traces of elegance that ran through the entire conservation movement. It helps us recover the stories of more people—women as well as men—who resisted the illusions of reductive science, technocratic expertise, and statist authority; who posed alternatives to mass consumption and the extractive, command-and-control resource policies characteristic of an era of total war; who thought both ecologically and historically and thus holistically; and who viewed life not in terms of purity and narrow static absolutes, but through the lens of experience—as a mixed, complex, evolving, democratic process.

Most important, looking for elegance in the twentieth century can be a means to rediscover and enlarge our capacity for elegance in our own fearful and uncertain time. As increasing numbers of resource managers, conservationists, scientists, and citizens are learning, elegance can help chart a way forward through the pitfalls, deceptions, and corruptions that confront us at every turn.

So what does elegant conservation look like in practice? Here is a vignette from Marshall’s life, which first requires us to establish the scene and the setting, or what
historians call “the context.”¹ Reset the time machine, rewind the tape, and go back—before Obama and Bush and 9/11, before Clinton and Reagan and the Cold War, before the 1960s and Vietnam and environmentalism and Korea, before the Baby Boom and the Bomb and World War II, back to the time of the New Deal and Roosevelt and the Great Depression. It is 1934. The Congress and the Executive are busily implementing programs intended to counteract a deep and profoundly unsettling economic collapse, the worst in the nation’s history. The New Dealers are structural thinkers who do not focus on life’s fine-grained textures, but who tend to see the world in terms of large social groups, voting blocs, corporate units, technological systems, and geographical areas, all driven or shaped by abstract forces: social, economic, psychological, political. One of their favorite concepts is adjustment. The structural pieces are maladjusted; the goal is to adjust them so that they function efficiently and thereby democratize wealth and stabilize the republic. Among the many structural adjustments they seek is the one between people and land.

As Chief of Forestry in the Bureau of Indian Affairs (BIA), Marshall is directly involved in the New Deal. Already he has begun to establish his reputation in conservation and government service. The son of a prominent, wealthy Jewish family

from New York City, he is a graduate of Felix Adler's Ethical Culture School, has degrees in forestry from Syracuse and Harvard, and has completed a doctorate in plant physiology at Johns Hopkins. An ardent and energetic hiker, camper, backpacker, and wilderness enthusiast, he also has worked for the U.S. Forest Service, including a stint (1925-1928) at the Northern Rocky Mountain Forest Experiment Station in Missoula, Montana, which he calls his “best loved city.” He is a voracious reader, a holistic thinker, and a pragmatic man of action influenced by the philosopher John Dewey. Passionate, charming, and irreverent, he fits uneasil

y into the federal bureaucracy and does not completely agree with the structural thinking of the New Deal.

At age 33, he has made clear his commitments. He believes strongly that wilderness—which he defines primarily as large areas of undeveloped, especially roadless, land—is socially useful. It provides open country in which to contemplate the problems of mechanization and mass consumption. It offers a rugged landscape in which to reinvigorate masculinity. It buffers Native people and villagers from the ills of the modern world. His views require him to live in a contradiction. On the one hand, he espouses the libertarian idea that wilderness should be a site of self-definition and freedom; on the other, he is a socialist who believes the state must protect wilderness and ensure recreational access for all classes of people. He has expressed many of his concepts in Arctic Village (1933), an account of a mixed “Eskimo” (Inuit), Indian, and European American community in northern Alaska in which he lived for 452 days in 1930-1931.² Because of their life in the wilderness, he maintains, the people there are

healthier, freer, smarter, more equal and cooperative, more capable, and more fulfilled than their counterparts on the Outside. Most important, because of the wilderness, the people are happier.

Marshall’s criticism of modernity, his desire to chart an alternative course for it, and his admiration for Native cultures give him much in common with John Collier, the social reformer and now Commissioner of Indian Affairs. Like Marshall, Collier believes that American Indians offer a valuable counterpoint to the ills modern life. Indeed, he never forgets the moment when he first saw Taos Pueblo, a “Red Atlantis” that proved the ability of communal societies to withstand the social atomization and alienation—the breakdown of communities and families, and the feelings of profound loneliness and psychological depression—characteristic of modernity. Collier and Marshall recognize their affinities. Collier appoints the like-minded forester to the BIA and seeks the young man’s advice on a range of Indian policy issues.

Among them is a looming problem of great magnitude down on the Navajo Reservation in Arizona and New Mexico. The people and the land are maladjusted. The range is overstocked. The people’s goats, horses, and sheep are eroding the fragile desert soil, threatening the integrity and security of the great Navajo civilization. Adjustment is necessary, Collier believes. The herds must be radically reduced in size. His inclination is to act on what he thinks is the people’s best interest, and force them to do it.

Collier asks Marshall for advice, and Marshall responds with a classic statement of elegant conservation. You can let nature take its course and watch as the people
destroy their land and themselves, he writes. You can act on behalf of the tribe’s cultural interests—on behalf of its “cultural freedom”—and assume the contradictory role of a heavy-handed “cultural dictatorship” in which you force the people to do what you think is necessary. Or you can follow a third way that offers federal government expertise and aid while respecting Navajo autonomy and the tribe’s prerogative to make its own decisions.³

Marshall is on delicate ground in suggesting this middle way. With Collier’s support, and acting on what he thinks is the best interest of Indian tribes, he has envisioned the establishment of wilderness areas on numerous reservations in the American West. The crucial difference between Marshall’s wilderness concept and Collier’s livestock reduction program is that Marshall does not propose to destroy animals or anything else of value to Natives. Rather, the Indian wilderness areas will buffer the people from the outside world by preserving undeveloped land on which they can sustain their cultural and subsistence practices, in their own time and in their own ways. This belief in the need to protect and empower Indians shapes the advice that he gives Collier. Seek to understand the people and their culture, he urges, “especially … the influences which make them happy”—a clear reference to the major theme he developed in Arctic Village. The people might make mistakes, but be there with help if and when they ask for it. Above all, think forward as well as backward, and imagine the possible consequences that any policy “is likely to have on the future of Navajo civilization.”

Despite the wisdom of the message, despite its prescient anticipation of post-colonial thought and practice that will emerge decades later, despite its elegance, Marshall’s advice goes unheeded. Unable to resist the power that he can exercise, Collier, like a typical colonial administrator, enforces livestock reduction. The outcome is tragic; the means produce the opposite of the end that he deeply desires. Instead of leading to a better world, his authoritarian actions blow back in his face. The Navajos rebel at the destruction, and to this day hold conservation—and the well-intentioned Commissioner—in contempt. Politically and emotionally, Collier never recovers.

Amidst the wreckage, Marshall’s elegant message shines out like a beacon that can help guide us on our own dark and difficult passages: Think outside reductive modernist structures, categories, ideas, and practices. Know the people, their culture, and their past. Think forward and imagine the possible consequences of your actions. Empower the disempowered. Help Native people—be there for them—but do not make assumptions on their behalf. Wilderness and the non-human nature that it contains have intrinsic value unto themselves, but wilderness also has social value—it is a human space that can be a means to human betterment and happiness. If the modern world ails us, wilderness is a place in which to think about alternatives that do not separate humans from nature and that equip people to address the inevitable social and environmental problems that lie ahead.

Marshall’s life offers a telling example of elegant conservation and its potential. It is a brief chapter in a longer story of the waxing and waning fortunes of elegance from
roughly the mid-nineteenth century into the twenty-first. During that 150-year period, the United States consolidated its hold, often by military means, on its continental land base, insular and territorial holdings, and far-flung economic relationships. Exercising its immense power on scales that ranged from the local to the global, it fostered a mass extraction-production-consumption economy. This buildup of national power included the intensive management and use of natural resources and public lands, which the federal government often carried out with military-style efficiency and using the full force of modern engineering and reductive science. Elegant conservation—Marshall’s version of it and many others—was an outgrowth of, and ultimately a reaction against, those natural resource policies and practices.

The early resource policies and practices of the United States were, first and foremost, the product of the nation’s effort to suppress insurrections and impose order on its far-flung landscapes and borders. From 1861 until well into the twentieth century, the federal government deployed military and constabulary force to crush Confederate rebels, remove and confine western Indian tribes, quell striking workers, defeat Spain and vanquish the yellow fever threat from Cuba, neutralize Filipino insurgents, and harden and defend the border with Mexico. This effort to consolidate and strengthen the nation’s hold over its continental expanse and insular territories also included a

program to regulate the use of its natural resources, from water to wildlife, from forests to wilderness. The federal government established the first parks, protected areas, and resource agencies during this time, and thus the U.S. Forest Service (1905) and the National Park Service (1916) exhibited characteristics typical of constabulary forces, including uniforms—replete with cavalry-style campaign hats—and qualified police powers over their respective domains. The military certainly was not the only influence on the early resource agencies, their organizational cultures, and their methods, but it was fundamental.

Many of the agencies’ early practices, notably fire suppression, were consistent with, if not direct extensions of, military operations. The U.S. Army’s administration of Yellowstone National Park from 1886 until 1916, when the National Park Service took over, was crucial in establishing a precedent for suppression as the dominant approach to fire in the resource agencies and on the public lands. Fire had long been an important tool that Indians and other rural people used to shape their landscapes, but the Army associated it with disorder and rebellion. Much as warfare made military officers and their men proficient at the suppression of people, it prepared them for the suppression of fire. Many of the techniques they applied to combating insurrectionaries—lookouts, telegraph lines, mounted patrols and fighting units, starving the enemy of resources—they mobilized against fire. Military discipline similarly informed the creation of the first national park campgrounds. Orderly campsites and fire rings were easily observed and policed; patrolling soldiers ensured that the tourists kept their fires confined. Military
fire suppression was a powerful method, and both the Forest Service and the Park Service applied it with tremendous zeal.

Although the military was foundational to the nation’s resource management template, early foresters and rangers were not simply cogs in a giant machine that ruthlessly stamped out fire, destroyed predators, and reworked the landscape into the image of industrializing America. The suite of ideas and techniques that would dominate the agencies in later decades—and the assumptions on which they were based—had not crystalized yet. Even as the power and bureaucratic capacity of the modernizing state expanded across the American landscape, countervailing tendencies appeared. This was, after all, an important moment in the development and democratization of science, a pragmatic age of experimentalism that emphasized the direct experience of nature as the source of useful knowledge and provisional truths. Within the military structure of the resource agencies, the seeds of elegance took root.

Marshall was unusual but not alone in the Forest Service. Although the goal of the agency, as one young professional wrote, was to transform “the general riot of the natural forest” into an orderly and more economically productive landscape, some of the first rangers who fanned out across the American West in the early 1900s tried to understand the forests they entered in terms of the forests’ ecological contingencies, disturbances, and textures. “The silvics reports” produced by the rangers who studied the Blue Mountains of southeast Washington and northeast Oregon, the historian Nancy Langston concluded, “were a way of naming complexity, not just reducing complexity to fit simple theories.” The rangers’ curiosity led some of them to see
through Forest Services practices to more elegant ways of understanding, explaining, and managing land. The young Aldo Leopold who carried Forest Service doctrines to New Mexico and Arizona territories in 1909 was curious enough that his experience of those places eventually caused him to doubt the practice of killing predators to make deer more abundant. In this way, a colonial agency and its constabulary arm fostered a ranger whose essays on land and life reimagined the conservation movement.

Similar people appeared in the National Park Service. Despite its orientation to tourism, business management, and static scenes of natural grandeur, the Park Service was more flexible and open—with a greater potential for elegance—than it would be in later years. Women—ranch women, the daughters of park rangers, recent college graduates with degrees in science—began to make their way into the agency. At the University of California at Berkeley, Professor Joseph Grinnell and his graduate students served as proxies for the scientific research arm that the tourist-oriented Park Service lacked. Several of Grinnell’s students, including George Wright, Ben Thompson, and Joseph Dixon, eventually joined the Park Service and produced its first scientific reports on wildlife. “Fauna No. 1” (1933) and other documents assessed parks in terms of process, change, and relationships. Park fauna had histories, and parks were fragments of habitat with ecological connections running far beyond their official boundaries.

As vigorous as elegant thought and practice could be at particular times and places, they could not completely withstand the forces of change that cut against them and that reinforced and intensified the resource agencies’ heavy-handed tendencies. A series of national emergencies—World War One, the Great Depression, and World War
Two—favored methods and practices that were appropriate to an era of total war. In response to the needs of the moment, science and resource management became increasingly reductive, mechanistic, oriented to chemical technologies, extractive, authoritarian, and totalizing—in short, more war-like.

In the quest to cut timber for wartime demands, the Forest Service lost much of the elegant open-mindedness that characterized the early agency. Less and less the foresters saw complex, contingent, ecological forests; more and more they sought to remove old growth trees as quickly as possible and thereby remake the forests into even-aged stands that ensured a superabundance beyond anything nature alone could produce. During World War One, the line between the Forest Service and the Army blurred still more. Agency professionals served in forest engineering regiments in Europe, cutting timber and milling lumber for the war effort, while soldiers at home were deployed to the public lands, where they harvested spruce for aircraft and Douglas fir for ships.

After the conflict ended, the militarization of the Forest Service continued. Veterans joined or returned to the agency, reinforcing its system of military authority and discipline. Some Forest Service officials continued to use their Army rank, such as major or colonel. The Civilian Conservation Corps, administered by the Army and known as “Roosevelt’s Tree Army,” trained and supervised young men on a military basis for construction projects, firefighting, and other work, and thus strengthened the agency’s military inclinations. And, as never before, the Forest Service focused its efforts not on understanding fire ecology, but on devising all-out, military-style techniques of fire
control and suppression. CCC crews built roads and trails to facilitate fire fighting, and in 1935, the Forest Service instituted its “10 a.m. Policy,” which stipulated that fire officers and crews attempt to extinguish wildfires by ten o’clock on the morning following their report. The agency also adopted military technologies such as aerial reconnaissance and smoke jumping, and when personnel thought, wrote, or talked about fire, they used the language of warfare and likened firefighting to attacking an enemy.

The National Park Service paralleled the Forest Service in retreating from its earlier demonstrations of elegance. During the 1920s and 1930s, the hiring of women stopped as the agency set out to construct a mystique of the horse-mounted masculine park ranger. In the 1920s, the Park Service adapted fire suppression methods directly from the Forest Service, and in the 1930s, the CCC crews went to work in the parks. In a major project characteristic of many resource management programs in the age of total war, CCC crews tried—by hand and, eventually, using herbicides—to exterminate all native currant bushes, which public officials erroneously believed harbored blister rust, an exotic fungus that infected five-needle pine trees. As in the Forest Service, veterans joined or returned to the Park Service imbued with an acceptance of, and enthusiasm for, hierarchy and authority and rapid, all-out, can-do responses to problems. Perhaps most tellingly, as subtlety, holism, and pragmatic thinking diminished in the face of the exigencies of World War Two, so did the value placed on ecology and the budget for the Park Service science program.

Here and there, scientists, professors, conservationists, and resource managers sustained an increasingly marginalized resistance to the militarizing trends. As with
Marshall, it might be difficult, at first, to imagine two less elegant resource managers than Elers Koch of the Forest Service and John Roberts White of the National Park Service. Yet, as with Marshall, the details of their stories suggest otherwise.

Elers Koch was a tough, blunt ranger and forest supervisor who battled fires with a grim military determination and who once used a mattock handle to hold off a mob of angry firefighters. Yet he also was a native Montanan and amateur historian who loved the forests, animals, mountains, and undeveloped landscapes of the western part of his state and the adjacent Idaho panhandle, and who eventually decided that Forest Service fire policy was wasteful and destructive. In 1935, he published “The Passing of the Lolo Trail,” an eloquent lament for the cultural and natural values lost when CCC crews carved a road over the remains of a historic trail and deep into the remote, rugged Selway River drainage of Idaho: “The Lolo Trail is no more ... The bulldozer blade has ripped out the tracks of Chief Joseph's ponies. The trail was worn deep by centuries of Nezperce and Blackfeet Indians, by Lewis and Clark, by companies of Northwest Company fur traders, by General Howard’s cavalry horses, by Captain Mullan, the engineer, and by the early-day forest ranger. It is gone, and in its place there is only the print of the automobile tire in the dust.”

Koch had a counterpart in John Roberts White, superintendent of Sequoia National Park from 1920 to 1947. Col. White, as he was known, had considerable military experience, which likely made him appealing to Stephen Mather, the first

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director of the National Park Service. White certainly knew how to supervise people and build infrastructure, desirable qualities in an early park superintendent, but he turned out to be quite unlike the conventional military man—the characteristic “Mather Man”—the director hoped he would be. A Briton by birth and a naturalized American, White served in the U.S. Army in the Spanish American War and in World War One. By far the greater influence on his thought and practice, however, were the thirteen years he spent in the Philippine Constabulary commanding small units of Filipino forces in the running skirmishes of numerous counterinsurgency campaigns. The lessons he learned during his years on Negros and Mindanao served him well as Sequoia superintendent. Rather than follow the army textbook or the agency protocol, the aging backcountry irregular became something of an insurgent himself.6

His accomplishments were impressive. While the Park Service committed ever more deeply to the total suppression of fire, White and his rangers experimented with light burning around the Sequoias. While Mather and his assistant director, Horace Albright, promoted road construction and opening the parks to development, White resisted them—indeed, the reason Sequoia never had a high-elevation Trail Ridge Road, Going-to-the-Sun Highway, or Tioga Road, is directly attributable to his interference. In

the same spirit, White struggled to restrain the CCC units in his park, all the while laying out a network of backcountry trails that he hoped would encourage visitors to get out of their cars, escape the enervating effects of mass consumer culture, and experience life as he had known it in the Philippines. When the Park Service finally forced White into retirement, it ended what surely must have been one of the longest, most creative—and most elegant—careers in national park history.

White’s exit from the National Park Service in 1947 was emblematic of a generational shift in the strand of elegance that had developed in the interstices and on the margins of the modern resource management state and the mass extraction-production-consumption-destruction economy. By mid-century, many early elegant thinkers and practitioners—people who had witnessed a time before the rise of such reductionist, totalizing giantism—were disappearing from the scene. A few, like White, lived on in the bitter, frustrating silence of retirement. Wright and Marshall died prematurely, from accident and illness, respectively. Sick and in pain, grieving for a wife dead from cancer and a son who fell at Normandy, Koch took his own life. For others—Rachel Carson and Olaus Murie, for example—death soon would come calling. With the passage of time, the turn of history’s great wheel appears more clearly to us. Just as the machinery of statism, resource extraction, and mass consumption was about to shift into overdrive, the first generation of elegant resisters and dissidents began to fall by the wayside. Overlooked, forgotten, and misinterpreted, the legacy of their lives and works lingered on the shadowy margins of the booming economy and the burgeoning power of the twentieth century resource management state.
Leopold had seen the juggernaut coming. Two weeks and a couple of days beyond Pearl Harbor, he poured out his feelings in a poignant—and long unpublished—essay, “Yet Come June”: “Empires spread over the continents, destroying the soils, the floras and the faunas, and each other. Yet the trees grow ... Philosophies spread over the empires, teaching the good life with tank and bomb. Machines crawl over the empires, hauling goods. Goods are plowed under, or burned ... Dams to make goods block the salmon runs, but not the barges carrying goods. Railroads carrying goods race the barges. Trucks carrying goods race the railroads. Cars carrying consumers of goods race the trucks. Yet the trees grow.”

Leopold soon crystallized his thoughts in the poetic prose of the manuscript that would become A Sand County Almanac. Much as Marshall found his alternative to modern society among his friends in an Arctic village, Koch in the footprints of Indians traversing the Lolo Trail, and White among his Native troops and their families in the remote Philippines, Leopold found his in the green lagoons of the Colorado delta, on the lightly touched drainage of the Rio Gavilan, in the meadows, pine forests, and rocky faces of the American Southwest. Like White in the Philippines, Leopold journeyed to a far place and there, in effect, went native. Not the machine but the mountain, he concluded, must be the standard of value. Months before the book appeared in print—to modest sales and scant critical reception—Leopold was gone, dead from a heart attack while fighting a grass fire on a neighbor’s farm.

The massive extractive, infrastructural, and industrial development that soon followed—and the unprecedented outpouring of consumer goods that it yielded—was of world-historical significance. Scholars, polemicists, and others have labeled it variously. Paul Hirt (*A Conspiracy of Optimism*, 1994) has called the prevailing outlook of the time Technological Optimism or Techno-Optimism. Charles Wilkinson (*Fire on the Plateau*, 1999) has referred to the era as the Big Buildup. James Scott (*Seeing Like a State*, 1998) has written of High Modernism. In the national parks, Edward Abbey (*Desert Solitaire*, 1968) derided Industrial Tourism. K. Ross Toole decried *The Rape of the Great Plains* (1976). Tim LeCain has focused on another important outcome, which he calls *Mass Destruction* (2009). Of late, and on a global scale, John McNeil and others have spoken of the Great Acceleration. All of these are reminiscent of the term that President Dwight Eisenhower used to describe the system that dominated the country as of about 1960: the Military-Industrial Complex.

Whatever it is called, its material manifestations were astonishing to behold. On major rivers, the Bureau of Reclamation and the Corps of Engineers installed massive multi-purpose, earthen and reinforced concrete dams that backed up reservoirs of unprecedented size. The Forest Service carved thousands of miles of roads into the mountains of the far West—in some places, a mile of road for every square mile of forest. The roads were used for total fire suppression, which made ever-greater use of technologies—tanker aircraft, smoke jumpers, helicopters, and more—adapted from military operations. The roads also serviced giant clear-cuts, the silvicultural equivalents of the hydraulic engineers’ immense reservoirs and the mining engineers’ strip mines.
and open pits. Meanwhile, the National Park Service implemented a massive development scheme, Mission 66, to be completed by the agency’s fiftieth anniversary, that built new campground facilities, visitor centers rendered in modernist styles more typical of National Aeronautics and Space Administration facilities than of the parks’ rustic tradition, and sleek modern highways that slashed across the landscape, in some cases defacing geological and other resources of incalculable value. As in the past, returning military veterans carried a Cold War penchant for hierarchy and authority into the agencies.

Science, including the sciences of ecology and management, became more specialized and reductive than ever before, as did the universities where students learned that science. Colorado A&M became known as the Ranger Factory and Park Service Tech because of the large numbers of alumni who joined the ranks of the Forest Service and the National Park Service. Professor Jack Wagar, a veteran of the U.S. Army in World War One, an ex-Forest Service ranger and a former Civilian Conservation Corps camp commander, established the park management option in the university’s forestry degree. Not everyone was happy with the modernist, military-industrial strains that dominated the state colleges and universities, however. The ecologist Paul Sears lamented the reductive methodologies that swept through “college class-rooms” where “a type of fragmental teaching has been going on that breaks the world of human experience up into air-tight compartments.”

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Aldo Leopold similarly complained about specialists focused on learning “more and more about less and less,” and he assailed the academy for its reductionism: “There are men charged with the duty of examining the construction of the plants, animals, and soils which are the instruments of the great orchestra. These men are called professors. Each selects one instrument and spends his life taking it apart and describing its strings and sounding boards. This process of dismemberment is called research. The place for dismemberment is called a university.”

The achievements of the era cannot be denied—military victories, advancements in medicine, massive surpluses of food and energy, the democratization of wealth—the list goes on and on. At the same time, for all of its achievements, the prevailing system of resource management, and the mass extraction-production-consumption-destruction economy that it supported, proved incapable of dealing with the world’s ecological and cultural textures and subtleties. Ultimately, it proved to be not only unsustainable, but also the source of enormous damage. Against the backdrop of the Vietnam War debacle, dams, clear-cuts, chemicals, and highways offered clear signs not of achievement, but of overshoot and of a system in decay. The “‘control of nature,’” Rachel Carson famously wrote, “is a phrase conceived in arrogance, born of the Neanderthal age of biology and philosophy, when it was supposed that nature exists for the convenience of man.”

The stories are legion, and each is emblematic. At Saguaro National Monument in Arizona, the National Park Service noted with alarm that its iconic cactus was failing

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to regenerate. Research later revealed that cattle grazing on the monument found relief from the sun in the shadow of Palo Verde trees, and there trampled the immature Saguaro that also needed the shade to survive. But before so simple a cause could be identified, and before an elegant solution could be implemented—reduce if not remove the cattle—the Park Service rushed to judgment, and in a manner characteristic of the times. Scientists identified an apparent culprit—a bacterium that infected the plants. (As it turned out, it was a bacterium only endemic to aging cacti, and not fatal to them). The Park Service then arrived at a Vietnam-style solution derived from the treatment of livestock herds carrying hoof-and-mouth disease: Dig a giant pit, bulldoze the infected organisms into the hole (slaughter the organisms, in other words), douse them with chemicals, and bury them.

The status quo could not continue unchallenged. A decades-long period of breakdown, resistance, and reorientation ensued—a period from the 1960s and 1970s onward that, in some respects, still is underway. Social and political transformations were important to the process. The anti-war movement challenged the nation’s Vietnam policy, the most deeply troubled expression of the nation’s militarized approach to social, political, and environmental problems. Meanwhile, the modern feminist movement encouraged—and enabled—a new generation of women to enter the resource agencies and reclaim opportunities earlier generations had begun to experience, but then had lost for nearly half a century. For decades, women had been confined to the largely unrecognized auxiliary of wives who performed immense amounts of unpaid labor on behalf of their ranger-husbands and their ranger-husbands’
agency employers. By the 1970s, the agency wives’ literal and figurative granddaughters and daughters, equipped with degrees in ecology, wildlife biology, anthropology, history, forestry, geology, and natural resource management, were re-entering the ranks of the Forest Service and National Park Service. Those young women also were at the forefront of perhaps the most important development of all—the environmental movement, which posed an unprecedented challenge to the dominant system of resource policy and practice.

The changes were uneven, and often shaped by practices and by language characteristic of an era of military and social struggle. At the heart of the 1969-1970 National Environmental Policy Act (NEPA) and its environmental impact statement process, for example, were the words “comply” and “compliance.” Recalcitrant agencies must comply with the law and determine the potential environmental consequences of any action they might undertake. If an agency did not comply, citizens or even another agency might sue.

Structures of conflict, and the use of force words and military metaphors, also shaped movements for change within the resource agencies. As happened decades before, the alternatives grew out of reactions against the agencies’ militarized structures and the authoritarian resource management strategies characteristic of the Cold War era. The story of Jeff DeBonis, a Forest Service timber manager, is illustrative.

In the 1970s, after completing a degree in forestry at Colorado State University and after

a stint with the Peace Corps working on forestry projects in El Salvador, DeBonis joined the Forest Service. Imbued with the agency’s legendary esprit de corps, he took up his timber management duties with tremendous enthusiasm. What he soon discovered, however, appalled him: a narrow, “top-down” management process that ignored ecological conditions and imposed inflated, unsustainable, and destructive production goals on the forests.¹²

In 1989, after repeated protests to his superiors, a frustrated DeBonis founded the Association of Forest Service Employees for Environmental Ethics (AFSEEE). The extremism that DeBonis saw in the Forest Service shaped his own sense of himself and his reform mission in AFSEEE. Despite his status as a Peace Corps alumnus, he imagined his resistance in military terms. An early mentor who changed his mind about Forest Service practice was “a seasoned ‘combat’ biologist” named Ernie García. DeBonis eventually likened himself to a “revolutionary who would die in the fight no matter which side won.” Out of self-defense, he adopted a confrontational, hard-edged political style that he called his “‘kamikaze’ approach.” DeBonis certainly advocated a philosophy of forest management highly consistent with elegant conservation—what he called “the long-range, holistic, altruistic motives of the environmental community.” Yet his means of achieving his objectives, and the ways that he talked about them, were profoundly shaped and inspired by the very militarized system that he struggled so courageously to overcome.

While citizens reacted against the road-building, clear-cutting excesses of the Forest Service, and while a new generation of agency professionals debated the older proponents of conventional production-oriented silviculture, the National Park Service experienced comparable political tensions and management transformations. Ecologists and resource managers associated with the agency had forgotten much. The work of George Wright and his colleagues languished in the musty stacks of aging federal government documents tucked away in the memory holes of obscure land grant college libraries, themselves tucked away in the remote mountains, valleys, and prairies of the far West. When National Park Service fire scientists began to experiment with controlled burning in Sequoia in the early 1970s, they evidently knew nothing of the efforts of Col. John Roberts White nearly half a century before.

Yet there was some carryover, some transfer of enduring ideas. In reaction against the streamlined reinforced concrete excesses of Mission 66, Starker Leopold—Aldo’s son—and a group of colleagues issued a report that harkened back to the days of Wright and urged the National Park Service to return to the principles and practices of ecological science as the basis of resource management. More remarkably, as the years passed, the pro-development legacy of Stephen Mather and Horace Albright, two of the most important founders of the National Park Service, declined in popularity, to be replaced by the intellectual, ethical, and creative legacy of Aldo Leopold.

In September 1970, barely four months after Earth Day, Ballantine Books issued the first mass-produced paperback of *A Sand County Almanac*. That the edition was the yield of the very economic system against which Leopold had warned, detracted nothing
from its significance. At long last, Leopold had found his audience. From that time onward, his legacy spread far and wide, through the resource agencies, through the classrooms of the state colleges, through the hearts and minds of readers across the land. “It is only the scholar who appreciates that all history consists of successive excursions from a single starting-point,” Leopold wrote, “to which man returns again and again to organize yet another search for a durable scale of values.” From 1970 onward, Leopold would be the chief guide and muse on that never-ending quest. Others would join him—the long-dead Robert Marshall among them, rediscovered by a new generation of critical but appreciative historians. But at the forefront would be Leopold.

If one decade could be identified as a major departure in a Leopoldian succession of excursions in search of elegance, surely it would be the 1990s. The environmentalist achievements of the 1970s had engendered a conservative, anti-environmental political reaction—including the Sagebrush Rebellion in the West—and, in the 1980s, the ascension to power of President Ronald Reagan. The eclipse of 1980s Reaganism helped open a political and intellectual space for a reinvigorated and substantially revised environmentalism. Added to that was another crucially important generational turnover, as agency employees imbued with the values of the top-down resource management state began to retire. Far more important than domestic politics alone, however, was the end of the Cold War in 1989-1990. The end of the Cold War abruptly undercut any remaining bipartisan rationale for state-subsidized natural resource management in service to anti-communist ideology and timber extraction goals that would prove the superiority of the American economic system over that of its
Soviet nemesis. Reeling from the failure of its high modernist clear-cuts, roads, and fire suppression practices, bereft of the Cold War struggle that gave it its ultimate purpose, a beleaguered Forest Service grew weak and vulnerable. An intellectual and political opening now beckoned the proponents of ecological forest management and their environmentalist allies.

Intellectual and cultural historians, in thrall to the ossified, static categories and modernist separations characteristic of the Jim Crow system, the age of total wars, and the Cold War, have yet to offer integrated, thoroughly contextualized accounts of ideas, especially ecological ideas and related management practices, that began to mature in the 1990s. During that decade, ecologists and resources managers began to reject static, reductive, ahistorical, abstract explanations of ecological relationships—most important, system equilibrium models always trending through succession toward a balanced climax—that were characteristic of twentieth century militarized thought and practice. In their place, scientists and managers asserted a new style of thinking and doing that was more holistic, historical, fluid, process-oriented, and provisional than previous approaches and that acknowledged the significance of disturbance and change and the human influence on ecological relationships.

The sources of this alternative ecological approach were various, but included systems thinking, a recognition of the importance of history (especially environmental history), a sweeping revival of philosophical pragmatism, and resilience theory. Systems thinking grew out of World War II operations research and, shaped by advances in computer technology and various forms of statistical analysis, game theory, and other
abstract methodologies, went in various directions, including through the physical, biological, and ecological sciences, as explained and popularized in such works as Fritjof Capra’s *The Web of Life* (1996). As evidentiary anomalies contradicted the succession and climax paradigm, ecologists increasingly recognized the roles of disturbance and change—history—in ecological relationships, as Daniel Botkin explained in *Discordant Harmonies: A New Ecology for the Twenty-First Century* (1992).

Environmental historians, led by such scholars as William Cronon and Richard White, in *Uncommon Ground: Rethinking the Human Place in Nature* (1995), reinforced the historicist trend in ecology in their description and assertion of a powerful human role in shaping past landscapes, including areas conventionally considered to be non-human wilderness. Meanwhile, historians, scientists, and scholars and practitioners in many other fields recovered their intellectual roots in the philosophical pragmatism of William James and John Dewey, one of the great influences on the life and work of Robert Marshall. As Joyce Appleby, Lynn Hunt, and Margaret Jacob explained in *Telling the Truth About History* (1994), they rejected the certitude and extreme reductionism of absolutist science, the reductive and sterile Cold War consensus in historical thought, and the intellectual wasteland of post-modern theory in favor of a reinvigorated pragmatic approach to knowledge. Experiential, experimental, process-oriented, pluralistic (in contradistinction to “diverse”), democratic, and above all useful and practical, pragmatism overcame the Cartesian mind-matter divide and rejected
absolutist notions of truth in favor of a muscular commitment to provisional truths realized in dialogue and in practice with fellow citizens.\textsuperscript{13}

Perhaps the most important and telling intellectual innovation in ecology and resource management to come to the fore in the 1990s was resilience theory. Grounded in a 1973 article by Canadian ecologist C.S. Holling, who coined the term, resilience might be imagined as an attempt to reconcile some notion of ecological structure or system with the unpredictable, non-linear contingent events that occurred in the everyday world and that could disorder and radically rearrange patterns of ecological relationships.\textsuperscript{14} In this sense, resilience was defined as the capacity of a system to absorb perturbations or disturbances without reordering relationships and moving the system into a new condition or state.

Resilience in turn became the basis of adaptive management, the practical application of the finding that ecological relationships could be unpredictable and non-linear and unsettled by contingent disturbances. Adaptive management recognized the need for continual revision of management approaches as circumstances changed, the need for multiple points of view (in other words, a plurality of perspectives) on a given problem, and the likelihood if not necessity of failure as managers maneuvered toward methods that worked more often than not, that were more useful and effective than

\textsuperscript{13} James Kloppenberg is one of the leading intellectual historians of philosophical pragmatism in the United States, and one of its leading academic proponents. For an insightful, accessible discussion of the revival of philosophical pragmatism, see James T. Kloppenberg, \textit{Reading Obama: Dreams, Hope, and the American Political Tradition} (Princeton: Princeton University Press, 2011).

those attempted before. Although it is not clear how much a reading of pragmatism
ingfluenced Holling, his scientific commitment to experience, experimentation, process,
and provisional truths was consistent with the philosophy. “A management approach
based on resilience,” he concluded in his 1973 article, “would emphasize the need to
keep options open, the need to view events in a regional rather than a local context, and
the need to emphasize heterogeneity. Flowing from this would be not the presumption
of sufficient knowledge, but the recognition of our ignorance; not the assumption that
future events are to be expected, but that they will be unexpected. The resilience
framework … does not require a precise capacity to predict the future, but only a
qualitative capacity to devise systems that can absorb and accommodate future events
in whatever unexpected form they take.”

By the 1990s, ecologists and resource managers were busily elaborating the
initial work of Holling. The concepts of resilience and adaptive management began to
spread and flourish in the aftermath of narrow, militaristic, Cold War styles of science
and resource management. As Holling and his many colleagues continued to articulate
their vision of a new way of thinking and acting, they felt the need to define the older
system that they sought to overturn and replace. They found military metaphors to be
useful. Some adapted the nuclear acronym MAD—Mutually Assured Destruction—to
describe the conventional heavy-handed, conflict-oriented style of the natural resource
agencies: Make the decision. Announce the decision. Defend the decision. Other
ecologists and resource managers began to speak and write of “command and control”
as the predominant approach that they wanted to supplant. It is unlikely that they were
aware of the historical depth of their critique, that in many ways they were calling into question the very assumptions that had informed the constabulary resource agencies from the beginning—that they were, in effect, aligning themselves with a much older story of resistance and dissidence going back to Marshall and beyond. Nonetheless, their use of the term was effective, and it helped them demarcate their post-colonial, post-Cold War philosophy and methodology from the old regime that preceded it.

In 1996—again, the 1990s were a crucially important decade—Holling and Gary Meffe, a passionate, articulate, well-read, and outspoken ecologist, published a widely-cited and influential article that offered a scathing indictment of the failures of high modernist, techno-optimistic, militarized resource management.15 Dedicated to none other than Aldo Leopold—“who clearly anticipated the ideas herein, and who was writing about land pathologies as early as 1935”—“Command and Control and the Pathology of Natural Resource Management” asserted that the resource agencies and the universities that supported them were suffering from a kind of sickness. Instead of addressing the ecological conditions of the lands they were charged with stewarding, the resource agencies had focused narrowly on their organizational goals. Isolating themselves from the larger society and ignoring obvious evidence of the deleterious consequences of their actions, they grew defensive, turned inward, and denied their dependency on the damaging and unsustainable practices that they had fostered.

There was an antidote to the sickness, Holling and Meffe said. Incentives should reward resource users for engaging in practices that conserved ecological relationships rather than sundering them. Resource agencies should abandon narrow, reductive ecological science—focused on outmoded, ideal-type and unattainable static equilibria—in favor of concepts emphasizing resilience. Along with that, they should institute adaptive management practices that would allow them to “innovate and learn.” Finally, the resource agencies should reach out, “engage people as partners in the process of science and policy,” and “develop local partnerships among broad constituencies that all stand to gain (or lose) together from good (or poor) resource management.”

Such was the fluid, indeterminate, and unsettled state of ecology and resource management as the twentieth century turned over to the twenty-first. Everywhere could be witnessed signs of change within and without the resource agencies and the colleges and universities that aided and abetted them. For the National Park Service, a crucial turning point arrived in 1998. Partly in response to a critical history—Preserving Nature in the National Parks (1997) by agency historian Richard Sellars (who later claimed that he had wanted to title the book Not Preserving Nature in the National Parks), Congress passed the National Park Omnibus Management Act requiring the agency to conduct ecological research and manage the parks based on ecological knowledge. The ultimate consequence of this historic mandate remained to be seen, but a new direction, an alternative route into the future, was opening.
In this new environment, resource managers—sometimes unaware of past precedent—continued to revive, reinvigorate, and in some cases reinvent elegant styles of conservation. As command-and-control resource management lingered, resource managers maneuvered to find the way forward. The examples are many, but perhaps one might summarize the whole. This is a story of two metaphorical granddaughters of Robert Marshall.

National Park Service anthropologist Alexa Roberts had been given the task of working with the Southern Cheyenne and Arapaho tribes to begin planning the proposed Sand Creek Massacre National Historic Site. The agreement between the tribes and the Park Service specified that it would be a co-equal partnership that would honor, respect, and include indigenous knowledge. Eventually, the tribes and the agency came to a point of disagreement over the location of the village at which the massacre had occurred. Trained in the reductive scientific methodologies of modern archaeology, Roberts also had conducted oral histories of Native people, and from that experience concluded that indigenous knowledge was internally coherent and necessary to any reasonably thorough account of people, time, and change.¹⁶

To Roberts, history was not merely the putatively absolute and final facts about the past, but more important, also was a negotiated process of inquiry in which people talked, debated, and considered a range of potential explanations about what they think might have happened back then. How you practiced history, in other words, and with whom you practiced it, also mattered. Accordingly, and echoing the advice of Robert

Marshall to John Collier some seventy years before, Roberts urged her Park Service colleagues to work slowly and provisionally, in tandem with the tribes, and in a manner that respected the tribes’ knowledge and that gave them the authority to sort out the facts and come to some kind of conclusion on their own terms. Don’t impose your view on them, Roberts in effect said. Suspend your rush to judgment. Refrain from calling the site you have identified as the definitive village site. Give the people the maps and evidence and let them work on the problem. And yet, echoing John Collier some seventy years before, the Park Service, with the best of intentions and driven by a reductive research methodology and a zeal for absolute facts, acted in classic command-and-control fashion and dismissed the tribes’ interpretation.

The entire project hung in the balance. Angry, hurt, and alienated, the tribes and their representatives threatened to withdraw. Drawing on deep cultural knowledge and skills in cross-cultural diplomacy, Roberts struggled to work with the tribes to keep them involved in the planning effort. Park Service historian Christine Whitacre assisted her by compiling and writing a final planning document that was as important an example of elegance as any federal government document could be.

Although she acknowledged the certitude of the Park Service’s research findings, Whitacre also acknowledged the complexity of the evidence and the need to include alternative views espoused by the tribes. “The document,” concluded the historian Ari Kelman with approval, “is built atop a bedrock of certainty, but its greatest virtue is its flexibility, expressed through a willingness to tolerate doubt.” Holistic, process-oriented, pluralistic, and provisional, it helped keep the tribes involved and helped keep alive the
possibility of a site at which the nation at last might confront its enduring legacy of genocide.

If elegant conservation expresses anything, it is the ability or capacity to see people in the fullness of their lives and not simply in light of their flaws. In keeping with the late twentieth century penchant for purity and absolutes, it is easy to dismiss or condemn anyone who does not meet perfectly the high standards of the present. In this way, stories about the past become endless repetitions of corruption, failure, and disappointment, and the past loses the power to inspire or guide. Elegance, in contrast, presumes imperfection—indeed, assumes its necessity—and tries to see through the flaws to traces of possibility, fleeting contingent moments at which the past is free of the burdens of the present and the potential for an alternative future might be glimpsed.

Once more we dip into the middle of the story; once more we visit Robert Marshall.

It is 1931. Marshall is in the Arctic village about which he will soon write a book. Although he is deeply concerned with wilderness as a means to reinvigorate masculinity, his concern for manliness does not necessarily mean that he dislikes women or that his manliness is contingent on their suppression. To the contrary, he admires strong women, including Native women, and they influence his thinking. In the very near future, the housing activist Catherine Bauer will join the Wilderness Society at his invitation, but she will urge Marshall to find ways of providing outdoor recreation and wilderness access to working class citizens. Some of Marshall’s colleagues will dismiss Bauer’s advice, but Marshall will vigorously defend her and her ideas.
Much as Marshall admires Bauer, he admires the women of the Arctic village. Although he spends much time in the backcountry in the company of men, he likes the women, talks to them, and listens to them. Although he is not an especially elegant or poetical writer, he has an ear for the literary, the beautiful, and the sonorous, and he records the ideas, stories, pictures, and songs of the Inuit women and puts them in his book. At the end of the chapter on the arts, he concludes with “Darling Darling Harry Horton,” an anguished, profane, and poetical song by a middle aged Native woman exploited, abused, and abandoned by her Euro-American lover. Not only does Marshall try to understand Native women and feel sympathy for them, but he also admires them for their physical and instrumental competence and for their intelligence. He snaps a picture of his friend Jennie Suckik, sturdy and smiling and confident, swinging a double-bitted ax that flashes in the sunlight. Suckik, the caption reads, “is a splendid axeman and can outchop most of the men in the Koyukuk.”

Marshall reserves especial admiration for Ekok and Dishoo, who operate his scientific research apparatus with which he attempts to collect data on tree growth at the northern timberline. While Marshall travels beyond the village for nearly two months, the young women diligently gather data from a rain gauge, thermometers, an anemometer, a dendrograph, and five atmometers, which measure evaporation. At one point, the wind upsets of the atmometers. On her initiative and drawing on her own ingenuity with no instruction from Marshall, Ekok restores the instrument and gets it functioning again. When Marshall returns, he is pleased and deeply impressed, and he praises Ekok and Dishoo. He remarks in his book that he has seen “more than one
college student who was unable to run satisfactorily a far simpler weather station than this one.” He takes a photograph for his book. Ekok, a young woman of color, stands at the rustic wood table in the wilderness that is Marshall’s scientific station. Her dark hair shines in the sunlight. Eyes focused, intent on her work, she adjusts one of the atmometers.

Above the Arctic Circle, in the exuberant brevity of the northern summer, the possibility of an alternative—and more elegant—future momentarily comes into view. Such moments can be found everywhere on the margins and in the interstices of the past, if only we look for them. They might serve as beacons with which to find a way forward through our own perilous and uncertain times and into a world that, if far from perfect, will be better for our having tried.