

# Science or Tradition?

From the beginning, tourism has shaped the attitudes of Park Service leadership, resulting in a stubborn resistance to scientific resource management.

BY RICHARD WEST SELLARS

A CONFERENCE ON national parks held in Vail, Colorado, in 1991 focused on “environmental leadership”—asking how the National Park Service could establish itself as a leader in sound ecological land management. On the surface, it seems strange to raise such a question about a bureau that for 75 years had managed public lands under the mandate to leave them “unimpaired.” Yet the Park Service had always emphasized a kind of tourism and scenery management. And its response to demands to become more ecologically informed—especially outspoken since the 1960s—had been, as a Vail conference document noted, “sporadic and inconsistent, characterized by alternating cycles of commitment and decline.”

This reluctance to accept change has deep historical—and cultural—roots. With railroad companies as their chief lobbyists, the early national parks were not intended to be inaccessible nature preserves. By the beginning of the 20th century, more than 400 miles of roads had been built in Yellowstone, along with hotels, horse corrals, and trails. Yosemite, Sequoia, and other parks underwent similar tourism development,

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which came to include maintenance facilities, electrical plants, employee housing, campgrounds, garbage dumps, and extensive water and sewage systems.

Likewise, natural resource management sought to ensure public enjoyment of the parks. To protect popular wildlife species, predators such as mountain lions, wolves, and coyotes were systematically slaughtered. Na-

power base they would hold to tenaciously. Landscape architecture, because it formed the crucial link between park development and the protection of scenery, became the single most influential profession in the service (a position that, arguably, it maintains today). Early on, landscape architects had joined with engineers, foresters, park superintendents, and rangers to establish a loosely allied but enduring leadership, whose values and perceptions formed the service’s dominant culture. These leaders were deeply committed to public enjoyment of the parks, valued park scenery much more than ecology, and showed little interest in acquiring a scientific understanding of the parks.

This disinterest is demonstrated by the fact that biological science is the only important program in Park Service history to have been initiated with private funding. In 1929, 13 years after the Park Service was created, George Wright, a wealthy biologist stationed in Yosemite, used his own funds to launch a survey of wildlife in the national parks and to establish an office of wildlife biology. Later supported by the service’s own appropriations, the office grew by the mid-1930s to a maximum of about 27 biologists.

In the context of prevailing Park Service values, the wildlife biologists’ vision was truly revolutionary. The biologists opposed the killing of predators and voiced concern about the ecologi-



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turally occurring forest fires were suppressed to protect green landscapes; and to please anglers, millions of fish—native and non-native—were released in lakes and streams.

The 1916 act establishing the Park Service mandated no changes whatsoever for such policies. And, guided by the act, development to accommodate tourism continued with few interruptions. Significantly, this persistent determination to develop the parks propelled construction and development professions into commanding roles within the Park Service, giving them a

cal impacts of park development. They sought to maintain natural conditions in national park forests, adamantly opposing total fire suppression, and they charged that chemical spraying to kill native insects in the forests violated the very purpose of the national parks.

Without George Wright's leadership, the Park Service may have waited decades to create a science program—no evidence exists to indicate otherwise. Indeed after Wright's accidental death in 1936, the program declined. By 1939, only nine biologists remained, compared with about 400 employees classified as landscape architects—an indication of fundamental Park Service values. Without a vocal public constituency, the wildlife biology program languished for more than two decades.

Increasing public environmental awareness in the 1960s brought outside pressure for scientific resource management in the parks. This was reflected in two 1963 studies, the Leopold Report (principally authored by biologist A. Starker Leopold) and a subsequent report by the National Academy of Sciences. Both argued for creating strong, scientifically based natural resource management programs. In effect, they challenged the Park Service to reinterpret in scientific and ecological terms its long-standing mandate to leave the parks unimpaired. But a full and committed response would require Park Service leaders to share control over policies, programs, staffing, and funding with science, which had long been marginalized. Moreover, the reports' insistence on scientifically informed, research-based decision making threatened traditional management with more costly, difficult, and time-consuming processes. The reports thus precipitated a struggle between the ecologically oriented factions within the Park Service and the far more powerful leadership establishment.

Since the Leopold and National Academy reports, there have been about two dozen similarly critical studies of park science and resource management programs. While these programs have grown well beyond what

they were at the time of the Leopold Report, the fact that so many critical reports have appeared since 1963 suggests that the Park Service's response has been, as the Vail conference document stated, "sporadic and inconsistent."

The Park Service had long ago established itself as a national and even international leader in the field of general park management—that which is focused mainly on tourism, including attracting, accommodating, educating, and managing visitors. Indeed, the dominant culture of the Park Service has in large degree evolved in response

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to the demands of tourism. Since the 19th century, managers have had to deal not only with the planning, construction, and maintenance of park facilities and roads and trails, but also with increasingly difficult concerns such as concession operations, visitor services, law enforcement (including drug and crowd control), and political pressure from tourism and other interests outside the parks.

Out of this evolving set of circumstances, certain shared basic assumptions began to emerge before the Park Service was created; they gained strength under the first Park Service director Stephen T. Mather and his successors, and endured—some of them up to the present. These dominant assumptions have included: With public enjoyment of the parks and the protection of scenery being the overriding concerns, management even of vast natural parks required little scientific information and few, if any, highly trained biologists—the unscientifically trained eye could judge park condi-

tions adequately. Moreover, park managers should have independence of action, and scientific findings could restrict managerial discretion. Each park was a superintendent's realm, to be subjected to minimal interference. Similarly, the Park Service was the right-thinking authority on national parks—it could manage them properly with little or no involvement from outside groups. Environmental activism was often unwelcome; and legislation such as the Wilderness Act and the National Environmental Policy Act should not interfere unduly with traditional management and operations.

Overall, the Park Service developed a highly pragmatic management style that emphasized expediency, resisted information-gathering through in-depth research, and disliked interference from groups inside or outside the service. And when ecological concerns inspired a different perception of the national parks, many individuals who had risen to power embracing the dominant cultural assumptions of the Park Service adhered to tradition and resisted changing the perceptions and policies they had long taken for granted and upon which their careers and their influence and authority within the organization had been built.

For decades, the Park Service's dominant cultural traditions and assumptions have formed the chief impediment to a full acceptance of science. Nevertheless, the service has persistently claimed that preservation is its chief goal. If this assertion were valid—and if it had long been reflected in policies and organizational structure, and in such matters as staffing, funding, and programming priorities to establish an overall record of excellence in scientific natural resource management—the question of attaining environmental leadership, as posed at the 1991 Vail conference, would have been unnecessary. By example of its own resource management, the National Park Service would already have achieved such status had it followed the recommendations of its wildlife biologists, beginning more than six decades ago. 