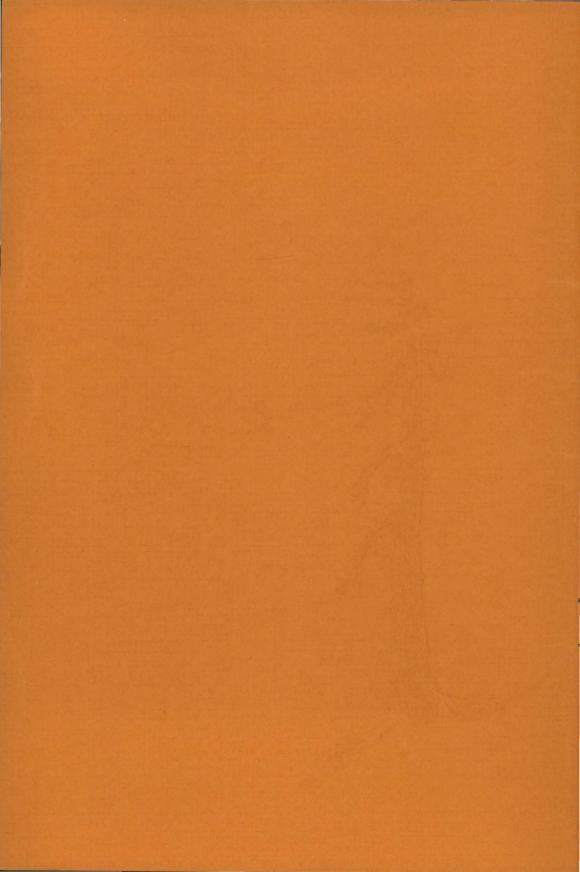
PROFESSOR RODERICK NASH

WILDERNESS RESOURCE DISTINGUISHED LECTURESHIP







WILDERNESS MANAGEMENT: A CONTRADICTION IN TERMS?

Roderick Nash

UNIVERSITY OF IDAHO WILDERNESS RESEARCH CENTER

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Dean's Introduction

Before I introduce this year's honored speaker, I would like to thank Dr. James Fazio and the members of the University of Idaho Wilderness Research Center for making this presentation on our campus possible. And in case you are not familiar with this unit of the University, I would like to say a few words about the Center. Under its auspices, a steering committee of interested faculty members promotes both ecological and social research for the purpose of better understanding our precious wilderness resources and the human experiences associated with them. Studies to date have included the investigation of such wilderness wildlife species as the mountain lion, the wolverine, the marten and the bighorn sheep. In fact, the host of wildlife studies associated with the Center runs the gamut from our highly prized elk to the lowly pocket gopher. Other studies have dealt with the role of fire in the maintenance of ecological balance under conditions as natural as possible in our modern world.

In the social sciences, a major project has been to learn more about the use of communication as a management alternative — perhaps one that can even keep Idaho wilderness free from the restrictions and regimentation that have become necessary in many other areas of the country.

Another study has dealt with the identification of researchable problems associated with our increasingly popular wild rivers, and yet another has documented the fascinating history of the Big Creek portion of the Idaho Primitive Area.

In addition to research, a second function can be attributed to the Center. This is in the area of education. Through the sponsorship of student field trips, exhibits, publications, and the annual Wilderness Resource Distinguished Lectureship, the Center attempts to convey to the public what is known about the history, ecology and management of our great wilderness resources.

Last year, the first Distinguished Lectureship was awarded to Senator Frank Church. As many of you will recall, the senator's presentation was titled "Wilderness in a Balanced Land Use Framework," and was based on his intimate association with the thought and action that culminated in the passage of the Wilderness Act of 1964.

Just today I received a letter from Senator Church, and I'd like to read part of it to you.

As the date of the Wilderness Research Center's Second Annual Wilderness Resource Distinguished Lecture quickly approaches, I wanted to get in touch with you to wish you and your staff my very best for a most successful program.

As you know, John, I fully support your efforts to sponsor this program and to create a dialogue on the many issues surrounding the Wilderness Act. I have fond memories of my participation in last year's lecture program and I wish I could be with you on April 18th to hear Dr. Nash's presentation. I would appreciate it if you could pass on my personal regrets to Dr. Nash and I look forward to receiving a transcript of his presentation.

This evening, we will again pursue the historical and philosophical path to understanding this thing we call wilderness. And at this time, it is my great pleasure to introduce the 1978 Wilderness Resource Distinguished Lecturer, Dr. Roderick Nash.

Dr. Nash is Professor of History and Environmental Studies at the University of California, Santa Barbara. His undergraduate work was completed, *magna cum laude*, at Harvard University in 1960. For his graduate work at the University of Wisconsin, Dr. Nash specialized in the area of social and intellectual history, and in 1961 he won the second award in the William P. Lyons National Master's Essay Competition. Resources for the Future granted him a Doctoral Dissertation Fellowship in 1963 and 1964 and a Faculty Research Grant in 1967.

To our students in the audience, Dr. Nash is perhaps best known for one of his eight books, and one which will undoubtedly stand as a classic in its field, *Wilderness and the American Mind*. This work was named among the "Fifty Best Books" published in the United States in 1967. Currently in paperback, it has enjoyed nine reprintings and appeared as a revised edition in 1973. In reviewing *Wilderness and the American Mind*, Supreme Court Justice William O. Douglas wrote "... this book is a mandatory prelude to

any modern treatment of conservation problems." Dr. Nash is also well known for publishing the first collection of documents relating to environmental history, *The American Environment*, in 1968, with a revised edition in 1976.

A national leader in the field of conservation and environmental management, Dr. Nash played a major role in Santa Barbara's response to the oil spill of 1969, writing the internationally publicized *Santa Barbara Declaration of Environmental Rights*. His efforts were rewarded in 1971 with presentation of the "Outstanding Young Man" award from the Santa Barbara Junior Chamber of Commerce, in recognition of distinguished service to the community. In 1974 Dr. Nash was honored by the American Academy of Achievement as "one of 40 giants of accomplishment from America's great fields of endeavor." His tribute singled him out as a "leading spokesman for environmental quality, particularly the preservation of wilderness, and for environmental education."

Wilderness is the setting of most of Dr. Nash's recreational as well as his scholarly interests. He was a champion fly and spin caster, and a professional guide in Ontario and Wyoming. Currently regarded as one of the most experienced whitewater boatmen in the American West, he has rowed and kayaked more than 10,000 miles on every major Western river and in Alaska. His speciality is the Grand Canyon of the Colorado River (Arizona), where he is both an amateur and professional boatman and a guide for inner canyon backpacking.

Presently, Dr. Nash is completing a study of the world nature protection movement and of environmental ethics. Longer-term projects include a history of the recent environmental movement emphasizing the role of the Sierra Club, and a futuristic novel exploring human needs for wilderness and civilization.

Tonight Dr. Nash will look at both the past and the present as he shares with us his thoughts on the problem "Wilderness Management: A Contradiction in Terms?"

It gives me a great deal of pleasure to welcome Dr. Rod Nash.



Dr. John H. Ehrenreich is Dean, College of Forestry, Wildlife and Range Sciences, and Director, Wilderness Research Center, University of Idaho.



WILDERNESS MANAGEMENT: A CONTRADICTION IN TERMS?

Roderick Nash

Wilderness does not exist. It never has. It is a *feeling* about a place; part of the geography of the mind. In an effort to construct a workable definition we draw lines on maps and pass complicated laws. We act as if wilderness were real—rocks, trees, canyons, mountains—but it is actually a state of mind evoked by a state of nature, a quality associated by some people with some places. This explains why the conditions under which one visits a place are so crucial to the so-called wilderness exprience. It also suggests why wilderness management may be a contradiction in terms.

The uncontrolled: Dig back far enough into the historical meaning of "wilderness" and that concept emerges as the essence of any definition. "Will," the root word in early Teutonic languages of both "wild" and "wilderness," meant chaotic, unruly, disorderly, literally will-full. An angry mob of people beating at the castle gate was said to be wild — ungovernable, out of control. So were animals that man

had not domesticated or tamed. The place one found such uncontrolled animals, called "deōr" in the old tongues, was "wild-deōr-ness" — literally the place of wild beasts. Their presence signified the absence of human control.¹

Contemporary meanings of wilderness emphasize the same concept. When he drafted the Wilderness Act, Howard Zahniser, executive director of the Wilderness Society, chose as his principal descriptive adjective an unusual word: "untrammeled." When Zahniser began using it in 1956, everyone assumed his secretary had erred in typing "untrampled." But Zahniser stood behind his original choice and with good reason. A trammel, he explained, is a net for catching wild birds or fish. Alternatively the word signifies a shackle used to slow the gait of a horse. The central idea is that of restraint, control, management by man. Untrammeled means the opposite.

The uncontrolled is unpredictable and therefore potentially dangerous. An untrammeled horse is a bucking bronco. In the psychology of wilderness we cannot minimize the centrality of danger, risk and fear. To be true to the basic definition, wilderness should be a place where it is possible to get lost, to become, literally, bewildered (the root word, "will," is the same). Reducing this possibility may make a place more pleasant, to some people, but it will be less wild. For this reason the existence of trails, guidebooks, ranger patrols and well organized search-and-rescue squads poised to bail out the unlucky or incompetent strikes at the very essence of wilderness. And since wilderness is a state of mind, even the knowledge that these things exist diminishes the wilderness feeling. It is even arguable that as soon as we label a region wilderness we destroy it as wilderness.

Maps have an especially erosive effect on wilderness in that they make the unknown known. Aldo Leopold defined wilderness in 1945 as "a blank spot on the map."³ It was this for Columbus, Lewis and Clark, John Wesley Powell, and still for Leopold as a young officer of the United States Forest Service in the New Mexico Territory in 1909. Presently the United States Geological Survey is moving inexorably ahead with its intent to publish 15and 7.5-minute topographic maps for the last spots in the 48 contiguous states. Alaska is next. The completion of this monumental task — the reduction of the United States to the scale of one inch to the mile - will be a just cause for celebration for that part of ourselves and our culture that seeks to order, organize, measure and control. But for the other part (the right side of the brain, psychologists believe) there is something terribly sad and terribly final about the end of uncertainty. At least those who understand what wilderness means cannot rejoice in the prospect of a country that is totally mapped.

The history of wilderness management is the history of increasing control over wilderness. But for a half-century after the establishment of the first reserves, wilderness preservation did not entail wilderness management. It simply meant designation. You drew a circle on a map as, for instance, in the cases of Yellowstone National Park (1872) and the Gila Primitive Area (1924), and concentrated on keeping things like roads and buildings out. No one was concerned with what people engaged in recreation did in the wilderness. It was not a matter of oversight — in fairness to the federal land administrators of this era, there really was little to manage.

Before 1940 very, very few Americans ventured into the backcountry. It is easy, amidst the widespread touting

of wilderness today, to forget that our fathers and grand-fathers were still very much a part of a frontier-shaped value system that emphasized conquest of, not communion with, wild places and things. As we wander the well-stocked aisles of today's outdoor stores, it is also easy to overlook how hard it used to be to go off the beaten track for more than a day or two. Any contemporary backpacking outfit is largely composed of materials derived from post-World War II technology — nylon, aluminum, plastics, foam rubber, freeze-dried foods. Without this equipment revolution, roughing it, in the parlance of the turn of the century, was indeed rough and unappealing.

What most outdoor-minded Americans before 1940 wanted was a room with a view — a comfortable lodge from which to watch wild nature without getting too close. The first leaders of the National Park Service after 1916, Stephen T. Mather and Horace M. Albright, never forgot this in their campaign to make the parks popular. What emerged in Yosemite, Yellowstone, Glacier and the Grand Canyon were resorts complete with paved roads, downhill skiing, putting greens, scheduled feedings of bears with hotel garbage, the firefall (Yosemite) and colored lights on night eruptions of Old Faithful.⁴ No one in the 1920s and 1930s saw these things as incompatible with the national park idea. Fortunately for wilderness, the "circuses" were confined to small areas of the Western parks. The few who did go into the wilderness in those years, like David R. Brower of the Sierra Club, could claim a first ascent almost every time they climbed a peak. For a magic interlude wilderness management could actually consist of letting things alone.

One of the first indications that this could change was a 1926 cartoon in the *New York Herald Tribune*. It was a before-and-after view of a mountain lake. In the first

frame a lone horseman approached the lake, which was surrounded with pines and full of leaping trout. In the second view a solid rank of fisherman ringed the lake and their camps obliterated the scenery.

A decade later Lowell Sumner, a regional wildlife technician with the National Park Service, made one of the first official recognitions that wilderness managers could not rest content with merely setting land aside from development. In his 1936 report on parks in California's Sierra, Sumner wondered "how large a crowd can be turned loose in a wilderness without destroying its essential qualities." Sumner was among the first Americans to understand that if wilderness is to exist in the national parks, the parks "cannot hope to accommodate unlimited numbers of people." Sumner also understood that wilderness management could pose a threat to wilderness values. He urged that only "the very simplest maintenance activity" be undertaken in wilderness. ⁵

The Wilderness Society, organized in 1935, initially reflected the designation-is-enough perspective on wilderness preservation. The idea was to keep adverse influences out of wilderness rather than to understand and control what was happening within its borders. But Robert Marshall, a Wilderness Society founder and the leading advocate of preservation in the 1930s, quickly perceived that there was an internal dimension to wilderness protection. As early as 1933, Marshall's contribution to *A National Plan for American Forestry* ⁶ suggested that backcountry campsites could be overused and urged the education of recreational visitors in camping etiquette.

In 1937 Marshall, then Chief of the Division of Recreation and Lands in the United States Forest Service, toured the mountains of California with members of the Sierra Club. The party visited high country severely damaged by the grazing of pack stock and the behavior of campers. After the trip Marshall requested Joel H. Hildebrand, president of the Sierra Club, to organize a committee to advise the Forest Service with regard to wilderness management. He wanted to know about the feasibility of distributing and restricting use to the end that "certain areas may still be preserved in what might be termed a super-wilderness condition, or, in other words, kept entirely free even from trails, in order that a traveler can have the feeling of being where no one has been before." For Marshall to pose this question was understandable, in that he personally coveted this extreme condition of wildness and had, in fact, found it in the Brooks Range of Alaska on his explorations of the late 1920s and early 1930s.

The communications between Marshall and the Sierra Club in 1937 and 1938 constituted the first recognition that recreational management of wilderness could threaten wilderness. The construction of trails was recognized as a problem for persons who wanted the sense of being in pristine country. Trail signs and established campgrounds also came in for criticism, as did the grazing of pack animals and the cutting of living trees for bough beds and firewood. The Sierra Club concluded its report by recommending that high country rangers or guards be appointed to enforce the rules. But neither Marshall nor the Sierra Club then understood that the rangers themselves, and the rules, might also adversely influence wilderness perception.

In the November 1940 issue of *American Forests*, J.V.K. Wagar became the first to raise the possibility of licensing as a means of controlling the behavior of persons

engaged in wilderness recreation. He began by pointing out that "nature once certified outdoorsmen" by weeding out and killing the weak, foolish and careless. But now anyone could become a wilderness traveler, and many people were in the backcountry who did not know how to care for either themselves or the country. His suggested remedy was the Certified Outdoorsman. The National Park Service and the Forest Service would establish tests with the purpose of determining who was "safe to leave in the woods." Once in possession of his license, the Outdoorsman would be admitted to wilderness.⁹ Wagar's proposal, which has support in some quarters today, has the advantage of making possible less intense wilderness management due to the fact that the users are skilled and careful. Search-and-rescue operations, for example, could be curtailed or eliminated. But the licensing idea strikes at the heart of the idea of uncontrolled country that is so central to the traditional meaning of wilderness.

Following the interruption of World War II, the Sierra Club renewed its interest in wilderness management. The Club's own outings, which at that time found more than a hundred persons traveling through the wilderness in one group, were a focal point. Club leaders were discovering that excessive recreational use could damage natural conditions just as severely as lumbering, mining and commerical grazing. One sequence of photographs published in the 1947 Sierra Club Bulletin showed the stages in the transformation of a lush mountain meadow into an eroded dustbowl. Discussing the problem under the heading "saturation of the wilderness," Richard M. Leonard and Lowell Sumner declared, "We need a comprehensive technique of use that will prevent oversaturation of wilderness and still enable people, in reasonable numbers, to enjoy wilderness."10 Among the management tools discussed

were rotation of camp sites, limitation on the length of stay by one party in the same area, and the use of transported oats rather than natural grasses for pack stock food. According to Leonard and Sumner, there already existed 24-hour limits on camping in some Sierra meadows. These 1947 rules must have been among the earliest such controls in wilderness management history.

In 1949 the Sierra Club sponsored the first High Sierra Wilderness Conference. One hundred federal and state administrators, outing club representatives, and professional guides and outfitters joined to discuss the proposition that wilderness could be loved to death. The conferees, in other words, had the courage to recognize that they were part of the problem.

A recognizable problem in the 1950s, the crowding of wilderness reached crisis proportions in the 1970s. Several factors contributed to the wilderness recreation boom. The intellectual revolution that transformed wilderness from cultural enemy to cultural asset was nearing completion. The nation had grown up from its frontier adolescence. Only about 3 percent of the 48 states could be considered wild, and the same amount was paved! For the great majority of Americans, wilderness was no longer an adversary to be feared and conquered but a novelty to be sought as a refreshing antidote to an urban-industrial lifestyle and the controlling weight of an increasingly complex civilization. If the counterculture of the 1960s had any definable meaning, it was that the establishment had gone too far with growth, progress, control and transformation. Nature acquired new appeal. Charles Reich wrote about The Greenina of America¹¹; Paul Simon and Art Garfunkel sang "I'd rather be a forest than a street."12

Better equipment, and the affluence and leisure to buy and use it, helped open the wilderness. So did the publicity generated by the campaign for the Wilderness Act (1964) and the fight to preserve threatened wildernesses such as the Grand Canyon, the North Cascades and Hells Canyon. As a result, many Americans no longer thought of the national parks as resorts near the wilderness but rather as places to experience wilderness. Throughout the 1960s biocentrism made headway against anthropocentrism as the guiding philosophy of national park management.

The proof of the new popularity of wilderness was in visitor statistics. Every part of the country could supply evidence, but the most dramatic varieties came from the "name" wildernesses of the West. Mount Whitney, the highest peak in the United States outside Alaska, is a case in point. Dominating California's southern Sierra, Mt. Whitney was first climbed in 1873. On August 4, 1949, a man climbed the peak with his father. Proudly, they signed the register on the summit, the sixth and seventh individuals to have done so that year. On August 11, 1972, the same man climbed Mt. Whitney with his son. Upon signing the register they noted with some shock that they were the 259th and 260th persons on record that *day!*

Or consider the Grand Canyon in Arizona, where the 280-mile float trip down the Colorado River is the most intensely supervised wilderness activity in the United States today. Due to the limited access to the river, a complete set of visitor statistics exists. They tell an incredible story.

Similar, if not quite so dramatic, statistical portraits could be drawn for the Middle Fork of Idaho's Salmon River, Washington's Mount Rainier or New Hampshire's White Mountains.

Travel on the Colorado River through the Grand Canyon, Arizona

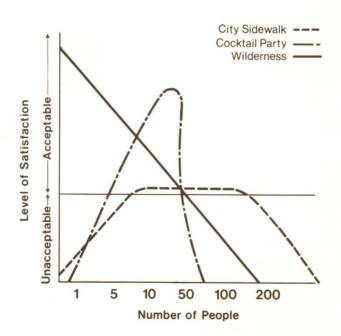
Year	Number of People	Year	Number of People
1867	1?	1960	205
1869-1940	44	1961	255
1941	4	1962	372
1942	8	1963-1964	44
1943-1946	0	1965	547
1947	4	1966	1,067
1948	6	1967	2,099
1949	12	1968	3,609
1950	7	1969	6,019
1951	29	1970	9,935
1952	19	1971	10,385
1953	31	1972	16,432
1954	21	1973	15,219
1955	70	1974	14,253
1956	55	1975	14,305
1957	135	1976	13,912
1958	80	1977	11,830
1959	120	Estimated 1978	

Faced with this surge in popularity, managers turned to the idea of carrying capacity. A stockman's term, it originally referred to the number of head of cattle that could graze a piece of range without causing its permanent deterioration. The point, of course, was to keep the number from exceeding the carrying capacity and ruining the range. The first American to apply this concept to people and wild country was Lowell Sumner. In 1942 he wrote an essay concerning the biological balances in wilderness areas and urged that visitation be kept "within the carrying capacity or 'recreational saturation point.'" Sumner defined this as "the maximum degree of the highest type of recreational use [that is, minimum-impact camping] which a wilderness can receive, consistent with its long-term preservation. "Managers," Sumner urged, "should determine in advance the probable maximum permissible use, short of impairment, of all wilderness areas."13

In 1942 Sumner's main concern was the biological carrying capacity of wilderness, the impact of people on nature. It was relatively easy to measure. An eroded meadow or fished out lake was there for all to see. Much more difficult to calculate was the psychological carrying capacity of wilderness, the impact of people on people. But given the fact that wilderness is a state of mind, this factor may be the most crucial of all in preserving the experience of wilderness.

As an aid to understanding psychological carrying capacity, consider the following satisfaction curves for three kinds of activity:

THE PSYCHOLOGICAL CARRYING CAPACITY CONCEPT



The city sidewalk is an unsatisfactory place (in this case, frightening) with only a few people in sight. A pedestrian could be mugged or raped. The presence of more people raises the curve over the cut-off point and it remains there until the crowd builds to the point where walking becomes difficult. The cocktail party is similarly unsatisfactory with only a few people rattling around a large living room without much to say to each other. As more guests arrive the party gets going, but the curve turns down as a sardinelike situation develops. Wilderness recreation, on the other hand, is an activity that by definition is more satisfying at lower densities. Large numbers cannot enjoy solitude together. The graph suggests that the wilderness visitor can tolerate other visitors up to a point. Then the wilderness is no longer wilderness; the psychological carrying capacity has been exceeded. Of course this cut-off point varies with the individual, a fact that vastly complicates the task of the manager attempting to formulate policy.

This same wilderness curve can also depict the impact of wilderness management on visitor satisfaction if the horizontal axis is taken to represent increasing amounts of control. Most visitors are able to accommodate some control within the limits of a satisfactory wilderness experience. But as management increases in intensity, satisfaction declines, because wilderness is supposed to be a place that civilized man does not control, a place, in fact, to escape from control, an island of freedom for the individual in an ever more managed world. For many wilderness users the cut-off has already been reached in the most heavily managed wildernesses of the West. The wilderness permit, which first appeared in 1963 in the Forest Service's Boundary Waters Canoe Area (Quetico-Superior) as an innocuous research aid to determine the numbers of visitors, has been upgraded to an admission ticket. Permit applications must be filed

months in advance. The number of applications for the popular wildernesses greatly exceeds the established carrying capacities, so lotteries are held. Applicants try to cheat the system; still the chances of drawing out a permit for a noncommercial, do-it-yourself trip have declined in places like the Grand Canyon to approximately 1 in 20. This is, to be sure, an extreme case, but the era of driving to a roadhead, parking your car and taking off into the back-country is definitely over, and with it ends much of what wilderness once meant.

Even with a permit in hand, control does not end. "No substitution" rules, in force in the Grand Canyon and on the Salmon River, require rangers to check drivers' licenses or birth certificates for each member of a party. Then there is the frequently-encountered practice of assigning campsites. For many wilderness users this is the final back-breaking straw. Their itineraries must be rigid. The wilderness is managed as a motel: check out and allow the next group to occupy the site. Extremes have also been reached in the regulation of camping procedure. Open wood fires are on their way out as part of a wilderness experience. In the proposed management plan for the Grand Canyon river trips, permitees are required to carry out all human sewage — for a party of up to 40 for a 2-week trip! Rangers presumably will check the containers at the end of the trips to see that regulations have been observed. For many this would be the ultimate indignity - to people and to the idea of wilderness.

If the recent history of wilderness management contains reason for concern, the future looms dark with problems. The interesting scenario of William C. Leitch entitled "Backpacking in 2078" assumes, quite plausibly, that in the next

century electronic technology, world population and wilderness popularity will continue to grow at their recent rates. Leitch envisions a global, computerized reservation-permit system that tells his hypothetical applicant that he may take an 11-night trip 3 years after his application. He had, after all, enjoyed a 3-week wilderness trip 4 years before. When the applicant appears at the appointed time and place, he is issued a tiny transmitting device that informs rangers back at headquarters where he is at all times during his trip. He is also issued a small plate to imbed in his boot heel, to aid in search-and-rescue, but his Mayday attachment can summon a helicopter in half an hour. The large animals in the hypothetical park also have transmitting devices so that, say, human-bear interactions can be avoided. At headquarters it is like a giant game of chess. 14

The near-absolute control over the "wilderness" does, Leitch points out, guarantee the visitor a solitary experience. His itinerary is planned so he will encounter no other person for his allotted stay. Moreover, the natural resources in the park are in excellent condition, nearly undisturbed. The park of 2078, in short, is a management triumph; the only trouble is that the wilderness is dead — the victim of human control.

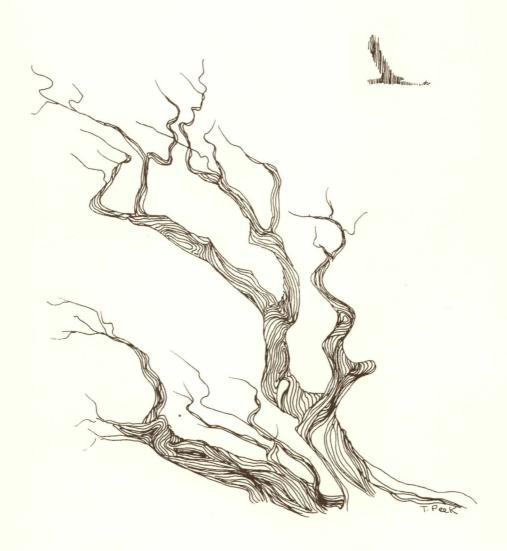
The Leitch scenario, to which anyone familiar with wilderness recreation could add, underscores the terrible dilemma of wilderness management today. The managers have to manage. If they don't, crowds quickly eliminate any vestige of solitude and the resource itself is damaged. But the very fact of management destroys the essence of wilderness.

Awareness that wilderness management is indeed a contradiction in terms, but at the same time a necessity if anyone is to have any semblance of a wilderness experience,

is a prerequisite to enlightened planning for the future. Wilderness managers are not bad guys. Things would be worse without them. But in controlling wilderness they might attempt to be as unobtrusive as possible. What this means is that the element of risk, the presence of danger and mystery, should be cherished and protected. Better to have an occasional backpacker killed by a bear than to put transistors in every moving thing in the backcountry along the lines of the Leitch forecast. Better to reduce visitation than to institute mandatory carrying out of human feces. Better to require wilderness licenses as evidence of minimum-impact camping skill than to send waves of patrolling, ticket-writing rangers through the mountains and down the canyons. Better to have some visitors get lost than to have signs at every trail crossing. Better to give self-guided but well trained and properly equipped parties precedence over commercially outfitted and guided safaris in allocating limited time in wilderness. If that means some people cannot make a trip, tough. The ability to write a check to a professional guide is no substitute for physical, intellectual and psychological preparedness. Let those who want to go badly enough compete and qualify as they do, for instance, for state universities, rather than buy their way into wilderness.

The point is to manage so that less management is necessary. Upon this seemingly simple yet enormously difficult principle hangs the fate of everything the wilderness preservation movement has tried to achieve. The sad alternative is to have wilderness that is not wild.





Notes

¹ The discussion here, and at several other points that follow, is based on the author's *Wilderness and the American Mind* (revised edition, Yale University Press, New Haven, CT, 1973) and on his "Historical Roots of Wilderness Management," chapter 2 *in* John Hendee, Robert C. Lucas and George Stankey, eds., *Wilderness Management* (Government Printing Office, Washington, DC, 1978).

² United States Congress. Statutes at Large 78:891.

³ Leopold, Aldo. "The Green Lagoons," American Forests 51(1945): 414.

⁴ Nash, Roderick. "Changing Conceptions of the Meaning and Purpose of Protected Wildlands." Pages 73-89 in Lawrence Royer, William H. Becker and Richard Schreyer, eds., Managing Colorado Whitewater: The Carrying Capacity Strategy (Utah State University, Department of Forestry and Outdoor Recreation, Logan, UT, 1977). See also Robert Shankland, Steve Mather of the National Parks (2nd revised edition, Knopf, New York, 1954) and Donald Swain, Wilderness Defender: Horace M. Albright and Conservation (University of Chicago Press, Chicago, IL, 1970).

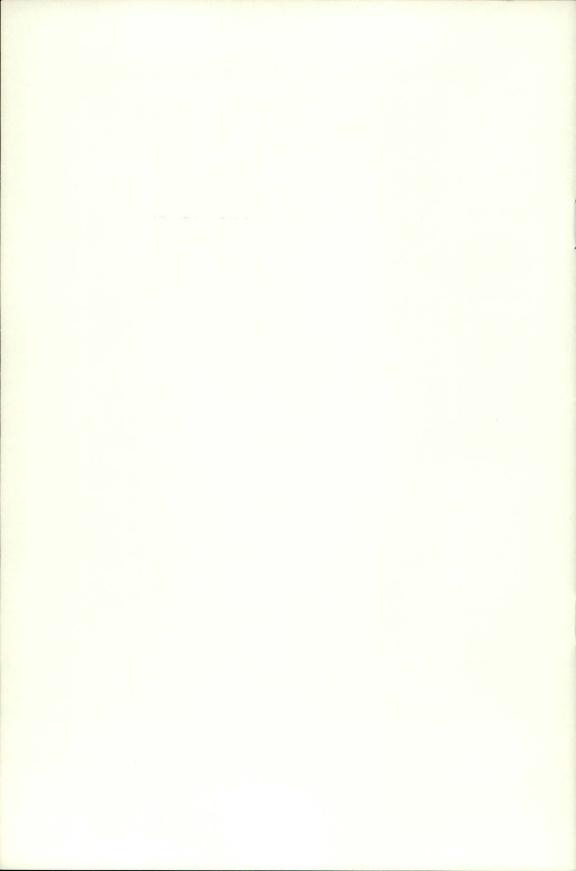
⁵ Sumner, E. Lowell. "Special Report on a Wildlife Study in the High Sierra in Sequoia and Yosemite National Parks and Adjacent Territory," National Park Service Archives, Washington, DC (unpublished).

- ⁶ Marshall, Robert. 1933. "The Forest for Recreation," Pages 466 ff in A National Plan for American Forestry. 73rd Congress, 1st Session, Senate Document 12, Vol. I.
- ⁷ Hildebrand, Joel H. "Maintenance of Recreation Values in the High Sierra: A Report to the United States Forest Service," *Sierra Club Bulletin* 23 (1938):5.

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- ¹⁰ Leonard, Richard M., and E. Lowell Sumner. "Protecting Mountain Meadows," *Sierra Club Bulletin* 32(1947):5.
- ¹¹ Reich, Charles. *The Greening of America*. (Random House, New York, 1970).
- 12 Simon, Paul, trans. from Jorge Milchberg. 1970. "El Condor Pasa." Charing Cross Music, Inc. London.
- ¹³ Sumner, E. Lowell. "The Biology of Wilderness Protection," Sierra Club Bulletin 27 (1942):8.
- ¹⁴ Leitch, William C. "Backpacking in 2078," Sierra Club Bulletin 63 (1978):25-27.

⁸ Ibid.









The University of Idaho Wilderness Research Center has initiated the Wilderness Resource Distinguished Lectureship as an annual event to encourage constructive dialogue and to broaden understanding of the wilderness resource. Speakers are invited on the basis of contributions to the philosophical or scientific rationale of wilderness management.

Other activities of the Wilderness Research Center include promotion of sound methods of protective management; stimulation of interdisciplinary research; support of a graduate student assistantship and of summer research projects for undergraduate students; sponsorship of annual field trips for Wildland Recreation Management students; and other similar wilderness-related activities appropriate to the mission of a land grant university.

Support for the Center or for its specific projects is welcomed in the form of gifts and bequests. For further information, contact

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