

Origins of a Wilderness Philosophy

Etymology

The word “wilderness” is hard to define. It is a noun, but acts deceptively like an adjective because it denotes a quality, or mood, or feeling that is very subjective and elusive. The word “wild” seems to have developed in the early Teutonic and Norse languages from the word “willed” which meant to be lost, disordered, or confused.

In Old Swedish the word was represented by the figure of boiling water and meant to be ungoverned or out of control. “Wildeor”, meaning wild beast led to “wild-deor-ness”, the place of wild beasts.

Attitudes

The value system of primitive humans was structured in terms of survival. They appreciated that which contributed to their well-being and feared what they could not control or understand. Safety, happiness and progress seemed dependent on rising out of a wilderness situation.

The Roman poet of the first century B.C., Titus Lucretius Carus spoke for his age when he observed that it was a serious defect that so much of the earth “is greedily possessed by mountains and the forests of wild beasts. It is filled full of restless dread throughout her woods, her mighty mountains and deep forests.”

Classical mythology contained a whole menagerie of gods and demons believed to inhabit wild places. Pan, the lord of the woods, was pictured as part goat, part man with gross sensuality and boundless energy. The word “panic” originated from the blinding fear that seized travelers upon hearing strange cries in the wilderness, assuming them to be Pan.

Russian, Czech, and Slovak folklore spoke of a creature living in forests and mountains with the face of a woman, body of a sow, and legs of a horse.

In the Austrian Tyrol and Bavarian Alps, the “Wild Woman” was imagined to have enormous size, tough bristles, immense pendulous breast, and a hideous mouth that stretched from ear to ear.

The Judeo-Christian culture powerfully influenced the Europeans who colonized the New World. The term “wilderness” is mentioned many times in the Bible and it is interesting that while the wilderness was seen as an environment of evil, a howling waste that was a punishment for sins, Moses’ forty year wanderings in the Sinai Peninsula proved to be immensely important because it was there that the Israelites were tested and purified which enabled them to draw close to their God.

Early Settlers

The first settlers to the new world were confronted by nothing but wilderness which was a formidable threat to their survival. Their mission, in biblical terms, came from Genesis 1:28, which stated that man should increase, conquer the earth, and have dominion over

all living things. In 1629 John Winthrop, defending his decision to settle in the new world argued, “Why remain in England and suffer a whole Continent to lie waste without any improvement.”

The Puritans, living so close to the wild, were also vulnerable to a more subtle terror than Indians or wild animals. They feared that the opportunity the freedom of wilderness presented for people to behave in a savage or bestial manner would overcome self-restraint, morality and social order.

A utilitarian approach to wilderness was the prevalent attitude during a time when there was too much of it. There were those, however, who could see something else in America’s wild country. The first hint that wilderness might be something to revere rather than conquer came after the Revolutionary War. Americans began to seek a national identity for their new country. It became clear that what set this country apart from others was it’s abundance of wilderness, the beauty and vastness of which was unmatched in Europe where thousands of years of civilization had long since gobbled up the wilderness.

If, as many suspected, wilderness was the medium through which God spoke most clearly, then America had a distinct moral advantage over Europe.

Advocates

An appreciation for untouched wild country began in the cities where comfortable, literary gentlemen began to write about beauty and sublimity, the idea that God, not evil was the dominant force in the wilderness. The aesthetic and inspirational qualities of wilderness were celebrated by such poets, authors and artists as William Cullen Bryant, James Fenimore Cooper, and Thomas Cole. In 1816 Lord Byron wrote:

“there is a pleasure in the pathless woods,
There is a rapture on the lonely shore. There
is society where none intrudes ... I love
not man the less, but nature more.”

One of the most famous voices was Henry David Thoreau. This passionate and prolific writer believed that nature mirrored the currents of higher law emanating from God. He felt strongly that wildness was the source of vigor, inspiration and strength and that to the extent that a culture, or an individual, lost contact with wildness it became weak and dull. Hence his famous quote:

“In wildness is the preservation of the world.”

Also:

“From the forest and wilderness come the tonics and barks which brace mankind.”

As cities were founded, wild land plowed under and America’s people became more comfortable and secure, they began to notice the loss of wild country. John James

Audubon who became famous for his book, “Birds of America” which he wrote during the years 1827-1838, realized from his field studies that America was losing its forests at an alarming rate. He called for preservation. George Catlin, an early student and painter of the American Indian, became alarmed at the imminent extinction of Indian, buffalo and the wilderness in which they existed. In 1832, he was one of the first voices to suggest that they be protected in “a magnificent park.”

George Perkins Marsh caused a stir with his thesis, published in 1864 in “Man and Nature: or, Physical Geography as Modified by Human Action.” He introduced the idea of the interrelatedness of man and nature; that we were misusing our resources and eroding the earth’s ability to support us. His arguments made protecting the wilderness compatible with progress and economic welfare.

Then along came John Muir. Nature had never had such an articulate, intelligent or radical defender. He totally immersed himself, travelling thousands of miles on foot through some of America’s wildest and most beautiful country. His philosophy:

“Going to the woods is going home; for I suppose we came from the woods originally,”

“Climb the mountains and get their good tidings. Nature’s peace will flow into you as the sunshine into trees. The winds will blow their freshness into you, and the storms their energy, while cares will drop off like autumn leaves.”

Preservation

The prime of John Muir’s life coincided with the advent of national concern over conservation. In 1864 the Yosemite Valley was granted to the state of California “for public use, resort, and recreation.” The Act of March 1, 1872, established Yellowstone National Park to create a “public park or pleasuring ground for the benefit and enjoyment of the American people.” But it wasn’t until the fall of 1890, with the signing of the Yosemite Act creating Yosemite National Park, that the nation’s first preserve was established to specifically protect wilderness values.

With the establishment of the National Parks, wilderness preservation and commercial prosperity were linked together. The parks were for the enjoyment of the people, but also for the commercial profitability of the transportation and recreational tourism industries.

It has been noted that there are several conditions which must occur before the concept of preserving wilderness becomes understood and valued. There must be a high level of economic development, a high level of education among residents, and a growing scarcity of wildland resources available to a largely urban population. These conditions began to be met in the United States after the turn of the century. Arthur Carhart, a young USFS landscape architect, was assigned to survey the spectacular Trapper’s Lake in Colorado for road access and vacation home sites. He did so, but when he returned his very courageous recommendation was that the best use of the area would be to do

nothing at all there - a very unique and bold move in 1919. The time was right, however, there was public and agency support and Trapper's Lake was preserved.

Aldo Leopold, another young forester, began his lifelong crusade for wilderness preservation with concern for wildlife. Later, he began to realize the importance of wild country to humans as well. He felt it was important to maintain the opportunity for successive generations of Americans to acquire the characteristics of pioneers and to acquaint themselves firsthand with the conditions that shaped their culture.

“Many attributes most distinctive of America and Americans are due to the impress of the wilderness and the life that accompanied it.”

And,

“I am glad I shall never be young without wild country to be young in. Of what avail are forty freedoms without a blank spot on the map?”

Largely through his efforts the Gila Wilderness Reserve was established in 1924 in New Mexico. This designation was unique in the U.S. and in the world because its purpose was to retain large areas free from human influence.

Robert Marshall was another free-thinking USFS employee who felt the need for preserved wild country on an acutely mental level. The basic importance of wilderness, Marshall decided, was its capacity for meeting human needs that civilization left unsatisfied. When asked how many wilderness areas America needed, he replied, “How many Brahms symphonies do we need?” In his short and intense life (he died at 38), he was instrumental in reducing human impact and preserving America's remaining wild areas.

Wilderness Act

Carhart, Leopold and Marshall were in the forefront of those calling for legal protection of wilderness in the United States. In the years preceding 1964 when the Wilderness Act was passed, much public debate was heard and many intense battles were fought. Congress spent more time and effort on the wilderness bill than on any other measure in American conservation history. From June 1957 until May 1964 there were nine separate hearings on the proposal, collecting over six thousand pages of testimony. The bill itself was modified and rewritten or resubmitted sixty-six different times. In the end, this is how it turned out:

“In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition, it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the

benefits of an enduring resource of wilderness. For this purpose there is hereby established a National Wilderness Preservation System...”

The Act goes on to say,

“A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and community of life are untrammelled by man, where man himself is a visitor who does not remain.”

-Wilderness Act, 1964

The values that the Wilderness Act protect can be summed up as follows:

- preservation of wildlife habitat
- source of genetic diversity
- preservation of ecological baselines in order to follow the changes in our culture
- protection of air and water quality
- provide educational opportunities to study natural processes
- sanctuary away from our over-technological society
- reminder of our humble place in the biotic community
- a place to enjoy nature’s beauty, find inspiration and spiritual renewal
- a link to our cultural heritage

Why preserve wilderness? Aldo Leopold said it best in 1925:-

“The time is almost upon us when a pack-train must wind it’s way up a graveled highway and turn it’s bell-mare in the pasture of a summer hotel. When that day comes, the pack-train will be dead, the diamond hitch will be merely rope, and Kit Carson and Jim Bridger will be names in a history lesson. And thenceforth the march of empire will be a matter of gasoline and four wheel brakes.”

And this in 1989 from Chief Oren Lyons, Turtle Clan chief in the Onondaga Nation of the Iroquois Confederacy:

“Today we have a common cause; we have to look out for the life coming - for your children, for my children. We are accountable; they will hold us accountable. When they’re suffering in the coming times, they will look back upon us and say, “Why did they do this to us?” This is what we have to consider.”

The Enduring Resource of Wilderness: Legacy for the Next 25 Years

Introduction

This is a sample speech, suitable for an agency official to give to a community group or other local audience. Some modifications need to be made to reflect local issues and policies.

It will be 25 years this September since the Wilderness Act of 1964 was signed into law. In that period of time, the Congress has set aside for the American people a multimillion acre legacy of wilderness that continues to grow in size and value. Though the debates continue over what lands should be set aside as wilderness, there is an equally compelling job of managing the wilderness we already have. That is what I want to discuss with you today.

History of the Act

We have a long history of wilderness in this country. As the early settlers explored and inhabited the United States from east to west, they found true wilderness. This was land affected primarily by the forces of nature, with the imprint of humans substantially unnoticeable. The settlers cleared that land, farmed some of it, built towns and rail lines and roads. The wilderness was endless, a challenge to be conquered.

In the mid-1800's, writers and artists began to recognize the historic, spiritual, and scientific values of wilderness. Others recognized the changes overtaking and altering the landscape with settlement. Henry David Thoreau pursued wilderness as essential for individual thought, freedom and identity. John Muir wrote and worked tirelessly for the value of wilderness to society.

Muir was also largely responsible for the establishment of Yosemite National Park in 1890 to preserve that area from development. This contrasts greatly with the establishment of Yellowstone National Park. It was set aside in 1872 as a pleasuring ground for the benefit and enjoyment of people, to preserve natural curiosities and wonders.

Forest reserves were set aside to be wisely managed or used in a variety of ways. They later became the National Forests. Yet, early in Forest Service history, there were also voices for preservation and for setting aside special areas within National Forests.

In 1919, Forest Service landscape architect Art Carhart was asked to design a vacation home development at Trapper's Lake in Colorado. He also traveled that summer to the Quetico-Superior area in Minnesota. Carhart recommended that the best use for both areas was wilderness recreation. Aldo Leopold was another forester that argued that some National Forest land be preserved without human influence. In 1924, Leopold was instrumental in setting aside more than 500,000 acres in the Gila National Forest in New Mexico as the Nation's first reserve for wilderness recreation.

By 1925, the Forest Service adopted regulations establishing Primitive Areas. Later, new regulations allowed the Secretary of Agriculture or the Chief of the Forest Service to establish wilderness areas, wild areas, and roadless areas. They were written by Bob Marshall, Chief of the Division of Recreation and Lands, who had devoted much of his career and leisure time to wilderness preservation.

The first efforts to legislatively protect wilderness grew out of the concern that administratively-designated wilderness could be reversed. Howard Zahriiser, Executive Director of the Wilderness Society, drafted the first bill that was introduced in 1956. After 8 years, 65 different wilderness bills, 18 hearings, and considerable compromises with the grazing and mining interests, the Wilderness Act was passed by Congress and was signed into law on September 3, 1964. The 9.1 million acres of National Forest land set aside as wilderness areas became “instant wilderness.”

There have been 90.8 million acres of wilderness designated by more than 100 wilderness bills. The Eastern Wilderness Act of 1975 expanded wilderness to include small tracts of wilderness near major population centers. The Endangered American Wilderness Act of 1978 established 16 wilderness areas that had been highly controversial. It also gave further interpretation of the congressional definition of wilderness which was then used in the Forest Service’s RARE 11 study. The Alaska National Interest Lands Conservation Act of 1980 designated about 50 million acres of wilderness in Alaska.

Statewide wilderness bills have passed for most states (excepting Idaho, and Montana) designating wilderness and releasing other areas for non-wilderness uses. Some National Forest Land and Resource Management Plans contain further recommendations for wilderness. There are nearly 12 million acres of potential wilderness in National Parks and Monuments and National Wildlife Refuges that Congress has not yet acted on. The Bureau of Land Management is currently reviewing its wilderness study areas and preparing recommendations for wilderness designations.

Preservation System

The National Wilderness Preservation System now spans almost 91 million acres, an area the size of *****. Wilderness is managed by four Federal agencies. The Forest Service manages almost 33 million acres, one-sixth of the National Forest land. The National Park Service manages 38 million acres and the Fish and Wildlife Service manages 19 million acres. Most of their lands are in Alaska. The Bureau of Land of Land Management has only 1/2 million acres of wilderness, but is in the process of preparing recommendations for wilderness designation for the President.

The National Wilderness Preservation System includes mountains and valleys, alpine lakes, wetlands, seashores, deserts, unusual geologic formations, wildlife habitat, streams. The largest is the Wrangell-St. Elias National Park in Alaska. The smallest is the 5-acre Oregon Islands off the coast of Oregon. The largest in the lower 48 states is the Frank Church-River of No Return Wilderness in National Forests in Idaho.

[Insert paragraph about wildernesses in your state or National Forest.]

What the Act Says

The Wilderness Act is a brief, concise piece of legislation. In the twenty-five years since passage, it has been virtually unamended.

Let me read to you directly from the Wilderness Act to give you a sense of the mandate for wilderness management:

“(a) A wilderness ... is an area where the earth and community of life are untrammelled by man, where man himself is a visitor who does not remain.. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.”

The Wilderness Act allows mining, grazing, and water resource development. It also allows commercial services for recreation, access to private and state land, use of aircraft and motor boats when occurring and authorized at time of designation, control of fire, and under certain conditions insects and disease control activities. Except for existing private rights, the Wilderness Act does not allow commercial enterprises and permanent roads.

There are prohibitions listed in the Act: ‘Here shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircrafts, no other form of mechanical transport, and no structure or installation within any such area.’”

What Wilderness Management Means

Wilderness management is far more than setting aside land and leaving it alone. To retain its enduring value, there must be some management of the resources and various uses, and administrative activities must be compatible with the wilderness character. I will give you several examples of each of these.

Resource management

The Wilderness Act calls specifically for the management of various resources. Any management activities must be carried out in a manner compatible with the wilderness concept, that is, “managed to preserve its natural condition with the imprint of man’s work substantially unnoticeable.” The complex issues are illustrated by fire management policy and use of motorized equipment.

Fire management is an important and currently controversial issue for wilderness management, particularly after the 1988 fire season. Current policy for the Forest Service is to allow lightning-caused fires to play, as nearly as possible, their natural ecological role within wilderness. This can occur only when there are no predicted negative consequences to surrounding land or other resources outside the wilderness. Naturally-ignited fires may be designated and managed as a prescribed natural fire in wildernesses that have approved fire management plans as long as the fire meets and remains within established criteria. When crews are fighting fire in wilderness, they try to use the minimum motorized and mechanical equipment, and restore any disturbance to near-natural conditions. Other wilderness managing agencies have similar, although not identical, approaches to balancing the natural role of fire with protection of resources and property outside wilderness.

The Wilderness Act prohibits the use of motor vehicles, motor equipment, mechanical transport, structures and installations except “as necessary to meet minimum requirements for the administration of the area.” Exceptions are granted only when other alternatives have been explored. Wildlife and fish stocking and surveys may be done with helicopters and other vehicles only when managers have demonstrated that no other alternative exists and the activity was established prior to the areas being designated wilderness. Again, Alaska is a major exception to this rule. Range improvement materials may be hauled with motor vehicles only when it was done before the wilderness was designated.

[Add paragraph about other local management issue.]

Recreation Management

The Wilderness Act calls for the use and enjoyment of wilderness. There are to be “outstanding opportunities for solitude or a primitive and unconfined type of recreation.” The challenge is to provide recreational opportunities while keeping wilderness an area where “man himself is a visitor who does not remain.”

We have focused on education and information rather than regulation of visitors. Visitors need to “leave no trace” when they enjoy wilderness, to camp away from water, reduce the impacts of horses on trails and campsites, and pack out all containers and gear. Permits, limits, and some regulations have still become necessary in heavily-used areas.

[Describe “leave no trace” messages that are most important for local wilderness, or raise recreation management problem.]

Administration

Good administration is important in wilderness. The Wilderness Act allows for administrative exceptions for some of the prohibitions, but we want to set an example for permittees and wilderness users. Therefore supplies are hauled by pack strings, primitive

tools are used in clearing trail, and we periodically review the need for administrative structures.

Wilderness management objectives are part of specific wilderness management plans for a given area or, in the case of National Forests, in individual National Forest Plans. Beyond that plan, each wilderness manager is responsible for deciding what is needed to get the job done. A recent example of comprehensive planning was done in the Bob Marshall Great Bear-Scapegoat Wilderness Complex, with extensive public involvement and the Limits of Acceptable Change process.

Challenge for the Future

In twenty-five years, we have seen the National Wilderness Preservation System expand beyond the founders' dreams. The management challenges have become increasingly complex. The toughest challenge will be to keep wilderness "affected primarily by the forces of nature, with the imprint of man substantially unnoticeable."

Management of range, minerals, wildlife and fish, fire, and recreation must all be done in a manner compatible with the wilderness philosophy. Managers must constantly evaluate the requests for exceptions to the wilderness definition. Visitors need a place to experience solitude and enjoy primitive recreation, and to enjoy the many non-recreation values of wilderness.

As we look forward 25 years, the Wilderness Act will continue to be the guiding words. As managers, we are directed to "secure for the American people ... future generations the benefits of and enduring resource of wilderness." We are directed to keep it "unimpaired for future use and enjoyment and wilderness."

This job is too big for Federal agencies to do alone. We need the involvement and dedication of professionals and the public alike. We need you to practice "leave no trace" camping. We need you to participate in the planning process. And we need you to teach your neighbors and friends about wilderness ethics and values. Together, we'll preserve this enduring resource of wilderness for the next 25 years and beyond.

Wilderness Values and History

Introduction

“A wilderness ... is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.”

-The Wilderness Act (P.L 88-577), September 3, 1964

Over the past century the United States has built a federal land conservation system that is the envy of the world. We were the first nation on earth to create a national park system, the first to establish national wildlife refuges, and, on September 3, 1964, the first to set aside pristine wilderness areas for permanent protection in their natural state.

On that day the President signed the Wilderness Act, enacted by Congress ‘to secure for the American people of present and future generations the benefits of an enduring resource of wilderness.’ With the stroke of a pen, the preservation of federal wildlands became national policy.

The Wilderness Act established the National Wilderness Preservation System to be composed of federally owned areas designated by Congress. The Act did not expand the federally owned land base or require the acquisition of additional land. It simply directed that some *existing* federal wildlands be set aside and protected as part of the new preservation system, and that other federal lands with wilderness characteristics be reviewed for possible wilderness designation by Congress. Today, congressional designations are made on wildlands within our National Forests, National Parks, National Wildlife Refuges, and on western lands managed by the Bureau of Land Management.

The Wilderness Act mandates that wilderness areas be administered for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness. Accordingly, wilderness areas are protected from development--from the construction of roads, dams or other permanent structures; from timber cutting and the operation of motorized vehicles and equipment; and, since 1984, from new mining claims and mineral leasing.

Today, the **474** units totaling nearly 91 million acres that make up the National Wilderness Preservation System are the crown jewels of America’s public lands heritage. They stand as living testimony to the wisdom and foresight of Congress and the American people--to the concern of past generations for future generations.

Why Wilderness?

To Thoreau, wilderness was a ‘tonic’, enough of which humans could never have. To John Muir, wilderness represented ‘the hope of the world.’ And for former Supreme Court Justice William O. Douglas, wilderness helped preserve man’s ‘capacity for wonder--the power to feel, if not **see**, the miracles of life, of beauty, and of harmony around us.’

However an individual may view wilderness, there are a number of recognized reasons for its preservation. Wildlands have natural and ecological values that are vital to the

nation's—indeed, the planet's—well-being, many of which are yet to be discovered or fully understood:

Wilderness protects watersheds upon which many cities and rural communities depend for pure water.

Wilderness serves as critical habitat for wildlife threatened by extinction.

Wilderness improves the quality of our air because of the filtering action of their green plants and forest.

Wilderness maintains gene pools to provide diversity of plants and animal life. Today, as we learn more about the greenhouse effect and the depletion of the ozone layer, more and more people are coming to realize that humanity is only part of an interconnected 'web of life,' and that the survival of our own species may ultimately depend on the survival of others. That is why the preservation of biological diversity is of importance.

Wilderness serves as a unique and irreplaceable 'living laboratory' for medical and scientific research. Already plant and animal species existing in their natural states have played major roles in the development of heart drugs, antibiotics, anti-cancer agents and anti-coagulants. More than one-quarter of all the prescriptions sold in America each year contain active ingredients from plants.

Wilderness also provides for the protection of geological resource values. Undisturbed, naturally occurring geologic phenomena are protected for present and future generations to pursue the origin of this planet and the universe.

Wilderness serves as a haven from the pressure of our fast paced industrialized society. It is a place where we can seek relief from the noise and speed of machines, and confines of steel and concrete, the crowding of people.

Wilderness is a unique repository for cultural resource values. Artifacts and structures protected by the Archeological Resources Protection Act or other laws take on a new perspective when experienced within the context of the wilderness. These features tell a valuable story about the human relationship with wilderness.

For all its uses, values, and scenic wonders, wilderness is a land heritage that is uniquely American. In the words of Pulitzer-Prizewinning novelist Wallace Steger, 'Something will have gone out of us as a people if we ever let the remaining wilderness be destroyed.'

Facts and Figures

Today, nearly 91 million acres of wild land are preserved within the National Wilderness Preservation System. The system is divided as follows: 38.5 million acres in National Parks, 32.5 million in National Forests, 19.3 million acres in National Wildlife Refuges, .5 million acres in BLM lands, 90.8 million acres TOTAL

This represents about four percent of all land in the United States (a total of some 2.2 billion acres) that is protected as congressionally designated wilderness. In the lower

forty-eight states, 1.8% of the U.S. is preserved as wilderness. In Alaska, 15% of the State is designated wilderness.

Where is the Wilderness?

A majority of the nation's wilderness, 62.3% of the system, is in Alaska. Almost 30 million acres, or one-third of the entire wilderness system, is in the eleven western states. Thus, 95.3% of all the protected wilderness in the United States is in the eleven western states or Alaska. Only 4.7% of the nation's wilderness lies east of the 100th meridian, and almost half of it can be found in just two areas, Everglades National Park in Florida and the Boundary Waters Canoe Area in Minnesota.

The northeast has the smallest amount of wilderness. In the eleven states from Maine to Maryland, where nearly one-quarter of the nation's population resides, there is a total of 192,686 acres of wilderness. This represents two-tenths of one percent of the wilderness system and less than two hundredths of one percent of the land area of those states.

Nationwide, there are 474 wilderness areas--43 in Alaska and 431 in the rest of the United States. Federal wildernesses are found in every state except Connecticut, Rhode Island, Delaware, Maryland, Kansas, and Iowa.

The nation's largest wilderness, 8.7 million acres is in Wrangell-St. Elias National Park in Alaska. The largest wilderness area in the lower 48 states is the Frank Church-River of No Return Wilderness in Idaho, which totals 2.3 million acres. The nation's smallest wilderness area, just five acres, can be found at Oregon Islands off the coast of Oregon.

History

Wilderness has always had special meaning for the American people. From the discovery of our land and through centuries of its development, wilderness has been part of our national culture and the character of our people.

As America began its spread from the Atlantic to the Pacific, the land and its boundaries seemed limitless and were often used with careless disregard and abandon. Eventually, voices raised in protest. Such nineteenth century writers and artists as Henry David Thoreau, John Muir, Ralph Waldo Emerson, and George Catlin sang the virtues of wilderness and warned against its loss.

Slowly, toward the turn of the century, the idea of preserving some American lands began to take hold. Congress created Yellowstone National Park in 1872, the first national park in the world. Other national parks followed: Yosemite, Sequoia, and Mount Rainier. By the second decade of the twentieth century, a few people began to campaign to set aside portions of our National Forests in a natural state. The long road to wilderness preservation had began.

Important Dates

1917. Landscape Architect Frank Waugh's survey of the recreational potential of National Forests concludes that the "enticing wilderness" of the forest has 'direct human value' and should be given parity with economic consideration when determining the forests' future.

1919. Arthur Carhart, a planner of the Forest Service, recommends that the Trapper Lake areas in Colorado's White River National Forest not be developed for summer homes but be allowed to remain wild. Regional office approves Carhart's plan.

1924. Noted ecologist Aldo Leopold, a Forest Service forester and one of The Wilderness Society's eight confounders, urges the Forest Service to protect the Gila National Forest in New Mexico. On June 3, 1924, 574,000 acres are set aside as a preserve for wilderness recreation, the first step in a 40-year administrative and legislative journey that is to culminate in passage of the 1964 Wilderness Act.

1926. Forest Service Chief William B. Greeley issues national policy statement on wilderness and instructs his assistant, Leon F. Kneipp, to prepare an inventory of all de facto wilderness on the National Forests, the first such survey of its kind in American history.

1929. Forest Service issues the L-20 Regulations, to establish 'primitive' areas within the national forests.

1930. Robert Marshall, another Wilderness Society co-founder and later Forest Service manager, publishes 'The Problem of the Wilderness,' in *Scientific American*. 'The preservation of a few samples of undeveloped territory, Marshall writes 'is one of the most clamant issues before us today. Just a few more years of hesitation and the only trace of wilderness which has exerted such a fundamental influence in molding American character will lie in the musty pages of pioneer books.'

Congress enacts the Shipstead-Newton-Nolan Act to protect the more than one million acres of interconnected waterways that comprise the Superior Primitive Area in northern Minnesota--the first Federal law in American history to protect a wilderness area.

1935. Marshall, Leopold, Benton MacKaye, Bernard Frank, Harold Anderson, Ernest Oberholzer, and Robert Sterling Yard launch The Wilderness Society on January 21, an organization devoted to preserving wilderness.

1939. At the urging of Marshall, the Forest Service issues the U Regulations, which supplant and strengthen the L-20 Regulations and direct that the operative areas be reviewed and reclassified as 'wilderness,' 'wild,' or 'roadless,' depending on size.

1950-1956. Conservationists rally to prevent a proposed dam at Echo Park in the Dinosaur National Monument. Howard Zahniser, executive director of The Wilderness Society, becomes convinced of the need for statutory protection of wilderness and writes first draft of a wilderness bill.

1956. Senator Hubert Humphrey of Minnesota introduces the first wilderness bill in the U.S. Senate, June 7, 1956. Congressman John Saylor of Pennsylvania introduces a companion bill in the House of Representatives just a few days later.

1963. U.S. Senate passes the wilderness bill, 73 to 12, on April 9.

1964. House of Representatives passes the Wilderness Bill by a resounding 373 to 1 on July 30. The President signs the Wilderness Act at a White House garden ceremony on September 3.

It took eight years, 18 hearings, and some 66 different versions of the wilderness bill before it eventually became a law. Upon passage of the Wilderness Act, all National Forest areas that had been administratively designated as ‘wild,’ ‘wilderness,’ or ‘canoe,’ areas immediately became part (The National Wilderness Preservation System, a total of 9.1 million acres. But the act also directed the Forest Service to study all of its remaining ‘primitive’ areas to determine which of these should also be preserved as wilderness. The Act also directed the National Park Service and the Fish and Wildlife Service to study their lands for possible wilderness designation.

1971. The Forest Service began a Roadless Area Review and Evaluation (RARE) of national forest lands to assess their wilderness suitability. Using a stringent ‘purity’ standard for wilderness eligibility, the agency held that in order for roadless areas to qualify as wilderness, they must be totally pristine, removed from even the ‘sights and sounds’ of civilization. No roadless areas in the East qualified as wilderness because eastern forests had earlier been impacted by roads and timber cutting.

1975. Following court challenges of the RARE **study**, Congress enacted **the Eastern Wilderness Act** of 1975, designating 16 National Forest wilderness areas in **13** eastern states.

1976. Congress passed the Federal Land Policy and Management **Act**, giving the Bureau of Land Management its wilderness mandate. The law directed the agency **to** inventory and study all **of** its roadless lands in the lower **48** states to determine which lands **should be** recommended for wilderness. The BLM later determined that approximately 25 million acres are to be studied further for possible wilderness designation.

1978. Congress passed the Endangered American Wilderness Act, which designated significant wilderness areas in the West. The law made clear that wild areas could not be disqualified simply because cities or towns could be seen or heard from them.

1979. The Forest Service completed a more extensive Roadless Area Review and Evaluation (RARE 11) of 62 million acres of roadless forest lands, required **by the 1978** Endangered American Wilderness Act. **It** recommended that **15.4** million acres be designated as wilderness, **10.6** million acres be set aside for further study, and 36 million acres be released for development. RARE 11 also resulted in appeals and legal challenges. Despite **its** controversy, the RARE 11 study has served as a starting point for Congress to designate wilderness on a state-by-state basis for 31 states during the 1980’s.

1980. The historical Alaska National Interest Lands Conservation Act of 1980 (ANILCA) more than tripled the size of the wilderness system. It increased wilderness acreage in National Parks in Alaska to 56.5 million acres, and that on National Wildlife refuges to 18.7 million acres.

National parks and wildlife refuges also have been reviewed for inclusion in the wilderness system. In the lower 48 states, approximately six million acres of national parkland and almost 660,000 acres within national wildlife refuges have been designated wilderness. An additional 7 million acres of national park land, 3.4 million acres of refuge land, and 375,000 acres of Bureau of Land Management lands have been recommended for inclusion in the wilderness system, but Congress has not acted on these proposals.

Future Challenges

The future of wilderness in America can be characterized on two fronts. The growing pressure for uses of public lands that is not compatible with wilderness will make designation of more wildernesses as controversial as it has been for the last 25 years. The second and increasingly important challenge for the future will be how we protect and preserve the wilderness that has been designated. The value of wilderness to future generations will not come through designation alone. We must learn to properly care for the land which has been set aside as ‘an enduring resource of wilderness.’

References

America's Wilderness, Twenty-Five Years of Wilderness Preservation, 1964-1989 by The Wilderness Society, 1400 Eye Street NW, Washington, DC, 20005

The Wilderness Movement and the National Forests, by Dennis M. Roth, 1988. Intaglio Press, College Station, Texas

Wilderness: Definitions, Values and Benefits

“Although not every person who worked on this bill will agree with each and every provision, one thing we all have in common is a love for Wyoming and a desire to preserve and protect Wyoming’s unique natural features and way of life.”

-Statement from Rep. Dick Cheney introducing Wyoming Wilderness Act

Definition

“A wilderness, in contrast with those areas where man and his own works dominate the landscape, is recognized as an area where the earth and its community of life are untrammelled (uncontrolled) by man, where man himself is a visitor who does not remain. It is an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions in which:”

1. generally appears to have been affected primarily by the forces of nature with the effects of human activities hardly noticeable.
2. has outstanding opportunities for solitude or a primitive and unconfined type of recreation.
3. 5,000 acres or is of sufficient size so that its preservation and use in an unimpaired conditions is practical.
4. may contain ecological, geological or other features of scientific, educational, scenic, or historical value.

Purpose

To insure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas, leaving no lands designated for preservation and protection in their natural condition.

Values and Benefits

1. **Recreation** (Re-creation of the mind, body and spirit)
 - a. Improved performance - place of challenge where can discover inner resources and develop them. Solitude can enhance creativity.
 - b. Physical and mental health.
 - c. Self-esteem, confidence.
 - d. Self-sufficiency, independence.
 - e. Spiritual values, Inspiration.
 - f. Develop outdoor skills including hunting and fishing.
 - g. Intra-group intimacy, Build team work.

2. Scenic

- a. Teton Range is internationally renowned for its scenic value.
- b. Aesthetics inspire art, music, literature.
- c. People can re-connect with natural beauty.

3. Scientific

- a. Ecological benchmark to assess impacts in more developed settings. Baseline for global monitoring.
- b. Study how natural systems function - interactions, evolution.
- c. Study people's relation to land - how can we better harmonize activities.

4. Educational

- a. Outdoor classroom where can learn about nature first-hand.
- b. Learn skill to live more simply and more self-sufficiently in everyday life.

5. Conservation / Preservation / Non-utilitarian

- a. Ecosystem preservation. Species biodiversity. Maintain planet health.
- b. Preservation of gene pools, carbon banks.
- c. Right of other species to live freely.
- d. Preserves future options - don't know how whole planet works, so shouldn't disturb now.
- e. Bequest to future - pass on some wild places to future generations.
- f. Refuge for many species that depend on large, remote, undisturbed areas.

6. Historical

- a. Part of our natural character.
- b. Tie with our history - reminder of what the frontier meant in shaping a national culture.
- c. Maintains traditional, primitive skills.
- d. Archeological resources tell valuable story about human survival in harsh environments.

7. Quality of Life

- a. Improved air quality due to lack of development and filtering action of green plants.
- b. Steady flow of water to downstream areas, reduces floods and provides places to recharge aquifers (water supply).
- c. Clean, relatively pure water (quality).
- d. Helps maintain open space. Limits urban sprawl.

8. Economic/Commercial

- a. Outfitter/Guide Businesses.
- b. Domestic livestock grazing.
- c. Commercial art and photography.
- d. Potential place to collect gene stocks - seeds and tissue of wild plants for propagation. Already plant and animal species existing in their natural states have played major roles in the development of heart drugs, antibiotics, anti-cancer agents, and anti-coagulants. More than 23% of all prescriptions sold in America each year contain active ingredients from plants.
- e. Tourism and rural growth. A national survey on migration into western wilderness counties found that, while populations in most rural communities were declining in the 1980's, counties with wilderness were continuing to grow. Scenery, outdoor recreation opportunities, environmental quality, peace of life and limited development potential were reasons people were moving to the counties. 55% of the residents felt wilderness was an important reason for living in the area, while 72% of the migrants considered it a major factor in their decision to move to the area.

Reference

Rudzitis, G. and H.E. Johansen. 1989. *Migration into Western Wilderness counties: causes and consequences*. *Western Wildlands*. 15(1):19-23.

Fact Sheet

National Wilderness Preservation System:

Agency	Units	Federal Acres (%)
Forest Service, USDA	354	32,532,285 (36)
National Park Service, USDI	41	38,498,128 (42)
Fish and Wildlife Service, USDI	71	19,332,897 (21)
Bureau of Land Management, USDI	25	450,260 (1)
GRAND TOTAL		90,813,570 (100)

National Wilderness Preservation System (excluding Alaska):

Agency	Units	Federal Acres (%)
Forest Service, USDA	340	27,078,949 (79)
National Park Service, USDI	33	6,143,128 (18)
Fish and Wildlife Service, USDI	50	656,577 (2)
Bureau of Land Management, USDI	25	450,260 (1)
TOTAL		34,328,914 (100)

National Wilderness Preservation System (Alaska):

Agency	Units	Federal Acres (%)
Forest Service, USDA	14	5,453,336 (10)
National Park Service, USDI	8	32,355,000 (57)
Fish and Wildlife Service, USDI	21	18,676,320 (33)
TOTAL		56,484,656 (100)

Note: Data current as of March, 1989. Detailed breakdowns by wilderness within each State and Agency jurisdiction can be found in the Annual Wilderness Report to Congress. Some acreage values are estimates, pending final mapping and surveys. Total number of units for all agencies is 474; this is not additive from information above because of overlapping responsibilities.

Current Wilderness Management Issues

Introduction

More than 90 million acres of Federal land are managed as wilderness, a Congressional mandate that began with passage of the Wilderness Act in 1964. In partnership with the public, wilderness managers have a responsibility to preserve an enduring resource of wilderness, where natural processes are allowed to operate freely and man is a visitor who does not remain.

Simply designating a wilderness does not assure its preservation. Wilderness values need to guide all activities in wilderness, including grazing, access to private lands, mining, fish and wildlife, cultural sites, fire, and insects and disease. Management is needed to minimize the impacts of the wilderness visitor on the immediate environment and their relationship to other visitors. Wilderness management applies guidelines derived from social and natural sciences to preserve the qualities for which wilderness was established.

The long-term values of wilderness to our society and the world will be their naturalness and wildness, and their protection from human influence. We need to better understand these values, and strive to keep human influence to a minimum while still providing for visitors to enjoy and experience the wilderness.

Resource Management

How are wildlife and fish managed in wilderness?

Non-commercial hunting, fishing, and trapping are allowed in most Bureau of Land Management, Fish and Wildlife Service and Forest Service wildernesses, but not those managed by the National Park Service. States are responsible for management of wildlife and fish, working together with wilderness managers. Wildlife species may be introduced and fish species stocked in order to perpetuate or recover a threatened or endangered species, or to restore a native species that has been eliminated or reduced by human influence. Exotic species may not be stocked. Habitat may be manipulated only when it is necessary to correct conditions resulting from human influence or to protect threatened or endangered species. Research and management surveys are permitted if done in a manner compatible with the preservation of the wilderness resource.

How Is grazing managed in wilderness?

Where previously established, grazing is permitted to continue in wilderness. Permittees are required to maintain range improvements necessary to the livestock operation or the protection of the range, such as fences and watering facilities. The use of motorized equipment is permitted where it occurred prior to the establishment of wilderness. Range improvements such as fences and watering holes may be made, when necessary to protect wilderness values and manage the range resource. Prescribed burning, noxious weed control, seeding, irrigation, fertilization, and liming are allowed where each activity was practiced prior to wilderness designation, when absolutely necessary for the grazing operation, and where there would be no serious adverse impacts on wilderness values.

Horses and packstock used by commercial outfitters and guides and private individuals are grazed under permit. Feed must be packed in when forage is inadequate, and each wilderness may set regulations on tethering of horses, party size limits, and use of native feed and pellets. Wild horses and burros are considered part of the natural system, where established at the time of designation.

Is mining allowed in wilderness?

Effective January 1, 1984, the Wilderness Act withdrew minerals within lands designated as wilderness from appropriation under the mining and mineral leasing laws, subject to valid existing rights. Holders of valid mineral leases retain the rights granted by the terms and conditions of the specific leases. Holders of valid mining claims are allowed to conduct operations necessary for the development, production, and processing of the mineral resource. Mechanized equipment, motorized access, and utility corridors may be used. However, these activities and the reclamation of all disturbed lands must minimize the impact on the surrounding wilderness character. Prior to designation as wilderness, mining claims may be made on public lands administered by the Bureau of Land Management. Mining operations may continue after designation, subject to strict regulation to protect wilderness characteristics.

How can private land owners get access to private land within wilderness?

State and privately-owned land may occasionally become completely surrounded by wilderness. The landowner retains adequate access to that land. If landowners are willing and funds are available, the Federal government may purchase such inholdings. The land may, however, be exchanged for federally owned land of approximately equal value within the same state. The Alaska National Interest Lands Conservation Act (ANILCA) of 1980 contains special provisions for access to non-Federal lands within wilderness in Alaska.

How are water resources managed in wilderness?

Dams and water development structures, other than those necessary for range and wildlife, can only be authorized by the President. Existing reservoirs, ditches, water catchments and related facilities for the control or use of water can be maintained or reconstructed if they meet a public need, or are part of a valid existing right. Motorized equipment and mechanical transportation for maintenance of water development structure is not allowed unless practiced before the area was designated wilderness. Watershed restoration is permitted only where human activities have caused soil deterioration or other loss of wilderness values, where watershed conditions could cause unacceptable environmental impacts or threaten life or property outside the wilderness, and where natural revegetation is insufficient.

What is the fire management policy in wilderness?

Fire in wilderness is managed to permit lightning-caused fires to play, as nearly as possible, their natural ecological role within wilderness, and to reduce, to an acceptable level, the risks and consequences of wildfire within wilderness or escaping from wilderness. Naturally ignited fires may be designated and managed as prescribed natural fires in wildernesses that have approved fire management plans, as long as the fire meets and remains within established criteria. Prescribed fires, ignited by qualified personnel, may be used to reduce fuel buildups within wilderness, when approved in fire management plans. These plans detail wilderness fire management objectives for the area, historic fire occurrence, the natural role of fire, expected fire behavior, appropriate suppression action and acceptable suppression techniques, smoke management, and effects on adjacent land owners and wilderness visitors.

Most fires are detected from aircraft overflights and lookouts located outside the wilderness boundary, although some lookouts are maintained within wilderness. Fire suppression crews protect natural and cultural features and utilize suppression tactics that minimize the lasting evidence of suppression actions. Mechanized equipment is used only when essential, water is used instead of fire retardants when possible. Watershed restoration of burned areas is allowed where conditions exist that could cause unacceptable environmental impacts or threaten life or property outside the wilderness.

How are insects and diseases controlled in wilderness?

Insects and diseases are a natural part of the ecosystem and are not controlled, unless epidemics are expected to cause unacceptable damage to adjacent lands and resources, or exotic pests are expected to cause an unnatural loss to the wilderness resource. Noxious weeds may be eradicated by physical means such as grubbing when the infestations are isolated, and hand-applied chemicals may be used when absolutely necessary.

Are tree cutting and planting allowed in wilderness?

Timber harvest is not allowed in wilderness. Trees and shrubs may be cut for valid mining claims; under emergency conditions such as fire, insect, and disease control; and in the construction and maintenance of authorized improvements when the necessary material cannot be reasonably obtained elsewhere. In the latter case, the cutting is done away from trails or campsites and the evidence of camping removed insofar as possible. Dead and down material can be cut for campfires in most wildernesses, subject to local restrictions. Planting or seeding is allowed only in rare instances to correct conditions caused by human activities or for emergency situations when natural revegetation is insufficient. Native species are preferred and primitive methods, such as hand planting, are generally used. Only true native species or species that pose no threat to the existing gene pool should be used for emergency rehabilitation. Often a temporary species that will quickly give way to natives without hybridizing is the best way to protect wilderness values and unique gene resources in emergency rehabilitation situations.

What Is being done to protect air quality in wilderness?

The Clean Air Act requires that Federal Land Managers review new source permit applications that would affect Class I areas, which include 88 National Forest wildernesses and 48 National Parks. The emerging air resource management programs involve wilderness managers who must decide which resources are to be protected in wilderness, and air quality specialists who will inventory and monitor air quality related values in Class I areas, review Prevention of Significant Deterioration permit applications, provide recommendations to regulating agencies, and coordinate with air regulatory agencies and other federal and state land management agencies.

How are historic and archeological resources managed in wilderness?

Cultural features such as archeological sites, historic trails or routes, or structures that have been included within wilderness are protected and maintained using methods that are consistent with the preservation of wilderness character and values and cultural resource protection requirements. Preservation activities such as salvage rehabilitation, stabilization, reconstruction, restoration, excavation, and intensive inventories are approved on a case-by-case basis, if they will not degrade the overall wilderness character of the area. Cultural resource sites that appear to qualify are nominated for the National Register of Historic Places. Unless they are needed to provide wilderness benefits or serve administrative purposes, those **sites** or structures that do not qualify for the National Register **are allowed** to deteriorate naturally, are removed or destroyed. Interpretation of sites is done **outside of** wilderness, except for verbal interpretations by wilderness rangers.

Can scientific research be conducted in wilderness?

Research is considered a valid and important use of the wilderness resource and is encouraged as long as projects do not degrade the wilderness character and there are no alternatives for conducting that research outside wilderness. Research and monitoring devices may be installed and operated in wilderness only when the desired information is essential and cannot be obtained from a location outside of wilderness, and the proposed device is the minimum tool necessary to accomplish the objective safely and successfully. If proposed studies are not compatible with wilderness values, managers work with applicants to find alternate locations or access. For example, the Forest Service anticipated in a national survey of wilderness lakes by the Environmental Protection Agency in 1986. Helicopter access to sample the lakes was initially requested, but the Forest Service proposed and helped complete the sampling using foot or horse travel.

Better inventory of the physical and biological resources is critically needed to provide current baseline information, to serve as a benchmark for environmentally induced change in the future, to support other scientific studies, and to monitor the impacts that recreational uses have on wilderness resources.

What Is different about wilderness in Alaska?

In recognition of the special conditions that exist in Alaska, the **Alaska** National Interest Lands Conservation Act of 1980 (ANILCA) allowed many activities that may be permitted on NF Wilderness which would otherwise not conform to the Wilderness Act of **1964**. Most notable are motorized access for traditional uses and subsistence purposes, modification of fish habitat and establishment of fish hatchery programs, construction of a limited number of new recreation cabins or shelters to protect public health and safety, use of trees for house logs and firewood, and commercial salvage of beach logs. Temporary facilities, such as tent platforms and shafters, may be established for hunting and fishing.

Recreational Use of Wilderness

What kind of recreational opportunities does wilderness offer?

The Wilderness Act calls for ‘outstanding opportunities for solitude or a primitive and unconfined type of recreation’ in wilderness. The challenge is to provide recreational opportunities while keeping wilderness an area ‘without permanent improvement or human habitation,’ an area where ‘man himself is a visitor who does not remain.’ Visitors must accept wilderness largely on **its** own terms, without modern facilities provided for their comfort or convenience. Users must also accept certain risks, including possible dangers arising from weather conditions, physical features, and other natural phenomena, that are inherent in the various elements and conditions that comprise a wilderness experience and primitive methods of travel. Most wilderness users enjoy camping, hiking, hunting, horsepacking, fishing, climbing, canoeing, and many other wilderness-dependent activities.

What are managing agencies doing about wilderness education?

Wilderness education has become the most important tool for increasing public awareness about wilderness policy, affecting attitude and behavior changes, and developing an outdoor ethic. If people are aware of what is required of them in a particular situation such as a wilderness trip, there is a chance that they will behave appropriately. The hope is that people, by their own actions, will preserve the aesthetic landscape, eliminate unnecessary resource damage, and gain a better understanding of the purpose of management plans and policies. Then, land management agencies need not rely completely on closures, restrictions, regulations and law enforcement. Management can be anticipatory rather than reactive, and a traditional freedom of choice will be maintained in wild land recreation.

What Is “Leave No Trace” camping?

In wilderness, ‘man is a visitor who does not remain.’ When visitors leave evidence of their journeys, the next visitor loses the sense of solitude and undisturbed recreation opportunities. Wilderness visitors can take responsibility for being unnoticed, leaving no trace. They should pack all trash out of the wilderness, use a lightweight stove instead of a fire, stay on designated trails in heavily-used areas, keep group size small, camp 200

feet or more from trails and water bodies, do the washing away from water sources, make sure that horses and stock do not damage the campsite or overgraze areas, and leave cultural resources in place.

What restrictions are there on using wilderness?

To protect the wilderness resource, restrictions may be placed on party size, campsite location, or length of stay in individual wildernesses. Visitor education, trail design, and other non-regulatory measures would be tried before restrictions are imposed. Permits are required in some of the heavily-used wildernesses, and some portals of the Boundary Waters Canoe Area Wilderness. They are necessary to preserve the area and to ensure that visitors are provided with a degree of solitude. Permits are either free or have a nominal processing fee. Saddle and pack stock are permitted in most wildernesses, as are non-motorized canoes, rafts, and kayaks. There may be local restrictions and closure orders for some wildernesses.

Are outfitters allowed in wilderness?

Wilderness-oriented commercial services enable some segments of the public to enjoy wilderness values and recreational experiences. Activities such as guide services for horseback, hiking, mountain climbing, or river trips may be authorized if they are outlined in the wilderness management plan and are issued special use or commercial permits. Outfitters and guides are generally allowed to use temporary structures such as tents, hitchracks and corrals, but they must be removed after the season of use.

Prohibitions and Conflicting Uses

Why are motorized equipment and mechanical transport prohibited in wilderness?

The Wilderness Act states that ‘there should be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport.’ Where motorboat and aircraft use was established before a wilderness was designated, the Wilderness Act, the Alaskan National Interest Lands Conservation Act, and other laws allow their continuation. Mobility-impaired persons may use non-motorized wheelchairs in most wilderness, and some types of motorized wheelchairs are allowed in National Park and Bureau of Land Management wilderness.

The Wilderness Act makes exceptions for occasional use of motorized and mechanical equipment, ‘as necessary to meet minimum requirements for the administration of the area for the purpose of the Act (including measures required in emergencies involving the health and safety of persons within the area).’ The exceptions might be for search and rescue, fire fighting, fish stocking where it occurred before the area was designated, certain grazing purposes when it occurred before designation, for some administrative purposes, and other similar reasons.

Why are some non-motorized devices such as hang gliders, parasails and bicycles not allowed in wilderness?

Hang gliders and bicycles are considered mechanical transport which are prohibited by the Wilderness Act. Both hang gliders and parasails are forms of aircraft, which are prohibited from landing in wilderness. All tend to intrude on the wilderness experience of other visitors. The Wilderness Act recognizes the wilderness resource as a place that ‘... has outstanding opportunities for solitude.’ In most cases there are opportunities for these activities to take place outside of wilderness.

What are the most common violations of the law in wilderness?

This varies by area, but off-road vehicles such as snowmobiles and wheeled vehicles are illegal in wilderness and are often cited. Where the wilderness borders a road or off-road vehicle trail or where vehicles had historically been used in that wilderness, vehicle trespass can be a serious problem. Many wildernesses require dogs to be kept on a leash, and these regulations are violated often. Littering and camping in areas that are being rehabilitated are still a problem. A growing serious law enforcement problem is the cultivation of *Cannabis* in wilderness.

What is the policy on aircraft flights over wilderness?

There are restrictions for aircraft flights only over the Boundary Waters Canoe Area Wilderness. The Federal Aviation Administration has issued a Notice to Airmen that a minimum altitude of 2,000 feet above the terrain (or above the uppermost rim of a canyon or valley) over wilderness and National Parks be voluntarily observed by all aircraft. Boundaries of many wildernesses are marked on aeronautical maps produced by the National Aeronautics and Space Administration. In some wildernesses, military overflights and other airplanes can be heard by visitors. The Forest Service and National Park Service are now cooperatively studying the effects of aircraft noise on visitors in selected wildernesses and parks.

What is the policy on staging competitive events in wilderness?

Races, endurance runs, special events, and large organized hikes are prohibited in wilderness. The basis of this policy is that wilderness was established to provide ‘...outstanding opportunities for solitude’ according to the Wilderness Act. Competitive events in wilderness tend to lessen the wilderness experience for others, and there are many opportunities for such events outside of wilderness.

What is philosophy behind administrative activities?

Planning and Administration

In protecting wilderness character and resources and in managing wilderness use in accordance with the Wilderness Act, the managing agencies adhere closely to the 'minimum tools' concept. Wilderness managers select the minimum tool or administrative practice necessary to successfully and safely accomplish the management objective with the least adverse impact on wilderness character and resources.

Are cabins and lookouts allowed in wilderness?

The Wilderness Act provides for administrative cabins and other facilities '...to meet minimum requirements for the administration of the area for the purpose of the Act ...'. The need for all existing administrative structures and facilities, including cabins, fire lookouts, buildings, fences, trails, airfields, helipads, and communication facilities is evaluated in each wilderness management plan. A decision to construct, maintain or remove an administrative facility is based primarily on whether it is required to preserve wilderness character or values or is essential to ensure public safety. Such decisions are not based on administrative convenience, economy of effort, or convenience to the public. Maintenance or removal of historic structures must also comply with cultural resource protection policies. Special provisions apply to the construction, use, and occupancy of cabins and other structures in Alaska.

Are trails, bridges, and signs used in wilderness?

Trail systems are managed for the purposes of recreation and wilderness protection. To meet these objectives, existing trails may be expanded, relocated, restored and closed and new trails may be built if necessary. Bridges are built only when the crossing is unsafe during the primary season of public use, where other structures are frequently destroyed or damaged by flood water, or where unacceptable bank damage will occur from visitors seeking a crossing.

Signs detract from the wilderness character of an area and make the imprint of man and management more noticeable. Only those signs necessary to protect wilderness resources or for public safety are permitted, and must be compatible with their surroundings and be as small as possible. However, accurate maps, route descriptions, and brochures are usefully available for visitors.

Are there many differences between agency policies in wilderness management?

There are some differences, and specific questions should be directed to the individual agencies. Close coordination through meetings, joint policy reviews and field trips help ensure that the approach to management of wilderness by the four agencies is as consistent as possible. Many wilderness management training sessions are attended by managers from several agencies, an interagency correspondence course in wilderness management is being developed at Colorado State University. A national interagency Wilderness Management conference was held in 1983 in Moscow, Idaho, and another is

planned for Minneapolis on September 11-17, 1989, 'Managing America's Enduring Wilderness Resource.'

How Is the Bureau of Land Management reviewing the suitability of land for wilderness?

Authority for wilderness administration was first given to the Bureau of Land Management in the 1976 Federal Land Policy and Management Act. The agency is currently conducting inventories of the land it manages for wilderness characteristics, protecting areas undergoing wilderness review, identifying wilderness study areas, and managing all designated wildernesses. The Secretary of the Interior was directed by the 1976 Act to report these to the President by late 1991.

What kind of wilderness management research is Federally funded?

National leadership for wilderness management research is provided by researchers at the Forestry Sciences Laboratory in Missoula, part of the Intermountain Forest and Range Experiment Station in the Forest Service. There are three major components of wilderness recreation research. In the area of social science, research scientists provide managers with information on wilderness user characteristics, behavior, and expectations. Research also provides information on how to most effectively carry out wilderness education programs. In the area of biological science, research provides an understanding of the ecological impacts that visitors may cause in various wilderness settings, and how those impacts can be minimized.

To tie together the social and biological sciences, research provides management systems that effectively respond to environmental and social issues, and to the needs and preferences of the users. In addition, much of the fundamental ecology, range, watershed, wildlife, and air quality research conducted by Forest Service and Department of Interior researchers and their cooperators provides information for wilderness managers.

What future changes might affect wilderness management?

Technological creep has already been affecting wilderness; sometimes for good and sometimes not. Some of today's technology has the potential to take away the sense of adventure and uncertainty. Satellite communications and global positioning systems may increase search and rescue calls, if visitors take sophisticated beepers into the wilderness. Bob Marshall or Art Carhart probably didn't envision this as part of the solitude and adventure of wilderness travel.

On the other hand, technology has helped people spend time in wilderness while impacting the land very little. Modern camp stoves have made camp fires a luxury most of the time. Lightweight equipment has made foot and horse travel much easier and less of an impact. The need for big stoves and heavy tents are a thing of the past. People can pack out what they pack in.

Probably the biggest challenge we all face is how to keep the ‘wildness’ in wilderness and still make it available for the public to visit and enjoy. The demands on the wilderness resource will intensify over time as resources like clean water become more precious. There will be more pressures to modify weather over wilderness and to divert water from one part of a wilderness to another for easier transmission. There will be requests for use of wilderness that cannot even be envisioned now, but they will come. When managers decide what to approve and what to deny, they must keep foremost the protection of the wilderness resource itself. The wilderness resource is fragile and can be lost through the erosion of seemingly inconsequential decisions.

For further information, please contact one of the following managers or the manager of your local wilderness.

Keith Corrigan, Chief, Branch of Wilderness Resources, Bureau of Land Management, Department of Interior, Room 3360-Main Interior Building, 18th and C St., NW, Washington, DC 20240 (phone 202-205-1422)

John Twiss, National Group Leader for Wilderness, Recreation Management Staff, USDA Forest Service, Box 96090, Washington, DC 20090-6090 (phone 202-447-2422)

Jerry Stokes, National Group Leader for Wilderness, Recreation Management Staff, USDA Forest Service, Box 96090, Washington, DC 20090-6090 (Phone 202-205-0925)

Dave Heffernan, Division of Refuges, Fish and Wildlife Service, Department of Interior, 18th and C St., NW, Washington, DC 20240 (phone 703-358-2036)

Steve Hodapp, Ranger Activities Staff, National Park Service, Department of Interior, 18th and C St., NW, Washington, DC 20240 (phone 202-343-5211)

What is the Job of Wilderness Managers?

Introduction

The concept of wilderness was formalized by the 1964 Wilderness Act. With this legal direction came the responsibility of caring for our nation's natural heritage. This vital role, entrusted to our wilderness managers, has continued to evolve from one of beneficent neglect to active involvement to maintain and restore wilderness values.

Roles

In recognizing the wide range of wilderness qualities from east to west, managers adapt management strategies to meet the unique challenges each area presents. With that in mind, the following list describes the complex and diverse roles of wilderness managers.

- Monitor, protect, and restore biological diversity and integrity.
- Analyze external threats to wilderness i.e. water, air, and noise pollution.
- Initiate public involvement in wilderness management issues through implementation of the LAC process.
- Implement the LAC process to analyze and evaluate physical and social conditions in wilderness.
- Design and apply management strategies to maintain physical and social conditions in wilderness.
- Develop Forest policy, wilderness implementation schedules, and long range budgets.
- Communicate wilderness philosophy to internal and external publics in order to improve conditions in wilderness.
- Educate wilderness users to reduce physical and social impacts in wilderness.
- Initiate, expand, and promote partnerships and volunteer programs.
- Coordinate with other departments within the agency on projects and issues pertinent to wilderness.
- Cooperate and coordinate with other agencies which have wilderness responsibilities.
- Administer outfitter/guide permits and coordinate with professional organizations related to those activities.
- Administer mining, grazing, and water development rights/permits and monitor impacts.
- Maintain trails.
- Insure law enforcement where necessary.

Solitude

Solitude is all about being instead of doing. Solitude is a physical, mental, emotional and spiritual time-out, a period of idleness in which our minds are stilled and our psychic batteries recharged.

Psychologist Dan Kiley says the ideal solitude is simply idling—doing absolutely nothing but watching birds at the feeder, becoming mesmerized by the pounding waves, strolling a wooded path.

Solitude is unstructured time for yourself, time in which you don't have to do anything or be anywhere, time in which whim—not the clock—determines what you'll do.

Solitude puts you in touch with yourself—your feelings, needs, goals. It spurs your creativity, prompts your wiser decisions, improves your concentration and memory. It reintroduces you to yourself.

Signs you are in need of solitude include: you feel out of touch with your feelings and your goals, as if you don't know are anymore. It seems other people are running your life. You are always busy. You feel overstimulated and often irritable. You feel bone-tired. The weekends are never long enough.

So, when your body signals an SOS, think solitude.