A PERSPECTIVE ON NATURAL RESOURCES MANAGEMENT IN THE NATIONAL PARK SERVICE[1]

by Roland H. Wauer[2]

The 10th General Assemply of IUCN meeting in New Delhi in 1969, passed a resolution stating that all governments should agree to reserve the term "National Park" to areas possessing specific characteristics, and to ensure that their local authorities and private organizations wishing to set aside nature reserves do the same. It stated that a national park should be a relatively large area where one or several ecosystems are not materially altered by human exploitation and occupation, where plant and animal species, geomorphological sites, and habitats are of special scientific, educational and recreative interest of which contain a natural landscape of great beauty, and where visitors are allowed to enter, under spacial conditions, for inspirational, educative and recreative purposes. This resolution was endorsed by the Second World Conference on National Parks in 1972.

Today, 100 of the world's 170 nations possess national parks.

National parks give protection, but they also require protection. Few parks have not been threatened by being overrun, reduced, altered, or even destroyed by internal and external pressures. Ironically, the popularity of national parks is often its most pervasive threat. Overuse by visitors causes damage and serious problems. But an even more insidious impact to park values comes from an assortment of adjacent land uses.

Background

When Yellowstone became the world's first national park in 1872, it contained no roads, no railroads, no bridges, scarcely any trails. But once the park became

identified as a wonderous resource, laws to control unsavory practices were required. Congress appropriated funds for its protection and administration, but it was never enough. And, in 1886, the Secretary of Interior appealed to the Army to come in and take over. Cavalry detachments moved into all of the pārks, 27 by then, and to some extent the poaching and illegal practices were reduced.

By 1912, nearly 40 national parks, monuments, reserves, battlefield parks, and miscellaneous sites had been set aside. But still there were no policies to guide the superintendents and their staffs. President William Howard Taft, who knew that some kind of organization had to be established if the parks were to be properly preserved, urged Congress to create a National Park Service. Bills for this purpose were introduced then and again in 1913, but they did not suceed.

As if to underscore the urgency of the situation, a water supply reservoir and power generation plant were authorized to be built in the magnificient Hetch Hetchy Valley of Yosemite National Park to supplt water for the city of San Francisco. For nearly ten years John Muir, the Sierra Club, and many others had fought diligently against this proposal. Yet out of that defeat emerged a more unified and determined park protection philosophy. And the National Park Service Act of 1916 that followed seemed to solidify a park preservation commitment for all Americans.

The mid-1920s saw Idaho ranchers and farmers launch a concerted effort to usurpt Yellowstone Lake for irrigation. Preservationists quickly percieved the scheme as a threat to their own proposal to extend the Yellowstone boundary southward to include a portion of the Teton Mountains. Out of that threat emerged Grand Teton National Park, established in 1929 as a "roadless" preserve.

Although the addition of the Tetons expanded the Yellowstone ecosystem southward, it caused a number of new problems. The southern elk herd was given protection for only part of the year, and not until 1950, following another prolonged and emotionally-filled battle, was Grand Teton National Park enlarged along its eastern flank to take in a substantial remnant of the valley and the elk's wintering grounds.

In 1933, the National Park Service publicized the need for broader management considerations in its precendent-setting report, Fauna of the National Parks of the United States. Authors George M. Wright, Ben H. Thompson, and Joseph S. Dixon stated: "The realization is coming that perhaps our greatest natural heritage, rather than just scenic features---is nature itself, with all its complexity and its abundance of life." For the first time Americans could admit that "awesome scenery" might in fact be sterile without "the intimate details of living things, the plants, the animals that live on them, and the animals that live on those animals."

The following year Congress authorized the southern extremity of Florida as the first national park expressely designated for wilderness and wildlife protection. But because the reserve failed to include the entire ecosystem it was to be vulnerable to development from the start.

During the early park years, strict protection became the hallmark; protection of timber from axe and saw, wildlife from hunters, minerals from miners, rangelend from grazing animals, and forests from fire. Reinforcing this was the United States Army.

After 1916, the newly established NPS took over the management of the modest but growing Park System. "Let nature take its course" became the new motto. And the

best management was, in effect, no management at all except for strict protection. The natural areas within the System were, and are still today, billed as great living museums of natural history and scenic beauty, with only incidental influences and modifications by man. Keeping these natural wonders essentially unimpaired seems like a reasonable aspiration, ans to a large degree it has been achieved.

What actually has taken place was that nature was not allowed to take its natural course. Nature was "aided" by man. What was really being practiced was a form of selective protection. Along with successful efforts to protect the parks from exploitation by man himself, they were also "protected" from certain natural forces. Some resources were considered as "good" and others as "bad." The good resources were protected from the bad. Deer were thought of as good and predators as bad; trees were all good, but anything that destroyed them was bad; fire was bad; fish were good and most things that ate them (besides people) were bad; etc. Protection as a management concept was steeped in emothionalism and sentiment, and coated with the best of intentions, but unfortunately it was misdirected.

By the mid-twentieth century, the Service was becomming more aware of its inability to deal with a number of resource issues. And the early 1960s produced a period of increased public awareness of environmental degredations within the parks. So, under the direction of the new Secretary of Interior, Steward L. Udall, two reviews were initiated.

The first of these was chaired by Professor Starker Leopold, ecologist at the University of California, Berkeley. Although the primary task was to advise on wildlife management, they found that the entire spectrum of park resource management had to be considered. This committee articulated a strong course of action which formed the nucleas for a new direction in the management of wildland parks. The Leopold Report, as it became known, stated:

"As a preliminary goal, we would recommend that the biotic associations within each park be maintained, or where necessary recreated, as nearly as possible in the direction that prevailed when the area was first visited by the white man. A national park should represent a vignette of primitive America. . . . Restoring the primitive scene is not easily done nor can it be done completely. Yet, if the goal cannot be fully achieved it can be approached. A reasonable illusion of primitive America could be recreated, using the utmost skill, judgement, and ecological sensitivity. This in our opinion should be the objective of every national park and monument."

While the Leopold Report primarily addressed resources management, the second report---a report of the National Academy of Sciences that was to become known as the Robbin's Report---addressed research as supporting resources management activities, park planning and development, interpretation, and pointing out various deficiences.

The Leopold Report did not suggest turning back the ecological clock to some time in the past and then attempting to stop it. It did suggest that park managers must view the total park resource mosiac ecologically. It means finding out what aspects of the ecosystem needs to be rectified and then doing something about it. Relatively unmodified portions of the parks must be closely guarded and maintained in as primitive a state as possible. To build a road, drill a well, or graze a meadow may accomplish one purpose; however, its effect on the naturalness of the park must also be considered. If an imporvement is to be made, its disruptive influence must be minimized.

Restoring and maintaing the pristine scene will demand increasing sophistication on behalf of the Service's scientific collaborators as well as it own resource

managers. Above all, understanding of the long-range objectives regarding the perpetuation of the natural resource mosiac is an absolute necessity. It has become, in a sense, a sacred charge---one that can only be successfully fulfilled through ecologically sound management.

Discussion

Robert Sterling Yard had written in 1922, "the majority of park visitors now come in motors," noting the shift from rails to roads, "while we are fighting for the protection of the National Park System from its enemies, we may also have to protect it from its friedds." No statement was to prove more prophetic or enduring. With the surge of park visitation, suddenly even the grand hotels seemed tainted as "resort and amudement-type" features.

And in June 1955, U. S. News and World Report featured the following headline: "This summer 19 million Americans will visit parks that are equiped to handle only 9 million people. Results: Parks overrun like convention cities. Scenery viewed from bumper-to-bumper traffic tie-ups. Vacationing families sleeping in their cars."

Finally, strained to the limit by the postwar travel boom, the National Park Service received relief from Congress in the form of "Mission 66." This ten-year program was designed to expand rather than reduce the carrying capacity of the national parks by reconstructing roads, adding visitor centers, and increasing overnight accomodations. Plans called for facilities sufficient to handle the estimated 80 million auto vacationers expected to crowd the parks during the golden anniversary of the Service, 1966.

In 1967, after the completion of "Mission 66," F. Fraser Darling and Noel D. Eichorn, in a report to the Conservation Foundation, stated, "Mission 66 has done comparatively

little for the plants and animals. The enormous increase in drive-in campsites is an example of the very expensive facilities which do nothing at all for the ecological maintenance of a park."

The following year, Robert Cahn published in Christian Science Monitor a series of articles entitled, "Will Success Spoil the National Parks?" These articles were based upon Cahn's personal evaltaion of 20 key park areas during anine-month span. He reported on the conditions existing within the parks, and pointed out numerous internal threats.

Between 1955 and 1974, visitation more than tripled in the parks. And in the ten years since 1970, the National Park System has been enlarged by 165%, while at the same time experiancing a decrease in total number of employees. More than 282 million people visited the national parks in 1980.

Edward Abbey, in Desert Solitaire, regarded this expension as "industrial tourism." He stated that, "the industry expects--it hardly needs to ask--that these (parks) be developed into modern paved highways. No more cars in the national parks. Let the people walk. Or ride horses, bicycles, mules, wild pigs--anything--but keep the automobiles and motorcycles and all their motorized relatives out."

In the sixth edition (1969) of Devereux Butcher's Exploring Our National Parks and Monuments, a new chapter---"Threat After Threat"---was added. There Mr. Butcher includes sections of "dam building," "road building," increasing missuse of the parks," "national parks in name only," "architecture gone wild," and "menace of inholdings," in presenting his views of park threats. He stated:

> "Because Echo Park was defeated in 1956, let no one suppose there will not be another attempt to push it through. Commercial interests tirelessly seek to invade the parks and monuments to gain from their natural resources--

at national expense--and if they can crash defensive barriers once, the system of parks and monuments is likely to be opened to them from that time on."

Butcher summarized his views in this way:

"Preservation of our natural sancturaries offers a challenge to thinking people everywhere. If we are to prevent commercial raids on the national parks and monuments, such as airplane landing fields and chair lifts which would destroy the primeval landscapes and the wilderness solitude; if we are to keep them free from artificial amusements, which have no rightful place in nature sanctuaries but defeat their purpose; if we are to uphold the national policy and the standards in order to prevent the deterioration of the national park and monument system to the common level of playgrounds and commercialized resorts--to prevent, in fact, the loss of this proud American heritage--then informed Americans must unite in increasing numbers and stand ready to defend the parks and monuments in every emergency."

In the March and April 1979 issues of National Parks and Conservation Magazine, the National Parks and Conservation Association (NPCA) published information they had obtained in a 1978 survey of 203 parks under the title of "NPCA Adjacent Lands Survey: No Park in An Island." These articles revealed a multitude of both internal and external threats that were affecting park resources. In summary, the authors stated that, "Unless all levels of government mount a concerted effort to deal with adjacent land problems in a coordinated manner, the National Park Service mandate . . . will be completely undermined."

This publication received considerable attention from the Service and in Congress, and apparently awakened key Congressmen to the problems existing within the parks. It resulted in a special request, in July 1979, from Congressmen Phillip Burton

and Keith G. Sebelius, to the Director of the National Park Service, for a State of the Parks Report.

The National Park Service, in response to this request, sent to every field area a three-part query that included a seven-part questionaire and dual sections on sources of threats and resources threatened. The questionaire served as a checklist of threats and asked the question, "In the light of the enabling legislation, the legislative history, and the Statement for Management, what threats are impacting the park resources and to what extent?"

Data received from 310 park units were tabulated and analyzed, and the "State of the Parks - 1980, A Report to the Congress," was submitted to the Congress. Three thousand copies of the report were distributed to every member of the House and Senate Park Subcommittees, to every NPS region and park, and to other congressmen, the press, special interest groups, and others on request. It received good attention from the Congress, the press, within the Service, and from the American public as a whole.

The Threats to Parks

Though the mean number of threats reported per park was 13.6 Servicewide, a significant number of parks exceeded this mean. The 63 national park natural areas greater than 30,000 acres in size reported an average number of threats nearly double the Servicewide norm. Included in this category were such well known crown jewels as Yellowstone, Yosemite, Great Smoky Mountains, Everglades, Olympic, Sequoia, Dénali, and Glacier National Parks. Most of these great natural areas were at one time pristine wilderness surrounded and protected by equally vast wild areas. Today, with the park's surrounding buffers badly eroded, many of these parks are experiancing significant and widespread degradation.

THE 12 BIOSPHERE RESERVE PARKS, WHICH ARE UNIQUE NATURAL AREAS THAT RANGE IN SIZE FROM 15,000 ACRES TO MORE THAN TWO MILLION ACRES, AND WHICH ARE DEDICATED TO LONG-TERM ECOSYSTEM MONITORING UNDER THE UNESCO MAN AND THE BIOSPHERE PROGRAM, SURPRISINGLY REPORTED AN AVERAGE NUMBER OF THREATS NEARLY THREE TIMES THE SERVICEWIDE NORM. THIS IS PARTICULARLY DISTURBING BECAUSE THE BIOSPHERE RESERVE PARKS ARE CONSIDERED TO BE MODEL ECOLOGICAL CONTROL AREAS FOR THE NETWORK OF INTERNATIONAL BIOSPHERE RESERVES.

THE LARGE NUMBER OF THREATS REPORTED FOR THESE NATURAL PARKS MAY REFLECT THE GREATER EMPHASIS DIRECTED TO MONITORING OF THESE AREAS. IF THIS IS SO, IN FACT, THE REASON FOR THE INCREASED OCCURRENCE OF REPORTED THREATS, IT SUGGESTS THAT SIGNIFICANT NUMBERS OF THREATS MAY HAVE BEEN OVERLOOKED IN OTHER PARKS WHICH, TO DATE, HAVE RECEIVED MUCH LESS RESEARCH AND MONITORING ATTENTION.

ALTHOUGH AESTHETIC DEGRADATION ACCOUNTED FOR 25 PERCENT OF ALL THREATS REPORTED, MORE OBJECTIVELY DETERMINED THREATS, SUCH AS AIR POLLUTION (16 PERCENT), PHYSICAL REMOVAL OF RESOURCES (14 PERCENT), EXOTIC ENCROACHMENT (14 PERCENT), VISITOR PHYSICAL IMPACTS (12 PERCENT), AND WATER QUALITY POLLUTION OR WATER QUALITY CHANGES (11 PERCENT), WERE OF SPECIAL CONCERN.

THREATS ASSOCIATED WITH ACTIVITIES OR WITH SOURCES LOCATED WITHIN PARK BOUNDARIES CONTINUE TO CAUSE SIGNIFICANT NEGATIVE IMPACTS UPON PARK RESOURCES, PARK VALUES, AND VISITOR EXPERIENCES. THE MOST FREQUENTLY REPORTED INTERNAL THREATS WERE ASSOCIATED WITH HEAVY VISITOR USE, INCLUDING PARK UTILITY ACCESS CORRIDORS, VEHICLE NOISE, SOIL EROSION, AND EXOTIC PLANT AND ANIMAL INTRODUCTIONS.

THE VERY PRESENCE OF PARK VISITORS NECESSITATES VEHICLE USE AND REQUIRES FACILITIES TO PROVIDE ADEQUATE CARE FOR THE PEOPLE AND THEIR BELONGINGS. PARK ROADS, TRAILS, CONCESSION ACCOMMODATIONS, UTILITIES, ACCESS ROUTES, SEWAGE LAGOONS, LANDFILLS, REQUIRED MAINTENANCE EQUIPMENT USE AND FACILITIES, WATER LINES, AND THE LIKE ALL ARE ASSOCIATED WITH THE SCHEME OF PUBLIC USE OF THE PARKS.

WHILE MANY THREAT SOURCES LIE WITHIN THE PARKS, IT WAS APPARENT THAT SOME OF THE MORE SERIOUS THREATS ARE RELATED TO SOURCES AT A CONSIDERABLE DISTANCE FROM THE PARKS. MORE THAN HALF OF THE REPORTED THREATS WERE ATTRIBUTED TO EXTERNAL SOURCES OR ACTIVITIES. THE MOST FREQUENTLY IDENTIFIED EXTERNAL THREATS INCLUDED INDUSTRIAL AND COMMERCIAL DEVELOPMENT PROJECTS ON ADJACENT LANDS: AIR POLLUTION EMISSIONS, OFTEN ASSOCIATED WITH FACILITIES LOCATED CONSIDERABLE DISTANCES FROM THE AFFECTED PARKS; AND URBAN ENCROACHMENT; HOUSING COMPLEXES AND THE LIKE.

EXTERNAL THREATS ALSO INCLUDED LAND CLEARING, CATTLE AND OTHER FERAL ANIMALS, DUST, BURNING OF FIELDS AND REFUSE, APPLICATION OF FERTILIZERS AND OTHER TOXIC CHEMICALS, AND EVEN DDT STILL BEING USED IN MEXICO BUT AFFECTING ANIMAL SPECIES IN THE UNITED STATES.

WATER RELATED THREATS SUCH AS DAMS, FLOOD CONTROL CANALS, COOLING WATER DISCHARGE, DREDGING, FLOODING, AND WATER MINING ALL WERE REPORTED AS DIRECTLY OR INDIRECTLY AFFECTING THE UNIQUE RESOURCES OF THE NATIONAL PARKS. WATERCOURSES FLOWING THROUGH NATIONAL PARKS AND THEIR LAKES AND SWAMPS MAY BE POLLUTED OR SILTED OR DRIED UP BECAUSE OF HUMAN ACTIVITIES OCCURRING HUNDREDS OF MILES AWAY. IRRIGATION SCHEMES UPSTREAMS IN RIVERS WHICH FLOW THROUGH NATIONAL PARKS HAVE UPSET THE ECOLOGY OF THE PROTECTED AREAS, RESULTING IN ADVERSE CHAIN REACTIONS AFFECTING THE VEGETATION AND THE FAUNA.

IMPACTS FROM URBAN DEVELOPMENTS ARE FAR REACHING AS WELL AS PRODUCE AN OVERWHELMING VARIETY OF SOURCES, SUCH AS AIRPORTS AND VARIOUS AIRCRAFT, INCLUDING HELICOPTER TOURS, SNOWMOBILES, MOTORBIKES AND RACEWAYS: CITY UTILITY AND ACCESS ROUTES, FIRING RANGES, GARBAGE DUMPS, MUNICIPAL SEWAGE PLANTS, HUMAN WASTES, LANDFILLS, ROAD SALTING, LOGGING, AND WIDE USE OF BIOCIDES.

MINING AND ASSOCIATED ACTIVITIES WERE REPORTED AS THREAT SOURCES BY MANY OF THE PARKS. OIL, GAS AND COAL DEVELOPMENT WERE COMMONLY EXPRESSED CONCERNS.

MANY OF THE PARK UNITS REPORTED REAL AND POTENTIAL IMPACTS FROM COAL-FIRED AND NUCLEAR POWER PLANTS AND THEIR WASTE PRODUCTS, REFINERIES, PLANTS, MILLS, OIL SPILLS, PIPELINES, POWERLINES, AND A WIDE VARIETY OF HEAVY CONSTRUCTION.

ALL OF THE these ARE EXAMPLES OF THE SPECIFIC THREAT SOURCES REPORTED IN THE THREATS SURVEY. ALTHOUGH INDIVIDUALLY THEIR IMPACT MAY BE MINIMAL OR INSIGNIFICANT, COLLECTIVELY, THEY REPRESENT A PROBLEM TO THE PARKS OF GREAT MAGNITUDE.

THE THIRD FACTOR THAT THE STATE OF THE PARKS REPORT ADDRESSED WAS THE THREATENED RESOURCES, THEMSELVES. THESE ARE COMPRISED OF THE NATURAL AND CULTURAL FEATURES WHICH A NATIONAL PARK WAS CREATED TO PROTECT AND PRESERVE, THE VERY ESSENCE OF PARK PROTECTION AND VISITOR INTEREST. FORTY-NINE GROUPS WERE IDENTIFIED AND CONVENIENTLY AGGREGATED INTO FIVE RESOURCE CATEGORIES: BIOLOGICAL, PHYSICAL, AESTHETIC, CULTURAL AND OPERATIONAL.

THIRTY-TWO PERCENT OF ALL REPORTED THREATENED RESOURCES WERE BIOLOGICAL, SUCH AS PLANTS, MAMMALS, FOREST HABITATS, AND A RANGE OF OTHER LIVING ORGANISMS. PHYSICAL RESOURCES, SUCH AS AIR AND WATER, CONSTITUTED 24 PERCENT OF ALL THE REPORTED THREATENED RESOURCES. THREATENED AESTHETIC RESOURCES, WHICH COMPRISE SUBJECTIVE AND SOMETIMES INTANGIBLE FEATURES SUCH AS SILENCE, ODORS, GENERAL SCENE, WILDERNESS AND THE LIKE, CONSTITUTED 20 PERCENT OF ALL THE REPORTED THREATENED RESOURCES. AND OPERATIONS, SUCH AS ROADS, TRAILS, FACILITIES, AS WELL AS HEALTH AND SAFETY OF VISITORS AND EMPLOYEES, CONSTITUTED 8 PERCENT OF THE TOTAL REPORTED THREATENED RESOURCES.

THESE GENERALITIES DON'T ADEQUATELY ADDRESS SOME OF THE MOST SIGNIFICANT THREATENED RESOURCES BECAUSE SOME, LIKE CORAL REEFS AND MANGROVE HABITATS, MAY ONLY BE FOUND IN ONE OR A FEW PARKS. THEY REPRESENT EXTREMELY IMPORTANT RESOURCES WITHIN THE NATIONAL PARK SYSTEM BECAUSE THEY OCCUR IN ONLY ONE OR A FEW LOCALITIES.

THE TOP TEN REPORTED THREATENED RESOURCE FEATURES WERE COMPILED AND REPRESENT AN INTERESTING AND GENERAL OVERVIEW OF THE CONDITION OF RESOURCES WITHIN THE SERVICE. THE SINGLE MOST FREQUENTLY MENTIONED RESOURCE REGARDED AS THREATENED WAS THE GENERAL SCENE, THAT WAS REPORTED BY 191 PARKS. AIR QUALITY WAS SECOND (140 PARKS), FOLLOWED BY MAMMALS (136 PARKS), PLANTS (132 PARKS), FRESH WATER QUALITY (130 PARKS), FRONTCOUNTRY AND BACKCOUNTRY HUMAN EXPERIENCES (123 PARKS), SOILS (119 PARKS), SILENCE (114 PARKS), ARCHEOLOGICAL AND/OR HISTORICAL LANDSCAPES (111 PARKS), AND ARCHEOLOGICAL AND/OR HISTORICAL SITES (107 PARKS).

SEVENTY-FIVE PERCENT OF ALL THE REPORTED THREATS WERE CLASSIFIED BY ONSITE OBSERVERS AS INADEQUATELY DOCUMENTED BY RESEARCH OR OTHER VALID METHODS. THREATS ASSOCIATED WITH AIR POLLUTION, WATER POLLUTION, AND VISITOR RELATED ACTIVITIES WERE CITED AS NEEDING ADDITIONAL MONITORING, SCIENTIFIC MEASUREMENTS OR RESEARCH DOCUMENTATION.

THE PAUCITY OF INFORMATION ABOUT PARK ECOSYSTEMS RELATES NOT ONLY TO RESOURCE CONDITIONS AND THE STATUS OF IMPINGING INTERNAL AND EXTERNAL ACTIVITIES, BUT ALSO TO THE BASELINE INFORMATION AVAILABLE FOR PLANNING AND DECISIONMAKING. VERY FEW PARK UNITS POSSESS SUFFICIENT NATURAL AND CULTURAL RESOURCE INFORMATION NEEDED TO PERMIT IDENTIFICATION OF INCREMENTAL CHANGES THAT MAY BE CAUSED BY A THREAT. PRIORITIES ASSIGNED TO THE DEVELOPMENT OF SOUND RESOURCE INFORMATION BASELINES HAVE BEEN VERY LOW COMPARED TO THE PRIORITIES ASSIGNED TO MEETING CONSTRUCTION AND MAINTENANCE NEEDS. RESEARCH AND RESOURCES MANAGEMENT ACTIVITIES HAVE BEEN DELEGATED TO A POSITION WHERE ONLY THE MOST VISIBLE AND SEVERE PROBLEMS ARE ADDRESSED.

WITHOUT QUESTION, THE SIGNIFICANT RESOURCES--BOTH NATURAL AND CULTURAL--FOR WHICH THE NATIONAL PARK SERVICE WAS ESTABLISHED, ARE BEING DEGRADED TO AN EXTENT THAT IF THIS TREND CONTINUES THE PARKS WILL, IN THE NOT TOO DISTANT FUTURE, BE ONLY SHELLS OF WHAT THEY WERE ORIGINALLY.

GLACIER NATIONAL PARK PROVIDES AN EXCELLENT EXAMPLE OF THIS CHANGE. IT IS AMERICA'S PRIME EXAMPLE OF THE NORTHERN ROCKY MOUNTAIN ECOSYSTEM, AND ALONG WITH CANADA'S WATERTON NATIONAL PARK, FORMS THE UNITED STATES' FIRST INTERNATIONAL PARK. GLACIER PARK CONTAINS RUGGED, BEAUTIFUL LANDSCAPES WITH PRECIPITOUS PEAKS (MANY RANGING OVER 10,000 FEET), AND NEARLY 50 GLACIERS. THIS MAGNIFICIENT PARK, WITH ITS ABUNDANCE OF WILDFLOWERS AND WILDLIFE, INCLUDING ONE OF THE TWO LAST VIABLE POPULATIONS OF GRIZZLY BEARS LEFT IN THE LOWER FORTY-EIGHT STATES, HAS LONG BEEN PROTECTED BY EXPANSIVE WILDERNESS BUFFER ZONES. THE WILD AND UNSETTLED CANADIAN LANDS EXIST TO THE NORTH: THE FLATHEAD NATIONAL FOREST EXISTS ALONG MOST OF THE WESTERN BORDER: THE LEWIS AND CLARK NATIONAL FOREST AND THE BOB MARSHALL WILDERNESS AREA EXIST TO THE SOUTH AND SOUTHEAST: AND THE HUGE BLACKFEET INDIAN RESERVATION EXISTS ALONG THE EASTERN BORDER OF THE PARK.

OPEN PIT COAL MINING ON CANADIAN LANDS NEAR THE PARK'S NORTHWEST CORNER IS SCHEDULED TO BEGIN SOON AND CONTINUE FOR THE NEXT 20 TO 30 YEARS. APPROXIMATELY 1,700,000 TONS OF COAL ARE TO BE REMOVED EACH YEAR: THE MARKET VALUE IS ABOUT $10 BILLION. IN ADDITION TO THE DISRUPTION CAUSED BY THE OPEN PIT AND IMMEDIATE ENVIRONS, SETTLEMENTS AND ROADS TO SUPPLY THE MINE WILL SERIOUSLY COMPROMISE THE NORTHWESTERN BUFFER.

THE RESULTS FROM THIS STUDY INDICATE THAT THE NATIONAL PARKS TRULY ARE IN PERIL. THE MYRIAD OF THREATS ARE CAUSING SIGNIFICANT AND DEMONSTRATABLE DAMAGE TO THE PARK'S MULTIVARIED RESOURCES. AND THERE IS LITTLE QUESTION BUT THAT THESE THREATS WILL CONTINUE TO DEGRADE AND DESTROY THOSE IRREPLACEABLE RESOURCES UNTIL SUCH TIME AS MITIGATION MEASURES ARE IMPLEMENTED. IN MANY CASES, THIS DETERIORATION OR LOSS IS IRREVERSIBLE. IT REPRESENTS A SACRIFICE BY THE PUBLIC THAT, FOR THE MOST PART, IT TOTALLY UNAWARE THAT SUCH A PRICE IS BEING PAID.

Conclusions

In 1935, in the opening remarks of Fauna of the National Park Service - Fauna Series No. 2, George Wright stated:

> "How shall man and beast be reconciled in the conflicts and disturbances which inevitably arise when both occupy the same general area concurrently? As man is at once poser of the question, arbiter in the arguments, and, above all, himself the executioner, his verdict will be determined directly by the use he wants to make of any particular area and the order in importance to him of those uses."

The environment, that life support system of which we all depend, will be the single most important issue during the coming years, one that will touch every corner of people's lives and every facet of decision-making and planning by private and public leaders. And the condition of the nation's parks is at the center of the hottest of the debates over environmental policy.

The new Secretary of Interior, in charting a new course of Interior policy, stated, on June 15, 1981, that the most important element of the Administration's natural resources policy is "the recognition that man is a key component in the environmental equation. Too often in the past," he said, "there has been a strong tendency to write people out of the equation. - - - My proposals for resource development are especially important for the environmental protection because they provide for orderly and careful efforts to find and produce energy, minerals and other resources essential to a modern civilized country." In a sense, Mr. Watt was restating the same philosophy of "parks are for people" that was emphasized during the Nixon administration.

Basic philosophical differences in the interpretation of "orderly and careful efforts" and "civilized country" seem to be at the heart of the dis-sagreements. The national parks, however, particularly those grand scenic gems, have consistently been defended by the Secretary as being inviolate to degradation and abuse.

Secretary Watt posed this question to the Rocky Mountain News (June 5, 1981): "Do you let the crowned jewels--the Yosemite and the Yellowstones and the Grand Canyons and the Everglades go down the tubes with lack of maintenance and attention or do you grab out and take more lands that you don't properly take care of?"

The principle concern for park protection has taken the form of visitor and employee health and safety and the conditions of park facilities. These concerns led to a moritorium on land purchases and the proposed use of $105 million of the Land and Water Conservation Fund for restoring parks to sound conditions. The moritorium has since been lifted.

The principle support for the contention that the parks are falling down was a

report by the General Accounting Office. That study surveyed 12 parks and estimated that safety deficiencies in the 334 parks could be as high as $1.6 billion. The State of the Parks survey indicated that 24% of the parks reported visitor/employee health and safety threats.

There is no question in anyone's mind that facilities scattered throughout the Park System are in a state of disrepair, and many of them pose serious safety hazards. In recent years, the vast increases in national parks have far outpaced the allotments for funds and personnel to operate the parks. Today's park superintendent is literally running the operations on a shoestring. Many have survived on emergency appropriations for the last eight to ten years.

The July 1, 1981, Wall Street Journal quoted Superintendent Townsley; "I have never seen a time when you did so much juggling to figure out how to stay alive. It's all legal and proper, but my God, it's like a shell game that you can't believe."

Martin J. Rosen, President of the Trust for Public Lands, voiced a different perspective (Washington Post, June 9, 1981): "This no growth attitude is exactly contrary to demonstrated public need. The total monies spent in 1980 for federal parkland throughout the United States ($132 million) is less than is proposed for the refloating of the battleship New Jersey and mothballed carrier Oriskany ($146 million)."

Out of the embers of earlier environmental catastrophies arose benefits in the form of unification, legislation and better land use habits. What can we expect from the ashes of our evolving land use practices for the 1980s?

The State of the Parks Report has been an unqualified success in a number of ways. It has become the catalyist that focuses attention on park

resources like never before. It has been instrumental in reminding the National Park Service of its primary mandate to protect its significant natural and cultural jewels. It has awakened the Service to the reality of the magnitude of threats that are bombarding the parks. And it has created an urgency to act now if the current flood of threats are to be mitigated.

But even now, there continues to be a basic misconception of the seriousness of the threats to park resources. The Service, the Secretary, and the Congress continue to hang a program on human health and safety and more and better facilities, and thus increasing the park's physical carrying capacities that will in turn lead to even greater threats. Health and safety and maintenance of existing facilities are essential and must be addressed. Such a program will not, however, address the more appalling deterioration that presently exists--the eroding natural and cultural resources for which the parks originally were established.

Step by step, the parks are being subjected to those influences which Devereux Buther and others warned us about. National Park Service philosophy is incrementally being changed by the forces that surround us. Our defensive barriers, like park buffers, are being severely damaged and are likely to be breached.

I can see a time in the not too distant future when many of the park's most significant resources are only a memory. A time may come when the appeal of Yellowstone or Everglades will be little more than a huge city park. What would Yellowstone be without Old Faithful and grizzly bears? What would Everglades be without the alligators, masses of birdlife, and sea of grass?

It was Enos Mills, the father of Rocky Mountain National Park, that said:

> "Without parks and outdoor life, all that is best in civilization will be smothered. To save ourselves--to enable us to live at our best and happiest--parks are necessary. Within national parks, there is room--glorious room-room in which to find ourselves, in which to think and hope, to dream and plan, to rest and resolve."

The parks are in trouble! They are not only in disrepair but the vital resources that contributed to the original purpose of the parks are endangered. That is the message that must be heard! The American public must somehow overcome that all pervasive concern regarding the protection of park visitors and their comforts, and concern themselves with the real threats--to the basic natural and cultural resources themselves.