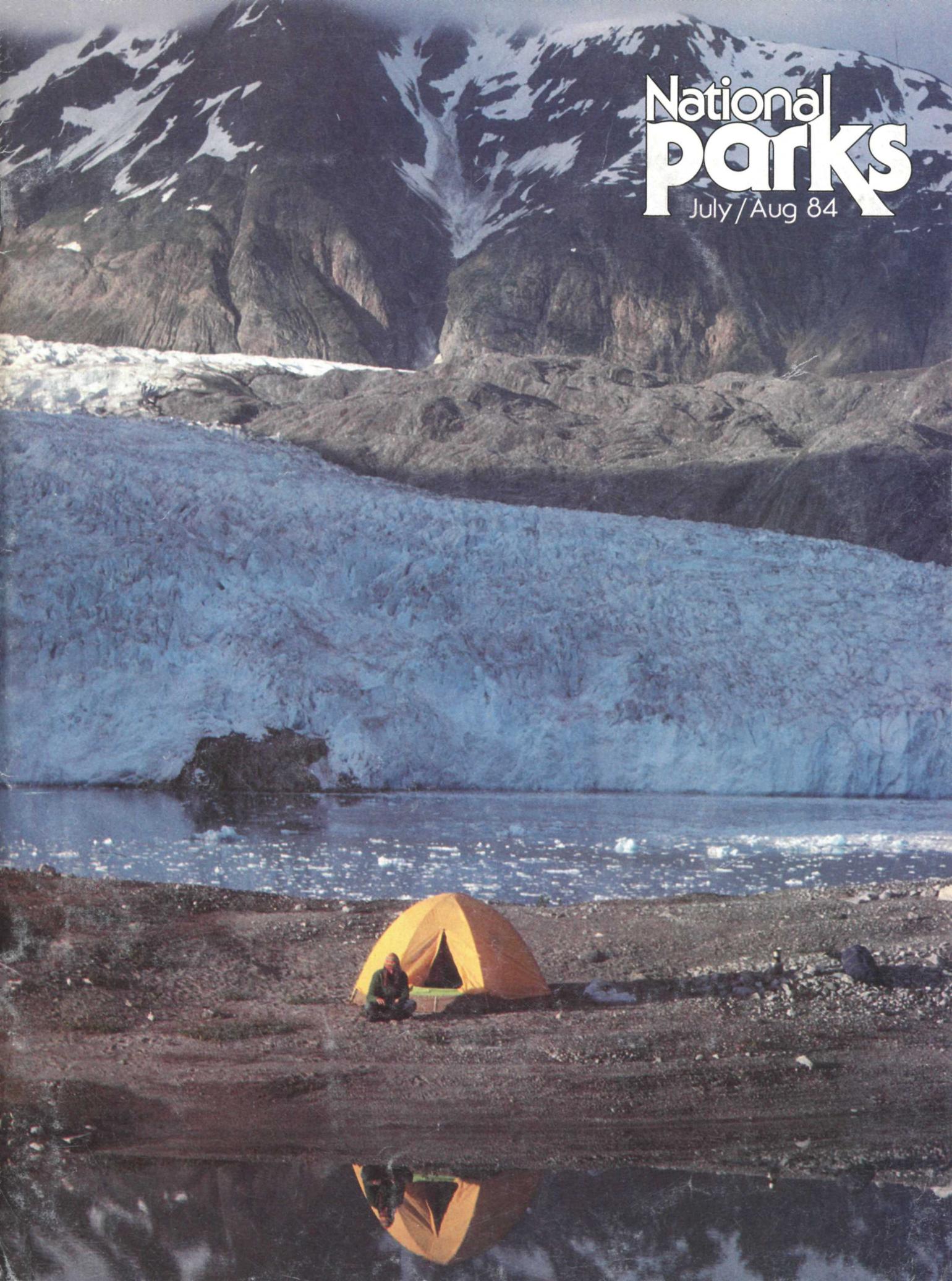


National parks

July / Aug 84





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Commentary

The Life of the Rivers

For me, a river is not a static element of nature, but a lively personality—moving, changing, dramatic. The Suwannee River's quiet, tannic waters are elegant, but I have a special place in my heart for the rivers that flow so energetically—in surges, swells, and falls—that you can hardly imagine that energy stilled.

That is why I was disturbed recently when a senior official of the National Park Service (NPS) said to me, "Do you realize that we have just about run out of wild rivers in this country? We have either used up or dammed up every drop."

His comment exaggerates the situation, yet there is an element of deeper truth in it than we would like to admit. True, Congress is now considering 19 new river conservation bills, and a National Park Service report revealed in 1982 that nearly 61,000 miles of rivers in this country still qualified for wild and scenic protections.

At this point, though, only 0.2 percent of the rivers in the lower forty-eight states are protected under the National Wild and Scenic Rivers System, when at least ten times that amount qualify for protection.

Not only do these miles of rivers hang in a kind of congressional limbo, but no one will dispute the fact that even protected rivers are often threatened by upstream damming, pollution, and other degrading changes at the hand of man.

From the mighty Colorado to the Green, from the Shenandoah to the great Columbia, rivers have been dammed and manipulated by man despite efforts at protection. These are among our most treasured recreational rivers.

A wild river has value outside the role it plays in serving our recreational needs. Each natural river has a unique and varied community of flora and fauna. A river that is turned on and off, blocked by a dam, and channelized through flumes loses that natural variety. You notice something missing from such a river when you move down its curves and bends.

The fact that many of the wild rivers left in this country have been changed by man is symptomatic of a much broader environmental problem. The last habitats of the grizzly in this country are faced with disturbance by man's hand as well. And the parks provide the last bastion of our great redwoods.

The conservation movement is at the end of one period and the beginning of another. As we face the future, we see both promising and disturbing signs.

Truly wild rivers are few, but we do have the skills to protect those rivers in a free-flowing state. Park protections and laws, such as the Endangered Species Act, are available as tools to sustain the grizzly and regenerate redwood forests.

Man can manipulate nature; we have proven that. Now the question is, have we learned enough to take on the challenge of saving what we have, of putting the wildness back into the rivers, of keeping tall redwoods in the clouds, and putting the fire back in the grizzly's eye.

—Paul C. Pritchard
President

Commentary

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COVER: Glacier Bay National Park and Preserve, by Tom Bean
A lone camper stakes a claim at the foot of Riggs Glacier.

Established in 1919, the National Parks & Conservation Association is the only national, nonprofit, membership organization that focuses on defending, promoting, and improving our country's National Park System while educating the public about the parks.

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Bayou Barataria, page 16

Editors' Note: New Orleans is one of our great port cities—a link between the Gulf of Mexico and the drainage system of the Mississippi River. So it is appropriate that New Orleans is hosting the 1984 Louisiana World Exposition, whose theme is rivers.

NPCA's exhibit at the fair focuses on the waterways and wetlands of our national parks, as does this issue of *National Parks*. Our nation's rivers provide power as well as water, and Dr. Brent Blackwelder looks at ways to provide both without squandering a precious commodity. Articles on the future of Louisiana's fertile wetlands and the subtle relationship between Glacier Bay and humpback whales highlight the importance of our coastal waters. As parks are our link to the natural world, water is the vital link in the chain of living things.

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Members Corner

NPCA at the Exposition

Members who plan to enjoy the fun of the Louisiana World Exposition are in for a surprise. NPCA has sponsored an exhibit—in cooperation with ARA Leisure Services, Inc., and the National Park Service—entitled "Our National Parks." We invite you to come and see the exhibit, located at the Exhibition Convention Center. It is an exhibit of which we can be proud.

Also, New Orleans is the location of the Jean Lafitte National Historic Park and Preserve, and members traveling to the exposition will want to visit its diverse units. The Chalmette unit is where American forces were victorious over the British at the Battle of New Orleans in the War of 1812. The French Quarter unit provides an introduction to the culture of the region and the Barataria unit, fifteen miles south of

New Orleans, focuses on the ecology of the Mississippi River Delta.

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From October 18 to November 1 visit six of the eight major Hawaiian Islands. Experience the lush, tropical ecosystems, see some of nature's most active volcanic areas, and rest on sandy beaches, near waterfalls, and under candlenut trees. Join us on tours of Hawaii Volcanoes National Park, Haleakala National Park, Hanalei National Wildlife Refuge, and many other natural areas. Alaska-85: Visit the last frontier. Experience its tundra, rivers, and Sitka spruce forests. Gold rush towns and glaciers await you during the seventeen spectacular days of the NPCA and Questers 1985 Alaska tour, beginning June 21, 1985. Stops on the tour include Glacier Bay National Park, Denali National Park, and Katmai National Park.

Be sure to see our advertisement below for details about the fast-approaching Pacific Northwest trip.

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NPCA

Feedback

We're interested in what you have to say. Write Feedback, 1701 18th Street, NW, Washington, D.C. 20009. (Letters may be edited for space considerations.)

Jets Blast Peace

Since 1979, the Air Force has been proposing that Catron County, New Mexico, be declared a Military Operations Area (MOA). The area would be used for at least 300 low-level supersonic flights per month. It is estimated that the flights will produce 10-15 sonic booms per day in the skies above Gila and Apache national forests.

If [the proposal is] accepted, the Air Force is expected to set up similar MOAs in Utah, Nevada, and Texas. The Air Force operates a similar program above the Papago Indian Reservation in Arizona, and they experience 114 sonic booms a day.

Catron County sits in the middle of Gila National Forest. There are no sirens, traffic jams, ski resorts, or metropolitan airports. There are only the sounds of coyotes, birds, and cows. This is the land Geronimo hunted and where Aldo Leopold first studied Southwest ecosystems prior to establishing the Gila Wilderness. The beauty found here will be lost if the roar of jet fighters replaces the howl of coyotes. Sonic booms should not be allowed to destroy one of the last wild places in America.

These aren't ordinary sonic booms either. According to the Air Force, the ground pressure exerted by an F-15 is five times greater than a Concorde, which is restricted in the East because of noise pollution. Whole houses shake, walls crack, windows shatter. The Air Force asks, "What's so bad about a few sonic booms anyway?"

We wonder who is protecting us from this menace. We need to inform other Americans of this invasion.

Robert Lee
Luna, New Mexico

Great Lakeshores

There are few sites that give me the same thrill over and over no matter how many times I view them. Pictured Rocks National Lakeshore is one such site.

Being from the Midwest, I am thankful that certain people had the foresight to establish national lakeshores.

The insects at Pictured Rocks can be rough, but most good things require a little sacrifice. The sacrifice at Pictured Rocks is worth it.

The Great Lakes shoreline took thousands of years to evolve into its present state and should be protected for future generations.

Thanks to Larry Rice for bringing the message of Pictured Rocks to all.

Chuck Gibbons
Madison, Wisconsin

Rock Creek Rebuttal

The paved bike path in Rock Creek Park may or may not be a good idea. It all depends on how much it would disrupt the park and how wide the path would be. I am inclined to

think that the disruption would be minimal compared to Ms. Graham's proposal [Feedback, Mar/Apr 1984] for a park freeway or boulevard. This would amount to near destruction of this narrow park.

The weekend closing of Beach Drive is inconvenient for me and other motorists, but I am willing to sacrifice some of my driving for the sake of nature-loving cyclists and walkers.

Winthrop C. Wolfe
Washington, D.C.

Correction

The photo credits on page 25 of the May/June issue were inadvertently transposed. Counterclockwise from the top left photo, the credits should read: Canyonlands, by Tom Till; Arches, by Harry Jarvis; Natural Bridges, by F.A. Barnes; and Capitol Reef, by Harry Jarvis.

One more time: Black Canyon National Monument was proclaimed by President Herbert Hoover.

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Ansel Adams: 1902–1984

Visions on the Frontiers of Photography

This issue, in lieu of our regular Photo Tips column, we offer a tribute to the late Ansel Adams, a man whose photographs have shaped our view of the national parks and whose work moved both policymakers and the public to protect some of our most cherished parklands.

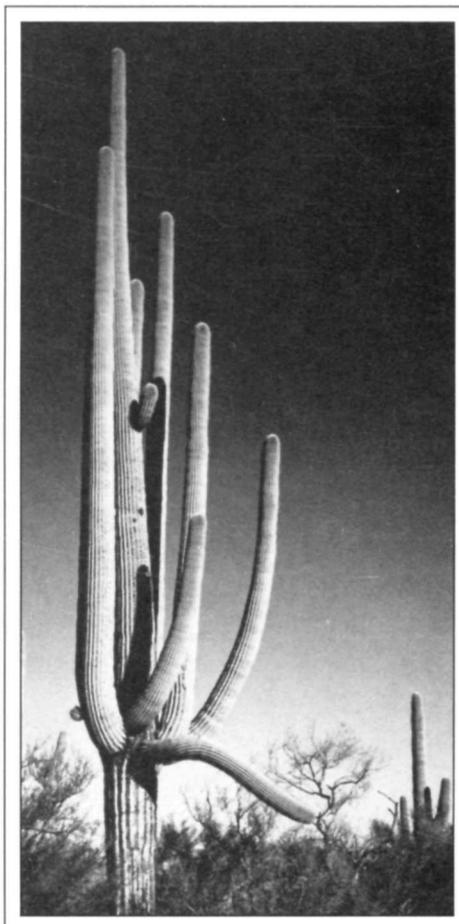
*The Sierras have dominated my mind, art, and spirit. It is quite impossible to explain in words this symbiotic relationship. My photographs must serve as equivalents of my experience and I hope they may help others to express their own experience.—Ansel Adams, from the prologue of *Yosemite and the Range of Light*, © 1979 Little, Brown and Company.*

This short statement by Ansel Adams could serve as a tribute to his life. His photographs of the Sierras, especially Yosemite, created a majestic vision of the West, expressing for millions the enduring and wordless eloquence of the wilderness. He was a consummate artist, who revolutionized the way other photographers saw their subjects.

Photography began as a young boy's hobby for Adams, a means to record his summer ramblings through the Yosemite Valley. As he grew older, Adams realized that a photograph could reveal and excite the spiritual dimension of an image. He first experienced "visualization"—his term for this other dimension—while photographing Half Dome in Yosemite.

His first exposure was good, but it didn't capture the excitement he felt. On his second attempt he added a red filter, adjusted the exposure, and the result was what he had envisioned: the soaring vertical face of Half Dome in stark relief against a brooding black sky and the surrounding snow-covered hills.

By controlling each element of the picture—light, composition, focus—



Saguaro National Monument, by Ansel Adams

Adams discovered that he could communicate an image's resonance, transcending verbalization. Though perhaps best known to other photographers as the inventor of the "zone" system—a method for producing a desired range of dark and light tones—most recognize Adams for his use of light to create mood in a photograph. The dynamic play between light and dark, each subtle feature in sharp relief, and a timeless, spiritual quality became the signature of Adams' half-century of work.

The Sierras were not only the subject of his art, but the focus of his

life as well. Adams developed a proprietary regard for these mountains during the summers he worked as a caretaker and guide for Sierra Club trips into the backcountry. He developed a photomural of Yosemite for the National Park Service in 1935, and a year later Adams took a portfolio of prints to Washington to lobby for the inclusion of Kings Canyon as a national park.

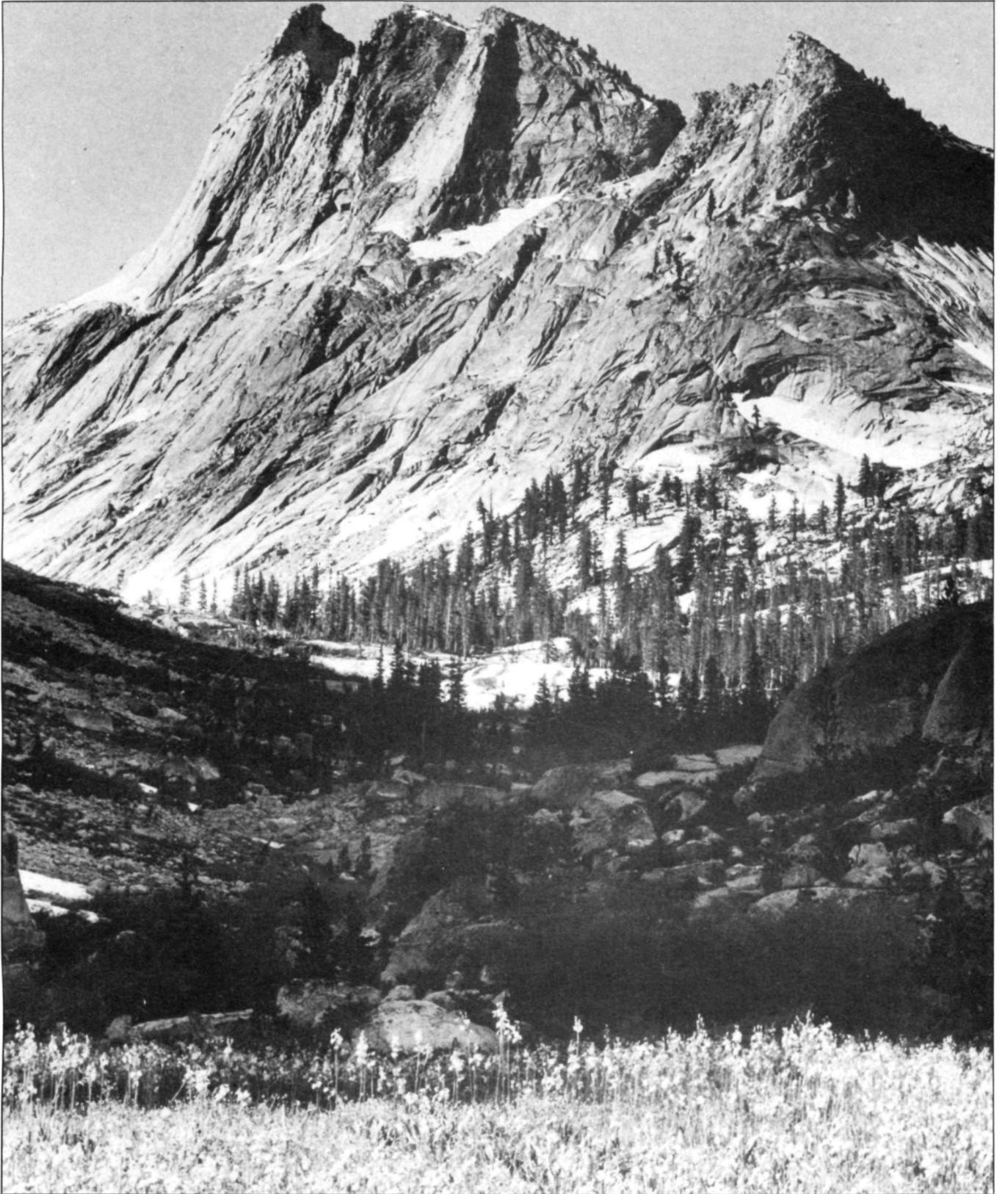
Then-Secretary of Interior Harold Ickes was so impressed with his work that he commissioned Adams to do photomurals of all the national parks. Unfortunately, World War II intervened and the project was only partially completed.

In a *Playboy* interview last year, Adams recalled his effort to save Kings Canyon: "The opposition claimed there was enough land preserved in nearby Sequoia, but it was perfectly obvious then, as it is now, that we must keep adding to the protected land as the population grows or end up with far less preserved land in proportion to the population."

Adams' feelings did not cool. He became an outspoken opponent of the current Administration, whose policies he characterized as reflecting "a determined intention to destroy the integrity of the parks and wilderness areas to lessen their importance, which will eventually make it easier to invade them for commercial purposes."

Through his photographs, Adams spoke eloquently to millions about wilderness—not as scenery, but as a gift to be cherished and preserved for our children. His eloquence lives in the photographs he has bequeathed to us. They stand as a documentary of what wilderness is and what wilderness can be in the eyes of visionaries.

—Kimber Craine



Kings Canyon National Park, by Ansel Adams

DAMS: A CHANGE OF COURSE

The BuRec and the Army Corps can find options to curbing wild rivers, by Brent Blackwelder

People have been building dams since the first stirrings of civilization. The early Egyptians dammed sections of the Nile, we have indications of an almost prehistoric earthen dam on the Tigris, the Chinese have built dikes along the Yellow River for more than a millenium, and the early Romans built a number of massive masonry dams in Italy and North Africa. In the twentieth century, however, the size and numbers of dams built around the world have reached grandiose proportions.

Although the pace of major dam construction in the United States has slowed during the last decade, the number of giant dams (450 feet and higher) is increasing exponentially around the world, threatening parks, biosphere reserves, and wilderness areas.

Because dams are usually costly—both in monetary and environmental terms—in many cases alternative measures could be employed to satisfy water needs. The most obvious places for alternatives to proposed dams are in or near conservation ar-

reas—national parks and other lands most worthy of protection.

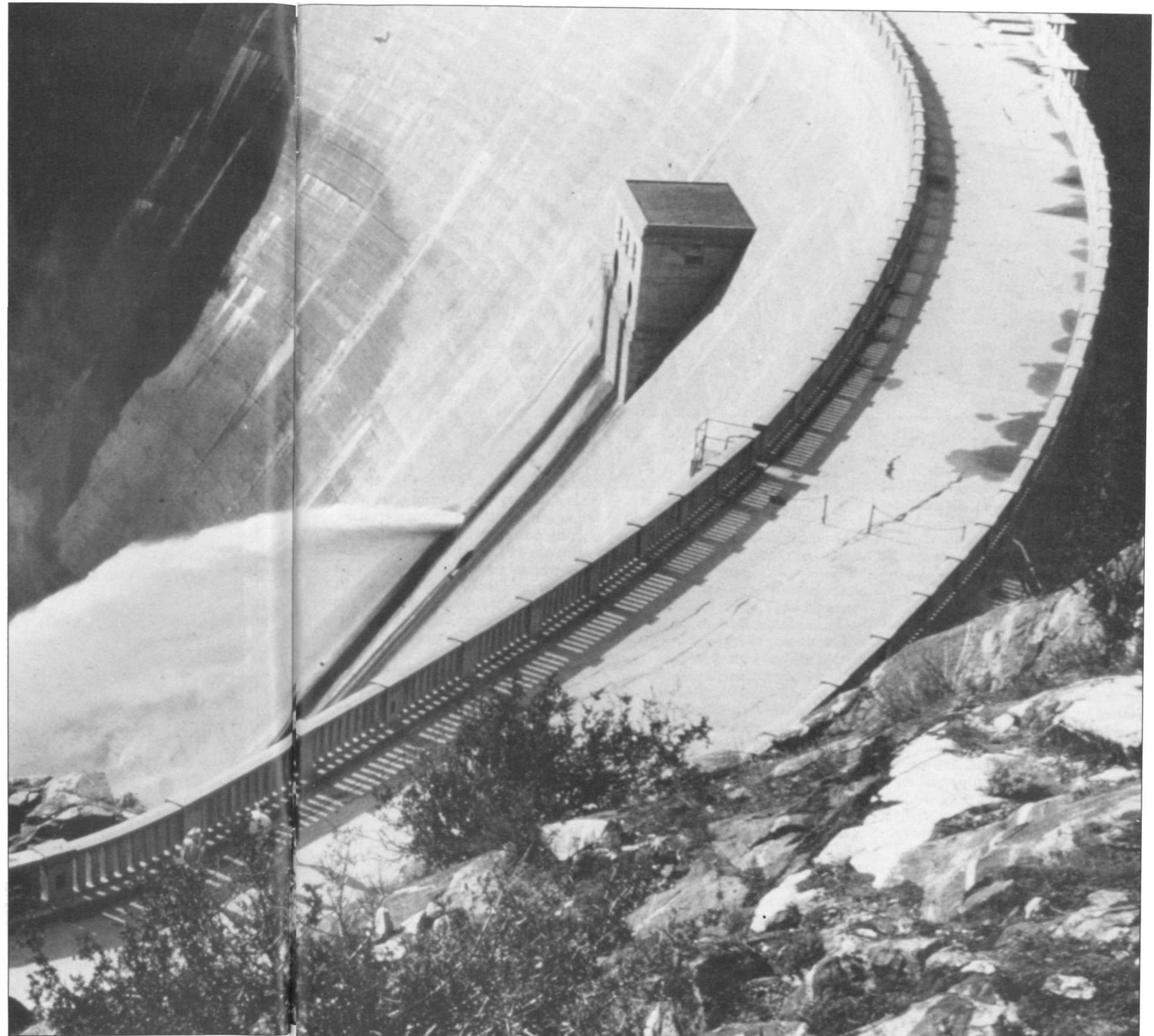
One of the first and greatest conservation battles in this country involved a dam and a national park. In 1890 John Muir, founder of the Sierra Club, convinced Congress to include the stunning, high alpine Hetch Hetchy Valley in Yosemite National Park. A few years later, San Francisco proposed damming this valley to provide the city with a reservoir. The ensuing battle involved a cast of politicians plus engineers and lawyers hired by San Francisco to argue for the dam.

Up against this crew of professionals was a collection of volunteers, who were taking time off from their jobs to wrangle with the legislative process, get publicity, and—in short—do all the things that our volunteer citizen groups do today.

Muir provided leadership and the kind of prose that gave heart to the issue:

These temple destroyers, devotees

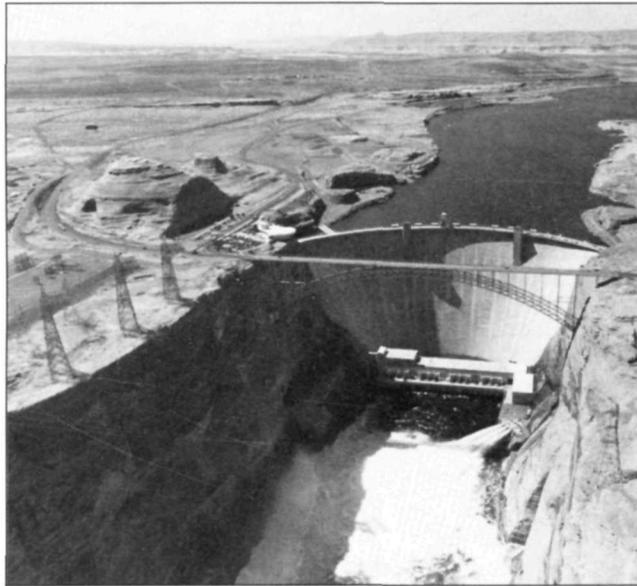
Before and after, right: The Hetch Hetchy Valley in Yosemite before 1913. Far right: A dam is now a major feature of this part of the park. Hetch Hetchy was the first dam ever built in a national park. Many others have been proposed.



National Park Service photo, by L. Nahm

Right: Flooding acres of desert canyons as it filled, the Lake Powell impoundment at Glen Canyon on the Colorado has been called the greatest single conservation defeat of the sixties.

Far right: The downstream view from Glen Canyon Dam. Peaking power surges have flooded out rapids, scoured riverbanks, and upset fish habitat in Grand Canyon National Park downstream.



Bureau of Reclamation, Upper Colorado Region

ing the downstream flow of nutrients, and damaging estuarine fisheries. At full pool, some reservoirs cover three or more times as much area as at a normal pool, making for wide stretches of mudflats at times.

Dams can be turned off and on to accommodate power production, causing a river to behave like a yo-yo, scouring the streambanks, and radically changing the water temperature. As water is diverted from a reservoir into an irrigation canal, downstream flows can be curtailed drastically and rivers can even dry up. The Colorado, for instance, never reaches the Gulf of California as a full-fledged river.

Dams have triggered earthquakes, such as the 1967 quake that took place in Koyna, India. Water impoundments along the Volga River have changed local climates. And, in tropical areas, the use of dams has spread serious diseases, such as malaria.

Dams also trap sediment, so reservoirs ultimately will silt up—sometimes in less than a century. From a long-range standpoint we are sacrificing our valleys, farmlands, and canyons and bequeathing to future generations a silted-in mess.

In comparison, the economic benefits we reap are questionable. In far too many cases, dam projects have proved to be unsound economic investments.

The Tennessee Valley Authority promoted the idea that damming a river valley was *the* way to make a region flourish. A recent analysis by William Chandler in *The Myth of TVA* shows that non-TVA areas in the southeastern United States did as well or better according to TVA's own economic indicators. After fifty years, TVA's flood control and navigation projects have yet to pay for themselves by any reasonable standard of accounting.

Dams are constructed primarily for six purposes: flood control, water supply, hydropower, irrigation, navigation, and recreation. For each of these purposes, better alternatives exist. Taking inflation into account, the annual flood-damage bill for our nation is growing

of ravaging commercialism, seem to have a perfect contempt for Nature, and instead of lifting their eyes to the God of the mountains, lift them to the Almighty Dollar. Dam Hetch Hetchy! As well dam for water tanks . . . cathedrals and churches, for no holier temple has ever been consecrated by the heart of man.

Although Muir and his allies staved off the dam proposal for many years, they finally lost when Congress approved the dam in Yosemite National Park in 1913. Hetch Hetchy became the first major dam to be built in a preexisting national park. Muir died a year later, but his fighting spirit inspired citizens to challenge and defeat unsound dam projects—more than 100 since the 1960s.

The point is that too often dam-building is the only solution ever considered. Many attractive, cost-effective options are ignored.

Usually proponents of dams can provide many reasons to plug up one river or another; and, generally, they have the money to tout the benefits of water projects before a wide audience. As the number of major dams mounts, however, conservation organizations have become

more and more skeptical of such claims, more aware of the environmental hazards, and more adept at discovering cost-effective alternatives.

The most obvious harm dams cause is to the terrain they inundate. Dams have drowned out some of the most beautiful stretches of river in North America, as well as wildlife habitats; productive farmlands; forests; and areas of historic, archeological, and geological value.

Glen Canyon Dam drowned one of the world's most spectacular canyons. Tellico Dam in Tennessee eliminated the ancient Cherokee village of Tenase and the site of the oldest continuous habitation on the North American continent.

New Melones Dam, on the Stanislaus River, eliminated the most heavily used whitewater boating river in California and inundated an extraordinarily beautiful canyon. The Bureau of Reclamation's proposed Garrison Diversion would damage a dozen national wildlife refuges and would cause the greatest loss of wetlands in North Dakota history.

Dams can produce fundamental changes in the hydrology of a river, blocking fish passage, imped-



Bureau of Reclamation, Upper Colorado Region

steadily larger despite the \$20 billion we have spent on dams and other flood-control measures since the 1936 Flood Control Act. It is time for a change of strategy. Conservationists are urging the use of often-ignored nonstructural techniques.

These include floodplain zoning, floodproofing of structures, warning systems, greenbelts and parks along streams, and protection of upstream wetlands, which act as sponges and prevent surges of water downstream.

Unfortunately, the Army Corps of Engineers—this country's major dam builder—has earmarked less than one percent of its current budget to nonstructural methods of flood control.

Instead of constructing more reservoirs we should better utilize the water supplies we already have. A 1981 General Accounting Office report discovered that 15 million acre-feet of water lie unused in federal reservoirs around the country—a clear testimony to the power of pork-barrel politics.

The potential for increasing the

efficiency of water use in the municipal, industrial, and agricultural sectors is so great and so cost-effective compared to the price tag for developing additional supplies that new reservoirs generally are not needed. But the federal government exacerbates the problem of waste by subsidizing reservoir construction regardless of whether a local area is using its present supply wisely.

People tend to think of dams as power producers, but 97 percent of the 60,000 major dams in the United States generate no electricity. When power sources are needed, before we give way to building new dams, we should first retrofit existing dams with generators. Even then, according to soft-energy path advocates, electricity is needed for less than 10 percent of the end uses of energy, and existing dams already generate more than this amount.

For instance, one of the most telling arguments against the Dickey-Lincoln hydroproject in the wilderness of northern Maine was that forty-three times as much energy could be saved as the dam would

produce simply by investing the money in attic insulation.

Do we need more dams for irrigation? The answer is a resounding no. During the past decade the prime objective of U.S. farm policy has been to curtail the excessive production that is depressing farm prices. Given that goal, it makes no sense whatsoever to spend billions trying to increase production through federally subsidized irrigation. Bureau of Reclamation dam projects are now being built in some of the very areas most involved in the 1983 payment-in-kind (PIK) program, which paid farmers \$20 billion not to plant crops.

Just as it is hard to make a case for more dam construction in general, it is especially questionable to propose more dams in and near our national parks. Yet the Bureau of Reclamation (BuRec) and the Army Corps of Engineers are planning just those kinds of dam projects.

One might think that having national park status protects an area,

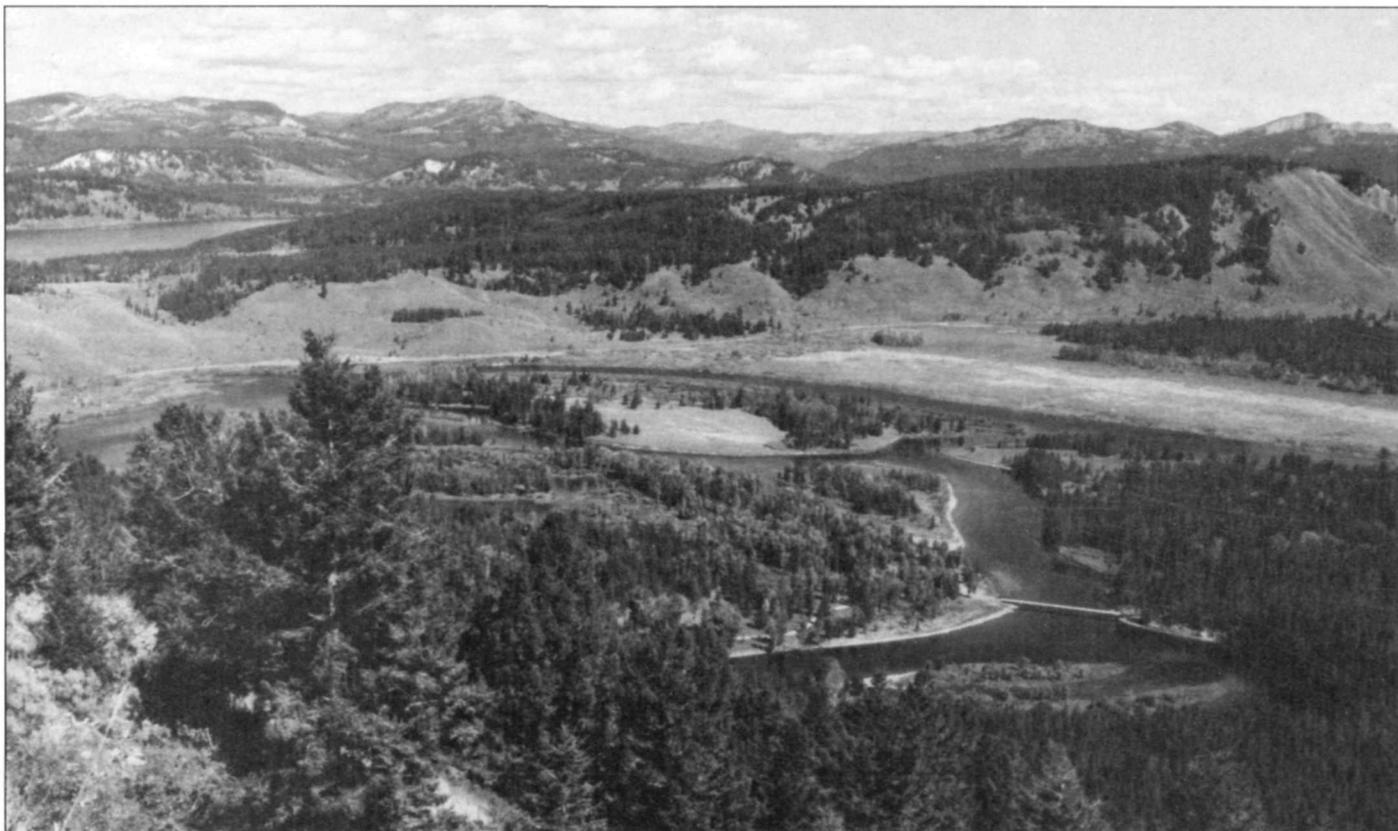


Photo by Jackie Gilmore

but this is not so. More than 350 dams lie within or adjacent to the boundaries of National Park System areas: on inholdings, as property acquired when certain parks were established, and on public and private lands adjoining park areas. In the 1960s, the Grand Canyon itself was threatened by two BuRec dam proposals. Fortunately, these proposals have been put on the shelf for the time being. But the BuRec has other proposals up its sleeve.

Before the 1929 creation of Grand Teton National Park in Wyoming, the BuRec had constructed a dam—Jackson Lake Dam—to raise the level of an existing natural lake. In the aftermath of the 1976 Teton Dam disaster in Idaho, Congress asked the BuRec to strengthen similar dams that might be unsafe.

Experts agree that Jackson Lake Dam is not capable of withstanding the moderate-to-severe earthquakes predicted for the area. To minimize the risk of collapse at the dam, BuRec partially drained the reservoir

while deciding what to do. Some BuRec officials want to build a new dam in the Pacific Creek area of Grand Teton National Park.

Conservationists vigorously oppose this alternative because it would inundate flora and fauna in the Oxbow Bend area, which is prime habitat for bald eagles, moose, and river otters. Even if the BuRec chooses the less drastic alternative of strengthening the existing dam, the park would be disrupted for years by construction activity; and the tons of rock and gravel used in construction would be quarried in or near the park.

As with other water projects under its jurisdiction, the BuRec has not given serious consideration to alternatives that would avoid these adverse impacts. Alternatives include water conservation measures and crop insurance for irrigators, reduction of the reservoir's water level, and the transfer or government purchase of some agricultural water rights.

Water conservation, such as lining irrigation ditches, is an especially at-

tractive alternative. Because of water loss through the permeable ditches and overwatering of crops, downstream irrigators probably divert twice as much water as their crops require. Crop insurance is also a sensible option, since the irrigators need Jackson Lake water only during droughts.

The Big Thicket National Preserve in Texas is another park area whose ecology would be rearranged by a dam. In this case, the Army Corps of Engineers is proposing to build the Rockland Dam some fifty miles upstream from Big Thicket on the Upper Neches River.

In 1974 the preserve was established as part of the National Park System to protect the great biological diversity of this East Texas region, which combines southeastern swamp, eastern forest, central plain, and southwestern desert.

One quarter of the preserve—about 21,250 acres—depends on the regular flooding cycles of the Neches River for its diverse habitat. The Rockland Dam would suppress the

historic flood patterns required to nourish the Big Thicket bottomlands.

Rockland Dam is a truly archaic water project, authorized by Congress back in 1945 and resurrected recently because of interest by the Lower Neches Valley Authority. A glance at a map of East Texas reveals dozens of reservoirs, including some of the nation's largest.

Not only would the dam be costly, but also it would drown 126,000 acres of productive forests and potential wilderness areas, in addition to its harmful effects on Big Thicket and the Sabine River estuary.

Currently, the Bureau of Reclamation is charged with operating two massive Colorado River dams—Hoover and Glen Canyon—on a multi-purpose basis with river regulation (flood control) as the top priority. Yet, in 1983, the BuRec did not manage two of the biggest dams in the world so as to control floods on the Lower Colorado. The BuRec has sacrificed all other purposes to the god of peak power production.

The BuRec plans a major increase in power production at Glen Canyon; and this uprating of the dam's generating power will cause huge surges of water downstream through Grand Canyon National Park. It is estimated that the peak discharge will rise from the current maximum of about 30,000 cubic feet per second (cfs) to an astonishing 70,000 cfs. These surges will endanger users of the river and will damage sand beaches and vegetation in the canyon.

The United States has a special responsibility to protect the Grand Canyon because it is both a national park and a United Nations World Heritage Site. The latter distinction is accorded only to the most significant natural and cultural areas in the world. It is time the BuRec showed a little sensitivity to the great responsibility that goes with such designation.

In northwestern Colorado the magnificent Yampa River flows freely from its source through Dinosaur National Monument. The Colo-



Photo by Jackie Gilmore

Left: The Oxbow Bend area of Grand Teton National Park is prime habitat for moose, as well as bald eagles and other wildlife. In 1983, the BuRec proposed to build a dam that would have inundated 2,000 acres of this park habitat. Far left: The Oxbow Bend region encompasses the winding Pacific Creek drainage and its lush, green banks—an area popular with park visitors.

rado River Water Conservation District, a state-chartered agency, has been planning to build two hydroelectric dams on the Yampa, upriver from the monument.

The Cross Mountain Dam would be located only nine miles above the monument, and the Juniper Dam would be twenty-five miles farther upriver. Besides flooding habitat upriver, these dams would radically alter the flows of the Colorado River system's last major undammed tributary and would damage riparian habitat along the Yampa's banks.

Despite a devastating economic critique of the project, which caused the major financial backer (Colorado Ute Electric Association) to withdraw, the water district and Colorado politicians are fighting to keep the project alive.

Resources of Yosemite National Park are threatened again by hydroelectric dams and diversions planned downstream from the park's borders. A magnificent, undammed stretch of the Tuolumne River below Yosemite would make an outstanding addition to the National Wild and Scenic Rivers System. Inclusion is being blocked by California's Turlock and Modesto irrigation districts, which want more power dams.

Already the infamous Hetch Hetchy Dam and subsequent diversions of water within the park have destroyed or degraded thirty-eight miles of trout stream. The proposed dams and diversions would damage an additional forty-five miles of trout fishery in the Tuolumne Basin directly connected to Yosemite National Park.

These five dam projects certainly do not exhaust the number of threats dams pose to our national parks. Rather, they indicate that extraordinary diligence is still required to protect the parks from unnecessary dams.

It is indeed surprising to find so little regard for our great national parks from developers, utilities, and certain federal agencies. Clearly, the federal government needs to devise a broader plan for water conservation and to come up with some far-sighted policies for the future.

Dr. Brent Blackwelder, who holds degrees in both mathematics and philosophy, is director of water resources at the Environmental Policy Institute, and serves as chairman of the boards of the League of Conservation Voters and the American Rivers Conservation Council.

Conservation Through Consensus

The concept of protecting our wild-life and natural resources is not a new one. Organizations such as National Parks and Conservation Association, National Audubon Society, and Sierra Club have been around since the early part of the century.

Conservation efforts in the West, however, have dramatically increased during the last two decades, reflecting shifting population patterns and increased use of our national parks and forests. Population growth and its accompanying demands result in the inevitable conflict between development and environmental protection. Therein lies the need for land-use planning.

Personally, I have always felt there are many areas that do not have to be developed and that should be protected. But we must make decisions in a manner consistent with the way the American people want to live, and accommodate the kind of life Americans believe in—both now and for the future. This also means that we must preserve the kind of resources needed to protect and to enhance the quality of our way of life.

Resource protection is often a complicated matter, however, requiring much compromise and negotiation. Originally, I was going to write about two successfully negotiated legislative proposals, the Arizona Strip District Wilderness Act of 1983 and the Aravaipa Canyon Wilderness Act.

Now we have another one before the Senate: the Arizona National Forest Wilderness Act of 1984. All three proposals have had direct input from conservation groups, mining interests, ranchers, local and state governments, federal agencies, and many others.

The first time I heard about the Arizona Strip wilderness proposal was in March 1982 when the late

Bob Adams, who was then head of Energy Fuels Nuclear of Denver, visited my office. His company has some exceptionally high-grade uranium mines in the Strip country and—with RARE II looming on the horizon and with the Bureau of Land Management (BLM) coming up with its wilderness recommendations—Bob wanted to make sure his company's investments were protected. At the same time, I felt that Bob had a genuine love for this area of Arizona and that he was convinced that some land protection was needed.

In order to initiate public discussion on the Strip question, Energy Fuels held a public meeting in Flagstaff in September 1982. A member of my office attended, as did Russ Butcher, the Southwest/California representative for NPCA. In my opinion, this was a real high point in the whole process. Legislators and the federal government would be a lot better off, I suspect, if we had more town hall meetings of this nature.

During the first three months of 1983, serious negotiations took place among NPCA's Russ Butcher, Sierra Club, the Wilderness Society, Energy Fuels, and others. What was important here was that the participants worked with unprejudiced maps. In other words, the maps had the outlines of BLM wilderness study areas, but no lines had been drawn to indicate wilderness preferences.

Each unit was judged on its own merits. There was no mediator, and the group came up with a consensus proposal that represented a compro-

mise between the mining interests and the environmentalists.

During the spring of 1983, the Arizona Strip Grazing Advisory Board was briefed on the proposal, problems were discussed, suggestions were made, and further compromise took place. After that, the Interior Department's National Public Lands Advisory Council gave its endorsement of the refined proposal. The governors of Utah and Arizona, county representatives, and the respective congressional delegations then followed suit; and legislation was introduced in both the House and Senate in July 1983.

The Aravaipa Canyon Wilderness Act has a different kind of history, because we were working with an area that was already protected by the federal government. In 1969 and 1971, the 4,044-acre, seven-and-a-half-mile-long canyon was designated as the Aravaipa Canyon Primitive Area—the BLM's first primitive area.

Over the years, Defenders of Wildlife (which had purchased adjoining land for conservation through a bequest by George Whittell), the BLM, and local residents worked out problems concerning public access to Aravaipa Canyon. Everyone agreed it was necessary to protect the wildlife and the unique composite of desert and riparian habitats of the main canyon, its side canyons, and the canyon rims and plateaus. The result was a presidential recommendation for wilderness, born through negotiation.

It has never ceased to amaze me how seldom people really communicate with each other on these issues.

In 1982 and 1983, legislation was introduced to include Aravaipa Canyon and an additional 2,626 acres of adjoining public lands into the National Wilderness Preservation System.

The Aravaipa Canyon and Arizona Strip proposals are part of the Omnibus Arizona National Forest Wilderness Act presently before the Senate. We hope that the greater part of the omnibus bill will successfully conclude Arizona's RARE II program, which began in 1977.

Title I of the bill would designate 29 areas, which contain 641,260 acres of national forest lands, as wilderness; 67,930 acres in three units as lands for future planning; and 41 miles of the Verde River as part of the Wild and Scenic Rivers System.

The legislation also contains "negotiated release language," which lays out the steps for proposing wilderness areas in future public land reviews. This language was worked out between Senator McClure (R-Idaho) and congressmen Seiberling (D-Ohio) and Udall (D-Ariz.), and is of great importance to Arizonans and citizens of other states because we need to know how to plan for the future of those lands not designated as wilderness.

Hundreds of hours went into drawing the unit boundaries in these wilderness bills. For example, to complete the Arizona wilderness bill, we worked with individual ranchers, mining groups, environmentalists, the timber industry, utility groups, local and state governments, Native Americans, the Forest Service, and other interested parties.

In many cases, the members of the Arizona Wilderness Coalition, under the leadership of Joni Bosh, worked directly with grazing permittees and the timber industry in locating suitable boundaries that would satisfy

mutual interests and needs. In some instances, area boundaries were the result of hard-won compromise.

I do not think everyone is completely happy with what we have come up with, but I think everyone can live with the results. And I am sure there will be more changes and compromises before final passage by Congress.

*It is my belief that
compromise is far preferable
to legal confrontation.*

Throughout the time I have been involved in putting together these wilderness proposals, it never ceases to amaze me how seldom people communicate with each other on these issues. Once we got the environmentalists and the ranchers to talk with each other, they found they had a lot of the same goals for managing an area. Other times, when differences of opinion arose, unit boundaries were redrawn to resolve the problems.

Negotiation between the many varied groups has not always been easy; and there will always be people who say they did not get enough or were not consulted. It is my belief, however, that compromise is far preferable to legal confrontation. It may take longer to achieve initially, but the results of compromise are far more enduring.

The Arizona wilderness bill has been difficult to achieve, not just from the standpoint of negotiation,

but also from a philosophic standpoint.

I have to admit that, fundamentally, I am not a great believer in wilderness areas. On the other hand, I have lived in Arizona my entire life and have watched it grow from a handful of people to millions. I have great affection for the lands in my state, and I have watched many beautiful areas become ruined by overuse. I have also observed a great change in our population, particularly among the new residents, who believe that the land should be preserved.

It will not be easy to pass this legislation because we always have people who want more and people who want less. Legislation itself becomes a compromise.

Once a wilderness area is created, we have to consider the next steps for protection; that is, avoiding overconstruction of roads, motels, and restaurants near these quiet places. After all, a wilderness area is one that we care enough to protect for future generations.

And I, like all of you, want my children, my grandchildren, and their children to experience what I have known, loved, seen—the lands I've walked for all of my life.

Senator Barry M. Goldwater of Arizona, a member of the Senate since 1952, serves as chairman of the Senate Select Committee on Intelligence. Besides chairing a number of subcommittees, Senator Goldwater is also an author and a photographer. Some of the books that include both his text and photographs include Down the Green and Colorado Rivers, The Face of Arizona, and Barry Goldwater's Southwest. His book Arizona is illustrated with David Muench photos. The Senator is also a regular contributor to Arizona Highways magazine.

A Tour Through

Bayou Barataria

*Where the silent swamps of Louisiana's
Jean Lafitte National Historical Park
tell of a colorful past and a clouded future,
by DAVID R. YOUNG*

In southern Louisiana, the spirit of "laissez le bon temps rouler" holds sway. The air of festivity surrounding any tourist event in Louisiana is as infectious as Cajun music. And this summer the overflow from the World Exposition in New Orleans will be drawn to places such as Bayou Barataria, only half an hour from the city.

Barataria is where the pirate Jean Lafitte and his privateers plotted raids on Spanish galleons and helped plan the American defense against the British in the Battle of New Orleans. Bayou Barataria is also part of Jean Lafitte National Historical Park, Louisiana's only National Park System area.

A 20,000-acre tract of marsh, swamp, and bayou, the Barataria is by far the largest of the park's units, which include the Chalmette unit, where the Battle of New Orleans was fought; a French Quarter interpretive station in New Orleans; and three small archeological sites in Orleans Parish.

World Expo visitors who travel to the park's swamplands will be looking forward to the flavor of the bayous: shrimp trawlers and Acadians poling pirogues, those finely crafted cypress boats that can maneuver through the tangle of swamps and marshes. What visitors probably will not notice are the pollution and the saltwater intrusion in the Barataria.

Although contamination from New Orleans' effluence has ruined a portion of last season's oyster harvest in Barataria Bay, and whole

stands of bald cypress were chopped down in the last century to create channels for floating logs to market, the bayou still evokes a sense of the primitive: of alligators, trappers, and tannin-stained waters.

As I drive south to the Barataria from New Orleans, I detour through the town of Lafitte, where houses and trailers are strung out along the levees of Bayou Barataria in a ramshackle way. In some places, the husks of old Chevys and Fords have been retired to those levees, one next to the other, their noses pointed downhill in what seems to be a futile effort to keep the town from washing away to the Gulf.

At the park, Oscar Rodriguez, the young manager of the Barataria unit, offers to take me canoeing back into the bayou. A stocky, soft-spoken man with brilliant black hair, he's been at Barataria for the past three years.

We drive back into the Barataria in a National Park Service pickup truck. I notice a large bottle of the ubiquitous Louisiana hot sauce in the open glove compartment. At the Kenta Canal, originally dredged for cypress logging activities, we put in on the park side of the highway bridge.

The canal runs north from Bayou Barataria through the interior of the park. Bayou Des Familles and Bayou Coquille—also part of the closed-

circuit canoe trail—were opened just in time for the Louisiana exposition. Until May these streams were clogged with water hyacinths. Introduced into Louisiana by the Japanese at the New Orleans World's Exposition of 1884, the water hyacinths are a continuing headache for park management.

Rodriguez says, "We have a Mudcat Harvester out here maintaining the canoe trails. Kenta Canal and Bayou Des Familles are clear, but right now you can only travel fifteen to twenty minutes on Bayou Coquille before you run into water hyacinths."

Incidentally, the Peruvian delegation to this year's fair has insisted that the piranha they need for their exhibit could not possibly escape into Louisiana's waterways. State officials heard echoes from a hundred years ago. So far, at least, the state has denied Peru permission to bring in their voracious fish. To which the delegation replied, "Do they really believe piranha could last in the Mississippi River?"

Although water hyacinths appear in sections of the Kenta Canal, most of the canoeing is easy. Down the canal we spot fish breaking the surface of the water. Rodriguez tells me that there are bowfin, alligator gar, perch, and bass in the canal. But the scene captures my attention; I've lost my appetite for facts. This backwa-

Opposite: The pirogue is a traditional form of transportation in Louisiana's southern wetlands. Photo by Frank Ebret III.



Below: Visitors watch for wildlife at Jean Lafitte's Barataria Unit. Right: The cypress swamps at Bayou Barataria are habitat for cranes and waterfowl of all kinds. Photos by National Park Service, page 18, and Frank Ebret III, pages 18-19.



ter region of the bayous is so beautiful that I plan future visits even while in the midst of my first.

The warm, steady breeze at our backs makes paddling downstream a pleasure, as we watch the surface of the water constantly shift in the sunlight and wind. Along the banks the Spanish moss drapes black willows and live oaks, and egrets take flight quickly from a grove of wax myrtles as we round a bend. The wind touches everything here—the moss, the marshgrass, the waterways that lie before us. For several hours I share in the image of a pristine world.

The NPS wants to share these images of the park with greater numbers of park visitors; and plans exist for an interpretive museum and for guided boat rides into the swamps.

In addition, construction has just begun on a visitor center. It was hard to negotiate a bid on the visitor center, however, because local construction firms have so much lucrative work building condominiums. In fact, condo development has spread rapidly south in Jefferson Parish, en-

croaching within a few miles of the park in the last year.

What the visitor to the Barataria can also experience are two walking trails, the first of which eventually will be accessible to the handicapped. Bayou Coquille Trail, less than a mile long, takes the hiker through diverse ecological systems, including a cypress-tupelo gum swamp and a freshwater marsh that is home to nutria, a large water rodent that is the state's number one trapping animal.

Another trail, the slightly longer Ring Levee Trail, leads to a more profound and silent swamp. On my several walks along this trail, I've seen great blue herons, barred owls, turtles sunning themselves on logs, and alligators. Cottonmouths and coral snakes are said to inhabit the area, as well as raccoon, armadillo, otter, mink, opossum, and white-tailed deer. In April, the surrounding marshes were luminous with spring wildflowers: purple spiderwort, butterweed, wild blue iris.

There are larger cypress swamps in Louisiana, such as the famed Atchafalaya Basin, and there are greater expanses of marshland, but



here in the Barataria several distinct ecosystems meet. Unlike parks such as Yosemite, which present extraordinary geological formations, Barataria is more representative of the subtle diversity of Louisiana's wetlands.

In keeping with the charter of a historical park, the Barataria unit also includes a wealth of archeological sites, such as mounds—built by prehistoric peoples—that date back to 100 B.C. In a larger sense, the historical park is fulfilling its charter by emphasizing the continuing cultural importance of the entire wetlands region.

With power boats rather than pirogues, trappers can now go home after a day's work; but a few trappers' camps remain in the area. These stilt houses and shacks are reminders of the past, when everyone—from Filipino and Yugoslav immigrants to every combination of Creole—trapped and fished. In keeping with historical use, the Barataria unit will remain open to these activities.

A few problems exist, however, that threaten the fish, the nutria, the

park itself. First is sewage. The park is divided into two areas: a "core area" of 8,600 acres of marsh and swamp, and a "park protection zone" of about 11,400 acres to the immediate north. This larger area is being monitored "to assure the environmental integrity of the core unit." But most of the news is bad.

The protection area was to remain private property, as long as Jefferson Parish prevented waste spillage from the area's already overused sewage plants. So far, the parish has done nothing to control the problem. Traces of raw sewage float down through the park and eventually into Barataria Bay and the oyster beds. At a recent meeting, concerned local citizens suggested that the federal government purchase the entire protection zone area unless the parish made some commitment to deal with the problem immediately.

The second, more complicated problem is subsidence—and its corollary, saltwater intrusion. Walking along Bayou Coquille Trail, in areas where the land has sunk, one can see the exposed roots of older oaks, willows, and sweetgums. In places, the land has subsided five feet.

The Army Corps of Engineers' strict regulation of the Mississippi River deprives the wetlands of natural spring flooding, which provides the silt and fresh water needed to maintain the environment of the region. If there is no silt, no new land can form to replace the land being washed away. If there is no fresh water, the hardwood swamps decline into brackish marshland.

Eventually, if this scenario holds, saltwater will intrude into all the freshwater areas of the coastal region, threatening the sea life, such as shrimp, that thrive where fresh and salt water meet. The continuing channelization of the wetlands, impelled mostly by the oil industry, accelerates this process of saltwater intrusion.

So far, the state of Louisiana has shown little concern. The newly elected Governor Edwin Edwards, no environmentalist, has favored new channelization projects on the eastern border of Louisiana, near Bogalusa, which would threaten the Wild and Scenic Pearl River.

About 56 percent of the original wetlands acreage of the lower forty-

eight states has already been destroyed. The Louisiana coastal region, containing the nation's largest areas of coastal marsh, is especially fragile and vulnerable. While the endless festival, the *fais-do-do*, goes on, the old Acadian stomping grounds are being slowly washed away.

The people of Lafitte and the Barataria region must know that their lives and livelihood will change irrevocably if greater conservation methods are not introduced. As these changes occur, the Barataria unit of Jean Lafitte National Historical Park will remain at least relatively unspoiled.

The park will serve as a touchstone for a region rich in history and subtle natural beauty, a region whose fertile waters and wetlands drew immigrants from every part of the world to create a mix of cultures called Creole.

DAVID R. YOUNG is a freelance journalist and an award-winning short-story writer. He is also an English instructor at the University of New Orleans and, as a newcomer to Louisiana, is discovering the lure of the bayou country.

In search of Minke whales, ocean birds, and harbor seals, kayakers ply the icy waters of Glacier Bay, by Carol J. Spears

INSIDE PASSAGE

Gliding silently through the icy seawater, we slip closer and closer to the two bald eagles, a mother and its young, perched on a grey rock streaked white with guano.

The eagles know we are approaching, but the presence of two humans bobbing near them in a kayak does not seem to alarm them. I am close enough to peer into one pale eagle eye before the adult lifts from the rock and sails over us to another island.

We lay our paddles across the kayak and allow the ocean's subtle tide to carry us; quickly we drift into the world of Glacier Bay. Canada geese honk from a nearby shore. Bonaparte's and glaucous-winged gulls float overhead, their piercing cries strangely soothing. Northern phalaropes churn the water ahead of us as they twist in rapid circles to stir up food. A harbor seal pokes its head out of the sea and gazes at us with dark, round eyes.

For the next two days, as we kayak our way into the northern tip of the Inside Passage, the Southeast Alaska wilderness that is home for these animals, I will come to view the harbor seal as friend and companion.

Glacier Bay National Park and Preserve is an ideal place for exploring by kayak. Not surprisingly, access to most of the park's 3.3 million acres of glaciated coastline is by water only. Kayaks can be rented from a concession at Bartlett Cove.

My friend and I, newcomers to this form of travel, chose to investigate the waters around the Beardslee Islands, which are strewn throughout a twelve-mile stretch between Bartlett Cove and Beartrack Cove. The many forests, inlets, and lagoons make the waters around the Beardslee Islands exceptional kayaking.

We had begun our journey in a cool drizzle from Bartlett Cove, near park headquarters. Comings and goings through the narrow, shallow strait between Lester Island and the mainland are dictated by the tides; high tide provides the only safe passage.



Glacier Bay's harbor seals (above, by George Wuerthner) are best seen from a kayaker's point of view (opposite, by Tom Bean).

We were in the rocky strait a little too soon. High tide had not yet raised the water level enough. Suddenly our kayak scraped sideways over a protruding boulder.

We were wearing life vests, but tipping over in 48° F water can freeze you more quickly than you can drown. We stopped paddling and let the rising tide ease us slowly through the passage. Sitting in front, I peered through the drizzle for the dark, silent shapes of hidden rocks in the steely wash. Tensed with concentration, we steered the kayak through a labyrinth of real and imagined snags.

Once through the strait, the sea was deep and calm. It was as if maneuvering through treacherous rocks had won us entrance into this special marine world. Sitting so low in the water, as only those in a kayak can, we began to feel a communion with the eagles, geese, and seals that surrounded us.

Our world was defined by sea-level views of the Beardslees. Dense, vivid hemlock forests covered the surrounding islands, screening all but their shores from view. We knew these larger islands abounded in black bear, and hoped to catch a glimpse of one from our safe perch on the open sea.

The rain let up, replaced by a breeze rich with the scent of saltwater. Clouds began to pull apart and afternoon sun glittered in silvery patches on the water as we continued on our northward journey.





Black oystercatchers and numerous other seabirds nest on the rocky shores of the Beardslee Islands, by George Wuerthner.

Opposite: Fireweed is one of the pioneer plants that is first to invade the glacial soil that was deposited in Glacier Bay only 200 years ago, by Joel Swisher.

Below: Mosses, ferns, and alders thrive on Glacier Bay's misty air, in a later stage of plant succession, by George Wuerthner.



Powering a kayak comes from push, not pull. The oar is one solid bar with paddles at either end. Sitting with my legs stretched straight out in front of me, I would dip one paddle into the water, pushing against the end of the raised oar. This kayaker's stroke is supposed to be less tiring than the traditional canoeist's paddle. Supposed to be.

After four hours of rhythmic paddling, interspersed with frequent stops to drift and enjoy, I was ready to give my arms a break and bend my stiff legs. Also, I was beginning to give some thought to the question of how one makes the necessary pit stops while in a kayak, floating on a cold bay, surrounded by steep-sided islands that have no obvious landing sites.

The afternoon was fading, but we still had not sighted our destination, Spider Island. Actually, it had been an hour since we had seen anything that fit the jigsaw arrangement of scattered islands on our topographic map. To our inexperienced eyes all the islands looked the same.

I was beginning to despair of finding a campsite when I looked behind us and saw a harbor seal following the kayak. Somehow, those round brown eyes watching our progress was reassuring.

As we moved northward, a low, flat, green island began to distinguish itself from the grey waters. On its south side appeared a short span of perfect landing beach. With a soft jolt and muffled swish of kayak against sand, we slid onto land for the first time that afternoon.

The island was small, treeless, bearless, and thickly populated with sea birds. Earlier in the season, camping here would probably have disturbed nesting birds. But as it was, we had all the benefits of their close company without feeling like unwelcome intruders.

Black oystercatchers, with their blood-red legs, eyes, and beaks, screeched and scolded as we explored the circumference of the island. Gulls, observing us from rocks at the water's edge, seemed oblivious to our presence. After much debate, checking of maps, and scan-

ning nearby islands, we decided we must have landed on Eider Island.

We pitched our tent at the sheltering edge of the ryegrass, where it met the sand beach. After dinner we perched on top of a sea-worn log and watched the coming of night to Glacier Bay.

Evening glowed pink, its soft light mirrored by the snowy Fairweather Range to the northwest. Shadows colored the clefts of 15,300-foot Mt. Fairweather a cold, somber blue.

In the dusky light, we could just pick out the silhouettes of seals as they circled the island, crowding in close to the shore to watch us. As darkness settled in, animal sounds, amplified across the sea, telegraphed evening messages.

Sea lions crunched noisily on their bony fish dinners. We were startled by the loud, breathy sigh of a nearby whale, perhaps a Minke, surfacing and expelling a faint wheeze of spray from its blowhole.

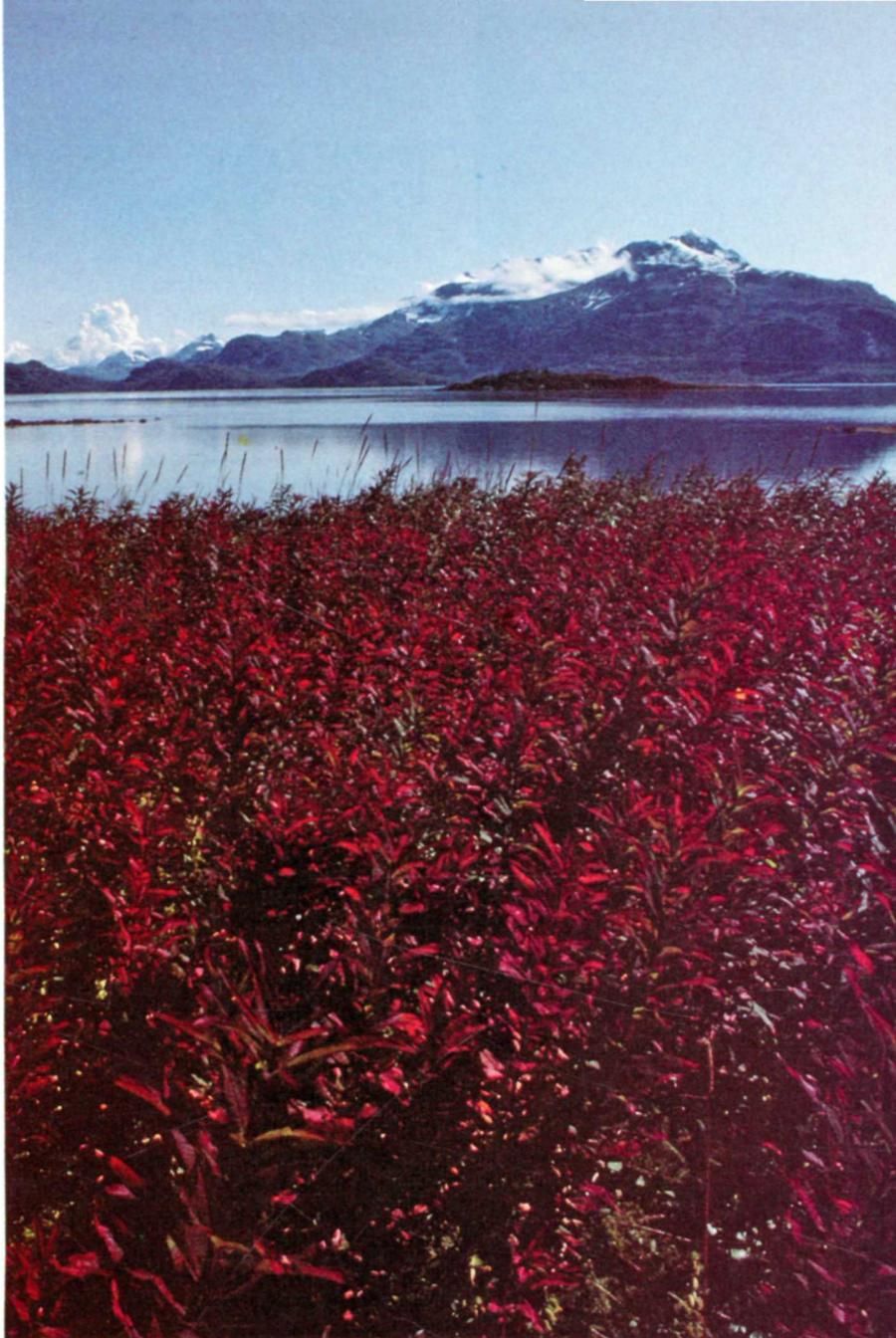
At every splash, grunt, bird cry, and sea-lion crunch, I conjured foreboding images of a black bear swimming over from another island to investigate our alien presence on this small portion of Alaskan soil.

We collected driftwood and managed to keep a small fire burning for hours. Clouds filtered the moon's light to a canescent glow as we listened to the cacophony of night.

We had come into Glacier Bay from the north, in a four-seater plane, flying low over glaciers that were born long before recorded history. But the island, on which we were camped is less than 200 years old.

In 1794, when Captain George Vancouver sailed through Icy Strait, Glacier Bay and our island lay buried under a shield of ice, up to 4,000 feet deep and 20 miles across in some places. When the glaciers began to recede, tidewaters entered, and great fjords were formed where ice had once been cradled. Stranded pockets of land, released from the groaning weight of dense ice, formed low islands in the bay.

The ice-scoured land was not bare for long. Pioneer plants clung to the newly exposed rocks. Dwarf fire-



weed and *Dryas* mats helped build a soil suitable for shrubby willow and alder. Spruce and then hemlock forests succeeded the shrubs. The rate of retreat of the glaciers can be measured here in the types of plants gracing the land. Along with each new plant community came new animal arrivals—mountain goats, marmots, black and brown bears, river otters.

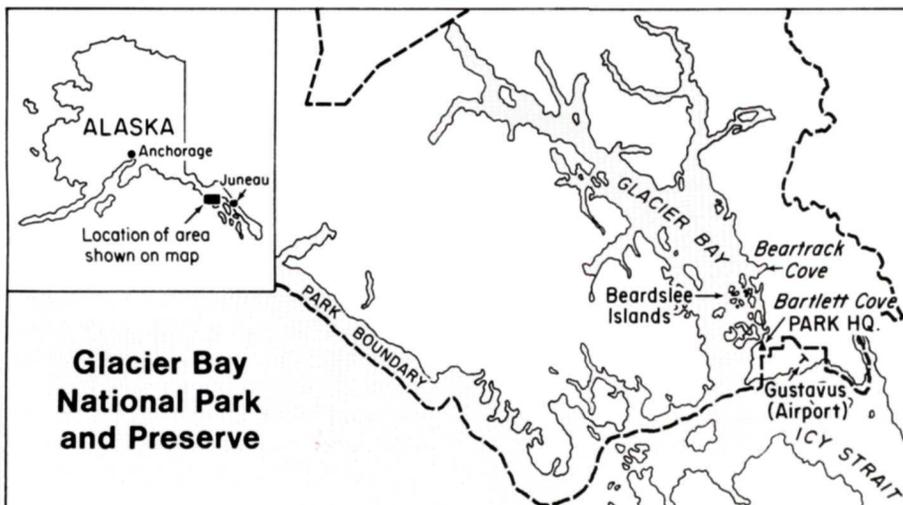
But sitting there, absorbed in the ceaseless night noises of Glacier Bay, I knew it was not a finished story. Forty miles north, tall blue glaciers calve into the sea; some glaciers are moving forward while others are retreating. New land is still being uncovered at Glacier Bay; pioneer plants still claim bare rock each season, setting in motion the process of succession.

We settled into our sleeping bags. We were fairly confident that we had the kayak and tent well above high tide. But to be safe, we set an alarm for 3:30 A.M., to wake us just before high tide was due. When the alarm rang, we found that we were quite safe from the incoming tide.

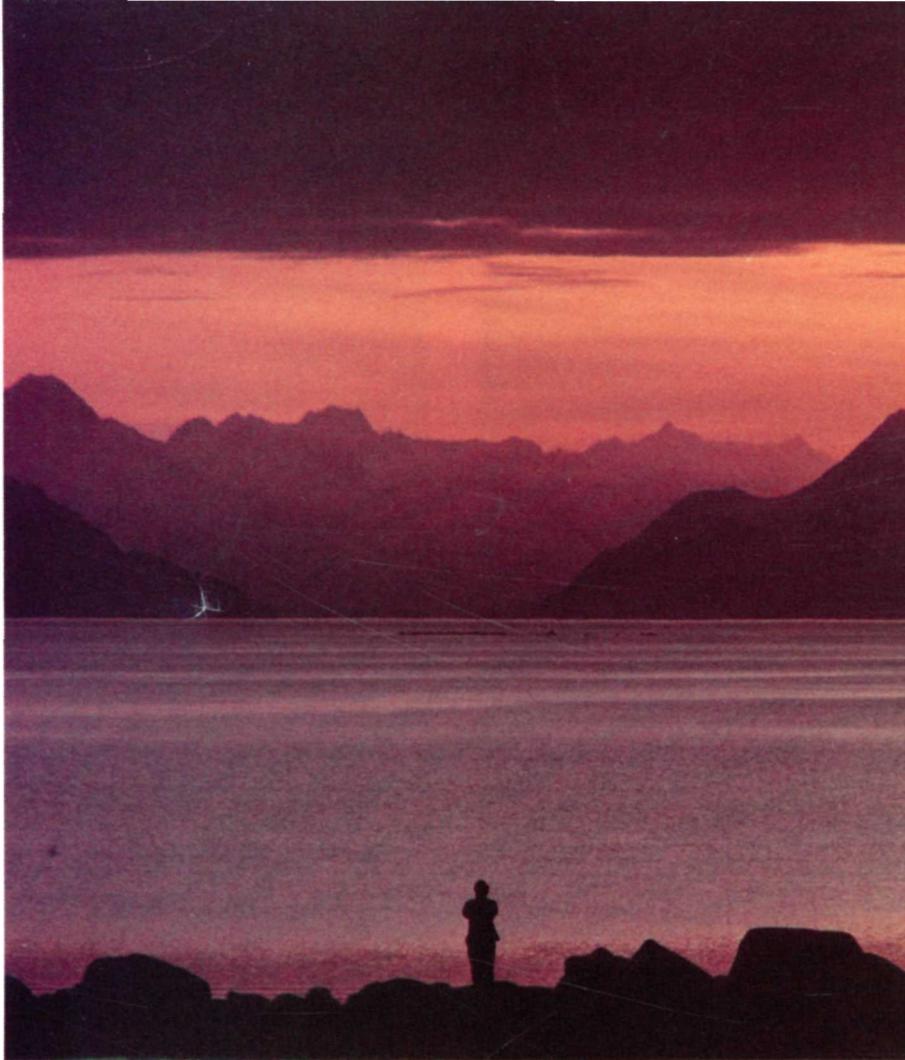
But our diligence was rewarded by a totally unexpected sight. As the sea flowed onto the land, it brought with it tiny, oblong points of green and blue luminescence. The plankton glowed with phosphorescent light—like miniature stars caught shimmering in the water's net. We stood in darkness at the ocean's edge, in our thermal underwear and untied sneakers, watching these gleaming organisms until the cool, damp wind drove us back to our sleeping bags.

Dawn never came that morning: the sky just got brighter until all our world was a light grey. It was raining. Fog obscured even the closest islands from our view. As I took in the blurred, new shape of the seascape, I wondered how we would ever find our way back through that maze of islands.

But after a rather soggy breakfast the rain stopped and visibility improved a bit. We were reluctant to leave the island, our hard-won parcel of the vast bay wilderness, so we



NPCA map. © by James F. O'Brien



The Beardslee Islands provide a view of the whole range of glaciated peaks, misty waters, and low islands that make up Glacier Bay, by Tom Bean.

wandered Eider's length and breadth, and set out on the return trip a little later than we had planned.

We stepped into the kayak, securely fastening the brown waterproof skirts into place over the cockpit openings. Pushing gently off the sand bank, we entered the sea once more. Two harbor seals fell in behind us.

The journey back to Bartlett Cove had us facing into a brisk wind, against the tide. That, along with our late start, could keep us from getting to the shallow strait during high tide. Setting our bodies into a quick rhythm, vowing not to stop to look at every merganser and scoter that floated by, we discovered that kayaking fast is a lot of fun. The kayaking push-stroke came more naturally. In a few short hours we found ourselves back in the quiet

waters where yesterday we had visited with bald eagles.

The rain began again, falling from black clouds, cold and insistent, making silver circles where each drop joined the sea. A flock of ducks whisked overhead on the sharp grey wind. This time we were entering the rocky strait at the perfect moment; high tide would carry us safely over the rocks.

As we pointed the kayak into the narrows, I gazed back into the misty world of sea and islands that we had barely glimpsed these two days. Through the rain I saw two dark eyes framed in a grey-white face.

The harbor seal watched as we passed safely through the narrows. When I turned for one last look, the grey-white face had disappeared behind a curtain of sea mist.

Carol J. Spears lives in Freeport, Ohio.

IF YOU KAYAK IN GLACIER BAY . . .

- Access to Glacier Bay park headquarters is by tourboat or plane. Check listings below for more information.
- Even if you use a professional guide, learn basic kayaking skills and emergency maneuvers before you go. Know what to do if your kayak tips, and be familiar enough with the technique to do it in cold bay waters.
- Fully equipped kayaks are available for rent from the concession at Bartlett Cove. For a fee, the concession tour boat will take you up bay so you can kayak within sight of the glaciers.
- At park headquarters, let the rangers know your proposed route, inquire about local conditions, and purchase nautical charts and the local tide tables, both necessities for water travel at Glacier Bay.
- If kayaking up bay, do not approach glaciers closer than half a mile. Ice falls and rolling bergs can produce kayak-tipping waves.
- No fresh water is available on the Beardslee Islands; you must bring your own. Fresh water is available up bay. Rain gear, tent fly, and water resistant boots are musts.
- Take your own stove, fuel, and supplies. Campfires up bay are discouraged, as the driftwood there is valuable to researchers.
- For more information about visiting the park, write Superintendent, Glacier Bay National Park and Preserve, Gustavus, AK 99826.
- For information about guides and outfitters, contact Alaska Division of Tourism, Juneau, AK 99811.
- For more general information about travel in Alaska, read the current edition of *The Milepost*, published by Alaska Northwest Publishing Company, Box 4-EEE Anchorage, AK 99509.
- Publications, maps, marine charts, and hiker's guides are available from Alaska Natural History Association, Glacier Bay National Park and Preserve, Gustavus, AK 99826.

Contested Waters

Humpback whales win new protections in Glacier Bay, by Kim Heacox

Scientists estimate that 15,000 humpback whales lived in the North Pacific Ocean a century ago. By 1966, when humpbacks finally gained complete legal protection by the International Whaling Commission, that number had fallen to 1,200. Four years later, the humpback whale (*Megaptera novaeangliae*) was added to the U.S. endangered species list.

Southeast Alaska's Glacier Bay has long been recognized as an important summer habitat for the humpbacks. National Park Service rangers documented their presence in the 1950s and 1960s. With national park status for Glacier Bay came a new awareness of the threats to the Bay's humpback population. Fortunately, park protection dictates that research be conducted on the whales' habits to find ways to keep whale populations intact.

The first to study this population of humpbacks was Chuck Jurasz, a high school science teacher and self-made cetalogist from nearby Juneau. For more than a decade, Jurasz and his family studied the Glacier Bay humpbacks from aboard *Ginjur*, their home and research vessel. Each summer, from his silent-running boat, Jurasz watched between ten and twenty-four whales enter the Bay and establish feeding territories. Then came 1978.

Early that summer, Jurasz identified twenty whales entering the Bay. But seventeen immediately departed, leaving only three. Why the exodus? Jurasz pointed an accusing finger at the steadily increasing number of tour boats and cruise ships visiting Bay waters.

His data showed a strong correla-



Fishing Boat in Glacier Bay, by Tom Bean

tion between the incidence of nearby vessels and the "agitated" behavior of whales. Did the seventeen retreating humpbacks regard the vessels as other whales encroaching into their feeding territories? Maybe.

Most fisherfolk in the Bay attributed the whale departures to a reduction in available feed. The summer of 1978 was unusually overcast in Southeast Alaska. Could this reduced sunlight have affected the production of marine zooplankton and small fish on which the whales might feed? Maybe. No one was certain.

Again in 1979, whales returning to the Bay were few, while cruise ship and tour boat traffic increased. In August of that year, the National Park Service (NPS) invoked the Endangered Species Act and requested that the National Marine Fisheries Service (NMFS) assess the problem. NMFS is a government agency, administered under the Department of Commerce's National Oceanic and Atmospheric Administration

(NOAA), which provides research on marine life and other ocean resources.

NMFS soon released its first "Biological Opinion" to serve as a guide for whale management until more extensive research could be completed. The agency reported that the "uncontrolled increase of vessel traffic, especially erratically traveling craft, may have altered humpback behavior, and that a continued increase in vessel traffic was likely to further jeopardize the existence of humpback whales in Southeast Alaska." NMFS made three formal recommendations:

- restrict vessel traffic in the Bay to 1976 levels,
- conduct additional research, and
- initiate regulations to control vessel routing, maneuvering, and speed.

The NPS used the NMFS Opinion to come up with two sets of regulations. The first set established "whale waters" in those areas of the Bay most frequented by whales.

During whale season, June 1 to August 31, all vessels were required to travel at a constant speed not to exceed ten knots, to maintain a mid-channel course, and to avoid approaching within a quarter nautical mile of a humpback whale. Furthermore, only eighty-nine cruise ship visits were allowed into the Bay during whale season—a substantial cut-back to the 1976 levels.

The second set of regulations addressed small pleasure craft and commercial fishing. A daily quota was set on small boats entering the Bay. And fisherfolk, long active in the waters of Glacier Bay, could no longer harvest prey species of proba-

ble importance to the whale diet—that is, herring, capelin, sandlance, and shrimp.

Tempers flared. Cruise ship captains had schedules to keep. Tour boat concessionaires had profits to make. Fishermen had families to support. At one time or another they all grumbled that the regulations were too strict, that the NPS had overreacted.

But the NPS remained adamant. Said Chief of Park Operations Don Chase, "This is an endangered species. If we have to err, we hope it is on the side of the whale."

Meanwhile, from 1980 to 1983, NMFS prepared a more detailed report based on extensive research. Research teams arrived from as far away as the University of Hawaii and the Woods Hole Oceanographic Institute in Massachusetts.

This research consortium investigated three components of whale ecology in Glacier Bay: prey distribution, acoustic environment, and whale behavior.

The researchers carefully constructed their statistical designs and methods for hypothesis testing, a precaution neglected by Jurasz that eventually weakened the authority of his conclusions.

Parallel studies were conducted in the Stephens Passage/Frederick Sound area of Southeast Alaska where whales also concentrate to feed. Such data would provide a basis for determining the statistical significance of the results from Glacier Bay.

Prey studies in the Bay have just begun. Thus far, they indicate that from year to year the natural amounts of zooplankton and small fish in the Bay vary considerably. The whales' preferred prey, if any, remains unknown.

Scientists suspected that the deep bedrock fjords of Glacier Bay might amplify underwater vessel noise. Decibel graphs were recorded for all large vessels in the Bay and, indeed, some ships sounded far louder underwater than others. Yet, when compared to the Stephens Passage/



Humpback whale, by Tom Bean

Whales react to boat engine noise coming from three kilometers away.

Frederick Sound readings, the Glacier Bay data showed no significant amplification.

The most conclusive results of the research have come from tests correlating vessel operations and whale behavior. In one case, a cruise ship disembarking park naturalists in the lower Bay made a quick shift in engine speed that was recorded as a huge decibel jump on an underwater microphone. At that same instant, two nearby whales breached out of the water, rolled over, and slapped their pectoral fins several times. Other documentation suggests that the whales react to such noise when it occurs as far away as three kilometers.

In another case, a whale had been tagged and monitored for ten days at Point Adolphus, near the mouth of the Bay, feeding and sleeping within a two- to three-kilometer area. Suddenly, two high-speed pleasure boats passed near the whale, turned, and passed again. The whale moved

ten kilometers away from its feeding area and did not return until the next day.

On June 22, 1983, NMFS issued its second Biological Opinion, reflecting the results of these studies. Taking this new information into consideration, the NPS released revised regulations this spring. They require that

- no vessel is to approach within a half (rather than a quarter) nautical mile of a humpback whale.
- a "vessel use day" permit system establish a more strict ceiling on the *total* vessel traffic in the Bay at any given time.
- sudden changes in engine speed and propeller pitch be avoided.

With many questions still unanswered about whale prey and Bay acoustics, the NMFS Opinion was not without a final caveat:

We believe that no additional vessel traffic should be allowed unless the number of individual whales that enter Glacier Bay remains equal to or greater than the 1982 level. If under these conditions, the NPS proposes to increase total vessel use from the present level, NMFS believes that an additional increase of no more than 20 percent would be prudent. . . . A minimum of two years should be allowed for monitoring and evaluating the effects of such an increase before additional increases are proposed. . . . We caution NPS that we are unable to determine the amount of additional vessel traffic in Glacier Bay to which the whales could adjust.

And what of the whales? Their numbers have remained low. Three humpbacks established territories in Glacier Bay in 1980, six in 1982. At the first science symposium in Glacier Bay last September, NPS and NMFS officials agreed that continued whale research is imperative. And, until definitive answers are found, the whales will receive the benefit of any doubt.

Freelancer Kim Heacox has worked as a seasonal ranger at Glacier Bay.



Securing the GRIZZLY'S SMALL PORTION

A new interagency research team must dig deep to find ways to sustain Yellowstone's dwindling number of bears, by Paul Schullery

Photo by Ron Shade

From the 1890s to the 1960s, feeding at park garbage dumps was a way of life for the grizzly at Yellowstone. Then, in 1969 and 1970, as part of a new park management trend toward restoring natural balances, major dumps in the park were finally closed. Now, almost fifteen years later, feeding the bears is being promoted as a solution to an alarming drop in Yellowstone's grizzly population. The proposal is controversial, and for good reason.

It was those same dumps and their clusters of grizzlies that provided

two distinguished scientists, John and Frank Craighead, an opportunity to launch their ambitious long-term study of the bears in 1959. The study finally ended, in bitterness and controversy, in 1971, just after the dumps were closed.

The Craigheads maintained that the dumps had not only bolstered the nutrition of the bears but kept them concentrated and safe within park boundaries during the summer. When the dumps were closed, scores of grizzlies were killed both in the park and outside. Many were de-

stroyed by various agencies and many more died accidentally or as victims of poachers.

Both state and park policies toward the grizzly changed dramatically at this time. Any bear sighted in an area where it could come into contact with people was actively dealt with in some way. Yellowstone rangers killed a number of grizzlies that were so used to feeding at dumps that they repeatedly raided campsites rather than forage on their own. State agencies killed a number of the bears that had ranged outside



Photo by Laurance Aiuppy

the park looking for new sources of food. Loss through car killings, poaching, and removal of problem bears to other regions or zoos were added into the Craigheads' estimate of total reduction of the grizzly population—by more than 150 bears in the five years following the dump closures. The duo expressed justifiable alarm at the numbers killed and have since predicted a bleak future for what they see as a declining population.

Through the 1970s the National Park Service (NPS) continued to believe that the population would recover from the short-term losses once the bears were redistributed naturally, but in the past two or three years the NPS has begun to express its own concern about the decline of the population. In 1973 an Interagency Study Team began to study the bears, and that team now agrees that a decline has occurred.

Experts today generally agree that the grizzly population of Yellowstone is now less than it was in the 1960s. Current figures set the number of bears at less than 200, with half of those immature bears and only 30 adult females. Scientists still disagree over the direct relationship between closing the dumps and this decline. Other potentially important factors in the decline range from agency killings of "misbehaving" bears to accidental deaths, poaching, climatic changes in the 1970s, and reduction of the open range outside the park. Despite disagreement over the reason for the bears' decline, at least one documentable change is clear enough to worry biologists.

The Craigheads recorded an average litter size of 2.2 cubs in the 1960s. The Interagency Team reports that the average litter size was 1.9 cubs between 1975 and 1982. In an

animal as slow to reproduce itself as the grizzly, this drop in the reproductive rate is significant. This change has been attributed most often to the loss of nutrition that occurred when the dumps were closed, and lowered reproductive rates are now used as justification for suggesting that the bears' diet be supplemented to boost their chances of survival.

Concerned about the change in reproductive rates, Frank Craighead has strongly recommended supplemental feeding for years, in the form of some dump-type feeding arrangements. In the past year, for reasons that are less clearly documented, independent groups as diverse as the Wyoming Outfitters Association and the Murie Chapter of the National Audubon Society (Casper, Wyoming) have supported supplemental feeding, as have Wyoming Senator Alan Simpson and Assistant

Secretary of the Interior G. Ray Arnett. Public attention has further been focused on the issue by articles in popular magazines such as *Atlantic* (February 1983); *Natural History* (January 1984); and *Western Outdoors* (October 1983).

force met several times and submitted its final report on December 5, 1983.

In its report, the task force recommended against supplemental feeding, pointing out that if human-caused mortalities of grizzlies can be kept low enough, the bears can maintain their numbers in the Yellowstone area as they did for thousands of years before the dumps were established. Though not ruling out the possibility of supplemental feeding in the future, the task force saw serious problems with any attempt to feed the bears systematically. They asserted that supplemental feeding is "not a cure-all and should not become a substitute for proper management of habitat and human activities inside and outside Yellowstone." The message was that if we give the bear the chance—and adequate protection—the bear will feed itself.

This same sentiment has recently been expressed by others. Dr. Charles Jonkel, a leading grizzly authority, has written that supplemental feeding is "a quick fix approach, not worthy of serious consideration." Thomas McNamee, who is just completing a book on the grizzly, agrees, objecting that concentrating bears inside the park may make it easier for managers of national forests and other lands adjacent to Yellowstone to ignore their responsibilities to protect valuable bear habitat on those lands.

The task force also reported that it is difficult to imagine a supplemental feeding program whose implementation would not somehow risk making matters worse. Simply reopening garbage dumps, even if it were not a violation of federal laws, would be of questionable worth. This is partly because little garbage

Secretary of the Interior G. Ray Arnett. Public attention has further been focused on the issue by articles in popular magazines such as *Atlantic* (February 1983); *Natural History* (January 1984); and *Western Outdoors* (October 1983).

In early 1983 a task force appointed by the Interagency Grizzly Bear Committee, the umbrella group that oversees and makes recommendations on grizzly management, met to consider the possibilities and consequences of initiating some kind of supplemental feeding program. The task force was perhaps unique in the history of the bear controversy, for its members included not only representatives of the various agencies involved, but John Craighead, one of their most outspoken critics. This made for a rare and promising combination of opposing perspectives. The task



Photo by Michael Sample

Below: A starved elk crosses the Gardner River in search of greener spring pastures. The Yellowstone elk herd is kept fairly large to allow for hunting outside the park, with the side effect that some elk cannot compete for winter range, and their carcasses become food for bears. In conflicts between bears and hunters, however, the bear is the loser. Right: Grizzly cubs hunt elk weakened by a harsh winter.

would be available for park dumps in the fall after most visitors have gone home. And without dumps to feed at during this season, bears would still range outside the park during the extended state hunting seasons, the time when accidental shootings are most likely. Even a plentiful supply of garbage at this time of year might not keep grizzlies from moving out to feed on elk gut-piles left by hunters. Hunting activity in state lands surrounding Yellowstone has dramatically increased in recent years with the increased size of elk herds in the area.

The task force criticized the most commonly suggested system for supplemental feeding, that of killing park elk. In order to do this, park service elk biologist Douglas Houston estimates, at least 1,100 to 1,300 elk would have to be shot each year. Even this number might not be sufficient for the feeding program to

work. To produce such a harvest each year, Houston says, would require massive manipulation of the elk population, including reduction of the herd to half of its current size.

Management of this herd has been controversial far longer than grizzly management, and the NPS would face tremendous public outcry if rangers began shooting elk as they did in the early 1960s. More important for the grizzlies, if this elk herd were greatly reduced, elk killed by natural causes over the winter would virtually disappear from spring ranges, thus denying the bears carrion protein during that critical time when they emerge from their dens. Bearing all these factors in mind, the task force concluded that using park animals to feed the bears "could create biological problems as acute as those currently under consideration."



Photo by Michael Sample



Photo by Laurance Aiuppy

The task force also feared some other repercussions of supplemental feeding. Almost any plan—whether using many small feeding sites or a few large ones—would require closures of extensive parts of the backcountry in order to protect both bears and people. Yellowstone Park's Research Administrator John Varley expresses concern that it would be virtually impossible to keep people away from the bears.

Interest in grizzlies is much higher now than in the 1960s, when scores of bears could be seen at a major dump. If a feeding program were set up in the backcountry, the curious gawker would only have to watch where the helicopters carried the garbage to locate the bears. And, though today the highly profitable practice of grizzly poaching is limited to chance encounters between bear and armed human, poachers would have a much easier time of it

if they could sneak up on a feeding site and shop for the hides they liked best.

No one has estimated the cost of such a feeding program, but it would require a great deal of work and helicopter time just to move the food in, wherever the food was obtained. Costs would also be incurred for increased patrolling of feeding sites and intense efforts to *gather* the food if park animal carcasses were being used.

On a more positive note, the task force pointed out that the elk herds have increased greatly in the past fifteen years under less active management, and this increase in available protein should certainly begin to have an effect on the grizzly diet. Though the task force did not comment on it, the same is true of the park's trout populations, now managed more

strictly and with far less harvest than in the 1960s. Once seriously depleted, Yellowstone Lake now supports excellent spawning runs in many tributaries, and the bears now line up along these streams every season.

On February 14, 1984, the Interagency Grizzly Bear Committee met in Denver to review the report of the task force. They approved and accepted it. They also directed bear managers to investigate ways to use feeding as a management tool. For example, if a known sheep-killing bear is tracked heading toward sheep range outside the park, managers may drop a carcass or other food in its path, diverting it long enough to get the sheep moved.

Christopher Servheen, Grizzly Bear Recovery Coordinator for the U.S. Fish and Wildlife Service, is quick to point out that this is not supplemental feeding.

"We are not putting the carcass there to help the bear's diet," he comments, "it's just a way to distract the bear for a short time."

There is still great reason for concern over the welfare of the Yellowstone grizzly. The task force's disapproval of supplemental feeding rests on the assumption that the number of human-caused mortalities can be kept low. Poaching and accidental killings—by black bear hunters or by cars—make this difficult.

Despite the unusual degree of consensus among scientists that supplemental feeding is not yet necessary, there is a growing public restlessness, part of a feeling that *something* must be done other than just watching the population decline. Ironically, one of the great risks now facing the grizzlies of Yellowstone is that public and political



Photo by Michael Sample

pressures will force managers to take actions just for the sake of taking actions rather than because those actions are sure to help the bears.

The best focus for public concern would be pressing for ways to prevent accidental shootings and poaching. Eliminating grazing from areas near the park would be a good place to start. Removing other human pressures, like resort development, from both inside and outside the park would also be a good idea. If such efforts are successful, perhaps we humans can, after all, provide enough of a natural habitat in the Yellowstone ecosystem to support a natural population of grizzlies.

Formerly a naturalist and park historian at Yellowstone, Paul Schullery has written a number of books on bears. His book Mountain Time will be published by Nick Lyons/Schocken of New York this fall.

Oblivious to a companionable Canada goose, a two-year-old grizzly cub forages for food along a riverbank in Yellowstone in early spring.

Additional Reading

Several books are available on the Yellowstone grizzly and its management. Dr. Frank Craighead's book *Track of the Grizzly*, published by the Sierra Club in 1979, covers the monumental Craighead research project as well as the Craigheads' viewpoint of the management controversy up to 1975.

Paul Schullery's *The Bears of Yellowstone* was published by the Yellowstone Library and Museum Association in 1980, and covers the natural history and lore of both grizzlies and black bears as well as giving a detailed history of bear management that presents the park

service's viewpoint as well as that of the Craigheads.

An important new book, *The Grizzly Bear* by Thomas McNamee, will be published by Alfred Knopf this fall. It covers management of the various grizzly populations in the lower forty-eight states.

The most current information on supplemental feeding of Yellowstone's grizzlies is found in *Final Report, Ad Hoc Committee to Investigate the Need and Feasibility of the Supplemental Feeding of Yellowstone Grizzly Bears*, available from U.S. Fish and Wildlife Service, Box 25486, Denver, Colo. 80225.

Battling for the Bears at Fishing Bridge Campground

While authorities debate the pros and cons of giving Yellowstone grizzlies extra food, the bears are having trouble making use of the existing natural habitat in the park.

Research by the Interagency Team and the National Park Service (NPS) suggests that the grizzly faces particular peril because of a recent turn of events at a favored habitat near Fishing Bridge at the outlet of Yellowstone Lake. Fishing Bridge is the site of a major park campground development, now the subject of controversy.

Yellowstone's systems of lodges, campgrounds, and other services were built in simpler times, when little was known about the needs of wildlife. Since 1968, NPS biologists have recommended that the 600-plus trailer campsites at Fishing Bridge be removed because they are in the heart of excellent bear habitat. Two smaller campgrounds nearby were removed after 1972 because of bear problems.

As one scientist put it, "If, way back when that development was established, they had wanted to put it in the most harmful place possible, they couldn't have found a better one than they did." The whole area, including the Pelican Creek drainage to the east, is, by Yellowstone standards, bear heaven. It is also one of the most ecologically diverse portions of the entire park, which another scientist called "a unique collection of habitats for both plants and animals."

In 1979, when the NPS wanted to build a new development, Grant Village, along the southwest shore of Yellowstone Lake, the new construction was made contingent upon the removal of the Fishing Bridge development. The U.S. Fish and Wildlife Service, charged with protecting the threatened grizzly, agreed that Grant Village's construction could proceed only if the Fishing Bridge campground was removed according to long-standing NPS plans. In January of 1981 the NPS agreed to this arrangement. They proposed to remove Fishing Bridge's NPS trailer campground in 1985. The adjacent commercial trailer court, the only full-hookup campground in the

park, would be removed sometime during 1986.

These trailer campgrounds are at the crux of the dilemma. Recreational organizations, not willing to lose the only full-hookup campground for recreational vehicles (RVs) in the park, have mounted an impressive campaign. The park and scores of senators have received a flood of mail.

The Good Sam Club, an RV organization, has complained loudly and lobbied effectively with sympathetic politicians, such as Wyoming Senator Alan Simpson. Meanwhile, under pressure from these groups, the director of the National Park Service has asked to see more evidence for the necessity of the campground's removal. Some see this as reflecting the current administration's prodevelopment mood and its preference for recreation over wilderness.

Yellowstone is now caught between its commitment to the Fish and Wildlife Service and what appears to be an unsympathetic climate in Washington.

Additionally, businesspeople in Cody, Wyoming, the park's leading gateway town, have objected that fewer people will enter the park through their town if the Fishing Bridge development is removed. A recent *Trailer Life* editorial observed that when Theodore Roosevelt dedicated that park's north entrance arch, "he did not dedicate it for the benefit and enjoyment of the bears, or the rangers, or the park administrators, or the environmentalists . . ." but for the people.

Roosevelt was an active supporter of the National Park Service, whose founding legislation stipulated that people's enjoyment of the parks should in no way diminish the natural setting for future generations.

So now the new Grant Village complex is in operation, yet Fishing Bridge remains. The Interagency Grizzly Bear Team members agree that having both developments in operation could have a disastrous cumulative effect on the bear. Because Fishing Bridge is such a good habitat, bears have always congregated there. Thus, this area has accounted for

more than half (ten of sixteen) of the grizzly-related injuries in or near developments in the park since 1968.

Exactly 102 of the 272 grizzly relocations in the park since that year have involved bears at Fishing Bridge and the nearby lake development. Nearly a quarter of all bears removed from the park population during the same period were bears enjoying this habitat. Interagency scientists estimate that since 1968, problems caused by the location of this massive campground in favored bear habitat cost the grizzly population at least six females, a shockingly high number considering their low reproduction rate.

But, they continue, "the actual mortalities tallied at Fishing Bridge are not as significant as the bears displaced from the area by human activity." Park data indicate that "a large percentage of the [grizzly] population undoubtedly uses this habitat" sometime during their lifetime. In recent years, bear sightings in the nearby Pelican valley have declined precipitously. This loss must be dealt with quickly.

In a compromise move, Yellowstone's administration has now proposed adding enough campsites to other campgrounds to make up for the removal of Fishing Bridge. This proposal may surmount the objections of recreational groups.

To answer the concerns of Cody's business community, NPS statistics show that visitor travel routes are established long before visitors get near the park, so closing Fishing Bridge would not affect Cody's business.

It seems a shame that with the grizzly's welfare at stake, Yellowstone is unable to simply act as it has planned. Ultimately, the Fishing Bridge issue comes down to whether the NPS will be allowed to fulfill its mandate. Established visitor use patterns, however, have enormous political inertia.

The grizzly bear will need all the friends it can find to survive even if we give it sufficient room and food. Its chances are grim indeed if we continue to give preference to trailer parks over some of the park's most important grizzly habitat.

—Editors

The Road Less Traveled

National trails across the country offer hikers a close-up view of the land,
by Eric Seaborg

If you ask a hiker why he hikes, you probably won't get a very good answer. I believe that's because people are drawn to hike primarily because of how it makes them feel, and feelings are hard to put into words.

Trails are the way to see the land, to live it and to feel it. A road passes through the countryside, changes it, and imposes its own values. It's possible to travel great distances in an automobile, look over a great deal, yet see very little. Although you travel much shorter distances on foot, you can see a great deal.

We are fortunate in America to have an extensive system of trails that do afford us an intimate view of this country. In 1968, Congress enacted the National Trails System Act, which designated the Pacific Crest Trail and Appalachian Trail as our first national scenic trails.

Since then, six national scenic trails and five national historic trails have been added to the system. Several thousand miles of shorter national recreation trails have been included as well. Following is a listing of some of the national trails that offer extraordinary hiking for backpackers and day hikers alike.

Pacific Crest Trail

The Pacific Crest Trail begins (or ends) at the Mexican border, crosses the desert of southern California, runs up the spine of the Sierra Nevada, then crosses several smaller ranges before following the ridge of the Cascade Mountains up to the Canadian border.

The 2,500-mile trail is now 90 percent complete. Though a large sec-

tion in southern California remains unfinished, the trail can be hiked from end to end, through seven national parks, twenty-three national forests, and other public and private lands.

Regulations on trail use and camping vary according to the agency managing an area. For more information, write Pacific Crest Club, P.O. Box 1907, Santa Ana, California 92702; or California Regional Office, U.S. Forest Service, 630 Sansome Street, San Francisco, California 94111.

Appalachian Trail

The Appalachian Trail, strung along the eastern coast of the continent, differs in every way from its western counterpart. While the Pacific Crest Trail exceeds 13,000-foot elevations in places, the AT rarely tops 5,000 feet. The shaded woodlands of the Appalachians are within a day's drive of over half the population of the United States.

Completed in 1937, the AT is the grandparent of the long-distance trails. From its southern terminus on Springer Mountain in Georgia to Mt. Katahdin in Maine, the trail extends more than 2,000 miles. On its way, the AT passes through some of the best scenery the East has to offer, from the rugged Smokies in North Carolina to the White Mountains of New Hampshire.

The trail links eight national forests, six units of the National Park System, and more than sixty public land areas in fourteen states. It follows roads or passes through "unprotected" areas for about 500 miles.

The trail was built and is main-

tained by a network of local trail clubs, under the leadership of the Appalachian Trail Conference. The clubs maintain a system of huts and shelters along the trail. In some areas of heavy use, these shelters are reserved for the long distance "through-hikers."

Regulations on the use of the trail vary according to the agency managing the land it passes through. For more information, write Appalachian Trail Conference, P.O. Box 236, Harpers Ferry, West Virginia 25425; or Appalachian Trail Project Office, National Park Service, Harpers Ferry Center, Harpers Ferry, West Virginia 25425.

Florida Trail

A newer national scenic trail, the Florida Trail differs dramatically from both of the original national trails. The Florida Trail is a flatland trail, so it does not afford the vistas of the others, and it is a winter trail, whose prime season is January through March.

Summer tends to be too hot, wet, and insect-infested for most hikers, but winter temperatures are mild. Even the dress on the trail is different. Rather than the hiking boots favored on the northern trails, hikers often wear sneakers, and simply plow through the water in wet spots on the path.

While Florida is a highly developed state, most of the development is still clustered along the coasts. The trail shows off this less-developed part, passing through tremendously varied habitats—forests, swamps, sandhills, wetland prairies, lakes, and rivers—that display the lush vegetation and wildlife of the South.

The route begins north of Everglades National Park in Big Cypress National Preserve, deep in the coastal lowlands of south Florida, and snakes its way northward to the Florida panhandle. The trail now includes more than 500 miles (of a planned 1,300) in about twenty separate segments. The longest continuous section runs for 350 miles through the northeast section of the state.

Much of the trail crosses public land and is open to the public. The segments on private land are open only to members of the Florida Trail

Association, which built it, under agreements between the land-owners and the association.

The association has also built designated camping areas along the way. For more information, write Florida Trail Association, 4410 N.W. 18th Place, Gainesville, Florida 32604.

North Country Trail

The North Country National Scenic Trail provides yet another kind of experience and scenery. According to the National Park Service management plan for it, the trail "does not follow a clearly discernible geological feature. Instead, it meanders through seven northern states. . . .

"The hiker will experience the grandeur of the Adirondack Mountains, the tranquillity of the rural farm countryside, the splendor of placid lakes and sparkling streams among forested hills, the boundlessness of the northern prairies, the merging of water and sky at the horizon of the Great Lakes, and the nostalgia of historic canals and abandoned logging and mining communities."

When completed, the trail will extend approximately 3,200 miles from near Crown Point, New York, through Pennsylvania, Ohio, Michigan, Wisconsin, and Minnesota to the Lewis and Clark National Historic Trail at Lake Sakakawea in North Dakota. About 800 miles of the route now exist, including parts of the Buckeye Trail in Ohio.

Regulations on use will vary according to administrative area. For more information, write North Country Trail Association, P.O. Box 311, White Cloud, Michigan 49349; or Midwest Regional Office, National Park Service, 1709 Jackson Street, Omaha, Nebraska 68102.

Oregon Trail

Rather than passing through areas of scenic interest, national historic trails follow a route of interest in American history. The Oregon National Historic Trail follows the path of the transcontinental pioneers of the 19th century.

Historians have estimated that between 250,000 and 300,000 settlers used the 2,000-mile route to emigrate from the Missouri River to the

Pacific Ocean between 1840 and 1869. While these emigrants did not follow a single track, the national historic trail will trace the most popular route.

The emphasis of this trail, once developed, will not be on hiking, but on historical interpretation. More information can be obtained from the Pacific Northwest Regional Office, National Park Service, Westin Building, 2001 6th Avenue, Seattle, Washington 98121.

The Oregon Trail exemplifies both the promise and the shortcomings of our national trail system. Although this trail has been officially designated by an act of Congress, it is not being built.

The National Park Service, after creating a management plan for the trail, has stated it will take no action to implement it—building the trail will be left to the states and local groups. The reason: lack of funding.

A dearth of funding has become a chronic problem for trails in recent years. Although trail clubs and state recreation agencies have traditionally played a strong role in caring for national trails, federal sup-

port is crucial in planning and building the trails in the first place.

The larger national trails are usually only lines drawn on paper when they are authorized by Congress. Just like bridges and roads, they need planners, builders, materials, and land to become realities. If authorized by Congress, a trail's successful completion becomes an item of national interest, and thus its funding a national responsibility.

Whether the promise of the national trail system will ever be realized will depend partly on the efforts of individual hikers and concerned groups in finding funding for trails, building them, and maintaining them. But it will also depend to a great degree on whether the federal government lives up to its commitment to national trails.

Eric Seaborg is president of the American Hiking Society (AHS), a national organization dedicated to promoting hiking and trails. AHS is working for the creation and maintenance of a better national trail system through both its lobbying efforts and its Volunteer Vacations program, which sends teams of volunteers out to work on trails each summer.

NATIONAL TRAIL SYSTEM UPDATE

Although Congress has authorized a system of trails, many of our national scenic and historic trails simply do not exist. National scenic and historic trails are long-distance trails that are often only proposed routes, not yet open as continuous, long-distance hiking paths.

Amendments to the National Trails System Act were passed last year—and signed into law by the President. These amendments added three new national scenic trails to the system; designated six more for study for possible inclusion; contained provisions for turning abandoned railroad rights-of-way into trails; and provided encouragement in other ways for getting trails actually built, instead of simply planned. Still, funding to support these activities has been minimal.

In fact, the federal government's effort to develop the system has de-

clined precipitously under the Reagan Administration. Trails programs would have been abolished completely last year, had not Congress added funds to the budget to continue them. And again this year the Administration has proposed cutting the trails' budget another 40 percent.

Funding is needed to turn the promise of new trails into a reality. For a relatively small investment, the benefits are many. The die is already cast for national trails funding for next year. But trail building is an ongoing task, one that will require attention in coming years as well.

To make your views known, write your Senator, United States Senate, Washington, D.C. 20510.

To volunteer to build trails, write AHS Volunteer Vacations, c/o Kay Beebe, P.O. Box 86, North Scituate, Mass. 02060.

NPCA Report

NPCA Exhibit Shines At Louisiana World's Fair

On May 12 the Louisiana World Exposition opened its doors on the banks of the Mississippi River in New Orleans. The city had spent months repairing streets in the French Quarter and in other neighborhoods in preparation for the twelve million expected visitors.

Appropriately, with buildings and exhibits overlooking the "father of rivers," the theme of this fair is rivers. The Nile, the Amazon, the rivers of Japan are all represented.

Funded by ARA Leisure Services, Inc., the joint NPCA-National Park Service exhibit entitled "Our National Parks" is one of approximately fifty at the fair, including more than a dozen exhibits from foreign countries. Of all the exhibits, NPCA's presents some of the most wild and scenic rivers and waterways in the world.

According to NPCA President Paul Pritchard, "This is the first time that our national parks—and NPCA—are represented at a world's fair. We are pleased to be able to

present this remarkable display of our nation's heritage to the millions who will visit the Louisiana World Exposition."

Through the use of dramatically backlit photographic transparencies, NPCA is also showing off many of the parklands that our rivers water. Positioned at the center of New Orleans' new convention hall, the exhibit uses mosaics of two-foot-square transparencies to pick out highlights of the National Park System.

From closeups detailing wildflowers and starfish to panoramic scenes of the Grand Tetons, these mosaics cover the range of natural and cultural resources that make our park system worth protecting.

In addition, soaring fourteen-foot-high transparencies—mirrored to produce multiple images—bring attention to some of our most spectacular vistas, such as rushing waterfalls and the spires of Bryce Canyon.

To alert visitors to the fact that protections for the National Park System are never absolute, that these lands, waters, and wildlife have no voice but that of a concerned public, NPCA provided recorded commentaries at various stations throughout the exhibit. These messages remind visitors that "we

rely on you to help us in our crusade for an unspoiled America."

The exhibit is staffed by NPCA and a National Park Service ranger. Besides providing literature that explains the goals of the Association, NPCA is also conducting a survey to measure public awareness of the parks and NPCA. The NPS is distributing its invaluable *Guide and Map to the National Parks*.

In conjunction with the exhibit, ARA Leisure Services, Inc., which manages concessions at Mesa Verde, Shenandoah, and Denali national parks, is operating an adjacent gift shop. The items offered there are handicrafts—Indian pottery and jewelry, wood carvings, and figurines—that represent cultures of the three parks that ARA serves.

Congress Stalls Plan To Contract Out Park Jobs

Taking care of the national parks is a bigger job than most people suspect. Maintaining backcountry trails, preserving the historic aspects of colonial-era buildings, and constructing interpretive centers are just a few of the countless jobs that the National Park Service must handle. In addition, the NPS must serve the millions of visitors who come to the parks each year.

The NPS already contracts out approximately one-sixth of the NPS budget to private firms. Last year, however, this Administration charged ahead and told the NPS to come up with an even longer list of jobs that could be contracted out—in the name of cost-efficiency.

Under the A-76 program, which was instituted in 1955 but is not a law, all federal agencies were asked to come up with more suggestions for contracted work. The deadline for all departments except Interior is 1987. Ironically, some programs in the Department of Defense and the General Services Administration have been exempted from the plan.

Former Secretary Watt and other top Interior officials insisted, however, that the NPS complete all contracting by 1984. Secretary Clark extended the deadline one year, but the NPS was pressured to get on

NPCA's *son et lumière* exhibit at the Louisiana World Exposition presents visitors with a montage of the many aspects of our national parks.



Stephen M. McPherson

Burr Trail Gloss

The Burr Trail feasibility study, requested by Senator Jake Garn of Utah, is expected to be made public this summer. The state and the five counties that would be affected if the trail were paved paid \$75,000 for the study.

Terri Martin, NPCA Rocky Mountain representative, says the glossy, four-color study "is a real collector's item, produced to sell the idea."

Environmentalists believe Garn's move to pave the sixty-six-mile trail is economically imprudent and ignores impacts on parklands such as Capitol Reef National Park and Glen Canyon National Recreation Area. At right: Burr Trail, now just a dirt road, winds through Capitol Reef's Waterpocket Fold.



Terri Martin

with its contracting program—again in the name of cost-efficiency.

"But," said NPCA President Paul Pritchard, "there are other important reasons why the cost of an activity must be considered in conjunction with *how* that activity is performed. Much of the work done by the NPS must include precautionary steps . . . to protect the resource and the health and safety of the visitors. Nature will never be managed with 100 percent efficiency."

NPCA took the lead among conservation groups and protested the rush to contract out NPS jobs; and NPS employees also complained—but quietly, for fear of reprisals. Finally, when NPS Director Russell Dickenson stated publicly that the NPS was being rushed to study the jobs that could be contracted to the private sector, Congress took note.

On May 17, the House/Senate conference approved, amended, and strengthened the Baucus/Bumpers amendment to a supplemental appropriations bill. The amendment buys time for Congress to legislate a better plan for the A-76 program. It extends the deadline for NPS contracting studies from September 1 to October 30 and imposes a moratorium on all private contracting until Congress can review each bid.

On the House side, Representative Pat Williams (D-Mont.) led the bi-

partisan move to revise the NPS contracting program. On May 22, Public Lands and National Parks Subcommittee Chairman John Seiberling (D-Ohio) held oversight hearings to find out just how bad the situation is and what can be done about it.

In his testimony, Representative Williams said, "The issue is not the contracting-out program. The issue is this Administration's implementation of the program."

In reference to Director Dickenson's statement, Williams said, "He and his agency were rewarded for their candor by being instructed not to talk to Congress or the press."

Congressman Richard Cheney (R-Wyo.), who does not usually concur with Democrats on natural resource issues, said, "I am in favor of saving money, but I am skeptical." He mentioned that the A-76 program could affect Grand Teton National Park in his state, and insisted that A-76 "should be done in an intelligent fashion."

Everyone at the hearing agreed that A-76 was, in theory, sensible; but the demands put on the NPS were not. Pritchard testified that guidelines for A-76 were necessary, but that each park superintendent should have the flexibility to decide what is best for his or her park.

As an example of how the NPS might handle a situation better than a private company with little knowledge of park resources, Pritchard mentioned a recent conversation he had at Big Thicket National Preserve.

Big Thicket Superintendent Tom Lubbert told about a wooden walk for the handicapped that an NPS crew was building through a bog full of pitcher plants. The crew noticed that a pair of hawks were feeding their young in a nest above the partially completed trail.

"I pulled the staff off the project," said Lubbert. "We'll wait until the chicks can fly away on their own."

A private crew, under a contract-imposed deadline, probably would not have been able to afford this lapse in cost-effectiveness.

Even the money spent in administering the contracting-out studies make the program seem less than efficient. As Seiberling pointed out, it will cost the NPS between \$5 million and \$10 million to do 62 studies on contracting work worth \$3.5 million.

"That doesn't make sense," Seiberling said.

With agreement from the representatives present at the hearings, the final words on A-76 were Seiberling's: "I think we ought to write something into law."

ORVs Tear Up Beaches At National Seashores

The arrival of summer brings a fresh onslaught of recreational off-road vehicles (ORVs) to the nation's beaches. Even though these ORVs damage vegetation and exacerbate erosion, destroy bird and sea turtle nesting habitat, and interfere with other recreational users, their use is not prohibited on most national seashores.

Staff at Gulf Islands National Seashore is currently wrestling with the ORV issue. A section of Gulf Islands, known as Perdido Key, had been open to ORVs intermittently until January 1983, when severe storm damage and shoreline erosion forced the National Park Service (NPS) to close those beaches.

The superintendent of the seashore had planned to open the Key to ORV use this past spring. Intense public opposition, however, and a resolution passed by the Gulf Islands National Seashore Advisory Committee calling on the superintendent to "indefinitely delay the reopening of Perdido Key to off-road vehicles" have caused the superintendent to delay a final decision on reopening.

The controversy over appropriate

levels of ORV use also continues at Fire Island National Seashore. In 1983, the NPS proposed revised vehicle regulations for Fire Island National Seashore that placed no limits on the number of recreational ORV permits. Nor did the proposed regulations limit the number of recreational ORVs on the beach at any one time.

According to Bill Lienesch, NPCA's Director of Federal Activities, "It is critical that limits be placed on recreational ORV use at our national seashores in order to adequately protect fragile dunes and assure positive visitor experiences for other recreational users."

At this writing, final decisions on ORV issues at both Gulf Islands and Fire Island are still pending. Whatever the outcome, ORV problems will continue at our national seashores. A lawsuit is currently pending over ORV use at Cape Cod National Seashore and the issue comes up sporadically at other park units, including Cape Hatteras and Cape Lookout.

Concerned members of NPCA can help by writing to park superintendents and expressing concern over excessive ORV use on our national seashores.

Off-road vehicle problems in the Florida section of Gulf Islands National Seashore may be solved by this small rodent. The rare Perdido Key beach mouse and its close relatives have been suggested for the endangered species list. If listed, their habitat could be protected from the damage caused by ORVs.

National Park Service



McClure Breaks Deadlock On Wilderness Bill

Senator James McClure (R-Idaho), who as chairman of the Senate Energy Committee has been wrangling over wilderness legislation for the past three years, finally broke the deadlock. Ten million acres in twenty-five states will now be added to the National Wilderness Preservation System.

On the House side, Interior Committee Chairman Morris Udall (D-Ariz.) and Representative John Seiberling (D-Ohio), chairman of the Public Lands and National Parks Subcommittee, have been pushing to get wilderness bills passed. McClure had blocked Senate passage in order to protect development and timber interests.

On May 2, Senator McClure agreed to compromise legislation that would add ten million acres of Forest Service lands to the wilderness system and allow another ten million-plus acres to be considered for multiple use.

Although the wilderness system contains 80 million acres, approximately 75 percent of these lands are in Alaska. So pending legislation will increase wilderness in the lower forty-eight states by more than 40 percent, an increase that pleases conservationists.

A crucial part of the compromise bill also allows new wilderness areas to be proposed in the future. Additions to the National Wilderness Preservation System can be proposed when Forest Service management revisions are written, which is every ten to fifteen years.

With the breakthrough on an overall wilderness bill, Congress can now pass specific state wilderness bills. Many of these bills have been awaiting passage of this wilderness legislation.

All of the western states, with the exception of Nevada, have proposed legislation; and Wisconsin, Florida, North Carolina, Virginia, and Pennsylvania are among the other states seeking new wilderness areas.

It is expected that these bills will be adopted before the end of this congressional session.

News Update

Guns in the Parks.

Because of overwhelming opposition to loosening restrictions on loaded weapons in the parks, the NPS will hold to its present restrictions. These state that firearms cannot contain ammunition in their internal or attached parts.

Rifle Association Sues. In a related issue, the National Rifle Association has filed suit against the NPS and Assistant Secretary G. Ray Arnett. The suit challenges NPS regulations that forbid hunting and trapping in park areas unless those activities have been specifically authorized by Congress. NPCA and other conservation groups will intervene in this lawsuit on the side of the National Park Service.

Drilling Near Glacier. The Forest Service has issued an environmental assessment on its plan to allow petroleum exploration next to Glacier National Park. NPCA has called for a more complete assessment because the present study does not address the threats from potential petroleum *development*.

Visibility Protections Upheld. On April 20, NPCA and the Environmental Defense Fund won their lawsuit against the EPA over enforcement of visibility protec-

tions for parks. The court-ordered time schedule requires states to develop visibility monitoring programs for all Class I national parks and wilderness areas.

Columbia Gorge Plan. The Hatfield-Packwood Columbia River Gorge bill has been endorsed by forty-four bipartisan cosponsors in the Senate—an unusually large consensus for a conservation proposal. The bill calls for a regional management plan, an addition of 310,000 acres to the planned Gorge area, and designation as a special unit of the Forest Service.

Jackson Lake Dam. Let the Bureau of Reclamation know what you think about its environmental impact statement for the proposed dam renovation in Grand Teton National Park. To receive an EIS, write Wayne Deason, Director; Office of Environmental Affairs; Bureau of Reclamation; Department of Interior; Washington, D.C. 20240.

Clean Air on Hold. In a dramatic turnabout, the House Health and Environment Subcommittee defeated legislation that would have created an acid rain control program. Congressman Dennis Eckart's (D-Ohio) deciding vote, which defeated the program 10 to 9, was particularly disappointing because major efforts had been made to meet the concerns of Ohioans. Environmentalists believe that reauthorization of the Clean Air Act during this Congress is now in question.

FAA Addresses Problems Of Air Flights Over Parks

In February, Golden Eagle Air Tours of Fresno, California, announced plans to begin several daily tourist flights over Yosemite National Park. The announcement touched off a wave of protest from individuals and environmental groups about the hazards and noise caused by overflights and the need to protect Yosemite's pristine air.

Overflights have been a long-standing concern for all the national parks; and, according to a recent NPCA survey, the number of incidents is mounting. Whether it be the sound of tour helicopters reverberating off the walls of the Grand Canyon or military jets playing hide-and-seek in the Sierra, overflights are changing the ways in which we experience the national parks.

Unfortunately, the National Park Service (NPS) has no jurisdiction over its airspace; it can only report its concerns to the Federal Aviation Administration (FAA). Noise,

safety, altitude, and frequency of flights are the crux of the problem, the issues that representatives of Yosemite and Golden Eagle Tours are now negotiating.

Overflights disturb the solitude of the parks as well as the wildlife; but even more ominous situations arise. Last August, a Sequoia National Park helicopter was involved in a near mid-air collision with a low-flying military jet. In Death Valley and other park areas close to military bases, sonic booms cause constant headaches, both literally and figuratively. The problem will only increase if the Air Force expands the number of military areas in Utah, Texas, New Mexico, and Nevada, as planned.

Because of the furor raised by the proposed Yosemite flights, and the concern for other parks with similar problems, the FAA, the Department of Interior, and the Fish and Wildlife Service have issued a joint memorandum to reduce the incidence of low-flying aircraft. Although the

memorandum is not legally binding, it makes eight specific recommendations.

One of the most important of these recommendations would create a 2,000-foot flight-free airspace above parks. In establishing the 2,000-foot ceiling, the FAA stipulates that the base points for measuring the ceiling should be from canyon or valley rims. The previous base points were canyon or valley floors—in most cases, a considerable difference in altitude.

The FAA will also pressure the Department of Defense to police low-flying jets that stray over national parks. In addition, the FAA will train NPS staff in proper identification of problem aircraft.

NPCA is encouraged by the FAA's cooperation in coping with the problem of overflights, and hopes that these advisories will reduce the number of overflight problems. Otherwise, stronger measures will have to be considered.

—Kimber Craine



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July/Aug 1984

Animal Groups Cause Lag in Death Valley Burro Plan

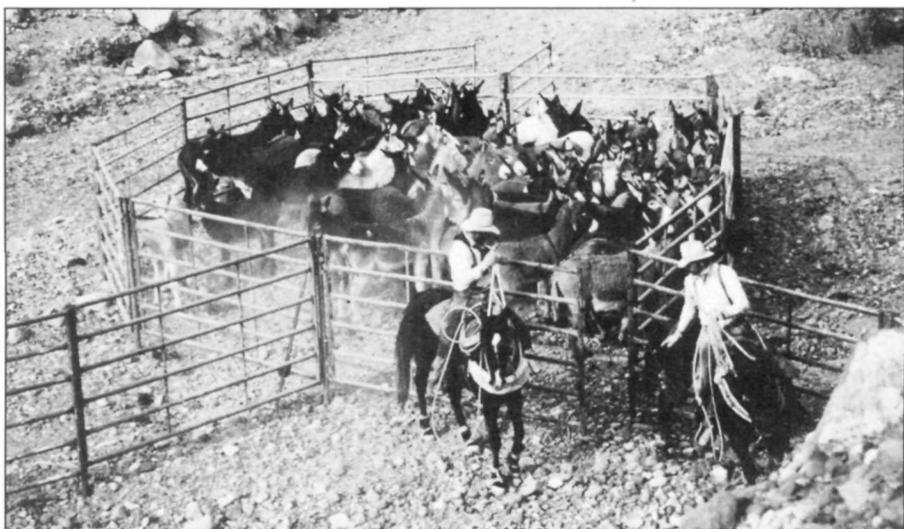
Death Valley National Monument is overrun by burros—an estimated 4,000 to 6,000 animals—but the National Park Service (NPS) is well on its way to removing them. At the end of the first season of a three-year plan, the NPS rounded up more than 2,000 burros, which consume and trample desert shrubs and push out native wildlife.

Once the burros have been rounded up, however, the NPS is stuck with the problem of what to do with them. The NPS had considered destroying the burros, which have no natural enemies, are not native species, and breed unchecked; but animal protection groups insisted that they would conduct an adoption program.



National Park Service/Rick McIntyre

The National Park Service was busy all spring rounding up more than 2,000 burros in Death Valley National Monument. These exotic animals, which push out native bighorns, were held in corrals until they could be adopted. Unfortunately, the animal groups who pledged their help lacked commitment.



National Park Service/Rick McIntyre

The program hasn't quite worked out as planned. After rounding up the burros with helicopters, then loading them into trucks, the NPS brought the animals back to a central corral. Under the arrangement, the NPS would provide feed for a week and the protection groups would care for the burros after that.

For the most part, the animal protection groups did not pick up the burros after the one-week holding period and also did not provide additional feed.

"These groups have not met their commitments," said Dick Rayner, chief ranger at Death Valley.

In addition, the NPS has had to help with the adoption program. And Rayner said, "We feel we've saturated the market for burros in southern California. If we had to go to auction in, say, Tennessee, my gosh, how much would that cost?"

Costs do worry the NPS. The agency had budgeted \$325,000 per year for the burro removal program. In just the first year they had to spend an additional \$70,000 to \$80,000 on extra feed and the adoption program. If the NPS is to round up the more than 2,000 burros left on Death Valley ranges and put them up for adoption rather than acquiesce to offers from packing plants, the animal protection groups will have to guarantee stronger commitments to the program.

Appalachian Trail Route Challenged

The Appalachian Trail has hit a snag in Cumberland County, Pennsylvania. Four local townships and a local citizen's group, Citizens Against the New Trail (CANT), oppose any change in the present sixteen-mile route as it crosses the Great Cumberland Valley between Carlisle and Harrisburg.

This section of the trail is the longest remaining route that follows a paved highway. The National Park Service (NPS) has identified two alternative routes that would wind through a variety of natural, scenic areas, rather than follow the paved highway, as town officials have proposed.

The Cumberland Valley in this area is losing its pastoral quality as suburban development rapidly swallows up farmland. The 1978 amendments to the National Trails System Act were designed to assure permanent protection for trails, such as the Appalachian, by providing a permanent buffer zone to development and by assuring a continuous footpath through the most desirable locations.

After six years of discussions, the two alternatives to the current route have emerged. One of the proposed routes would follow an abandoned railroad bed for seven miles, then move to side roads until it reaches Conodoquinet Creek, which the trail would follow to Blue Mountain.

The other alternative would follow Stony Ridge, a low wooded rise that runs in an almost uninterrupted straight line to Blue Mountain. Of the two alternatives, Stony Ridge offers the more scenic and the more direct route.

A consideration in choosing the Conodoquinet Creek route is that the abandoned railroad bed is currently the subject of a lawsuit by adjacent landholders, who are claiming that the right-of-way has reverted to them. This route also follows a stream culvert under Interstate 81, which could pose a potential safety problem.

CANT and township officials are concerned that if one of the alternatives is selected, the NPS would claim a 1,000-foot-wide right-of-way through backyards and other private lands. The NPS continues to assure landowners that alternatives, such as scenic easements, would avoid that problem.

Ironically, the present route and the proposed sidewalk undoubtedly would affect the greatest number of private landowners.

Since last October, the NPS has been weighing public concern and environmental impacts; and the agency is expected to issue an environmental assessment this summer. The report will be the key to creating this last link of natural and culturally significant lands along the Appalachian Trail.

—K.C.

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William B. Jewell Wins NPCA's First Mather Prize

At its Board of Trustees meeting May 11 in New Orleans, NPCA announced the winner of its first Stephen T. Mather Award. The award, plus a \$1,000 cash prize, was presented to William B. Jewell for his unstinting work in behalf of Big Thicket National Preserve in Texas.

Chosen from among eight regional finalists, Jewell is the person who best represents NPCA's stated ideal for the recipient of the award: "In the spirit of Stephen T. Mather, the first Director of the National Park Service, this award seeks to encourage those who take direct action where others hesitate, and to recognize the stalwart defenders of America's natural heritage who put principles before personal gain."

In its nomination, the Big Thicket Conservation Association pointed out how complicated land acquisition in the preserve is and commended Jewell for carrying out a difficult job "with consummate diplomacy, efficiency, and dispatch."

Jewell is the Army Corps of Engineers project director for land acquisition in Big Thicket. As such, he works closely with the National Park Service. Since the mid-1970s he has personally saved thousands of acres for the preserve by contacting and working with landowners—often absent landowners who were difficult to track down.

Joseph Sax, author of *Mountains Without Handrails* and environmental law professor at the University of Michigan, selected the award winner from among the finalists.

Jewell works to protect the Big Thicket National Preserve (below) in Texas.



National Park Service



Steven Kell

NPCA Chairman Stephen McPherson (right) presents award named after his grandfather to William Jewell.

Sax said of Jewell: "I am persuaded that Mr. Jewell deserves special recognition for his demonstration of initiative and resourcefulness in the steps he took to obtain authorization for land acquisition in the Big Thicket Preserve 'just in time,' and for his willingness to subordinate personal advancement to a commitment to getting the job done."

A number of organizations helped NPCA by choosing the regional finalists. Jewell was selected as regional finalist of the Southwest Region by the Texas Committee on Natural Resources. The other finalists and the respective panels include Jerry Davis, Tonto National Forest wildlife biologist, Western Region (California Trout, Inc.); Ruth Louise Hine, science writer for the Wisconsin Department of Natural Resources, Midwest Region (the Indiana Division of the Izaak Walton League); Helen Carner Fenske, assistant commissioner for natural resources in the New Jersey Department of Environmental Protection, North Atlantic Region (the Massachusetts Audubon Society); and Paul Frandsen, supervisor at Discovery Park, Pacific Northwest Region (the Mountaineers).

Also among the finalists are Gregory Munther, Lolo National Forest fisheries biologist, Rocky Mountain Region (Colorado Open Space Council); Everglades Superintendent Jack Morehead, Southeast Region (the Alabama Conservancy); and Ralph Abele, executive director of the Pennsylvania Fish Commission, Mid-Atlantic Region (the Maryland Wildlife Federation).

Acid Rain Costs Millions In Visibility Alone

Visibility degradation, acid damage to historic structures, harm to aquatic and terrestrial environments, health risks—all result from the same culprits: sulfur dioxide and sulfate pollutants in the air.

In May 1983, when Environmental Protection Agency (EPA) Administrator William Ruckelshaus was sworn in, President Reagan told him, "I would like you . . . to meet the acid rain issue head on." A few months ago, Ruckelshaus presented to the Cabinet council a very modest proposal to control acid rain; but he was rebuffed. The Reagan Administration remains entrenched against supporting an acid rain control program.

Background studies conducted by the EPA for its proposal recently have been made available. One analysis of a three-million-ton reduction program shows an estimated benefit of *\$640 million to \$2.81 billion*. (All programs that Congress has considered seriously have ranged from reductions of eight-million to twelve-million tons.)

The study did not look at any benefits to aquatic or terrestrial resources. It analyzed only four areas: visibility, recreational fishing, health, and structural materials.

The visibility analysis relied on a survey of approximately 2,600 people in six eastern cities. Each person was asked to put a dollar value on the following: a decrease in visibility of five miles, an increase of ten miles, and an increase of twenty miles in their resident area and throughout the East.

Extrapolating the benefits over a ten-state region—including New England, New York, Pennsylvania, West Virginia, and Ohio—the estimated benefits range from \$160 million to \$1.3 billion for visibility improvements alone.

The report states: "In contrast to aquatic and forest resources, the damage to [structural] materials from SO₂ and sulfates is much more extensive and is occurring now.

"The study examined maintenance and replacement costs. On the

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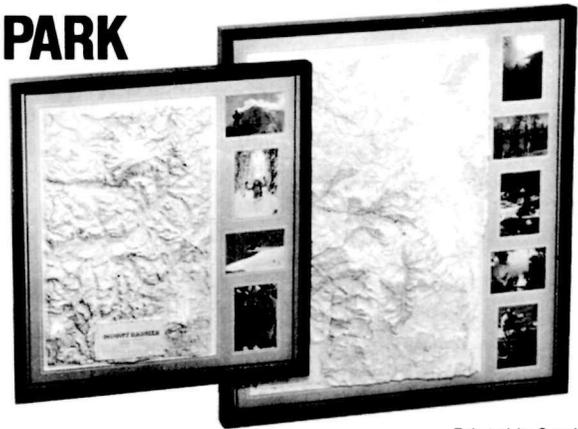
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Ronald A. Foresta

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basis of case studies in the city of Boston and the state of Massachusetts, it was found that the damage to historic buildings is \$5 million and to outdoor statuary \$600,000 annually in Massachusetts."

Clearly, acid rain is costing us money—in addition to damaging our resources.

NPCA to Honor NPS Cultural Resource Managers

By far, historical and archeological sites make up the greatest number of park areas in the National Park System. In recognition of the effort it takes to create outstanding cultural resource programs, NPCA and the National Park Service have announced an honorary award—the Utley-Holland Award—for senior staff and park managers of the NPS.

Each winner's name will be inscribed on a plaque to be permanently displayed at the Department of the Interior. The award was named for Robert Utley and Ross Holland, who raised the level of cultural resource management.

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After serving first as a seasonal historian at Custer Battlefield and then as southwest regional historian, Utley became chief historian of the NPS in 1965. Seven years later he organized the Office of Archeology and Historic Preservation at the top levels of the NPS.

Utley is also the distinguished author of historical books, such as *Last Days of the Sioux Nation*. Although now retired, he continues his NPS service through the National Parks Advisory Council.

Ross Holland entered the NPS in 1950 as an interpreter at Shiloh Battlefield. He worked as park historian at a number of park areas and, when Utley established the NPS history division, Holland was assigned to it as a specialist in colonial history.

In 1974, Holland became associate director of the North Atlantic Region and was instrumental in establishing that cultural resource program. Four years later he succeeded Utley as head of NPS cultural resources and, under Holland's guidance, the *Cultural Resource Management Newsletter* was established.

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By presenting this award, NPCA makes clear its concern for continuing high levels of cultural resource management. Send contributions to help fund administration of this award to the Utley-Holland Award, c/o NPCA, 1701 18th St. NW, Washington, D.C. 20009.

Harbor Tours to Celebrate Upcoming Coastweek '84

Coastweek '84 will be celebrated this year from October 7-14 nationwide with activities that foster public awareness and appreciation of our coasts and shores. The success of this celebration relies on the imagination and energy of local citizens and groups to sponsor activities that will promote greater recognition of the part coastal lands and waters play in maintaining a balanced environment.

These activities can include harbor tours, contests, nature walks, exhibits, and the like. For further information, contact Barbara Fegan, Coastweek '84, Box 545, South Wellfleet, Massachusetts 02663.

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The Latest Word

LAFITTE WETLANDS AT STAKE IN ARMY CORPS DECISION

Hurricanes
regularly
rearrange the

southern Louisiana coast and the Army Corps of Engineers has come up with a plan to protect an area that includes Jean Lafitte National Historical Park. The various alternatives in the Corps' plan all include construction of a levee in Jefferson Parish to protect against flooding in the communities just south of New Orleans.

NPCA agrees that flood protection is required, but disagrees with Alternative D, which the Corps and Jefferson Parish have endorsed. That proposal would "reduce tidal exchange between wetlands on the protected and flood sides of the levee in [the park protection zone] by about 82 percent," according to the draft environmental impact statement.

Not only would this drastic change in drainage patterns affect water quality and wildlife habitats in the park's wetlands, but Alternative D also may encourage developers to drain approximately 2,223 acres near the park for urban construction projects.

In addition, local conservationists have pointed out that Alternative D would be quite costly, compared with other protection measures. NPCA believes flood protection can be obtained by adopting the alternative that makes use of existing levees. This choice would be less costly, would guarantee comparable flood protections, and would not decimate any more of our fast-disappearing wetlands.

COURT GIVES MINE COMPANY ACCESS TO SAGUARO PARK ROAD

Consolidated
Mining and
Milling,

Limited, owns a gold mine directly adjacent to Saguaro National Monument in Arizona, and the company wants to use a park jeep road to gain access to their mine. For environmental reasons, the park is not readily willing to allow access. The courts are now in the process of settling this controversy.

The problem heated up in May when private landowners locked a gate across the

road that the mining company had been using for the past several years. Although Consolidated has an easement for the private mining road, on May 23 a court-approved interim agreement allowed the company limited access through Saguaro National Monument. According to this agreement, Consolidated cannot haul mineral concentrates over the park jeep road, but it can make twenty-one caretaker trips per week across parkland.

The NPS is also upset because mine trucks have disturbed thirty to fifty feet of parkland maneuvering in and out of the Old Yuma Mine.

The court will address the access problems this summer, but Russ Butcher, NPCA Southwest/California representative, says a more permanent solution is necessary: "If you don't like the mine there, the only solution is to buy them out--either through congressional appropriations or with private money."

DEVELOPERS WANT 82 ACRES CUT FROM ROOSEVELT PARK

A move is afoot
to delete
eighty-two

acres from Theodore Roosevelt National Park in order to lengthen and resituate the Medora, North Dakota, airstrip. Proponents of the project include North Dakota Senator Mark Andrews and local developers involved in the tourist trade.

Supporters of the plan assert that an improved airstrip is necessary for emergency aircraft use and for safer takeoffs and landings. Senator Andrews, speaking at a Senate subcommittee hearing on this issue said that the eighty-two acres are a "wasteland" and that "nobody is using it now." In fact, the park visitor center, park headquarters, and the beginning of the park's only tour road are in the immediate vicinity.

Park Superintendent Harvey Wickware said there is considerable public sentiment against this proposed parkland takeover. Wickware also mentioned that he did not know of a single air evacuation from the Medora area and that a better location for the airstrip exists seven miles east of the town.

NPCA Vice President T. Destry Jarvis said, "We are opposed to this dangerous precedent because it unnecessarily allows

public parkland to be used for purely private benefit. The improved grass airstrip will invite more commercial use, and eventually there will be plans to pave it.

"Furthermore, many national parks already face significant overflight problems. Theodore Roosevelt National Park should be spared this fate."

--Louis Weinberg, NPCA intern

NPCA TO TAKE LEGAL ACTION
AGAINST RIFLE CLUB LAWSUIT

NPCA will
intervene
on behalf

of the National Park Service (NPS) in the lawsuit brought by the National Rifle Association (NRA). On April 30, the NRA filed suit to prevent the NPS from banning trapping at eleven park units where trapping has been occurring, even though it is not legally allowed.

The suit poses a danger to wildlife in more than these eleven parks, however. If successful, the suit could allow hunting--as well as trapping--in approximately 80 percent of the 334 National Park System units, including Grand Canyon, Everglades, Zion, and other popular parks.

The suit could also affect visitor access and safety. To protect visitors, the NPS would have to close sections of parks where hunting activities were occurring. The rights of many would be sacrificed to the desires of a few. --Kimber Craine

AIRPORT BOARD WANTS EXTENSION
FOR RUNWAY IN GRAND TETONS

The Jackson Hole
Airport

Board recently released a noise abatement study, which was required by the new thirty-year lease signed last year. Environmental Protection Agency (EPA) officials and NPCA fear that the study is being used to justify the building of a runway extension for the airport, which lies wholly within Grand Teton National Park.

The study contends that an extension would allow larger but quieter jets to land at the airport and could reduce the number of takeoffs and departures. EPA officials point out, however, that noisier jets could also use the runway, and the extension could encourage even more flight traffic.

Besides the potential noise increase, an extended runway would further entrench the

airport in the park. In his comments on the noise abatement study, regional EPA official John Welles said the airport "is a land use not compatible with a national park."
--K.C.

UPPER DELAWARE RESIDENTS
PRESS FOR DEAUTHORIZATION

Upper Delaware
Scenic and
Recreational

River has been the scene of heated arguments in recent weeks. Because of inflammatory statements against the National Park Service, local residents believe the NPS is going to take over their land.

Although the NPS plans to purchase less than 300 acres of the park's 69,000 acres, citizen groups in two of the adjacent fifteen townships have passed resolutions to deauthorize the park. There is pressure in three other of the townships for similar resolutions.

HOUSE APPROVES PURCHASE
OF WOMEN'S RIGHTS HOUSE

The bill that
would allow the
National Park

Service to purchase McClintock House in Women's Rights National Historical Park passed the House in May. The proposal awaits markup by the Senate Subcommittee on Public Lands and Reserved Water.

McClintock House, now owned by the Waterloo Baptist Church, was where the Declaration of Sentiments was written in 1848. This document proclaimed the goals of the women's suffrage movement. The park also plans to restore Wesleyan Chapel, site of the first women's rights convention and now a laundromat.

The park is honoring Representative Frank Horton (R-N.Y.) and Senator Daniel Patrick Moynihan (D-N.Y.) for sponsoring this legislation and for obtaining the necessary funding for park acquisitions.

COURT ORDERS CAPE COD
TO REEVALUATE ORV USE

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ordered Cape
Cod National

Seashore to reconsider its off-road vehicle policies and reduce conflicts with other users of the seashore. NPCA believes ORVs should be banned because of these serious conflicts. If you agree, send your comments--by July 20--to Superintendent Olsen, Cape Cod National Seashore, South Wellfleet, Massachusetts 02663.

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