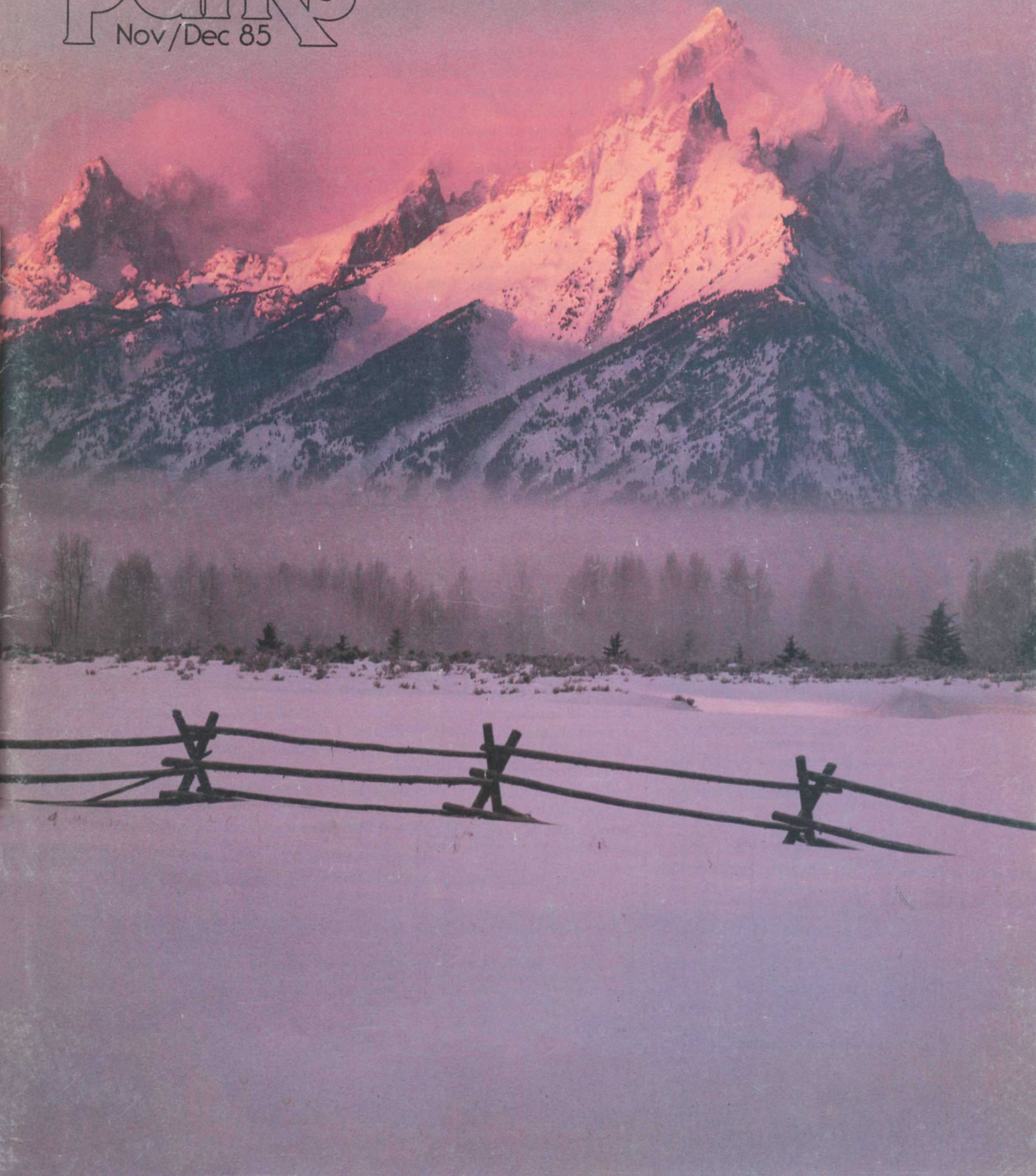


National
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Nov/Dec 85





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Commentary

Considering the Off-Season

A bison stood motionless in the middle of a wintery road in Yellowstone National Park. The road had been plowed to accommodate more tourist travel during the winter season in Yellowstone. With snow melting from his shaggy coat, the bison seemed almost out of place between the four-foot-high banks on either side of the cleared road.

This sight presented an interesting paradox. Traditionally, the "off-seasons" have provided periods of rest and restoration for park animals. Until recently, they have had part of the year to themselves. But increasing numbers of national park visitors have caused policymakers to look for new ways of providing for the demands and interests of the public.

At the same time, the growing popularity of snow-based recreation has caused the winter off-season to become more and more attractive to park visitors. Now the demands for winter facilities are intruding on the season that wildlife had to themselves.

The solution to off-season management should always depend on the wildlife and other resources that the parks were set aside to protect. Park managers must decide if a particular park can tolerate greater human presence; and, if so, where and to what extent. As we plan for our national parks, we must realize that the solution for one park is not necessarily a solution for another. This is the only way that both wildlife and the human community can benefit.

Seeing the national parks with their wintry mantles is an unforgettable experience. We must remember, however, that we are placing demands on a natural and cultural system that must be considered first.

Helping plan for these new recreational inroads is the responsibility of the newly established President's Commission on Americans Outdoors. Governor Lamar Alexander of Tennessee will take on the challenge of heading the commission to look at what recreational possibilities and what protections we will need in the next decades. We believe that this commission must face the following critical issues:

- expansion of national, state, and local park systems;
- equitable and cost-effective fee systems;
- establishment of carrying capacities to protect park resources;
- changes in federal tax policy to allow greater preservation of land;
- stable funding sources such as a trust fund for conservation programs;
- improvements to and expansions of the programs established by the first Outdoor Recreation Resources Review Commission.

The President's Commission on Americans Outdoors will begin holding public hearings around the country. It is imperative that citizens speak up for programs that would protect the bison caught in an expanding spiral of winter use, as well as the rest of our natural and cultural resources.

The magazine of the National Parks and Conservation Association

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The Tetons and other, smaller mountain ranges hem in
the valley called Jackson Hole.

Established in 1919, the National Parks and 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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Snow Surveyors, page 24

Editor's Note: The days are shorter and there is a bite to the morning air. Those of us who love snow are full of anticipation. We think about holidays and skiing. Few people ever say, "Hey, it's winter. Let's go to Alaska."

People always think of Alaska in the extreme: a summer day that lasts all night long, cold that can bottom out the best thermometer, more land than you can imagine.

On the fifth anniversary of the Alaska Lands Act (ANILCA), it is fitting to remind ourselves that a century ago, frontiersmen thought the bounty of land in the West was endless. Now, there's hardly a 14,000-foot peak in the Rockies that doesn't have old mining timbers, rusted cables, and other signs of human industry strewn across its slopes.

ANILCA—and the struggles surrounding its creation—reminds us that we cannot take Alaska's endless bounty for granted.

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Seeing Red

The wonderful July/August issue sings the praises of Canada's national parks, and editorializes about the "Right Stuff." But do you have to improve Banff National Park with the wrong flowers?

The popular geranium may add brilliance to a dull, city windowsill, but smuggled into Canada's "rough wilderness" it makes this botanist's eyes see red. Photographer Ed Cooper is a nature faker. For shame, for shame.

*Hugh Illtis
Madison, Wisconsin*

Ed Cooper replies:

I shoot them as I see 'em. The errant flowers were indeed there, and I had

nothing to do with their placement. If Mr. Illtis is seeing red, that proves he has good eyesight. The flowers looked red to me, too. He may want to contact the Banff National Park administration. The area in the photograph is not more than 100 yards from the administration building in Banff, and is, I assume, maintained by them.

The Sunshine State

As a member of NPCA, I was pleased to read Paul Pritchard's Commentary column in the July/August issue. The Grayton Dunes story is worthy of mention, and I concede that it was the personal intervention of [Florida] Governor Bob Graham that brought about the state's purchase. It should also be mentioned that this battle has been going on for some 20 years. Thanks to local residents, developers were held at bay.

*Graham Harrison
Bethesda, Maryland*

When I became a member of NPCA, I had no idea you people put out such an outstanding magazine. I ap-

preciate the high level of journalism you feature in *National Parks*.

Governor Bob Graham's article on the future of the Florida Everglades prompted me to write to him. I hope others will get involved in this monumental effort to save the Everglades, and especially the rare and critically endangered Florida panther.

*Kenneth Elk
Paget, Bermuda*

Yellowstone in Balance

Three cheers for Bob Barbee and William Mott for their stand on protecting the Greater Yellowstone ecosystem rather than only lands within park boundaries [Sept./Oct. 1985 NPCA Report].

Also, the idea of reintroducing wolves to Yellowstone for better ecosystem balance needs to be applauded. We need more administrators and politicians who are dedicated to conserving what our national parks were originally established to preserve.

*David Easterla,
Maryville, Missouri*

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Site Adjacent to Canyonlands Park Reconsidered for Nuclear Waste Dump

Earlier this year, many breathed a sigh of relief that Davis Canyon—next to Canyonlands National Park—was not chosen as one of the Department of Energy's top three sites for a high-level nuclear waste dump. Conservationists close to the issue warned that Canyonlands was by no means safe; and those predictions are proving true.

DOE is now changing the procedures for ranking potential dump sites. If DOE gives more weight to geohydrology, geochemistry, and rock characteristics, Canyonlands could move up from an alternate site to one of the three sites chosen for further testing.

If Davis Canyon were reranked and chosen for further testing, 47 deep boreholes would be drilled adjacent to park boundaries; some test holes may even be dug within the park; and two large shafts—each 3,000 feet deep and about 25 feet wide—would be blasted out of the Utah desert. In addition, roads, truck traffic, support staff, and a square-mile complex of buildings and equipment would take over the test site.

Utah Governor Norm Bangerter and former Governor Scott Matheson, NPCA, and numerous other conserva-

tion groups question DOE's ranking methods and accuse the agency of insufficient research for such an important decision. Conservationists also fault DOE for not allowing public comments on its first—or second—ranking methods.

Cascade Dam In Yosemite Shut Permanently

On August 25, the Cascade hydroelectric dam within Yosemite National Park was shut down because of the Merced River's low water levels. At the September 14 annual meeting of the Yosemite Natural History Association, NPS Director William Penn Mott announced that the dam would stay closed. That section of the Merced River will be allowed to run freely.

Further, the National Park Service is planning to remove the dam structure, which was built in 1917, before congressional approval for such projects was required. The dam originally was scheduled for an \$11-million upgrade; but the NPS decided the upgrade was neither cost effective nor ecologically desirable.

Thus, when Regional Director Howard Chapman recommended the shutdown to Mott,

Mott agreed. The NPS says that the next step—removal of the dam—will require an environmental assessment before work is allowed to begin.

NPCA Donates Land in Alaska To National Park

On August 31, NPCA gave the National Park Service a piece of wilderness property as an addition to Gates of the Arctic National Park in Alaska. This is the National Park Trust's first title transfer to the NPS, and the property is significant in several respects.

The five-acre parcel is one of the very few inholdings that lies at the headwaters of the Wild and Scenic Alatna River. Thus, the donation will help preserve the pristine quality of the river. The area is designated wilderness; and now that the Northern Alaska Environmental Center has assisted NPCA by removing a hunting cabin from the parcel, the land has been restored to its natural condition.

EPA Maps Confirm Danger to West From Acid Rain

Confirming what environmentalists have long believed, recently released Environmental Protection Agency maps show that lakes and streams of the West

are highly susceptible to acid rain damage. At a Clean Air Fund press conference on the new findings, Susan Buffone, NPCA's park threats coordinator and vice chair of the National Clean Air Fund, said the maps make clear that there is "an acid rain crisis" in the making.

The EPA published a similar national mapping project in 1982, but the new maps are more detailed and are the result of much more data. The maps show the degree to which localized areas throughout the country can buffer—or neutralize—the corrosive Ph content of acid rain.

High-altitude areas, where the soil is thin and the slopes steep, are more vulnerable to acid damage than areas with less extreme topography and greater amounts of topsoil. Mountains that contain limestone, however, are better able to buffer acid rain because of the limestone's basic Ph.

The new maps show that many of the granitic mountain areas of the West have little buffering capability. Thus, lakes and streams of Rocky Mountain, Yosemite, Mount Rainier, Grand Teton, and many other of our national parks—plus other wild and magnificent lands, such as Montana's Gallatin Range and the Northwest's Cascades—are all

in danger of acidifying and dying.

Already, more than 200 high-altitude lakes in upstate New York have become acidified. The EPA maps show that acidification is just as much a threat in the West.

"As acids from pollution eat further into our landscape," said NPCA's Buffone, "we may see the deaths of many more jewel-like mountain lakes and fewer and fewer fish in our mountain streams."

Saving Grizzly Is Subject Of Conference

NPCA joined numerous other conservation groups and federal and state agencies in Montana to discuss the fate of the threatened grizzly bear at the Great Bear Foundation annual meeting.

Conferees agreed that one of the major problems was the rapid encroachment of development into grizzly habitat. Although reports of grizzlies attacking humans are sensational and frightening, naturalists point out that whenever human habitat overlaps grizzly habitat, it is the grizzly who must inevitably retreat.

Grizzlies, however, range widely and, because an adult eats between 60 and 80 pounds of food a day, each bear requires a

large territory for foraging. This territory is being whittled away in the Lower 48, especially in the Yellowstone ecosystem.

Conferees discussed the need to remove Fishing Bridge Campground in Yellowstone National Park. They also talked about ways to better protect the entire ecosystem.

Steve Whitney, NPCA's natural resources coordinator, pointed out that the grizzly situation was a prime example of the need for cooperation among federal agencies. The National Park Service, the Bureau of Land Management, and the Forest Service, he said, could coordinate efforts in order to protect critical national park resources.

Park Scientists Look at Issues In Capital Region

The National Capital Region held its first natural science conference this autumn at Catoctin Mountain Park, Maryland. T. Destry Jarvis, NPCA vice president for conservation policy, was a featured speaker and he expressed NPCA's concern for the NPS science program as a whole.

Jarvis pointed out that the National Park System Plan, which NPCA is organizing, will make proposals that could help im-

prove science research in the parks.

Conferees discussed a number of scientific issues that concern the National Capital Region, including:

- the exotic hydrilla plants in the Potomac River;
 - control of wisteria and kudzu plants throughout the region;
 - the decline of song birds in Rock Creek Park, and;
 - gypsy moth research;
 - protection of rare and endangered plants.
- For instance, only 1,500 individual plants of a particular species of begonia exist in the United States. Some of these plants, which have orchidlike blooms, are in Prince William Forest Park, Virginia.

Park Interpreters Set System Goals At NPS Workshop

During mid-September, park interpreters from all levels of the National Park Service and all parts of the country met at Santa Monica Mountains National Recreation Area to discuss future directions. NPS Director William Penn Mott addressed the meeting. NPCA's interests were represented by staff member Jean McKendry.

The interpreters set priorities under six main categories: new directions, training, marketing, fee versus non-fee interpretation, celebrations, and the

Harpers Ferry Center, which is the national center for all NPS interpretive activities.

Among NPS goals are the need to develop a program to train volunteer interpreters; more formal training for staff; and an increase in budget and staffing.

Battlefield Road Requires Decision By Director Mott

As of this writing, the decision to enlarge the highway that runs through Chickamauga/Chattanooga National Military Park rests with NPS Director Mott. NPCA supports the alternative to create a bypass highway around the park.

Teddy Roosevelt Scales Back Plan For Radio Towers

Originally, managers at Theodore Roosevelt National Park wanted to erect three 180-foot communications towers. The park says that plan "has been changed to reflect the public comments received regarding aesthetic and archeological effects."

The park still plans to replace an existing tower at the south unit with one that is 180 feet; but it will be sited in a less visible place. The other two towers will be 45-foot and 30-foot high.

Rustic Lodgings In a Grand Style

The Elegant Architecture Of Early Park Hotels



In the early 1900s, while most American builders were pushing the limits of Victorian splendor, a new kind of architecture was being created in the parks. The National Park Service commissioned young, innovative architects to create grand lodges that would attract visitors to the new park system. These new designs set a style and a standard that influenced the direction of American architecture.

Those early lodges were rustic, romantic, and eclectic—some tracing their roots to Japanese castles and medieval fortresses. NPS Director Stephen T. Mather had decreed that all construction be “devoted always to the harmonizing of improvements with the landscape.” The architects’ use of native materials and sensitive and sophisticated siting prefigured the work of Frank Lloyd Wright and other modernists.

Built during a period of easy wealth, these lodges could not be duplicated today. We would not cut down 800-year-old trees to use as pillars for the lounge of the Glacier Park Lodge, nor could we afford the art found in most of them. But we can enjoy them—if we make our reservations far enough in advance. —*Judith Freeman*

OLD FAITHFUL INN
TWA Services, Inc., Yellowstone
National Park, WY 82120;
(307) 344-7311

This inn is really an immense rambling log cabin finished with twisted tree limbs as rafters, hand-wrought ironwork, rough-sawn board walls, an 85-foot-high lobby, and very simple sleeping rooms. Interior balcony railings are made of unpeeled tree branches, and the massive fireplaces are of stone quarried in the park.

Built in 1903, Old Faithful Inn—the first park lodge constructed of only native materials—defined the word “rustic” for the rest of the lodges. An eccentric old structure, full of surprising, small variations in details, such as the shape of window panes or the patterns of the shingles, Old Faithful has been called a “choreographic recollection of the Yellowstone landscape.”

EL TOVAR
Grand Canyon National Park
Lodges, P.O. Box 699, Grand Canyon, AZ 86023; (602) 638-2401

The Santa Fe Railroad built El Tovar in 1905 as a luxury country club that would combine the best of a Swiss chateau and a Rhine castle. But the architect muted the colors to harmonize with the browns and greens of the Grand Canyon, and used Navajo rugs and art to decorate the log-and-stone interior.

The lodge perches on the edge of a 6,000-foot drop at the south rim of the Grand Canyon. Although now surrounded by other park buildings and constant visitor activity, El Tovar’s views are still spectacular. Six suites with private balconies are available for those who want to view the canyon in solitude.

FURNACE CREEK INN
Fred Harvey Company, Death Valley National Park, Death Valley, CA 92328; (619) 786-2345

This first-class resort is not a concession and, therefore, does not fall under NPS rules. Furnace Creek Inn does offer a 90° F spring-fed swimming pool, lush gardens, tennis courts, and an 18-hole golf course.

Built by Pacific Coast Borax Company in 1927 for the then-handsome price of \$30,000, it was a watering hole for the affluent that offered dignified service in a jewel of adobe architecture. Beautifully crafted with handmade bricks and fixtures, such as hinges and lights, it stands in intriguing contrast to the desolation of its setting.



National Park Service

The Ahwahnee was built because Lady Astor could not find a satisfactory place to stay in Yosemite. Stephen T. Mather agreed that Yosemite needed a luxury hotel, and the Ahwahnee was built. It has remained a model of quiet gentility set in natural splendor. With its great stone piers and wooden walls and beams, the Ahwahnee is a cross between a

European medieval fortress and a pueblo. The Great Lounge is noted for its sophisticated use of Native American motifs, art, and elegant stained-glass windows. Sugarpine beams intersect 30 feet above you in the dining hall. Contact: Yosemite Park and Curry Company, Yosemite National Park, CA 95389; (209) 372-1445.

JENNY LAKE LODGE
Grand Teton Lodge Company
 P.O. Box 250 Moran, WY 83013;
 (307) 543-2811

Jenny Lake Lodge does not offer a grand building, but it does offer a grander and slower pace. The lodge itself is a compound of comfortable, simple log cabins, in which there are no newspapers, telephones, radios, or televisions. There is a public phone at the main lodge, for those who must stay in touch.

Bicycles and saddle horses are free to guests, and the award-winning restaurant offers views of the Grand Tetons as well as elaborate seven-course dinners, where the salad properly follows the entree and is followed, in turn, by the dessert and the cheese.

MANY GLACIER HOTEL
Glacier National Park, Inc.,
 East Glacier, MT 59434;
 (406) 226-4841

Many Glacier Hotel was built by railroad magnate Louis Hill as the "Showplace of the Rockies." The lodge nestles into a 900-foot curve of Swiftcurrent Lake. Built as a Swiss chalet, even the exterior trim is handcarved from native wood. The lobby, with its skylights and exposed beams, rises a full four stories above you.

Many Glacier Hotel is only one of a number of wonderful lodges in Glacier National Park; and you can visit them in the old, grand style. The park maintains a fleet of elegant, oversized 1936 cars, called "Reds," that takes visitors on a tour of the lodges in Glacier and its sister park in Canada, Waterton.

PARADISE INN
Mount Rainier Hospitality Service
 Star Route, Ashford, WA 98304;
 (202) 475-6260

Paradise Inn is not elegant, but charmingly rustic. Built in 1915, the enormous cedar logs used throughout the inn were salvaged from the remains of a forest fire on Mount Rainier in 1885. Most of the interior was built by a German carpenter who spent the winter of 1915 at the unfinished inn by himself, setting the huge hand-hewn logs in the lobby, building furniture, and a handmade piano. Today, Paradise Inn is known for its dining room, and its surroundings. Beautifully situated between Mount Rainier and the Tatoosh Range, it attracts mountain-climbing parties and guests who come for only one night.

Portions excerpted from *Old Lodges and Hotels of Our National Parks*, by Bill McMillon, Icarus Press, 1983.

Yellowstone Unbound

A secure ecosystem will keep Yellowstone National Park from becoming a curious, unspoiled island

by Bob Anderson

The pace of Congress is exceedingly deliberate. Law-making proceeds slowly with much compromise and consideration. Throughout its history, however, Congress has taken farsighted actions that have changed the way we live and the way we view our country. Establishing Yellowstone National Park in 1872 was one of those provident decisions.

The Yellowstone legislation began one of America's finest traditions—protection of unique natural and cultural resources for the perpetual enjoyment of the American people. National Park Service Director William Penn Mott, Jr., has said that this enjoyment is essential to the health and productivity of the nation. Indeed, the national park concept has been adopted by more than 100 other countries.

Yellowstone, the first of our country's national parks, is part of a larger ecosystem that includes an integral weave of mountains, meadows, lakes, and rivers. And it is the Greater Yellowstone ecosystem—not only the park—that is a national, even international, treasure.

Here lies the world's major, undisturbed geothermal basin, with more than 300 geysers and 10,000 other thermal features, such as hot springs and mud pots. Greater Yellowstone provides habitat for the threatened grizzly bear and the endangered bald eagle and the peregrine falcon. The continent's largest herds of elk and bighorn sheep live

here. Its major trout streams—the Yellowstone, the Madison, and the Henrys Fork—are pristine and abundant with native fish.

Yet, the 1872 Congress knew little about Yellowstone when it first established the park's boundaries. Organized exploration had begun less than three years before. Little was known about the hydrology of the Yellowstone River and Old Faithful Geyser, the range and needs of

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grizzlies and elk, or the migration of cutthroat trout.

Congress knew even less about the interdependence of elements that form an ecosystem. The result was a rectangular national park—with boundaries drawn to satisfy political interests.

It is now time for Congress to take another farsighted action and find ways of preserving the entire ecosystem. Since 1872, people have logged forest lands surrounding Yellowstone and Grand Teton national

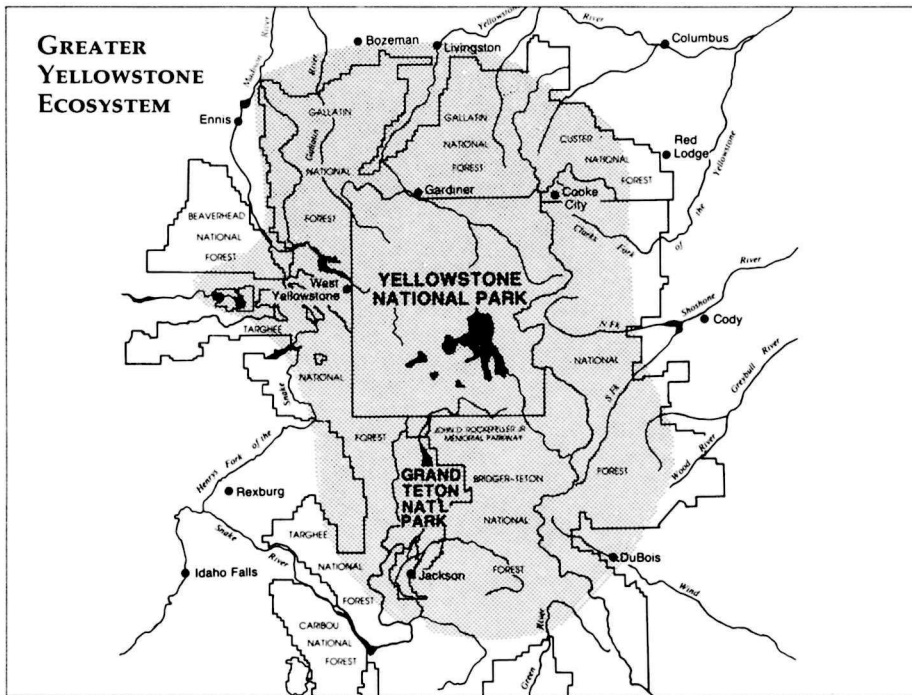
parks; suppressed fires that control undergrowth; eliminated predators such as the wolf; built towns and dams; dug mines; drilled wells; and grazed livestock. In addition, resorts and roads have been built that allow millions of people to enjoy Greater Yellowstone's scenic and recreational wonders.

Despite all of this activity, the ecosystem has clung to a semblance of healthiness. Greater Yellowstone remains the largest, essentially intact ecosystem in the world's temperate zones.

Right now, however, the ecosystem is at a turning point. To avoid irreversible decline because of cumulative adverse effects, a management system is needed that recognizes the interdependence of land, water, and wildlife.

A startling array of additional developments are being planned for the Yellowstone area—roads, mines, timber sales, dams, oil and gas drilling, geothermal drilling, and ski areas. In 1984, the Greater Yellowstone Coalition catalogued 88 of these threats. Each threat by itself could possibly be mitigated. Together these projects would be too much for the Greater Yellowstone ecosystem to tolerate.

The situation is made more complex because care of the Greater Yellowstone ecosystem is entrusted to nearly 30 separate political jurisdictions: two national parks (Yellowstone and Grand Teton); six national forests (Targhee, Beaverhead, Galla-



tin, Custer, Shoshone, and Bridger-Teton), which report to three different regional offices; two national wildlife refuges (Red Rock Lakes and the National Elk Refuge); three states (Idaho, Montana, and Wyoming); 13 counties; and the Bureau of Land Management. These agencies have different and sometimes conflicting objectives.

No agency has jurisdiction over the entire ecosystem. No legislation establishes long-term management goals. No plan holds the individual agencies accountable for the health of the ecosystem. No process adequately provides for the participation of citizens in the decision-making process.

A vision of how the Greater Yellowstone ecosystem should function would produce policies and decisions that account for the system as a whole and the role of its many parts. Over the long term, Greater Yellowstone could be managed to serve the human community, while maintaining the health and integrity of the ecosystem.

With the formation of the Greater Yellowstone Coalition, of which National Parks and Conservation Association is a member, conservationists have begun to advocate and practice the ecosystem concept.

The grizzly bear was the coalition's first important issue; and it continues to have a high priority. The threatened grizzly, a vital symbol of America's wild heritage, is an important element in the Greater Yellowstone food chain and an indicator of the overall health of the ecosystem.

The coalition, Audubon Society, and others have convinced the Montana legislature to provide Gallatin County with a \$70,000 matching grant to bearproof dumpsters in West Yellowstone. Bearproofing dumpsters in an area adjacent to the park parallels the park's efforts to reduce contact between humans and grizzlies.

The coalition also supports National Park Service efforts to remove camping facilities at Fishing Bridge. According to a memorandum of understanding, Fishing Bridge campgrounds were to have been dismantled when the Grant Village complex was built. One of the most diverse, productive areas in the ecosystem, Fishing Bridge provides the grizzly with forage, fishing streams, and excellent forest cover—making it prime grizzly habitat.

The Fishing Bridge issue will be one of many problems Congress will cover at oversight hearings on the

threats to and the management of the Greater Yellowstone ecosystem. The coalition urged Congress to hold the hearings; and, as of this writing, they are scheduled for mid-autumn.

This year, addressing the Forest Service's management plans for Greater Yellowstone's national forests is at the top of the coalition's agenda. So far, Forest Service plans fall short of a coordinated ecosystem approach.

The plans for Ski Yellowstone would actively degrade the ecosystem; and the coalition is fighting this proposal, which would introduce an enormous amount of human activity into grizzly habitat. If Ski Yellowstone is built, the NPS and the Forest Service would have to compensate by reducing the amount of recreation and human activity in other park and forest areas.

These specific problems point to the larger question: what should be done to ensure that the Greater Yellowstone ecosystem is protected forever?

Some people favor expanding the boundaries of Yellowstone National Park to include the entire ecosystem. Although it may sound fine in theory, the number of entrenched special interests make congressional passage of that proposal unlikely.

There are alternatives, however, such as cooperative management among the agencies involved in the ecosystem. Integrated management policies could protect Greater Yellowstone while continuing to accommodate use of the ecosystem's public lands. Whatever the solution, it is important to begin a serious national dialogue.

The challenge is on the doorstep of Congress. Greater Yellowstone can continue to provide the recreational and scenic benefits it has for the last century, enriching the lives of all Americans. Or, Yellowstone and Grand Teton national parks can become natural islands amidst a clutter of development, mere remnants of the magnificent Greater Yellowstone ecosystem.

Bob Anderson is executive director of the Greater Yellowstone Coalition and a water resources engineer.

WINTER PLAYGROUNDS

Visitors discover the off-season, putting new pressures on snowbelt parks

by Steven C. Whitney

Six of us were skiing across a silent, snow-covered meadow on public lands in northern Utah. Taken with the way the sunlight played on the snow, creating a field of crystals, I barely noticed the noise at first. But, as the snowmobiles approached, the sound became so intense we were unable to focus on anything else.

Finally, three machines rounded a corner and streaked into the meadow, their riders hidden beneath jumpsuits and smoked-glass helmets. They charged our party, swerving at the last moment and spraying us with snow. After about three such passes, the snowmobiles abruptly sped off into the trees, leaving us dazed in the restored winter silence.

Fortunately, such deliberate confrontations are rare. But, as winter activities become more and more popular, the snow-covered meadows and mountains of our national parks are becoming increasingly crowded. And the National Park Service is just beginning to take a close look at the range of potential management problems.

Park managers recognize that resources and visitor enjoyment suffer when too many people crowd the parks. One solution is to shift visitor use away from the peak summer season to the quieter winter months.

But the NPS is discovering the problems inherent in this solution.

Parks with snow-based activities, such as Mount Rainier, are already beginning to feel the pressures of winter use.

Early on a February morning we left Seattle with crosscountry skis lashed to the car, headed for Mount Rainier National Park and a place called Paradise. It was one of those incredibly crisp and clear—if infrequent—northwest winter days. The still, snow-laden evergreens along the park road framed magnificent views of Mount Rainier, and we expected Paradise to match its name.

As we rounded the final turn, we met an explosion of activity. Visitors were everywhere in the car-packed parking lot. Children zoomed down the slopes on saucers, toboggans, inner tubes—anything slick enough to slide. Nordic skiers snaked back and forth on the hillsides. Snowshoers clomped through the trees, trying to avoid the circus on the slopes. Photographers staked out plots of open space, focusing cameras on Mount Adams to the south. A small army of Boy Scouts was busy building a village of igloos.

Most of the throng at Paradise that day enjoyed themselves; but one must question whether the parks can or should try to be all things to all people. Is it necessary—or even appropriate—for our great natural parks to provide such a diversity of recreational activities? Or

should natural parks serve visitors as places for reflection and contemplation?

The park that is now about to face that challenge is Yellowstone, the first national park. Because winter recreation has become so popular at Yellowstone, the park is now drafting the National Park System's first comprehensive winter use plan.

In winter, Yellowstone is a study in contrasts: snow and steam, ice and hot geothermal pools. Less expected is the contrast between the imagined postcard-perfect scene of Yellowstone softened by snow and the reality of snowmobiles and snowcoaches chugging along park roads.

As more and more people discover winter in Yellowstone, visitors and their activities begin to compete with the natural environment and with each other. Limited park staff must provide year-round interpretive programs, law enforcement, and search and rescue services, in addition to spending more time protecting resources.

Steve Iobst, Yellowstone's management assistant for planning, has seen as many as 3,000 snowmobiles

Nearby views of Half Dome (right), a groomed track, and more than 50 miles of unplowed crosscountry ski routes make Yosemite's Glacier Point Trail the most popular in the park.



Photograph by Tim Messick, from Crosscountry Skiing in Yosemite

on the road to Old Faithful during a peak winter weekend. The use records of the past 20 years show a rapid increase in winter visitation. In the 1966–67 winter season, 5,218 visitors traveled over the snow to reach destinations in Yellowstone’s interior. Fifteen years later—during the 1981–82 winter season—the number of such visitors had increased to more than 46,000. At least 75 percent

of these visitors explored the park on snowmobiles and the balance traveled on concessioner snowcoaches, skis, or snowshoes.

In addition to all of the recreation going on inside Yellowstone, developers plan to build a four-season resort just outside park boundaries. Ski Yellowstone, sited on Forest Service and private land, would include complete downhill ski facilities, 600

residential units, overnight accommodations for almost 700 people, 195,000 square feet of commercial space, a marina, a golf course, and more.

All of this would lie in the heart of some of the best grizzly habitat in the Yellowstone ecosystem. Areas critical to the threatened Yellowstone grizzly would be lost and bear-human encounters would increase,

further jeopardizing the precarious population of Yellowstone grizzlies. The problem would be especially critical in late winter, when Ski Yellowstone would be in full swing and bears are just emerging from their dens. Endangered bald eagles and trumpeter swans—plus blue-ribbon trout waters—would also be affected.

Although Yellowstone does not have a downhill ski area within park boundaries, Lassen, Rocky Mountain, and various other national parks do. And it is questionable whether chair lifts, lift towers, and long lines of skiers are compatible with any of the purposes of a national park.

The Yellowstone Winter Use Plan will not address every problem facing every park; but it can serve as a model for other parks with winter use problems. A brief survey of some National Park System areas shows how widespread and diverse these winter use conflicts can be.

YOSEMITE

Visitors have been renting national park cabins and strolling through Yosemite Valley's dramatic winterscapes for years. It is only recently—with the growing popularity of crosscountry skiing—that winter visitors have begun making their way into farther reaches of the national park.

During the 1984–85 winter season, Yosemite staff counted nearly 40,000 nordic skiers as compared to only 4,000 during the 1971–72 season. As a result, demand for additional parking facilities; visitor services, such as rentals, repairs, and lessons; and machine-groomed ski trails has been on the rise. The issue of machine-groomed crosscountry ski trails has been a particularly sticky one at Yosemite.

The NPS and the Curry Company (the park's concessioner) have provided a groomed track from the parking lot of the Badger Pass downhill ski area up an unplowed road to Glacier Point. The 21-mile round trip leads to more than 50 miles of ungroomed trails, and to majestic vistas and secluded campsites.



Mike Maynard

Snowbelt parks such as Rocky Mountain are becoming busy both summer and winter as more visitors take up crosscountry skiing and snowshoeing, or come just to rollick in the snow. The NPS is working to phase out Ski Estes, a downhill ski area in the park whose runs cut broad swaths across mountainsides.

But the road to Glacier Point is surrounded by congressionally designated wilderness. In winter, when the road is unplowed and, thus, indistinguishable from surrounding lands, it becomes de facto wilderness. There has been some controversy over the decision to allow machine grooming of ski trails in an area that is essentially winter wilderness and therefore closed to mechanized vehicles.

In addition, grooming has served to concentrate visitors. At present, approximately 80 percent of crosscountry skiing in Yosemite occurs along the groomed Glacier Point trail.

The NPS is even considering the need to expand parking facilities at Badger Pass to accommodate crosscountry skiers. And there is talk of a permanent nordic skiing center for that area.

Some people fear all this activity may threaten park wildlife, which are already burdened by the demands of winter survival. Yosemite's resource management staff is currently evaluating the effect of increased nordic skiing on a population of great gray owls, which inhabit a series of small meadows along Glacier Point Road. The great gray owl is a state of California endangered species, and 50 percent of the state's entire population depends on national park habitat for survival.

OLYMPIC

The most popular winter activities at Olympic National Park are tobogganing, inner tubing, and general snow play at Hurricane Ridge, the only high country area currently accessible by automobile during the winter. The second most popular activity is crosscountry skiing, which



Laurance Aluppy

As bison watch, snowcoaches carrying park visitors with their skis ply the road that crosses Hayden Valley in Yellowstone National Park. The road to Mammoth generally is plowed; but to get to Old Faithful, visitors must ride concessioners' snowcoaches, or use other means of over-snow transportation.

has increased substantially in the past decade.

Although park policy does not encourage machine grooming of cross-country trails, the NPS currently grooms a snow-covered interpretive trail. To date the practice has not been controversial.

What has provoked controversy is a proposal to upgrade and reconstruct Olympic's Soleduck Road. Upgrading would give the National Park Service the option of plowing the road in winter, allowing automobile access to Soleduck Hot Springs. The hot springs area is rarely used in winter and opening it up to recreation may affect bear, elk, and other wildlife.

ACADIA

In 1971, annual visits to Acadia National Park, on the coast of Maine, numbered about 2.4 million. By

1983, the figures had almost doubled—to 4.2 million visits. Many of those visits were in winter.

Winter use in Acadia includes nordic skiing and snowshoeing along some 55 miles of trails. In addition, another 30 miles of unplowed roads have been designated for snowmobile use.

Acadia is now under pressure to open up the park during winter to all-terrain cycles (ATCs)—motorized tricycles with large, fat tires. The ATC lobby claims that their machines can negotiate snow as easily as snowmobiles and, therefore, National Park Service regulations should apply equally to both types of vehicles.

But snowmobiles are dependent on snow; ATCs are not. When snow cover is inadequate, snowmobilers stay home.

Unaffected by bare patches and

questionable conditions, ATCs can plow through mud and slush, causing soil erosion, loss of vegetation, and trail ruts. Because of potential resource destruction, Acadia managers have stood firm under pressure and have not allowed all-terrain cycles in the park.

VOYAGEURS

Voyageurs National Park offers a full range of winter activities, from nordic skiing to ice fishing. The big issue here is where to allow snowmobiling and which areas to reserve for nonmotorized recreation. Right now, the park's Kabetogama Peninsula and its scenic Chain of Lakes trail are at the center of this controversy.

Snowmobilers have access to the peninsula; but it is being considered for wilderness designation. Because of this issue, conservation organizations oppose snowmobiling on the Chain of Lakes route.

In 1980, the NPS said it would not take a position on the issue until the wilderness review was completed. The review came out in 1983; but no formal action was taken and the issue remains unresolved.

This autumn, Voyageurs began preparing a comprehensive, four-season trail plan to determine what trails are needed, where they should be located, and to what standards they should be built. The plan will address snowmobiles, and should result in an official position.

Another complex winter management problem involves the local resort community. Largely undeveloped, Voyageurs depends on the local community to provide the lion's share of accommodations and services for park visitors.

Although the park recognizes the importance of the local resort community and the interest these businesses have in promoting year-round use, the NPS also realizes that increased winter use will result in more user conflicts, demands on limited park staff, and increasing pressure on wildlife and habitats.

GRAND TETON

Grand Teton is the one national park in the Lower 48 that allows cross-



David Muench

This view of the Grand Tetons is near the Potholes, the only national park area where snowmobiles are allowed free range.

country, off-trail use of snow machines. The area where this relatively unregulated, motorized recreation takes place is called the Potholes.

In a 1972 wilderness proposal, the Potholes was described as having "... outstanding geological importance" and as being "... a crucial element of the scenic foreground of the Teton Range." The proposal also recommended that "... the highest priority should be given to the protection of this area."

The Potholes area of the park was not recommended for full wilderness designation at the time because it included 40 acres of state land, which was subsequently purchased by the park; a telephone line, since removed; and grazing rights, unused since 1956.

In a memorandum to the superintendent, park staff have opposed a recent decision to permit the continued use of snowmobiles in the Potholes.

This memorandum did not oppose the use of snow vehicles on unplowed roadways or for ice-fishing on Jackson and Jenny lakes. The memo did state, however, that *off-road* use of snowmobiles within Grand Teton National Park was inappropriate, contrary to National Park Service policy, and should therefore be discontinued.

ROCKY MOUNTAIN

Only a couple hours' drive from the Denver-Boulder metropolitan area, Rocky Mountain National Park draws many winter visitors. Right now, Rocky Mountain's key winter management issue concerns the proposed expansion of Ski Estes Park, a downhill ski area within the park. Plans include doubling the ski area and adding snow-making equipment.

Those arguing against the proposal say the ski area ruins park vistas, negatively affects fish and wildlife, and is not even economically sensible, since Ski Estes Park has a long history of money-losing seasons due to poor conditions.

The current Rocky Mountain master plan states that the facility should be phased out when alternative facilities become available outside the park. Until then, the plan says, Ski Estes should operate as a modest, family-style area, with expansion limited to minor safety improvements.

SEQUOIA-KINGS CANYON

Of concern at Sequoia-Kings Canyon is the increased popularity of the "High Route" crosscountry ski trail, which traverses the spine of the Sierra and requires some ski mountaineering ability. A limited park staff must monitor snow conditions

for safety, enforce rules and regulations, and conduct search-and-rescue missions. The NPS hopes its questionnaire on snow conditions, availability of drinking water, campsite locations, and other information will help the park manage this trans-Sierra ski traffic.

Yellowstone's Winter Use Plan will be the first of many such plans for the national parks. It will serve as the standard by which future plans are judged. Therefore, it is critical that the Yellowstone plan be of the highest professional quality and be sensitive to the role our parks play as places for spiritual renewal, as well as for recreation.

Winter use of our national parks presents an opportunity and a challenge for the National Park Service. The opportunity is to offer distinctive and rewarding park experiences to more and more visitors even as summer crowds approach the limits of park capacity.

The challenge is to manage increasing winter use without impairing the visitor experience or park resources. This challenge can only be met if the parks take a thoughtful—and *comprehensive*—look at winter use management.

Steven Whitney is the natural resources coordinator for NPCA.

Yellowstone's Winter Use Plan

YELLOWSTONE NATIONAL PARK'S Winter Use Plan will be the first comprehensive look at management of winter visitor use. The following includes some of the key issues and questions.

Visitor Experience. How can the park provide for a broad range of visitor experiences, taking into account varying degrees of solitude and safety, comfort and cost?

Land Use. Which areas of the park should be designated for concentrated, developed recreation and which for dispersed, primitive recreation?

Resource Protection. How should winter use be restricted to ensure protection of wildlife and other resources? The threatened grizzly bear, for instance, is extremely sensitive to disturbances when it exits its den in late winter or early spring.

Recreational Use. What types of recreation are appropriate in Yellowstone, and what types should be reg-

ulated or prohibited? (Present restrictions include prohibitions against ice fishing, bathing in thermal pools, and skiing or sledding on park roads open to wheeled vehicles.)

Motorized Access. Where and when should roads be plowed? What over-snow mass transit options are avail-

“Yellowstone's Winter Use Plan will serve as the standard by which future plans are judged.”

able? How should snowmobiles and other such vehicles be regulated?

Nonmotorized Access. What foot trails should be cleared? Where should crosscountry ski trails be designated and should they be machine-groomed?

Handicapped Access. What kind of

access and facilities should be provided?

Accommodations/Camping. What type and number of accommodations should be provided—from luxury lodges to campgrounds—and where should they be located?

Visitor Services. What are the needs for restaurants, warming huts, restrooms, telephones, gas stations, guided tours, equipment rentals?

Visitor Safety. How will the park respond to demands for visitor protection, patrols, fire fighting, and search and rescue services? Are present staff levels adequate?

Interpretation Information. Are visitor needs for information on safety, wildlife, geology, recreation, and other aspects of the park being met? What about future needs?

Specific Areas. How should major developed areas such as Old Faithful, Grant Village, and Mammoth be managed during winter?

NPCA Guidelines for Winter Planning

IN REVIEWING PARK winter use plans, NPCA will expect the National Park Service to accomplish the following:

1. Ensure consistency between the winter use plan and existing park plans that guide development, management, and resource protection.

2. Justify winter development by documenting existing use. Propose construction or expansion of winter use facilities only within the constraints of the resource, and as a response to documented visitor needs. Identify any alternative locations outside the park that could provide such facilities.

3. Evaluate the range of winter visitor experiences, make sure they are consistent with the purposes for which the park was established, and do not threaten park resources.

4. Include measures to avoid potential conflicts between recreationists, such as crosscountry skiers and snowmobilers, by creating use zones separated by time and/or geography, or by prohibiting inappropriate activities.

5. Document proposals with scientific information when making recommendations that could affect park wildlife and other resources.

6. Identify those issue areas that lack accurate scientific data upon which to base management guidelines.

7. Protect those lands that are designated wilderness or potential wilderness areas.

8. Analyze present staff levels and future staffing requirements to provide for visitor safety and to ensure the preservation of national park resources.

9. Monitor the impact of winter recreation on park resources and the visitor experience.

Demise of the ANCIENT MARINERS

Poachers ravage sea turtles
as scientists race against time
to save them.

by Michele Strutin

As primitive as the dinosaurs, sea turtles have existed on this planet for more than 100 million years. The hooded, impassive eyes express an ancestry far older than ours.

Yet, in less than 30 years, humans have so decimated sea turtle populations that every one of the eight species is listed as threatened or endangered in the *Red Data Book*, which is the International Union for the Conservation of Nature's authoritative listing for endangered species around the world.

Six of these species—green turtles, hawksbills, leatherbacks, loggerheads, and both Kemp's and olive ridleys—nest on beaches throughout the Caribbean and the Gulf of Mexico, including Virgin Islands National Park and Padre Island, Canaveral, and Cumberland Island national seashores.

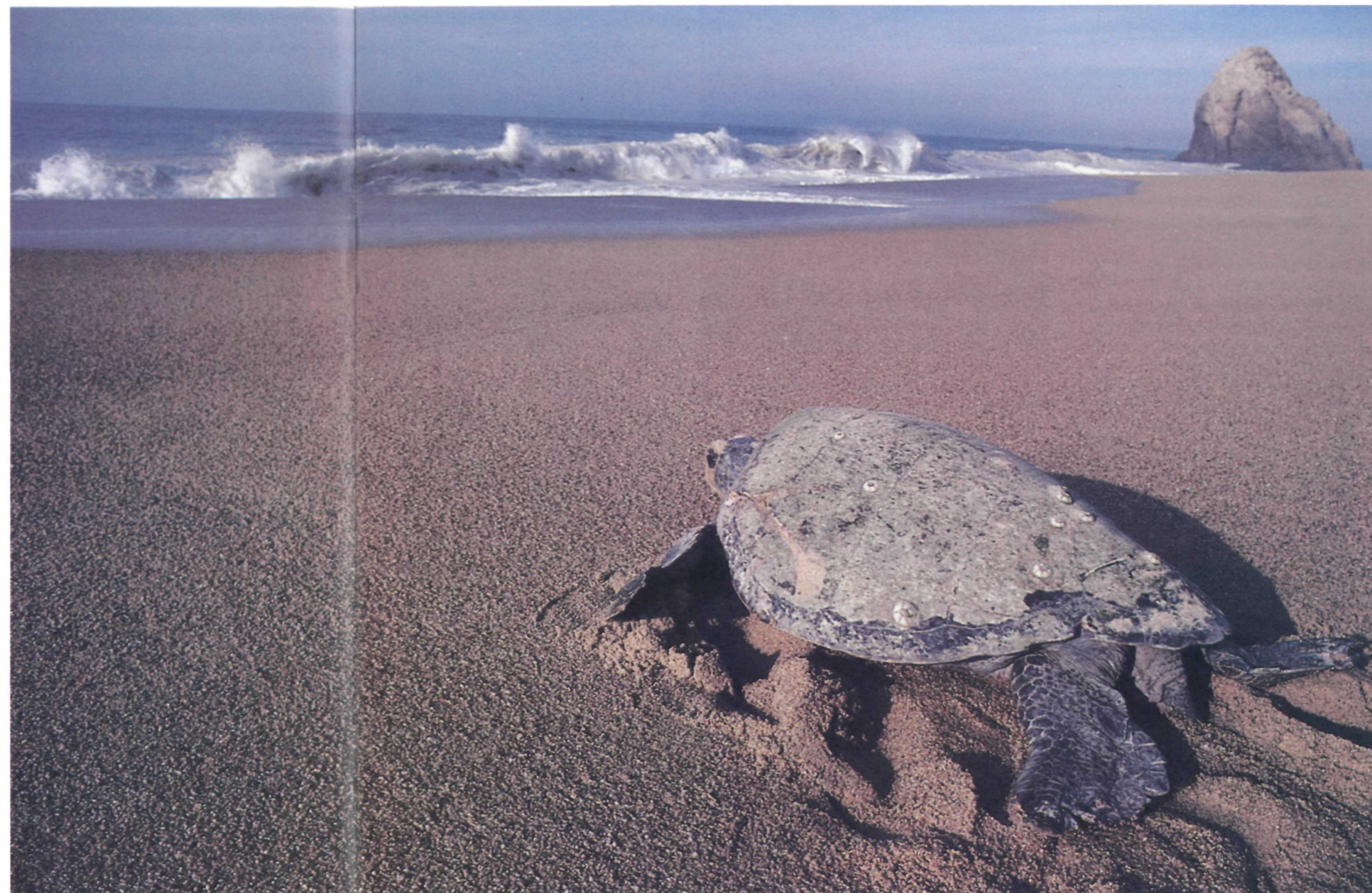
Sea turtles range in size from the 100-pound Kemp's to the massive leatherback, which can weigh well over 1,000 pounds; and they are

found in tropical and semitropical waters around the globe. Although sea turtles are cold-blooded reptiles, leatherbacks—which have great reserves of body heat because of their size—have been sighted as far north as the Arctic Ocean.

The carapace (shell), skin, flesh, and eggs of sea turtles are all highly prized—and hunted. With overlapping scales that describe a shield, the shell of the hawksbill is the most finely etched, and makes the best tortoise-shell objects.

Green turtles, the ones pictured on cans of turtle soup, are killed for their flesh and fat layers. In some Latin American countries, poachers often strip sea turtles of their most desirable parts and leave large bloody piles of carcasses to rot in the hot sun.

To protect these ancient sea creatures, the National Park Service and other federal agencies have set up hatchery programs and cooperative agreements with Mexico and other concerned countries.



George H. Huey

But the population of Kemp's ridley turtles, the most threatened species, has plummeted so drastically in the past few decades that some scientists fear hatcheries may not be able to keep pace with the death rate. On one occasion in 1947, 40,000 ridley females crawled onto Rancho Nuevo beaches in Mexico to lay their eggs. In 1985, there were only 100 females at any one time.

Protection is a complex proposition because no one knows how long it takes for sea turtles to reach breeding age. Scientists believe that turtles may live more than 100

years, but estimates on turtle maturation range from 5 years to 50. If the time between birth and fertility is too great, the existence of an entire species could end before protection programs take effect.

Harvesting turtles is nothing new. Traditionally, coastal peoples have eaten turtle meat. And, in the days of the sailing ships, seamen kept a live turtle or two on board as a source of fresh meat. Sea traders made money selling tortoise-shell jewelry, which had become popular in Europe. But turtle popu-

lations remained stable until a few decades ago, when large-scale distribution methods made wholesale selling—and slaughter—profitable.

Part of the trouble began in the 1950s, when alligators became scarce and leather-goods importers turned to sea turtle skins as a replacement for their upscale products. With tortoise shell from a hawksbill turtle bringing between \$50 and \$70 per kilogram on the international black market, devastation of these animals was almost assured.

Turtle meat and turtle eggs are thought to be an aphrodisiac in some

After laying her eggs, a green turtle heads out to sea from a beach in Michoacan, Mexico. A great many female turtles are not so fortunate. A reference cited in the latest international trade monitoring bulletin, funded by the United Nations and World Wildlife Fund, says, "... no other group of animals presently protected under the [international 'threatened with extinction' list] is traded more often or in such volume as sea turtles." Tortoise shell is the main product. Although Cuba and Panama are mentioned specifically, the bulletin lists Indonesia as the major exporter.

Just-hatched ridleys (right) crawl to the Gulf of Mexico from the protected beaches at Padre Island National Seashore. Once in the surf—their imprinting complete—they are scooped up and taken to the National Marine Fisheries Service laboratory in Galveston (below), where they are sorted into separate buckets and allowed to mature for one year before being returned to the waters near the national seashore.



National Park Service/Richard V. Harris



National Park Service/Fred Mang, Jr.

countries and command high prices. A female leatherback will lay between 60 and 80 eggs at a time. Each one of those eggs can be sold for about \$1 in Mexico City.

The Wider Caribbean Sea Turtle Team and Network (WIDECAST), a voluntary organization whose members include the United States and 28 other countries that border the Caribbean and the Gulf of Mexico, is preparing sea turtle management plans for the region. WIDECAST also reported that a single turtle may be “the totality of a

person’s income for one year in countries such as Haiti and Nicaragua.” It is no wonder that poor peasants in Latin America see turtle slaughtering and egg-poaching not as crimes, but as a means of providing for their families.

Mexico and the U.S. Fish and Wildlife Service tried to change this situation on the coast of Michoacan where local residents were slaughtering sea turtles. Instead of arresting poachers, government agencies paid them to collect eggs for hatcheries.

Now payments for eggs have been stopped. Mexican marines defend

the beaches against turtle snatchers while university students collect the eggs.

In addition to Mexico’s own efforts, a well-established and scientific program allows the NPS to save thousands of Kemp’s ridley eggs on Mexico’s Rancho Nuevo beaches—the only beaches where the turtles nest—by transporting the eggs to the safe sands of Padre Island National Seashore off the coast of Texas. This effort may help save the Kemp’s ridley from otherwise certain extinction.

The NPS, Fish and Wildlife, the Mexican government, National Marine Fisheries Service (NMFS), Texas Parks and Wildlife, and the Gladys Porter Zoo in Brownsville are all part of the Kemp's ridley program, now entering its ninth year.

The idea is to imprint sea turtle hatchlings to Padre Island beaches instead of to their original nesting site. Bob King, Padre Island wildlife biologist, expresses concern when he says, "Rancho Nuevo is the only beach in the world that we know of where Kemp's ridleys nest." The program hopes to change that. So, each year, 2,000 eggs are transported to Padre Island where they are allowed to incubate and hatch.

Male turtles spend their entire lives in the sea; but females always return to their natal beaches to lay eggs. Because scientists still have many unanswered questions about the imprinting process, the Padre Island program leaves little to chance. The Kemp's ridley eggs never touch Rancho Nuevo sand.

Scientists are not certain what causes sea turtle imprinting—the chemical composition of sand, celestial figurations, or something else. "A sewer outfall," says King, "could destroy the whole chemical 'taste' of a beach."

As the turtles drop their eggs into holes they have scraped out on Rancho Nuevo, researchers catch them in plastic bags, then deposit the eggs in boxes filled with sand brought from Padre Island.

While the eggs are being placed in the 22-quart styrofoam boxes, a thermocouple is embedded in the center of the clutch, and the boxes are flown to Padre Island. The thermocouples monitor the heat of the sand because sex determination of sea turtles is dependent on temperature maintained by the eggs, not chromosomes.

For instance, about 29°C is the critical temperature necessary to produce a sexually mixed brood of loggerhead sea turtles at Canaveral. A few degrees higher and the hatchlings will all be females; a few degrees lower and they will all be males.

The future of these turtles is protected in other ways as well. In the

wild, when sea turtle hatchlings crawl out of their sandy nest, they must scramble for their lives down the beach to avoid ghost crabs, gulls, and other predators. Even ruts from the tires of an oversand vehicle can be dangerous impediments. Disoriented, without the sea in front of it, a hatchling may follow a rut until the sun bakes the life out of it.

In the water they are no safer. Fish and mature sea turtles prey on them. If they survive, the hatchlings enter what is known as their "lost year."

Few people see or even know where to look for sea turtles during this crucial period of their lives. Scientists believe the young turtles may hide in great banks of seaweed within drift lines, feeding on small crustaceans until they grow large enough to fend for themselves.

**Rancho Nuevo is
the only beach
in the world where
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The program hopes
to change that.**

In contrast, the Padre Island Kemp's ridleys are nurtured and defended at every juncture. After the eggs are collected, Fish and Wildlife flies the boxes to Padre Island. There, the turtles hatch and make their way out of their sand boxes down to the surf. They are monitored and well-protected during their dash to the water.

Once in the surf—their imprinting complete—the hatchlings are collected and flown to the NMFS laboratory in Galveston, Texas, where they will spend their first year. In 1978, at the beginning of this program, hatchlings were loosed in a long tank; but crowding promoted disease and aggressiveness and many hatchlings died.

Now, each hatchling is kept in its own bucket for a year, when it will reach the size of a dinner plate.

In 1984, 90 percent of the trans-

ported eggs hatched; of those, more than 85 percent survived the first year. After the turtles are tagged, the U.S. Coast Guard then releases them into the Gulf of Mexico, offshore from Padre Island.

Besides the work being done at Padre Island, other programs are underway to help marine turtles. U.S. shrimp trawlers inadvertently catch loggerheads and Kemp's ridleys in their nets. So, NMFS developed a "turtle excluder device" (TED), which allows turtles and large fish to escape through a trap door in the net.

TEDs have helped shrimp trawlers increase their catch by 7 percent, and the device costs only \$400. According to WIDECAST, "It is one of those miraculous conservation mechanisms that benefits the profits of the fishermen and protects other kinds of marine life."

In 1980, the NPS began a turtle monitoring project at Virgin Islands National Park. Historically, hawksbills, leatherbacks, and green turtles nested in the Virgin Islands; and the NPS set out to map all known nesting sites within park boundaries.

Park researchers found that only hawksbills now nest on Virgin Islands National Park beaches. A park management report says, "The decline in leatherback nesting . . . is probably related both to egg loss from nest poaching and to the exploitation of adults for medicinal oil, which sold for phenomenal prices in the British Virgin Islands as late as the 1970s."

Although poaching occurs in the United States, it is not a major problem. Predation, however, is. Of the 61 nests found on 12 Virgin Islands National Park beaches during the 1980 and 1981 nesting seasons, 15 nests were destroyed by mongooses and dogs.

The situation was stabilized by urging dog owners to control their animals, by shooting feral dogs, and by placing protective mesh over the nests. Mongooses—persistent and voracious predators—are being live-trapped.

At Cumberland Island National Seashore, feral pigs had been tearing



up loggerhead nests. The problem has been remedied because the pigs are being eradicated, in compliance with the park's management plan. The park also has a ten-year-old tagging program in which plastic tags are attached to the carapaces of female loggerheads. The park can now predict when the turtles will return to nest on the beaches of Cumberland Island.

In years past, raccoons destroyed approximately 95 to 98 percent of sea turtle nests at Canaveral National Seashore. In 1984, however, the park instituted a pilot program in which the nests were covered with screens. The program proved so successful that the NPS funded a major program for 1985, under the direction of Richard Bryant. About 1,000 loggerhead nests were screened, and the park expects about 80,000 hatchlings.

Park interpreter Richard Helman, who takes visitors on night turtle watches as part of the park's education program, says, "The big prob-

lem in Florida is the development of the coastline." Sea turtles once nested all along the Florida coast, but housing developments and other construction projects have destroyed many nesting beaches.

Even the lights from developed areas cause problems. Hatchlings, which usually make their mad dash to the sea at night, instinctively head for the lightest part of the sky. In a natural setting, this would be the horizon where sky meets sea. If nests are near a lit-up development, the hatchlings will move toward those lights.

"Often," says Helman, "the turtles will die in the hot sun the next day or they get run over in a parking lot."

Sea turtle programs are also underway in other countries. To protect green sea turtles on the Galapagos Islands, the Ecuadorian Army turns off lights on its Galapagos base during nesting season.

Costa Rica, which has a strong national park system, has begun to protect green turtle and olive ridley nesting beaches. At Parks Canada's recent centennial conference in Banff, Maria Teresa Coberg, a Costa Rican member of WIDECAST, described that country's efforts to save nesting sites in two national parks while allowing local residents to

harvest those eggs that would have been destroyed when female turtles inadvertently dig out previously laid eggs.

All of these efforts may yet save sea turtle populations. Because of indiscriminate killing, the American bison was once similarly threatened. The bison was brought back from the brink, and perhaps hatchery programs, protection from predators, and other measures can do the same for sea turtles.

But once turtles are loosed in the vastness of the ocean, we cannot assure their fate. We cannot protect all of the world's beaches.

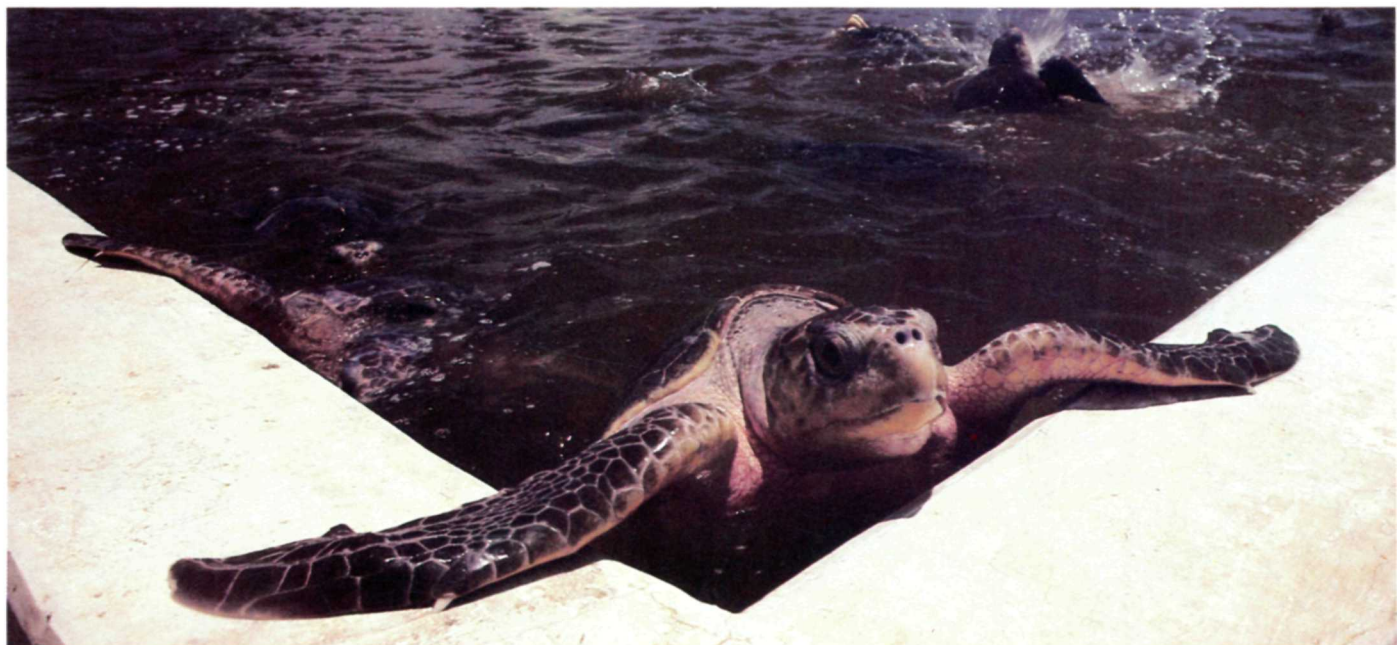
"Turtles are a kind of bird with the governor turned low. With the same attitude of removal, they cock a glance at what is going on, as if they need only to fly away."

Edward Hoagland
The Courage of Turtles (1985)

A female ridley, captured on the beach, leans heavily along the lip of a slaughterhouse holding tank. The unblinking gaze shows no awareness of her imminent death. Nor can she know how few of her kind are left. That knowledge, and the actions that result from it, are ours.

Michele Strutin is senior editor of National Parks magazine.

In the 1970s, piles of turtle carcasses, such as the Pacific ridley shells at left, were more common in Mexico than they are today. Although legal harvesting is still allowed, the number of turtles slaughtered and awaiting slaughter (below) has been reduced by Mexico's tougher protections.



A person in silhouette stands on a snowy mountain slope, looking out over a vast, snow-covered valley. The sun is low on the horizon, casting a warm glow over the scene. The person is wearing a dark jacket and pants, and is holding ski poles. The snow is deep and smooth, with some small trees and rocks visible in the distance. The overall mood is serene and quiet.

*Gauging the Snowpack
In the High Sierra*

by Gordon Wiltsie

Gauging the Snowpack In the High Sierra

Through whiteouts and blizzards, snow surveyors ski their rounds. It's a cold, treacherous job, but someone's got to do it.

Text & Photographs by Gordon Wiltsie

Halfway up the last hill to 11,053-foot Kearsarge Pass, en route to Kings Canyon National Park, I made the mistake of looking down. Below, a thousand feet of steep, icy snow funneled straight to a frozen lake, which yawned like a giant mouth.

All that kept me from rocketing into its lips were the sharp edges of my skis, and these scarcely bit the crusty snow. As a mountaineering guide, I knew the peril of letting fear overwhelm me. I realized my only escape was to look directly at the snow ahead and concentrate solely on moving one foot in front of the other.

Right behind the tails of my skis was Murt Stewart, a 58-year-old cowboy whose own aged skis were made of wood, with round "edges." I couldn't believe they were gripping at all. If I hadn't known that he'd already skied over Kearsarge more than a hundred times, I would have been more frightened for him than I was for myself. But Stewart isn't the kind of guy who needs a helping hand, and I hustled along to get out of his way. Unlike me, he wasn't here for fun; this was just another day on the job. Indeed, if it weren't for the steepness and the altitude, he wouldn't have come in the first place.

Every winter, when the jet stream opens a storm track in the western sky, the hulking Sierra pinnacles in California's national parks force nimbo-stratus



Snow surveyor Murt Stewart developed his own surveying equipment that is lightweight and simple to use.

clouds high above their dewpoint, wringing from them a mantle of snow that may pile more than 30 feet deep. Then, in late spring, just when the rest of California is drying out from the winter rains, this snow begins to melt, dripping down the highest peaks, passing through meadows and forests to form rushing cataracts and, finally, the state's great rivers: Owens, Kern, Kings, San Joaquin, Sacramento, Stanislaus, and Tuolumne, to mention a few.

This water is California's greatest treasure and without monumental projects to capture and tame it, the state could never have grown to be the economic power it is. But intelli-

gent water control of the dams and aqueducts depends on advance knowledge of the snowpack.

Since no one can predict whether this water will flood or fizzle, someone has to look at the snow, weigh it, and transmit the data. For all our modern spacecrafts and superchips, nothing can do this quite as efficiently as a human, plodding along on skis—people like Murt Stewart, a snow surveyor. Once a month each winter, in teams of two or three, those intrepid individuals ski the high Sierra passes and basins to gather numbers that farmers, utilities, and water districts need to keep California irrigated.

After hearing of their work for many years, I recently joined Stewart and his younger partner, Jay Jensen, for the Kearsarge Pass survey. It sounded like a great excuse to visit a spectacular national park that most people see only in summer.

Despite the long, icy slope, we finally crested Kearsarge, encountering an awesome panorama of frozen lakes, snow-garbed peaks, and high, lonely basins. But Stewart had no desire to soak up the vista or celebrate our arrival in the park with a rest.

The wind was gusting to 80 mph—in the valleys below it blew roofs off houses—and Stewart wore only faded Levis, a flannel shirt, a wool hat, and a thin, cotton windbreaker. He deftly stripped the skins, used for traction on the upward climb, from his skis. Immedi-



Murt Stewart has been a Sierra snow surveyor since the 1950s. Once a lonely profession, it is now in demand.

and water content. All these numbers went into a notebook, which Stewart guarded jealously from the wind.

"It's pretty easy to have a week's work blow away in a single gust," he said, as if he were reciting a hard-earned lesson.

Once out of the mountains, they telephone this data to forecasters in Sacramento, who compare it to readings from previous years and combine the results with information from satellites and automatic sensors to get reasonably accurate runoff forecasts for each major river drainage. Government land agencies, utilities, water districts, and corporate farms share the cost. Considering that billions of dollars ride on the accuracy of this survey, I was astonished by its simplicity.

Jensen and Stewart completed the survey course in less than an hour. The other courses were miles away, so we would be hard-pressed to measure more than three a day. Most of our time was spent in transit, climbing steep hills and—better—skiing back down the other sides.

Certain runs through the trees and down north-facing slopes bordered on spectacular, and every moment of the job was surrounded by the cracking, cold purity of the wildest park in California. "People get *paid* to do this?" I wondered.

After finishing the last course of the day and chasing Stewart for an hour, we reached a cabin at Charlotte Lake, built for snow surveyors. Without this shelter—stocked with supplies packed in by mules the summer before—our packs would have weighed 60 pounds, instead of 10 or 20. Eight feet of snow buried the door, and we dug for half an hour to get it open.

Inside, the cabin was no Ahwahnee grand lodge; but compared to a tent or a snow cave, it was wilderness luxury. Bunk beds, firewood, and cabinets full of food and sleeping bags lined the walls. Large

ately, he headed to the warmer climes below.

"That's all he ever wears, even in a blizzard," commented Jensen, himself wrapped in multiple layers of the latest wonder fabrics. "It makes him hard to catch. He never carries enough weight to slow him down, and he's always too cold to stop."

Jensen and I have climbed and skied together since high school, and I thought that on the downhill, at least, we would have time to admire the panorama and still catch up. There's a certain magic to winter in the "gentle" Sierra Nevada, when all the rough contours and colors of the wilderness are buried in soft, sensuous monochrome, and I wanted to absorb it. Scarcely had I removed my skis, though, when Jensen said, "It's time to go. I don't want to keep Murt waiting."

Below us swept a glorious-looking ski run. First Jensen, then I, pushed off to carve down it, intending to leave an unbroken signature

of figure eights. There was just enough crust to snag our ski tips, however, and time after time we exploded headfirst into craters. Though Stewart methodically traversed and kick-turned that entire slope, he reached the first survey course at Bullfrog Lake long before we did.

By the time Jensen and I arrived at the course, a flat open meadow, Stewart had already assembled a 15-foot sectional coring tube, laid out measuring tape and scales, and found the notebook for recording the numbers that warrant his salary. Between orange signs on trees at either end of the meadow Jensen and Stewart began to locate about a dozen precisely determined points.

At each, Stewart rammed the coring tube into the snowpack until he was certain it had hit the meadow floor. He then noted its depth, extracted the tube, and weighed everything on a simple spring scale to determine the snow core's density



Snow surveyors' cabins spot the wilderness areas of Kings Canyon National Park. Built before the passage of the Wilderness Act in 1964, they are maintained by the National Park Service and the Cooperative Snow Survey. Murt Stewart (left) built this cabin in 1958. He, Jay Jensen (right), and the other surveyors use it regularly on their rounds.

windows made the room seem bigger than it really was. Old wood skis with long, pointed tips and beartrap buckles hung in the rafters overhead and at the far end hunkered a big wood cook stove, waiting to smile with warmth.

Stewart built a fire and, with unspoken seniority, eased into his first-choice bed by the stove. Jensen began hanging up wet clothes, and I passed around a little nip to prevent frostbite while the cabin warmed. Stewart took a big swallow, lay back, and recalled building this shelter in 1952, when he worked year-round for the snow survey. I asked him how he'd gotten the job.

"Back then, nobody else wanted it," he chuckled, adding that even some of his supervisors doubted the sanity of any who would take it.

"I'll never forget a guy we called 'Pappy,'" Stewart said. "We had to get a cabin key from him once a

month. Each time he would glower at us from behind a sign on his desk that read, 'Halitosis is better than no breath at all.'

"Pappy thought we state surveyors were some kind of glory-seeking idiots for sleeping in the mountains and would usually sneer something like, 'So, you want to be heroes?' or 'I'd never send a man over Kearsarge in the winter.'"

At first, Stewart prowled University of California at Berkeley for partners, looking for "outdoorsy" types who needed a job badly enough to risk wintery mountain peril. Then, in 1956, he was joined full time by UC professor Doug Powell, who had surveyed for other agencies since 1948.

In subsequent years, others were hired and a brotherhood gradually formed, including many pioneers of California backcountry skiing and

mountaineering. Now, to meet increased demand for timely readings, there are four full-time surveyors and four alternates, seven men and one woman.

Much as Stewart talks, dresses, and looks more like a muleskinner than a mountaineer, over the years he has probably skied more backcountry miles than any other person. During the summer he runs a wilderness horsepacking business, and he feels his wilderness credentials are "impeccable."

"I've even climbed Mount Humphreys with David R. Brower," he laughed.

Next morning Jensen awoke sick from the sardines at dinner, and was unable to stand for any extended period. Stewart suggested I take his place gathering the data. After a leisurely breakfast, we set off to measure the course at Vidette Meadow, which was over a ridge and down a

thousand-foot slope that yielded steep and spectacular skiing through dense forests of pine and fir.

At the bottom, I followed Stewart through the meadow and along meandering goosenecks to Bubbs Creek, admiring steep granite walls to either side and thinking how lucky we were to visit this cathedral in winter. Vidette is the junction for two of the Sierra's most popular trails and, before imposition of wilderness quotas, summer crowds were large enough to inspire one National Park Service brochure with a headline that read: "Take the John Muir Freeway to the Bubbs Creek Offramp."

Since then, wilderness permit requirements have reduced the number of visitors, but winter had eliminated people entirely. For all the recent boom in ski mountaineering and winter recreation, the only tracks we encountered during our entire trip were coyote, rabbit, and desert bighorn.

"This is the course I designed," said Stewart, pointing to an orange sign across the meadow, his eyes twinkling. "Of course, it's the best and the easiest to measure."

He flung down his pack and, after eating a quick lunch of cold canned spaghetti with the goopy klisterscraper, began assembling the scales and coring tube. Half an hour later we were finished and ready to climb back up to the cabin.

By this point I was feeling pretty envious of Stewart and the other snow surveyors. Unlike the early 1950s, when only wild-eyed lunatics skied the backcountry, now there are probably a thousand people who would sell their souls to get a snow survey job. And, I was one of them. Halfway up the steep climb above Vidette, though, I began to see the other side.

Determined not to be humbled again by Stewart, I powered up switchback after switchback in a vain attempt to leave him behind. By the time the angle laid back to gentler climbing I was huffing and puffing like a locomotive. Stewart quickly passed me by, and, as I pushed on to keep up, I realized why he moved so fast.

Even in nice, sunny weather it was tricky finding our way through the dense lodgepole forest below Bullfrog Lake. Were a storm or blizzard to suddenly move in—as they often do—it would be very easy to ski in the wrong direction. Three years ago, it happened.

***Not just any skier
could get the data
every month, year after
year, through chill of night,
blizzard, snowblindness,
bad snow. It takes
a special skier
even to survive.***

After measuring courses in back of Mount Whitney, Doug Powell was caught by a rapid succession of whiteout, blizzard, and nightfall. Because Powell routinely carried anything that might be useful—including extra cameras, weighty books and manuscripts, geology tools, and whatever his ongoing natural history research demanded—he was usually slow, and at first Stewart didn't worry when he was late getting to the cabin. But this time Powell had crossed the wrong pass.

That night, after 35 years of backcountry skiing, Powell froze his toes and for the first time truly saw the frozen wilderness as a hostile place that could kill him. All that kept him alive was mental toughness acquired from years of experience—and a burning, embarrassed desire to tell *his* version of how a veteran skier had become lost. He had to be rescued by helicopter the next day. The next winter he retired at age 63.

Powell's experience reminded me that backcountry skiing can have its down side, especially when undertaken with professional deadlines. Often as not, snow surveyors don't have time for fun; the snow is terrible, or the weather is miserable. And, as anyone who has crossed a mountain pass under hair-trigger

windslabs knows, there's a lot more to gauge about snow than just its depth and weight.

Not just any skier could get the data *every* month, year after year—through chill of night, sunburn, snowblindness, blizzard, bad snow, avalanche and every new challenge swirled together by the winds of winter wilderness. It takes a special skier even to *survive*.

Back at the Charlotte cabin, Jensen was feeling better and wanted to go out for fresh air and a few turns below Glen Pass. Stewart wasn't interested, but I overcame my fatigue and went along.

As we wound our way up contoured windboard between weathered old pines and gargoyles of sastruggi, I thought how like pioneers these snow surveyors were. Every time they crossed a slope—no matter how many times they had done it before—they were explorers, pitting their wits and resources against the capricious vagaries of earth's most valuable—and changeable—crystal. No two experiences of their snowbound workplace were ever the same.

Someday snow surveyors like Stewart, Jensen, and Powell may go the way of prospectors and burros. Until then, I find it comforting that, just as California needs her national parks for an undisturbed watershed, she also needs these mountain souls who know how to meet the wilderness on its own terms.

Jensen and I climbed high above the treeline, with wind tearing at our clothing and spindrift scouring our faces. A fireball sun was setting over the Great Central Valley and I thought of how next spring the snow we measured today would nourish crops, orchards, and cities full of people. It's the only time I've ever stood on skis and felt so connected with the civilization I usually ski to escape. Then, I envied the snow surveyors for their chance to make skiing serve a broader world.

Freelance photographer and writer Gordon Wiltsie has climbed, skied, and written about many of the world's major mountain ranges.

Images

George H. H. Huey

by Marjorie Corbett

Born and raised in New York City, photographer George H. H. Huey now claims the Southwest as his home and his favored subject. Huey has traveled and photographed all over the Southwest and Mexico, focusing on national parks.

How did you get your start in outdoor photography?

I have been interested in photography since I was 12. By the time I was 18, I was ready to get out of New York City and head west. I ended up at Prescott College in Arizona, where I had a photography teacher who greatly influenced me.

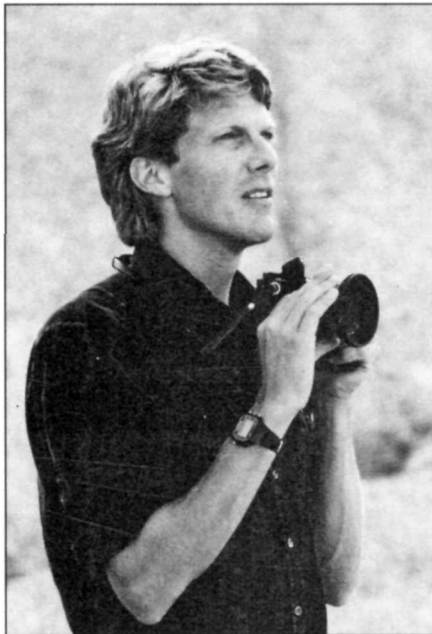
Not only did I learn technical expertise from him, but, more importantly, I developed a commitment to photography. The passion he felt for it was very infectious. He also taught me an appreciation for landscape. Nothing has ever moved me the way the landscape of the Southwest does.

Your first published work was of national parks. How did you get interested in that subject?

I'd had a feeling for the parks for a long time, but I never had the opportunity to photograph them. A friend suggested I come to the Grand Canyon to work with him on a book—and I was hooked.

You've said you don't like visual clichés in your scenic photos, and I've noticed that you avoid some of the framing devices that other photographers use. Can you tell me more about that?

I try to get a feeling for the sense of space and exposure one feels when looking down the rim of the Grand Canyon. Sometimes I look more at the edges of the frame rather than the center. In a way, the background is almost more important than the central subject.



Christine Keith

"I try to get the sense of space one feels when looking down the rim of the Grand Canyon."

I am trying to create a feeling. When I photograph a rock, I want to get at the essence of the rock. I'll focus on some form or color in the rock that a person might not notice at first glance.

You have recently covered stories on both the desert tortoise and the endangered sea turtle. What is the difference between scenic and wildlife photography?

I've found that using the 35mm camera loosened me up visually and aesthetically, which helps with my 4 × 5 scenic work.

While working on the sea turtle story I encountered a lot of pretty rugged conditions on the southwest coast of Mexico. I learned a lot down there, especially to be more flexible.

When preparing to photograph the turtles, how did you find out about their habits?

I learned the most from the local children. They collected the eggs for the conservation program. I'd spend

hours lying on the beach at night with the kids, talking about the animals. They knew a tremendous amount about the turtle's behavior.

How did you take night shots without disturbing the turtles?

I'd walk up and down the beach without a flashlight—if the turtles had not nested, they could be easily disturbed by the light. Once the turtle was laying eggs, I could get close without disturbing it. I tried many angles, including ground level. I used a wide-angle lens to get good depth of field and more than one flash.

What is your preferred equipment?

I use a Toyo 4 × 5 camera for scenic work. I use a lot of filters with it—especially with black-and-white film—to pull out the pattern in a rock, or to intensify the tone of the sky.

For my color work, I almost always use a skylight filter, and, to warm up colors on dark days, an 81-A filter. I use Ilford or Kodak black-and-white film, in different speeds. For color, I like Kodachrome.

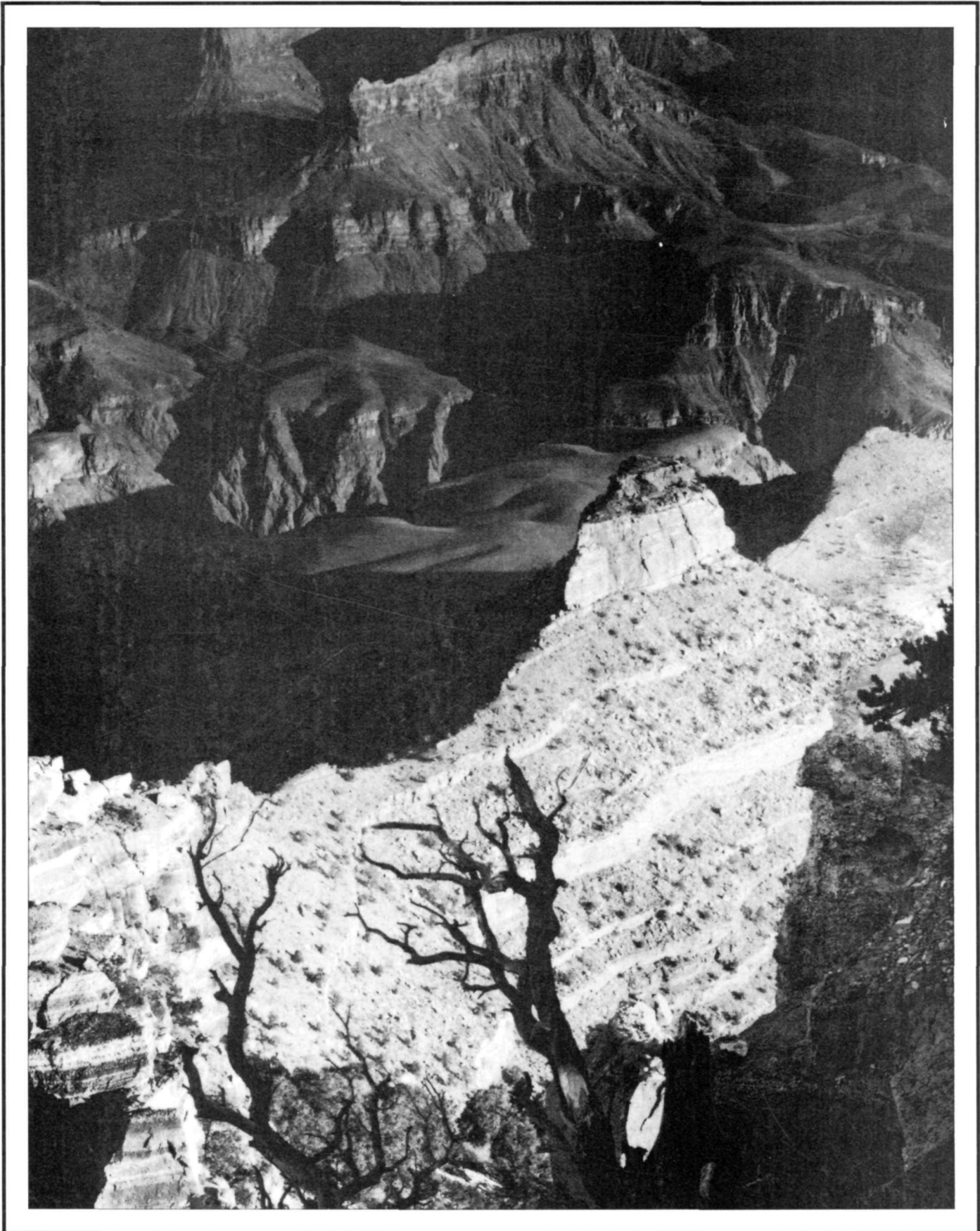
My 35mm camera body is an Olympus. It is small and lightweight. I use everything from 18mm to 500mm lenses, but I use a 24mm the most.

What kinds of projects do you have planned for the future?

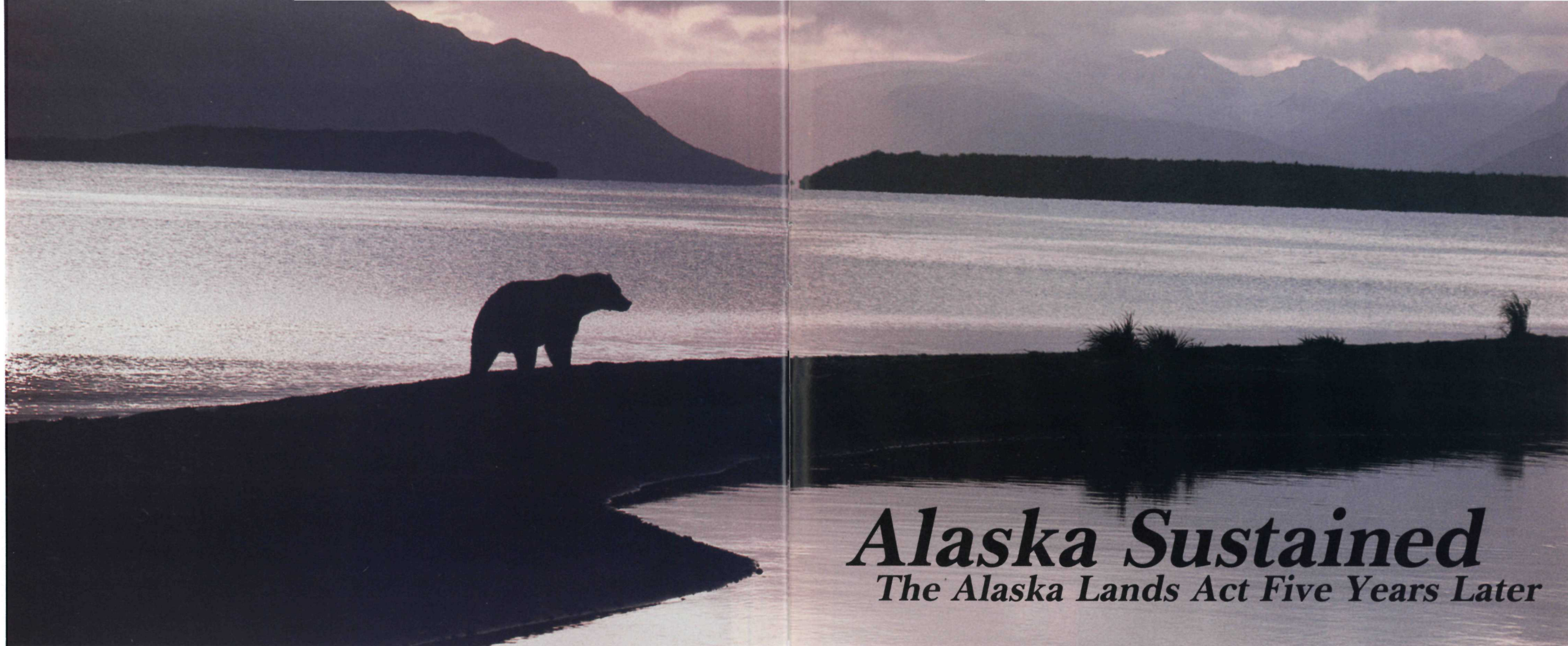
I'm going down to the Baja Peninsula to cover a story about overfishing of sharks in the Sea of Cortez. Then there's a fellow who has discovered the largest inland western migration route for raptors, and he has a banding project going in Nevada. He is testing them as a kind of environmental barometer, because they are at the top of the food chain.

If you have a specialty, it seems to be covering the southwest United States and Mexico. What would your dream project be?

I'd like to cover the Pacific Northwest, and more of Colorado. I'd also like to photograph Central and South America. My dream project? I'd like to continue what I am doing. I'm happy doing what I do.



From the South Rim of the Grand Canyon; Photo by George H. H. Huey



Alaska Sustained

The Alaska Lands Act Five Years Later

Brown bear in Katmai National Park, by Tom Bean

by Deirdre McNulty

FIVE YEARS AGO the most contested conservation battle in American history was ended by the signing of the Alaska National Interest Lands Conservation Act (ANILCA).

In 1973, Interior Secretary Rogers Morton asked that 83.47 million acres in Alaska be protected as part of the national park, refuge, and forest systems. A bill, introduced in January 1977, called for the protection of 116 million acres.

After much furor between developers and environmentalists, a compromise bill was finally passed in 1980. This struggle to save Alaskan wilderness resulted in the protection of more than 100 million acres and doubled the size of the National Park System.

Today, many of the original conflicts still flare—Alaska is still being torn between the claims of those who want to protect the natural splendor and those who are pursuing the possibility of great wealth.

Because Alaska is so vast and remarkably wild, many conservationists argue that its parklands should be managed differently from those in the Lower 48. They see Alaska as a new frontier, where management problems such as overcrowding, excessive development, and air pollution can be prevented.

We will soon discover whether or not that is possible. When ANILCA was passed, park managers were given five years to produce management plans for Alaska, which are now due.

"These plans must be done right,

because they will guide the development, use, and preservation of the Alaskan parks into the next century," says T. Destry Jarvis, NPCA's vice president for conservation policy. NPCA has already commented on a number of those plans to the National Park Service.

The management plans for Alaska address the following concerns:

- Many of the parks in the Lower 48 are overcrowded. Limiting the development of lodging and other visitor services to areas outside the parks could help alleviate this potential problem in Alaska.

- Some would like to see Alaskan parklands opened up to trophy hunters and trappers, even though vast NPS "preserve" lands are already open to hunting and trapping. A bill was introduced in the Senate

(S. 49) that would have allowed these activities in Alaskan parklands. Even though the bill was defeated last year, there is little doubt that it will be reintroduced.

- The State of Alaska is claiming pre-existing right-of-ways to park roadways, rail lines, and certain undeveloped areas. If those rights are recognized, the state will have control over many access routes in and through the parks, as well as possible roadside development in some areas.

- The 1976 Mining in the Parks Act closed national parks to further mining claims. But mines that have claims prior to 1976 are still potentially operable and these mines continue to be problems in Alaskan parks.

A recently resolved lawsuit ruled

in favor of conservationists and will help mitigate these problems. According to the ruling, all mining operations in Alaskan parks must cease on October 15, 1985, until mine operators submit plans of operations to the NPS, which must then produce environmental assessments for each plan. The NPS must also monitor and enforce regulations for each mine operation. The ruling will hamper mining considerably because the NPS does not have adequate staff to comply with the ruling.

Alaskan parks also suffer from specific problems.

- In Lake Clark National Park, among others, lands are being subdivided, and a high-rise hotel is proposed. The NPS is powerless to stop such intrusions, since it lacks fund-

ing for land acquisition in Alaska.

- All-terrain vehicles are becoming increasingly popular and are chewing up the tundra in Gates of the Arctic National Park.

- Although the cliffs of the Kenai Fjords are considered part of Kenai Fjords National Park, the water that runs between them is not, creating habitat and management problems.

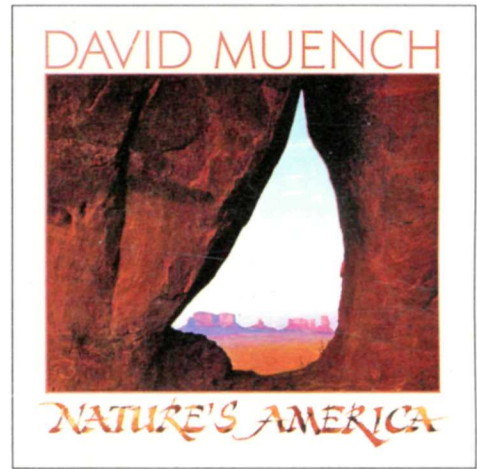
These are some of the most obvious concerns. More issues wait to be acknowledged and resolved.

On the fifth anniversary of the Alaska Lands Act, however, it is important to celebrate its triumphs, and the protection of vast and magnificent areas. We should recognize that proper planning can prevent irreversible mistakes, that Alaska can be maintained as it is today—lush, wild, and profound. 🐻

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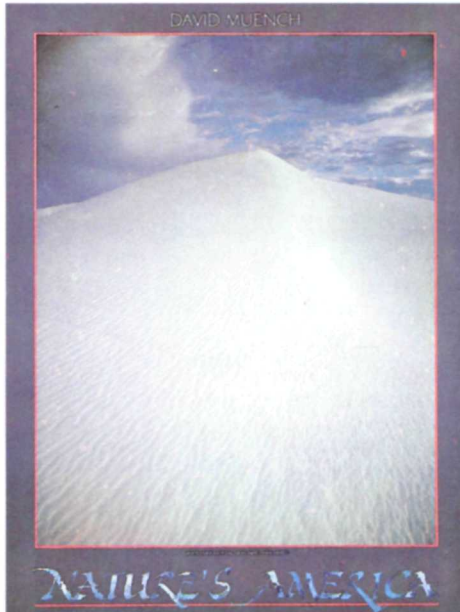
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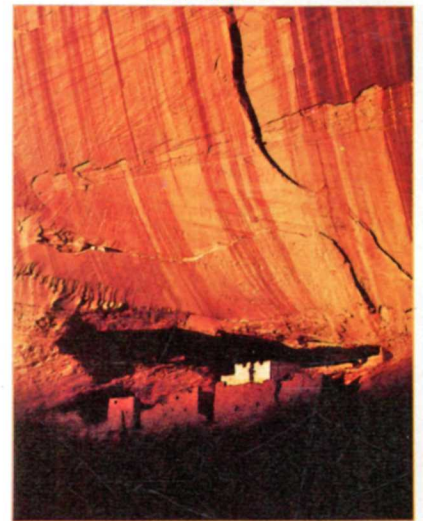
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Members Corner

Alaska Tour

This summer, Bill Lienesch, NPCA Director of Federal Activities, accompanied the Questers tour of Alaska. He reports:

The first stop was in southeastern Alaska at Ketchikan. Even before we arrived, we began plying Tour Director Warren Harden with questions. He provided a wealth of knowledge on Alaska, especially on wildlife and wild flowers.

As the plane was landing, we began to catch glimpses of wildlife. By noon, everyone had seen the first of many bald eagles.

A few days later we entered magnificent eagle country at Glacier Bay National Park. Eagles soared past the lodge, seeming to watch us as much as we watched them. The better part of a day was spent on the bay watching seals, whales, and hundreds of birds, as well as the Dall sheep that roamed the distant hill-

sides. Late into the night we watched and listened as massive chunks of glaciers crashed into the water.

In Denali National Park, we saw our first grizzlies. Much closer were the moose and caribou, which were browsing for food.

Denali—"the great one"—is usually shrouded in clouds; but after dinner it slowly began to clear. Taking advantage of Alaska's long summer days, we stayed up until midnight photographing the mountain. At 1:00 a.m., Denali glowed bright orange as the sun dipped in the west.

We also visited Katmai National Park, and stayed at the world-famous Brooks Lodge. Most of the other guests were there to fish. Some had traveled from as far away as Germany; and they spent hours fly-fishing for salmon that were making their runs upriver to spawn. We spent hours watching grizzly bears as they searched for salmon in the river below our lodge.

A special feature of this tour was that it offered a look at old Alaska as well as present-day Alaska. We vis-

ited the historic towns of Sitka and Skagway. We also made stops in Fairbanks, Anchorage, and Juneau, the state capital.

We enjoyed these towns, but they could not compete with the parks. Words cannot accurately describe Alaska. The beauty and wildness must be experienced first hand.

NPCA's Annual Art Exhibit

NPCA's Fourth Annual Art Exhibit opens on November 20, 1985, and will continue through December. The exhibit will feature the black-and-white photography of Henry Steinhardt.

Meet the photographer at a reception on December 4, 1985, at NPCA's headquarters in Washington, D.C. For more information, call (202) 265-2717.

NPCA Merchandise

As Christmas approaches, remember family and friends with a special gift from NPCA. *National Parks* makes a lovely gift, especially for students. See page 4 for other items that will delight young and old alike.

Explore the World with NPCA

The 1986 NPCA & Questers Joint Travel Program

The objective of the NPCA Travel Program has been to offer members and friends the opportunity to observe first-hand the natural history and beauty of our national parks. For 1986, we have broadened the program to include areas outside the United States. You will be accompanied by an interpretive naturalist from Questers, America's leading operator of nature tours. One fee covers all costs, including first class accommodations and all meals. The groups are small. Please join us.

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NPCA Report

Hurricane Gloria Proves A Point at Chincoteague

Chincoteague National Wildlife Refuge is at the center of a power struggle between local residents who want to develop the area and refuge managers who, with conservationists, want to protect the wildlife. Residents of the nearby town of Chincoteague depend, in part, on tourist dollars that visitors to the wildlife refuge bring. And they want the refuge to have all the amenities, including more roads and parking spaces.

The refuge is situated on a fragile barrier island; thus, storms keep destroying roads and rearranging the topography of the island itself. This natural process is inexorable. Despite the fact that the refuge road has been destroyed twice in the past year, Mayor Anthony Stasio and other townspeople insist that the road be rebuilt.

Conservationists and barrier is-

land specialists say that rebuilding the road is pointless, because a storm is sure to destroy it again. In late September, Hurricane Gloria swept through to prove this point.

Gloria washed out four dunes in the Tom's Cove area, at the southern hook of the island; further buried the refuge road; broke through the dunes in ten places below the parking lot; uprooted a great number of pines; and flooded part of the off-road vehicle trail in Assateague National Seashore, which comprises the northern part of the island.

Although Stasio has backed off from the idea of a permanent road, he and other residents say that the town of Chincoteague is willing to pay for an oyster-shell road.

They would also like to see the wildlife refuge, which is managed by the U.S. Fish and Wildlife Service, become part of Assateague National Seashore. Local residents think the National Park Service would be more sympathetic to visitor-oriented recreation.

NPCA does not see the need to promote more development on the refuge. In addition, NPCA believes

that Congress created the refuge to protect the dozens of species of migratory birds, the wild ponies, and the deer on Chincoteague.

The refuge is fulfilling its mandate and there is no reason for Congress to transfer authority to the NPS. Besides, the NPS is also required to protect natural resources.

One of the main reasons for all the opinions concerning Chincoteague is that the refuge is preparing its master plan. Bill Lienesch, NPCA Director of Federal Activities, pointed out the association's concerns in comments to Fish and Wildlife. They include:

- providing transportation, such as a shuttle-bus system, between various points on the island in order to serve more visitors without paving over more of the refuge;
- relocating administrative offices off the island;
- strictly limiting off-road vehicles;
- recommending certain portions of the refuge for wilderness designation;
- preserving habitats so that visitors will continue to enjoy Chincoteague's multitude of wildlife.

Recreation Commission Holds First Meeting

Last January, President Reagan approved a successor to the first commission on outdoor recreation to be called the President's Commission on Americans Outdoors. It took months to decide on the chairperson and the rest of the commission members; but, finally, the commission held its first meeting on September 13.

Tennessee Governor Lamar Alexander, who chairs the commission, laid out his two main concerns for the outdoor recreation agenda: looking at what Americans will want to do outdoors for the next generation and making sure Americans have appropriate places for recreation. Alexander also emphasized the need to conserve our resources, and said that recreation should not conflict with or harm resources.

Commission members lauded the first outdoor recreation commission, which was chaired by Laurance

Rockefeller, and its results, including the Land and Water Conservation Fund, the Wild and Scenic River System, and the Wilderness System. Members pointed out, however, that America has changed since the tenure of the first commission 20 years ago. Leisure time has increased, more women have entered the work place, economic situations, both individual and national, are different. New approaches for funding recreation programs were mentioned; these would include the cooperation of local and state governments and the private sector, as well as the federal government.

Although conservation interests may be underrepresented on the commission, both Chairman Alexander and Victor Ashe, executive director of the President's Commission on Americans Outdoors, want the conservation community to get involved. The first opportunities for public involvement will be at task force hearings held this autumn.

The commission has been divided into three task forces: one, chaired by National Geographic Society President Gilbert Grosvenor, will examine recreational demands; the second, chaired by New Hampshire State Park Director Wilbur La Page, will examine recreational resources; and the third, chaired by Conservation Resources Group President Patrick Noonan, will look for new ways to meet Americans' recreational needs.

At this writing, the resources task force is scheduled to hold public hearings in Dallas on October 27. And the demands task force hearings will be in Washington, D.C., on November 5.

NPCA members who are interested in closely following the work of the President's Commission on Americans Outdoors should contact Bill Lienesch, NPCA Director of Federal Activities, 1701 18th St. N.W., Washington, D.C. 20009, (202) 265-2717.

News Update

Hovenweep Drilling Ends.

This past summer, Transco Exploration Company began exploratory drilling for oil and gas on Utah state lands next to Hovenweep National Monument. Conservationists feared that energy development would ruin the peaceful aspect of the Anasazi ruins. Fortunately, the drilling yielded nothing; and now Transco is prepared to restore the drill site to its original condition.

BLM-Forest Service Interchange Fades. The plan to reduce the bureaucracy and federal costs by creating more efficient blocks of Bureau of Land Management and Forest Service land has hit many snags. In a *Washington Post* article, Interior Secretary Donald Hodel said, "Everybody wants to reduce the federal bureaucracy until you start talking about doing it in their back yard." Mining interests do not want to be governed by the Forest Service; timber companies do not think the BLM will understand their needs; and numerous others fault the proposal, which now seems doomed.

Cape Cod Restricts ORVs. Cape Cod National Seashore's recently issued management plan for off-road vehicles is a step in the right direction. From November 16 to April 14, ORVs are banned from the seashore's beaches in order to let dune grasses regenerate. In addition, a 17.5-mile stretch of fragile shoreland will be permanently closed to ORVs. Although NPCA and others

applaud these actions, Cape Cod would be best protected if *all* ORVs were banned.

Red Dog Bill Nears Completion. At this writing, Congress has approved the final details of a bill that would allow the Northwest Alaska Native Association (NANA) a road corridor through the northern section of Cape Krusenstern National Monument. To reach its Red Dog Mine, NANA would lease access rights from the NPS rather than acquire the rights. Plus, NANA would receive some NPS acreage near the northern border of the monument. In exchange, the NPS would acquire from NANA environmentally sensitive lands on the monument's western boundaries. NPCA supports this project.

Black Canyon Proposed for Park Status. Representative Mike Strang (R-Colo.) wants to change the status of Black Canyon National Monument to a national park that would include the Curecanti National Recreation Area. He also proposes designating a 25-mile stretch of the Gunnison River as wild and scenic.

NPCA Intervenes in Merced Issue. The Federal Energy Regulatory Commission (FERC) is reviewing a license application to construct a hydroelectric project on the Merced River near El Portal in Yosemite. The project would disrupt wildlife habitat and archeological resources, as well as the Merced River. NPCA has intervened in the application review, making clear to FERC our opposition to the project. In addition, the Forest Service has drafted recommendations that would make the Merced a wild and scenic river.

Canada Turning Parks Toward More Tourism

Canada's environmental organizations are smaller and more loose-knit than those in the United States because, generally, governmental protection of public lands—parks especially—has been balanced. Until now, Canadians are asking Americans to help stave off tourism plans for Canada's four Rocky Mountain national parks.

The four—Banff, Jasper, Yoho, and Kootenay—have been collectively designated as a U.N. World Heritage Site, representing the wealth of flora and fauna in the Canadian Rockies. If the hotels, upgraded ski areas, town enlargements, and other development take place, Canadian conservationists fear that flora and fauna, the ostensible reasons so many people visit these parks, will be replaced by ski lifts and steak houses.

Although funds for wildlife research have been cut, the budget for advertising Canada's national parks to potential tourists has gone up. Parks Canada, which is the Canadian national park service, has guidelines that restrict competitive skiing within the parks. Now, however, government representatives agree with ski area owners that restrictions against competitive skiing in the parks should be lifted.

An indication of the tension among government representatives, conservationists, and developers can be found in the progress of the draft management plans for the Rocky Mountain parks. During the past two years, public meetings on the plans have engendered much discussion. Grassroots support was strong for preserving the natural character of these parks from development.

Public comments on development versus nondevelopment options

clearly leaned toward the nondevelopment options. Yet, this past summer, the government overrode the voice of these constituents and sharply turned the management plans onto the path of development.

Besides deregulating competitive skiing, the plans would allow both Banff and Jasper townsites, which are each within a park, to grow by 50 percent. Banff townsite, in Canada's first and most acclaimed national park, already has a population of about 6,500. In addition, plans would allow hang gliding and mountain biking in backcountry wilderness; would expand the Trans-Canada highway through Banff; and would add new campsites, lodges, and tourist complexes.

To protest overdevelopment of Canada's parks, write Prime Minister Brian Mulroney, Parliament Buildings, Ottawa, Ontario, Canada K1A 0A6.

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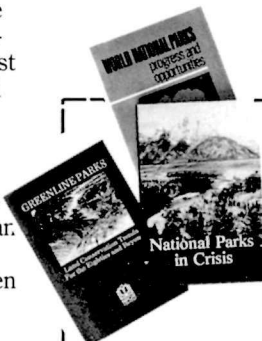
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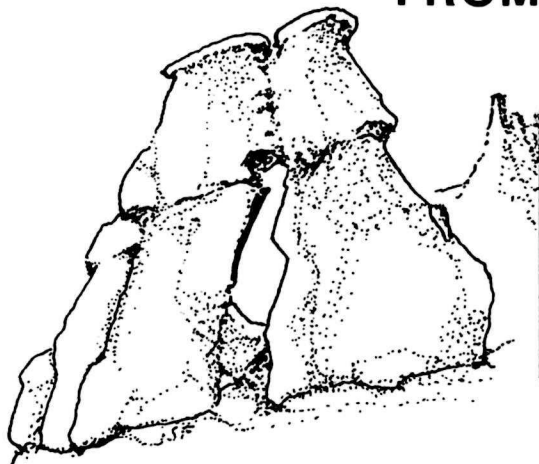
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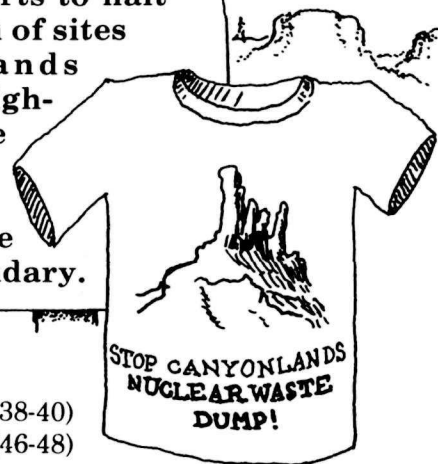
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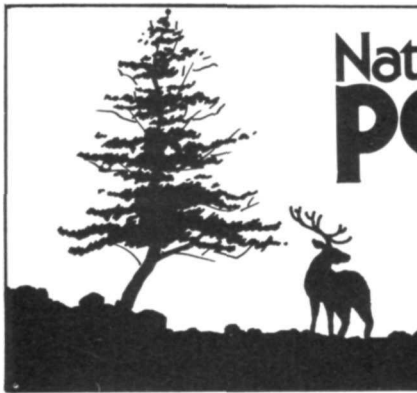
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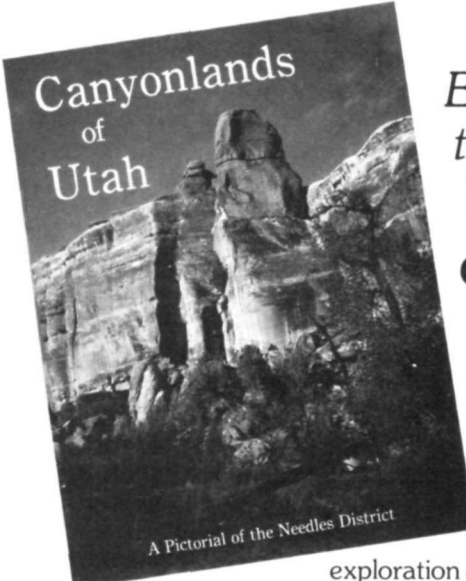


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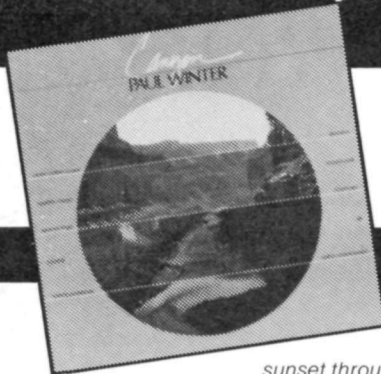
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Abbreviations:

BLM: Bureau of Land Management
 LWCF: Land and Water Conservation Fund
 NB: National Battlefield
 NHP: National Historical Park
 NL: National Lakeshore
 NM: National Monument
 NP: National Park

NPCA: National Parks and Conservation Association
 NPRES: National Preserve
 NPS: National Park Service
 NR: National River
 NRA: National Recreation Area
 NS: National Seashore

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Gettysburg



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Left: The battle at Cemetery Ridge marked the end of General Lee's invasion of the North and, to many, the end of the Confederacy. The conflict was so intense that at its conclusion the exhausted men sat for an entire day, facing each other without fighting. Above: The 50th reunion in 1913 was the first to include soldiers from both sides. Influential Union and Confederate officers had become friends after the war; they wanted that for all veterans. The week-long encampment brought together 55,000 people, happy to heal old wounds. Below: At the 50th reunion veterans re-enacted the Confederates' disastrous Pickett's Charge. This time it ended with a handshake over the wall rather than a bloodbath. By the 75th reunion in 1938 most veterans were in their 90s, and the charge was re-enacted one last time.

Park Portfolio

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