

Sierra Club Bulletin



MAY 1972

Whose Home on the Range?

Board of Directors



Annual Meeting

SAN FRANCISCO / MAY 6-7, 1972

Election of Officers and Resolutions Adopted

NEW OFFICERS ELECTED. Judge Raymond J. Sherwin was re-elected for his second term as Sierra Club president. Also elected to the Executive Committee were Larry Moss, vice president; June Vivant, secretary; Paul Swatek, fourth officer; Will Siri, fifth officer, and Charles Huestis, treasurer. Paul Swatek and John Ricker were newly elected to the Board of Directors in April.

BLUEPRINT FOR SURVIVAL. The Sierra Club supports the goals as described in the Blueprint for Survival of a stable but diverse society for the world community which minimizes environmental destruction, reduces the discrepancy between economic values and costs and social values and costs, and increases the diversity of physical and social environments.

EASTERN WILDERNESS. The Sierra Club urges the United States Forest Service to identify promptly and recommend to Congress protection under the provisions of the 1964 Wilderness Act to those acreages on national forests in the East that presently qualify as wilderness; the Sierra Club urges the United States Forest Service, to the extent administratively possible, to conduct a comprehensive review to identify promptly and give protection at least equal to that afforded by the provisions of the 1964 Wilderness Act to those acreages on national forests in the East that have the potential to restore themselves and to regain the qualities of wilderness; the Sierra Club urges the United States Forest Service to identify those areas worthy of protection as scenic areas or as research natural areas or other suitable designation without restriction as to size or prior use; the Sierra Club further urges that there be citizen participation in the identification and review of all of the areas covered in paragraphs 1, 2 and 3, and specifically suggests that the Sierra Club and its chapters and groups become involved at all stages of this process.

DEEP SEA MINERAL RESOURCES. The Sierra Club considers that without careful advance environmental planning, the development of ocean mineral resources may create serious pollution, thereby intensifying the gravity of existing marine pollution which now threatens the viability of marine life; the Sierra Club supports the creation of new international agreements and institutions with jurisdiction to control marine pollution and to protect the environmental quality of the oceans; and the Sierra Club is opposed to appropriation of mineral resources beyond the limits of national jurisdiction until international agreements or institutions are created with jurisdiction and power to plan, evaluate, and regulate such development consistent with marine environmental quality.

MINERAL KING. The Sierra Club reaffirms its opposition to any ski development in Mineral King, and access facilities to it, not consistent with present usage. The Sierra Club also reaffirms its policy to obtain the expansion of the boundaries of Sequoia National Park to include the present Sequoia National Game Refuge.

NATIONAL ENVIRONMENTAL POLICY ACT. The Sierra Club deplors the assaults upon the National Environmental Policy Act which will weaken the requirements that final environmental impact statements be prepared before projects can go forward. The NEPA procedure of assessing environmental impact prior to undertaking a major federal action affecting the environment is absolutely essential if irreversible mistakes are to be avoided, and the Sierra Club reaffirms its endorsement of this act.

VILLAGE LAKE LOUISE. The Sierra Club opposes the construction of the proposed Village Lake Louise community and recreation development in Banff National Park, Canada, for the reasons that such development is inconsistent with proper standards for national parks, is especially out of keeping in this scenic, internationally known spot, and would introduce population densities far exceeding the carrying capacity of the region.

CALVERT CLIFFS STATE PARK. The Sierra Club supports the creation of the Calvert Cliffs State Park of approximately 1,800 acres on the shores of Chesapeake Bay in the State of Maryland. Furthermore, the Sierra Club strongly opposes the construction of a liquid natural gas plant, including a 5,900 foot long concrete pier, as proposed in the Maryland State Department of Forests and Parks master plan for the park.

WILD RIVER PROTECTION FOR THE RIO GRANDE IN TEXAS. The Sierra Club supports the designation as a Wild River of unprotected portions of the Rio Grande River between Colorado Canyon and Dryden Crossing in the State of Texas. The Club opposes any incompatible development and management of existing facilities that would create environmentally harmful effects to the river environment within the Big Bend National Park. Furthermore, the Club strongly urges the United States government to seek the active cooperation of the government of the Republic of Mexico to obtain similar protection for their share of this international river.

NATIONAL PARK SERVICE UNIT IN MOUNT HOLYOKE AREA. The Sierra Club supports legislation to establish a major unit managed for conservation purposes in the Mount Holyoke area of Massachusetts as part of a National Park Service project to protect land along the Connecticut River.

CLEAN ENVIRONMENT ACT INITIATIVE. The Sierra Club takes no position on California's Proposition 9 (Clean Environment Act). It will provide its members with a full discussion of the pros and cons of Proposition 9, so that members can make an informed decision. The Sierra Club shares the concerns of the proponents of the Clean Environment Act. The Club should outline to the public a positive program, emphasizing those measures before the legislature which are consistent with the provisions of the Clean Environment Act, to redress the ills of our environment. The Sierra Club unreservedly condemns the falsehoods and misrepresentations contained in the pamphlet, "How the Pollution Initiative Affects YOU," issued by Californians Against the Pollution Initiative.

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VOLUME 57 / NUMBER 5 / MAY 1972

Contents

Whose Home on the Range?	4	by Leslie Hood and James K. Morgan
ASCENT 1972	12	
The Shape of Climbs to Come	16	by Yvon Chouinard
Mineral King: the Battle Goes On	26	A Staff Report
COMMENTARY		
News View	17	
Editorial	18	
Washington Report	20	
Regional Rep's Reports	20	
Directors' Meeting, May 6 and 7	Inside front cover	



Cover: A Rocky Mountain bighorn ram, still and sure, standing in the sunset of the day and the twilight of his species' survival on impoverished public land in central Idaho. The story of his fate, and that of great sections of our public lands, is unfolded in the story, "Whose Home on the Range?" (Photo by James K. Morgan.)

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Founded in 1892, the Sierra Club works in the United States and other countries to restore the quality of the natural environment and to maintain the integrity of ecosystems. Educating the public to understand and support these objectives is a basic part of the club's program. All are invited to participate in its activities, which include programs to "...study, explore, and enjoy wildlands."

The Sierra Club Bulletin, published 10 times a year, is the official magazine of the Sierra Club, 1050 Mills Tower, San Francisco, California 94104. Annual dues are \$15 (first year \$20) of which \$3 is for subscription to the Bulletin. (Non-member subscriptions: one year \$5; three years \$12; single copies 50¢.) Second class postage paid at San Francisco, California. Copyright ©1972 by the Sierra Club. No part of the contents of this magazine may be reproduced by any means without the written consent of Sierra Club Bulletin. Other Sierra Club offices: Alaska: 119 Seward Street, Juneau, Alaska 99801 / International: 777 United Nations Plaza, New York, N.Y. 10017 / Legal Defense Fund: 311 California Street, San Francisco, California 94104 / Midwest: 444 West Main, Madison, Wisconsin 53703 / Northwest: 4534½ University Way NE, Seattle, Washington 98105 / Sacramento: 927 10th Street, Sacramento, California 95814 / Sierra Club Books: 250 W. 57th, New York, N.Y. 10009 / Southern California: 2410 Beverly Boulevard, Los Angeles, California 90057 / Southwest: 2041 E. Broadway, Tucson, Arizona 85719 / Washington, D.C. 324 C Street, SE, Washington, D.C. 20003 / Wyoming and Northern Great Plains: P.O. Box 721, Dubois, Wyoming 82513.



Whose Home on the Range?

By LESLIE HOOD and JAMES K. MORGAN

THE SAGEBRUSH desert blankets the Western rangeland, a dreary landscape relieved by an occasional deer and the ever-present cattle and sheep. Yet less than a hundred years ago this same land supported the greatest assemblage of game animals found on the continent. Bison, elk, deer, pronghorn, and the prize of all, the bighorn, grazed the lush mountain valleys, the vast grasslands of the foothills, and the broad uplands that separate range after snow-capped range of jagged peaks.

The fate of the bighorn, banished now to the more inaccessible recesses of the mountains, is an indicator of the degradation of the environment that has taken place in less than a century. Some animals were hunted to the verge of extinction for the supposed threat they posed to man and his livestock, others for transitory economic gain. Now the bighorn, harmless and free of obvious utilitarian value, balances precariously close to oblivion in much of its range, the passive victim of the damage wrought by cattle and sheep to an environment which must, ultimately, preserve all of us from oblivion.

The decline of the bighorn is only one of many consequences of the exploitation and ravaging of this once-rich land, a waste subsidized by the American public. Before it is too late for both bighorn sheep and us, we must examine our public grazing land policies and chart a new course more in accord with the needs of our times and more attuned to our increasing knowledge of environmental necessities.

Today we realize that energy use is the measure of the quality of an environment. In the highest quality environments, plants and animals have achieved a dynamic equilibrium where all of the available energy is fully utilized. Such a system perpetuates itself, adapting to fluctuations, continually evolving to make the most efficient use of the energy. Evolving over thousands of years, the bighorn sheep made the most efficient use of a relatively stable habitat, the semi-arid grasslands of the western mountains.

For hundreds of generations, each spring as the grass turned green the bighorn began their annual trek up the ridges of the backbone of the continent, from the Sangre de Cristos of New Mexico to the Canadian Rockies, following the receding snow to the rich grassy pastures in the high mountains. The gravid ewes stayed behind to lamb in May and June, but as soon as the young were born they, too, climbed to the high pastures. Then, each fall, when the snows began

“... the bighorn, harmless and free of obvious utilitarian value, balances precariously close to oblivion in much of its range, the passive victim of the damage wrought by cattle and sheep to an environment which must, ultimately, preserve all of us from oblivion.”

Leslie Hood is executive director of the California Natural Areas Coordinating Council and is doing graduate work in economic mammalogy at California State University at San Francisco. He served as acting editor of the Sierra Club Bulletin from October, 1971, to March, 1972. James Morgan, who holds degrees in wildlife management and wildlife biology from Utah State University, spent five years studying the Rocky Mountain bighorn sheep for the Idaho Fish and Game Department. His work forms the principal scientific basis for this article.

to cover the increasingly sere pasture, the herds in small bands, always led by a ewe, wended their way back down the ridges to the winter feeding grounds on the foothills and in the valleys. Here on the snow-free slopes they could forage the grasses and forbs and, when the snow covered the ground too deeply, browse the shrubs. The abundance of the bighorn was a sensitive indicator of the quality of the environment: any disruption in the energy flow would immediately be reflected in the size of the herds.

To illustrate: the area around Challis, Idaho, is a microcosm of much of the present bighorn world. Located here on the headwaters of the Salmon River, Challis is in the heart of what was ideal bighorn country. In the 1870's the Middle Fork of the Salmon alone supported a herd of 2,500 animals. Today remnant bands of these thousands straggle through their traditional territories—perhaps a total of 300, half of what there were even a decade ago.

The cause is readily apparent. Overgrazing has stripped the hillsides and valleys of grasses and shrubs that once flourished, leaving sagebrush. On the south slopes, where the snow cover is lighter and the animals, wild and domestic, can find food during the winter, the sagebrush takeover is almost complete. On the north slopes, where the snow is deeper, some grass still remains, maybe a quarter of the

total cover. This is not a localized condition. Over two-thirds of the western ranges have suffered similar damage as a result of overgrazing by livestock.

The decline of the bighorn, and the range, set in with the rise of the cattle industry after the Civil War. Cattle swept through the West almost as fast as the animals could be driven. In their wake came the sheep. Within a few short decades the West was won; cattle and sheep could be found virtually anywhere the grass grew.

In the rush to settle, the mountain valleys with their rich meadows and year-round streams were the first to be homesteaded. Control of a stream—or a waterhole—gave the owner effective control of large stretches of land. Many ranchers had relatives or even casual employees homestead additional sites along a stream and quickly, if illegally, deed their claims to the rancher. Rapidly, the choice bottomlands were gobbled up, plowed and fenced. Fencing closed the land to the wandering livestock but it closed it just as effectively to the bighorn and other game, forcing them into the less desirable foothills.

Lands away from the valley bottoms and the forests remained in the public domain. They were there for the taking, free to anyone wishing to exploit them. And exploited they were.

The forests were hurt first. Great tracts were logged off for mine tim-

bers, fencing and railroad ties. Stockmen seeking richer grazing burned off thousands of acres, for thick grass carpets would spring up in their stead. Itinerant charcoal burners, supplying smelters, were permitted to work only burned-over lands, so they, too, fired the forests. By the 1890's, realizing that soon there would be no forests left unless some protection was given, the federal government put millions of acres into forest reserves.

In 1905, the newly established Forest Service instituted a permit system for the grazing lands it administered. Such an infringement of "individual rights" was bitterly fought by the stockmen, as was the modest grazing fee when it was imposed a few years later. These controls have continued to the present, and though not overwhelmingly successful, they have afforded a measure of protection to the forest rangeland.

With the prime timber protected and the choice lands taken, there still remained several hundred million acres in the public domain. The old adage that "everybody's land is nobody's land" might well have been coined to apply to these lands which have taken the brunt of abuse. Considered "free" by the stockmen, these lands were ruthlessly exploited. All too soon, ranchers could tell the progress of the nomadic herds by the great clouds of dust they raised as they moved across the range. The clouds

Before the coming of the cattle- and sheepmen, bighorn ewes dropped their lambs in their winter feeding grounds, the lower reaches of their natural habitat. Competition has driven them ever higher in search of feed and isolation, and their numbers dwindle at an ever accelerating rate.



portended more than approaching animals; the end of the grass was in sight, for grass-covered land does not stir into dust with the passage of animals.

The ecological impact of this rush to "get it before somebody else gets it" was dramatic and drastic. Today it is impossible to tell accurately in many areas just *what* the original plant cover was because so many of the more valuable species have disappeared completely. Others, more resistant to grazing or less used by livestock or other animals that like good grass, have increased, creating unpalatable plant communities. The relatively inedible big sagebrush, which commonly grows in association with wheatgrass and was present in moderate amounts, literally exploded on the rangeland as a result of overgrazing the grasses. Today over a third of the public range—96 million acres—is primarily sagebrush.

As the conversion to sagebrush desert was so swift, early ecologists were led to believe that sagebrush was the climax stage on the Western rangelands. Only a few tiny areas of the range escaped the violent change brought about by overgrazing to provide a clue to the original plant cover.

The alteration of the true climax plant cover radically reduced the numbers and changed the distribution of the bighorn as well as many of the other native animals. Other factors, such as hunting and the introduction of disease by domestic livestock, have complicated these changes, yet it must be pointed out that hunting has been under controls of varying effectiveness for many years, and that a long-run view must make declining range quality the most important factor in the continuing decline of the herds.

Both the summer and winter ranges of the bighorn have suffered the effects of overgrazing. The most acute problems are in the lower altitudes on the winter ranges. Here the animals are in competition not only with the domestic livestock but with the displaced deer, elk and pronghorn. Deer are very adaptable animals (there are more now than when the first Europeans arrived) and they very quickly took to the brushy vegetation of the new ranges created by man's animals. Heavy hunting probably limited their early proliferation, but with the advent of the game laws they have literally overrun the land.



Cattle on the public range near Salmon, Idaho. Stockmen subsidized by the federal government view the public lands with what amounts to a proprietary interest. Much of the vast range has been severely damaged by overgrazing.

An isolated patch of native grasses protected by fencing around an abandoned cemetery at Clayton, Idaho. Note the marked contrast with overgrazed sage-covered hillside beyond.



In one study area near Challis, mountain mahogany is the primary source of protein for the bighorn during the winter as they cannot, or will not, graze sagebrush. Although deer will browse sagebrush, they prefer the mahogany, and by sheer superiority of numbers strip it. Competition is further compounded in the spring when all of the animals on the range turn to what is left of the most succulent and nutritious food, the shoots of green grass. The thousand or so deer on the range quickly consume four-fifths of the new grass, leaving the rest to be shared by a hundred bighorn, small bands of elk, pronghorn and feral burros, as well as domestic livestock.

The effects of overgrazing, however, were not confined to the bighorn. The livestock industry itself became a victim of its own greed in the absence of any effective control of the public grazing lands. Before 1900, overgrazing had become apparent in parts of the range, yet despite the rising concern of conservationists over the next few decades, little was done to correct the abuses. Congressional preoccupation with disposal of the public

lands to encourage settlement led, in the Stock Raising Homestead Act of 1916, to a further compounding of the problem. This misbegotten act, which raised the homestead limit to 640 acres, was successful in attracting settlers but, as the better lands were long since gone, most of the settlers were not successful and soon abandoned their claims. The end result, as the stockmen who had opposed it feared, was to further break up the range and increase the competition for what little grass was left on the diminishing public lands.

By the 1930's, the situation was becoming desperate, as Professor Paul Gates describes in *The History of Public Land Law Development*: "The failure of Congress to adopt legislation to halt the destructive use of the public rangelands and to prevent the continued breakup of natural grazing areas by homesteading, which was taking the land with access to water and leaving useful grasslands without any water, brought about an increasingly critical situation by 1933. Overgrazing, destruction of the better grasses and survival of poisonous plants, erosion of steep hillsides, and



silting up of reservoirs, all emphasized the need for control. Furthermore, the catastrophic decline in livestock prices, which fell by 50 percent between 1931 and 1933, forced cattlemen to make greater use of the free range on the already depleted public lands."

Realizing the gravity of the situation, the ranchers sought protection, which came in the form of the Taylor Grazing Act of 1934. This act set the

pattern for public grazing land policies as we know them today. Tramp herds were effectively eliminated by giving preference in issuing grazing permits to ranchers who owned home ranches. The Grazing Service was created in the Department of the Interior to supplement the General Land Office and administer the public grazing land, virtually all of which was located in the 11 Western states. Controlled directly by the livestock indus-

try through local rancher advisory boards and the many employees who had been in the industry, and indirectly through the powerful cattle bloc in Congress, the service operated for the benefit of the industry. This early dominance by the livestock interests is reflected even today in the symbol of its successor agency, the Bureau of Land Management's "Johnny Horizon"—a rugged cowboy in a Stetson.

There is no denying that the Taylor Grazing Act was long overdue. Yet in operation it stressed one stated purpose of the act—to stabilize the livestock interest—at the expense of another which called for "preventing overgrazing and soil deterioration." No one even bothered to make an assessment of the long-term impact that the policies of continued heavy grazing would have on the land. Only recently have such assessments been made—and the results are appalling.

Of the 410,000 square miles of public rangeland, 30.5 percent (125,000 square miles—an area almost the size of Montana) is considered to be in poor condition, and 50 percent (250,000 square miles—an area greater than Wyoming and Colorado combined) is in only fair condition. These figures were developed by the Public Land Law Review Commission and are based on data supplied by the very federal agencies charged with responsibility for the land. After more than 60 years of "management," overuse and unsatisfactory conditions prevail on over two-thirds of our public range.

But the loss of plant cover and wildlife is only the beginning of the destruction. Without plant cover to dissipate the rains and slow the runoff of the melting snow, the water is not held on the surface long enough to seep into the ground and replenish the underground water tables. Rather, it rushes off the denuded land, causing floods downstream. Even more serious is erosion. In an account of the erosion of the range, the Bureau of Land Management states, "According to the best estimates now available, about 50 percent of the federal range lands are in a state of severe to critical erosion, 32 percent are eroding moderately, and only 18 percent are in a condition of slight or no erosion.

"It is estimated that the average annual run off from federal ranges in the major river basins of the West is 23 million acre feet of water, or only about five percent of the total annual

flow of the streams in the states west of the Mississippi. On the other hand, it is estimated that federal rangelands produce 320,000 acre feet of sediments annually, exceeding the combined volume of sediment discharged by the Mississippi and Colorado rivers. From a watershed standpoint therefore, we find the federal rangelands yielding a minor volume of usable water but producing a major portion of the sediment in Western river basins."

To stem and correct the damage brought about by overgrazing, millions of dollars are spent annually on soil conservation projects, stream channelization, dam building, fish restocking, and stream rehabilitation programs. Ironically, not only is the public taxed to repair the damage but, in this curious wonderland of politics and bureaucracy, it continues to underwrite, at a cost of more millions yearly, the very cause of the destruction of its own lands and wildlife.

These tax-supported subsidies—though they aren't called that—come in a variety of guises. Fire protection, improved access to public lands, or other pretexts justify slashing roads across the land—roads for which the main use is to haul stock and equipment. Wildlife range improvement is a guise for gouging out waterholes—wildlife may benefit but the new waterholes open previously unusable range to the livestock. Other tax-supported programs are frankly designed to protect the livestock.

The most grotesque subsidies have been in the "predator control programs." Ever since cattle and sheep first grazed the West, any creature that walked or flew that could be considered even remotely harmful has been relentlessly persecuted. Though dubiously necessary in certain areas on a limited basis, the indiscriminate killing of cougars, bears, wolves, coyotes, bobcats, even hawks and eagles, has all but eliminated them from much of their former ranges. The unnatural absence of predators throughout much of the West has been responsible in no small part for the explosion of deer, rabbits, ground squirrels, mice and other animals and even insects that the ranchers find to be *truly* economically dangerous pests.

Heading the list of the subsidies are the unrealistically low grazing fees. Private operators charge from \$2.50 to \$5 per cow-month of grazing.

Grazers on the public domain pay only 64 cents per AUM (Animal Unit Month, the amount of forage eaten by one cow or five sheep in one month) and those on forest lands pay an average of 78 cents. Even adjusting the grazing fees to compensate for the services offered by the private operators, they are still less than half of the going private rate.

Stockmen cling to the idea that government should subsidize the public range for their benefit—and they pack enough political clout to get their way. A program to raise the grazing fees to their fair market value in annual steps was begun in 1969. There was an increase in 1969, none in 1970, another increase in 1971. Early in 1972, the Wildlife Management Institute reported that this year "instead of the scheduled increase of nine cents per AUM on national forest lands and ten cents per AUM on the public domain, the Administration proposes to raise each by only two cents per AUM this year." Originally this decision was to be aired for public comment. The Interior Department, however, complained that public comment would delay completion of lease agreements by a few days and apparently has succeeded in disallowing the people any say-so in the management of the public land.

Sagebrush deserts, denuded hills, vanished wildlife, depleted fisheries, eroded gullies, silted rivers, flooded lowlands and, above all, the loss of productivity on the rangelands are the price we are paying for allowing overgrazing. It will take a long time to rejuvenate and restore the range to a point even approaching its original productivity.

Congressman John Saylor in a recent address to the Society of Range Management stated that "based on the present rate of public expenditures for range management, it was estimated that 180 years would be needed to complete the required treatment of these lands to bring them up to *acceptable* standards." (Emphasis added.)

Even this dismal estimate may prove overly optimistic if past "range management" techniques persist. The simplistic approach of reducing the animal unit months was tried in the 1930's and 1940's. It failed to prevent overgrazing primarily because estimates of the range carrying capacity were unsatisfactory; however, many ranchers cheated and exceeded their

quotas. This program was superseded, in the 1950's and 1960's by vast and (in terms of the cost per acre) expensive rehabilitation programs. Restoration normally consisted of dumping 2,4,D or other poisons on the land to kill the sagebrush and other undesirable plants, followed by a massive reseeding, usually with the exotic crested wheatgrass, a native of Siberia. Though often successful in providing forage for the livestock, there was no continuing management plan and the grass was soon polished off, necessitating reseeding. Further, the creation of large, unstable monocultures of an introduced grass muddled an already critical ecological mess.

A new technique, rest and rotation, devised in the mid-1960's and now gaining currency, holds promise but it is still too early to determine its long-term effects. Under this program the range is divided into several pastures, which in range management terminology may mean thousands of acres, and each is put into a regular rotation system. During the first year, while the others are being grazed, one pasture is closed to domestic animals to allow the plant cover to recuperate. It remains closed for most of the second year until seed-ripe time, then, for a very brief period, it is heavily grazed while the animals trample the seeds into the ground. Ideally, the pasture is rested for the third year to permit the plants to further re-establish themselves; however, it can be grazed at seed-ripe time. In the fourth year grazing is resumed in the spring and fall, subject to time and animal unit controls. By staggering the treatment of pastures so that each is in a different phase, grazing can be continued while the range is being restored.

To be effective, the rest and rotation program requires fencing the pastures to regulate livestock use. These fences do not pose a major obstacle to deer and antelope but they can restrict the movements of the bighorn and elk. Bighorn are normally not wide-ranging animals, spending most of their lives on their relatively small home range. The only regular exception, and then only for a limited time, is during the rutting season in the late fall when the rams may venture far afield in search of ewes. The size of the range varies from herd to herd; some migrate only a few miles between their winter and summer feeding grounds, others may travel 20 or 30 miles. To



Muddy waters of the east fork of the Salmon River near Challis merging with the clear flow of the main stream. Overgrazing in the watershed of the east fork led to severe erosion.



An abandoned homestead near Challis, testimony to the marginal capacity of large parts of the public rangelands to sustain domestic grazing.

fence the pastures without knowledge of the local bighorn habits, as well as those of the other game, would work to the detriment of the animals. Any sound restoration program must take into account all factors.

Encouragingly, the Bureau of Land Management has now developed, at least in the upper echelons, a consciousness of the need for a balanced, overall range-management program embracing recreation, wildlife, forestry, mining and watershed as well as grazing. This awareness has not always filtered down to the state or district offices where the pressures of the livestock interests are more immediate. In not a few local offices the rancher's whims are still paramount and his violations of the grazing regulations are ignored. Trespassing, overloading the range, grazing out of season, even defoliation treatments are frequently overlooked. These violations are too often reflections of the ingrained attitude held by many stockmen that the public land is their own private domain. This is seen today in the posting of public lands, in denying access to the public lands, and even in the shortened hunting seasons that ranchers demand to keep hunters off the public lands while the livestock are there.

A public-be-damned attitude is contagious, infecting parts of the body

politic. Bills are currently before Congress that would give stockmen not only a proprietary right to the public lands but 20-year renewable rights to graze the range with virtually no limits placed on how the grazing would be done. The ranchers would even be compensated should there be a reduction in grazing privileges.

The basic question arises, should cattle and sheep be allowed to continue grazing the public land? The answer is not simple. Ecologically the answer is a qualified no—qualified, since a case can be made for controlled grazing in productive areas.

Economically, the answer is probably no. Grazing on public lands is not a viable enterprise. A report of the Public Land Law Review Commission shows that the majority of stockmen using public lands run herds too small to be economic (200 head of cattle are considered an economic unit). Over half the grazing permittees have herds of less than 50 head. The average livestock operator's net annual income is at the break-even point and many actually lose money. Nor are the permittees an important segment of the livestock industry. Some three percent of the nation's livestock forage comes from the public lands. Even in the West, with animals grazing an average of three and a half months during the year, the public range provides only

12 percent of the forage.

The major stumbling block to removing domestic animals from overgrazed public ranges is the need to bolster the economy of small parts of rural Western America. Cost economics will soon dictate a restructuring of the livestock industry, as the Forest Service study reveals, with a probable decline in production in the West. This pending economic relocation will force out the marginal operators, many of whom rely heavily on public lands. Why not plan for this change—and mitigate its impact—by developing a comprehensive range-restoration program now?

The first step in such a program is the reduction of all grazing allotments for a five-year period. Reductions up to 50 percent and more, depending upon the condition of the range and its safe carrying capacity, should be made by curtailing spring grazing when the grass is most susceptible to damage. Fall grazing, which is less detrimental and may even help restore the grass, should be continued. During this time detailed objective studies of the public lands, district by district, range by range, would be made to determine their best potential use. (Ostensibly this has been done, but too many studies have been economically rather than ecologically oriented.) As the studies are completed, the land would be classified according to its best use: watershed, recreation, wildlife, timber, minerals and grazing. Grazing then would be restricted to those lands best suited to grazing.

During the five-year study period the money used to subsidize the livestock industry on the public land could be channeled directly to range restoration and rehabilitation projects, re-seeding with native grasses and forbs, repairing damage, cleaning up the range, and so on. Individuals seriously affected by the partial closure of the range could be employed in these projects or given aid in relocating. To further soften the impact, grazing fees could be maintained at the present low levels.

Grazing would be closely controlled through the use of range analysis to maintain grazing pressures that would not interfere with the reestablishment of natural, healthy ecosystems. It is quite conceivable that large numbers of animals might be grazed on suitable parts of the range when it is restored to its original productivity. When the

land was first subjected to rancher exploitation it often supported herds larger than those of today—it is overgrazing that has injured productivity of the land, and only careful husbandry can bring it back.

While the one-time costs of making the studies may seem high in terms of present range management expenditures, they are infinitesimal in comparison to the continuing costs that the taxpayers of the future will pay as a result of the further deterioration and destruction of the rangelands.

Congressman Saylor's injunction to the range managers is just as appropriate for the ranchers: "You must make the decision to support changes in the way we manage the public ranges. But you must also make the decision to support changes that are in the best interests of the *total American population.*"

To be successful, a range rehabilitation program working for the best

interest of all the people must consider the diverse elements of the range. Currently the Bureau of Land Management and the Forest Service, which administer all but a fraction of the public land, are developing a "management framework plan" which can prove a major step towards a valid restoration program. The plan considers the various user elements of the range, but unfortunately, political and economic factors bulk large and take precedence over the needs of the public. So the basis for land-use decisions is an expedient "best-agreed-to-mix" rather than optimum use. If the process of making judgments becomes based on ephemeral considerations the present may not suffer, but the future will. Today we are paying for the take-it-and-get-it judgments of our forefathers.

Management of our land must be firmly based on biological principles, for ultimately these are the principles

that determine our fate. To do less, to avoid these realities, is to quicken our own footsteps along the bighorn's path. Eons in the making, our land is sluicing down our rivers in a few short decades.

The clock cannot be turned back one second, let alone a hundred years. No one will ever again see the great spectacle of the wild herds that once ranged the grasslands of the Rockies, the bison, deer, elk, pronghorn and the bighorn feeding on the seemingly endless grass. The rangelands will never be entirely the same—but they can be restored, brought back to a natural, self-perpetuating ecosystem. They can once again approach the same smooth energy flow, the same ecological efficiency that created those vast herds. When they do, then the bighorn will move back from that precarious stance on the edge of oblivion, back to the abundance of the range, their future secured. And ours, too.





Icefall on Mt. Robson, highest (12,972 feet) peak in the Canadian Rockies.

Ascent 1972

This portfolio of photographs and the article which follows are samples of the excellent graphics and writing to be found in the sixth annual issue of *Ascent*, the Sierra Club Mountaineering Journal, to be published in June, 1972. For many decades following its first publication in January of 1893, the *Sierra Club Bulletin* focused primarily on mountaineering subjects. But as the Club's interests and concerns broadened in the years following World War II, the *Bulletin* reflected these changes to the extent that the need for an independent mountaineering journal was recognized by the Club leadership. The first issue of *Ascent* was published in 1967. Since then, it has been generally recognized by those qualified to judge as one of the world's finest mountaineering publications. This issue of *Ascent*, edited by Steve Roper, Allen Steck and Lito Tejada-Flores, is available at \$3 per copy from the Sierra Club, Mills Tower, San Francisco, CA. 94104.

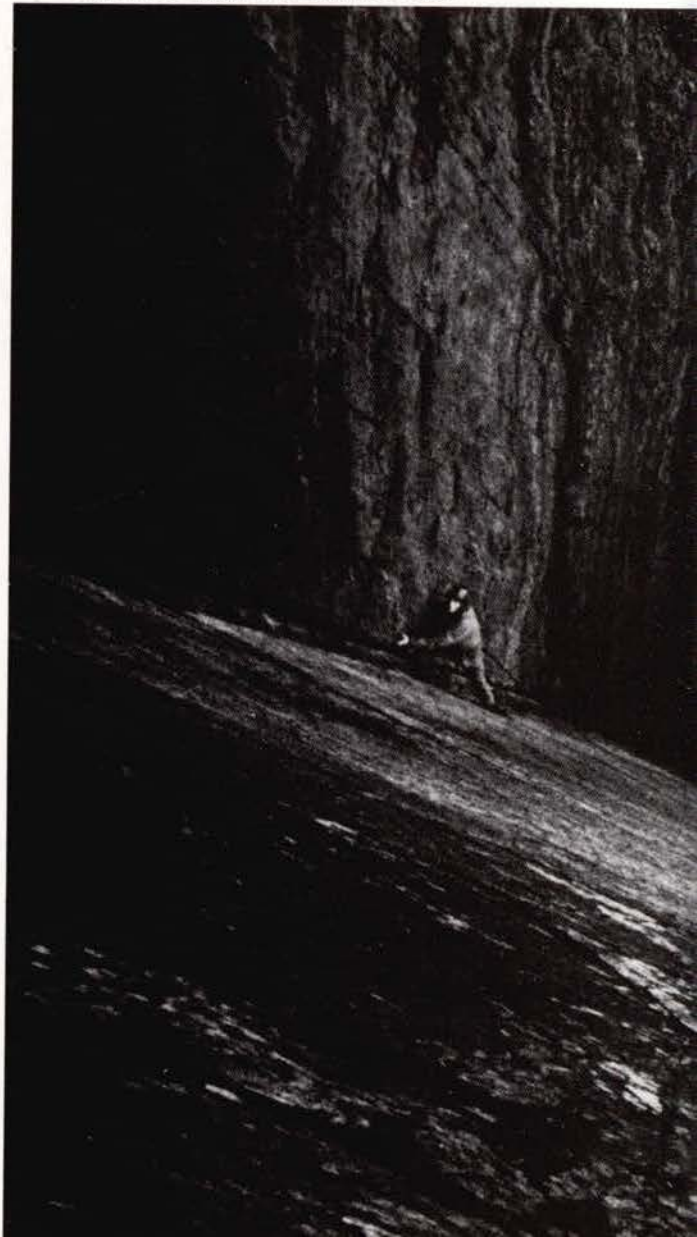


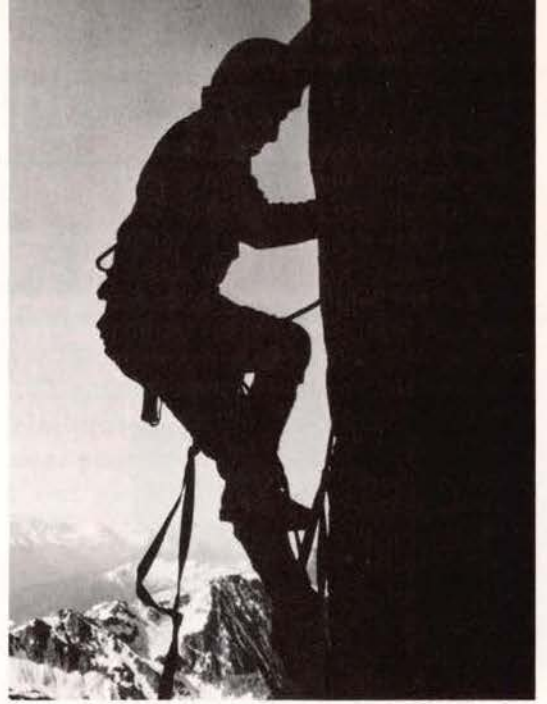
East face of Moose's Tooth, a 10,335-foot peak near Mt. McKinley.

Bosigran, a red granite sea cliff in Cornwall.



Scrattling Crack, Baggy Point, North Devon.





West face of the North Houser Tower in the Purcell Range, British Columbia.



The Shape of Climbs to Come

By YVON CHOUINARD

This article, which is taken from the forthcoming 1972 issue of *Ascent*, contains a few technical terms and place names that may be unfamiliar to many *Bulletin* readers.

But the observations and proposals of the author make fascinating reading for anyone interested in the future of our great remaining wildernesses and the adventure of climbing.

MOUNTAINEERING is very much in vogue in America. What was once a way of life that only attracted the oddball individual is now a healthy, upstanding, recreational pastime enjoyed by thousands of average Joes. The climbing scene has become a fad and the common man is bringing the art down to his own level of values and competence.

Living in California, I can see previews of coming attractions in America. I saw the peace and love movement turn to violence and hate even before it got to other parts of the country. Now there are bad vibrations in the overpopulated surfing scene and even worse vibrations with the climbing craze. The same problems which prevented us from realizing the Great American Dream are now facing mountaineering. Just as man continues to disrupt the natural order of things, so mountaineering has become increasingly technical, decreasingly difficult, much too crowded and far less adventuresome. The purity, uncertainty, naturalness and soul of the sport are rapidly being changed.

Having been passionately committed to climbing for 17 years, and with a business directly related to climbing and its problems, I feel a heavy responsibility to make known my apprehension over what climbing is becoming. Here are some of my thoughts:

Bolts

After the Wall of the Early Morning Light fiasco, there was a considerable increase in the sale of bolts in the climbing shops in Southern California. A kid buys a bolt kit before he even knows how to use a runner! Yet Reinhold Messner became one of the world's greatest alpinists without ever having drilled a single hole.

It's no longer enough to say that only the expert climbers should be allowed to place bolts. We've said that all along and it's not working! Even the Mad Bolter surely considers himself an expert.

On the big-wall climbs of the 1960's bolts had their place. They made it possible to ascend the great routes on El Capitan and Half Dome. This era is gone and yet bolts are being used in ever greater numbers to force illogical routes up blank faces. This permits the average Joe to do climbs that are normally over his head and they allow the experts to do incredibly hard climbs without having to stick their necks out. Bolts are even used for no apparent reason, like the one I once saw next to an eight-foot diameter ponderosa pine.

I believe we have reached the point where the only hope is to completely degrade bolting. We must refuse to recognize it as a legitimate means of climbing. If you are in sympathy, you must stop using bolts. Disparage others who do. Moreover, tell your local climbing shop that you are not buying anything from them until they stop selling bolts, or at the very least remove them from the front counter.

Hard-rock mining

The Lost Arrow Tip is as dead as the Hudson River. It is no longer a climb. The Nose of El Cap up to Sickle Ledge is a disgusting experience. You now use 1½-inch angles where the pioneers used rursps. Bashies have been welded into piton holes, leaving the rock once again smooth and flush—except for the rotten sling sticking out. Cracks are deteriorating, flakes are broken off, trees are being girdled by rappel ropes. Even the quartz-hard Shawangunks in New York are suffer-

ing from the onslaught of too many climbers. It can't go on like this. And it won't. The Park Service has already closed three climbs in Yosemite because of deterioration of the rock.

We once thought that America had the highest standard of rock climbing in the world because we removed our pitons and left the climbs "clean." This policy worked fine when there were just a handful of us and it's still a good way to climb a big virgin Alaskan wall. But in the Valley or the Gunks, it is now a selfish, destructive ethic.

I'd like to offer a few immediate solutions. Stay off climbs which you don't intend to finish. Don't climb to Sickle Ledge unless you plan to do the entire Nose route. Stay off climbs that are obviously over your head—otherwise you will just be placing more pitons than necessary for protection. Don't use artificial aid on free climbs. These actions would certainly help solve the problem, but the final answer is to leave the *necessary* pitons in place on all climbs, artificial and free.

The fixed-piton idea would appear at first to be a degeneration of artificial climbing standards, and it will probably end up being so. However, we could start playing the chock-and-natural-protection game instead of the piton game and thus perhaps even *raise* the existing standards. For instance, I believe that it's possible to climb El Cap using only chocks and a few thin pitons (these could be fixed).

The chock solution is dependent on everyone *using* nuts, not just carrying them around for looks, but really trusting them. Nuts and runners can be used in place of pitons on free climbs 95 percent of the time in Yosemite. I spent five days there last spring, climbing every day, and never placed a piton. I don't even carry a hammer in the Tetons anymore. This system of necessary fixed pitons and using natural protection will only work if the guidebook writers cooperate. The "all-clean" (no pitons necessary) routes should be mentioned to avoid extra piton placement and removal. The new Shawangunk guide will contain this information, and list

continued on page 29

Yvon Chouinard, a director of the American Alpine Club and one of the world's leading alpinists, is currently finishing a book on ice climbing techniques to be published in early 1973.

Sierra Club COMMENTARY

News View

Morton okays Trans-Alaska Pipeline

On May 11th, Interior Secretary Rogers C. B. Morton announced right-of-way permits will be issued for the Trans-Alaska Pipeline "as soon as it can be done without violating any court order." Environmental organizations, which obtained an injunction two years ago against issuance of the permits, said they would continue the legal battle which may finally be decided by the Supreme Court.

In a five-page statement, Morton admitted the pipeline from Prudhoe Bay to Valdez and subsequent tanker transport of oil "will involve some environmental costs and some environmental risks," but that it "is in the national interest of the United States."

Michael McCloskey, Sierra Club executive director, described Morton's decision as "a short-term expedient which will confront us with the worst possible combination of long-range results. Secretary Morton has allowed himself to be trapped into a solution that only serves the oil companies," charged McCloskey.

Dr. Edgar Wayburn, chairman of the Club's Alaska task force, commented, "The Interior Department's environmental impact statement concluded that marine transport of oil posed tremendous and unavoidable damage to aquatic life; that the Prudhoe-Valdez route would pass through two major earthquake zones; and that under any circumstances, one pipeline transport route through Canada would do less damage than two. If

national security is a prime consideration," continued Dr. Wayburn, "it would be better served by the Canadian alternative which eliminates the vulnerability of oil tankers to enemy attack. Also, the impact statement shows that the commercial and sports fishery of Prince William Sound, one of the greatest in the world, will be doomed by oil spills."

NEPA under attack

The Environmental Policy Act, conservationists' strongest tool for protecting the environment, is under quiet but critical attack in Congress. Vested interests and development-oriented agencies are exerting intense pressure on both houses to weaken the requirement that final environmental impact statements be prepared before projects can proceed.

The attack takes three legislative forms: direct amendments to NEPA, amendments to other congressional acts which in effect amend NEPA, and new legislation for federal procedures and projects which states explicitly that NEPA compliance is not necessary.

Some of the bills include: H.R.13752, which amends NEPA by allowing the Atomic Energy Commission to issue "interim operating licenses" for nuclear power plants to operate at 100 percent capacity without first filing the required final environmental impact statement (the bill has passed the House and has been heard by the Senate Interior Committee); and H.R.14137, which amends NEPA



to allow the President, at his discretion, to declare an emergency, suspending compliance with the provisions of NEPA for a particular project for a 180-day period. No hearings need be held to examine whether an emergency really exists. Amendments have also been drafted to the Highway Transportation Act which would relieve the Department of Transportation of the responsibility for filing environmental impact statements for highway projects, as now required by NEPA.

You are urged to write immediately to your senators and congressman, asking that they vote to defeat any bill which would allow NEPA to be circumvented. The National Environmental Policy Act is responsible for most conservation victories in the courts and most of the environmental reforms in federal agencies. Without it, there is little hope of similar success in the future.

Environmental Protection Act would protect citizens' rights

When the Supreme Court rejected the Sierra Club's first attempt to halt Disney Productions' resort complex in Mineral King (see page 26), its ruling was based on a decision that the Club did not show it was qualified to bring the suit. The issue of "standing" thus continues to pose a hurdle in some cases.

However, Senators Philip Hart and George McGovern have introduced a bill which would clarify the issue, the Environmental Protection Act, S.1032. The measure would establish the "right of all citizens to the protection, preservation, and enhancement of the environment." It would give each person a right to an environment free of unreasonable pollution or impairment, and would permit any person to sue to enforce that right. A similar bill, H.R.5074, has been introduced in the House by Rep. John Dingell.

At this writing, S.1032 has been reported out of the Senate Subcommittee on the Environment with several amendments, and trouble is expected in the Commerce Committee. The House bill is expected to meet even tougher going, and firm public support needs to be manifested.

Senator McGovern has said, "The powerlessness of people to participate effectively in the institutional decisions that affect their lives marks the end of a true democratic society." S.1032 would restore some of that power and provide a real means for citizens to protect the entire range of their interests.

Club wins major victory against PEPCO advertising

The District of Columbia Public Service Commission has ordered the Potomac Electric Power Company (PEPCO) to stop any advertising aimed at increasing electric power demands. This decision came in response to the utility's request to raise rates to generate capital for the construction of new power plants.

The commission also ordered PEPCO to file quarterly reports on its environmental program and urged the utility to "substantially increase" its expenditures on water and air pollution control and on environmental research and development.

In granting a \$12.5 million rate increase, the commission announced that it would consider in June a "neutral" pricing structure for electricity whereby each kilowatt of power consumed would cost the

same amount—thus reversing the current nationwide promotional practice of allowing the price to decrease as the amount consumed increases.

These measures directed by the commission essentially follow point by point the requests made by the Sierra Club, which has intervened in the rate proceedings at the behest of the Potomac Chapter. The Club is making the same case in Virginia, where VEPCO, one of the largest utilities in the country, is seeking a major rate increase.

California launches Coastal Initiative campaign

After five fruitless years of intensive pressure in Sacramento, the Sierra Club is taking the issue of coastal management to the people of California. The Club announced May 11 that it is making a major switch in its legislative program by launching a massive statewide campaign to put a coastal protection initiative on the November ballot.

"The people will have to enact for themselves what the legislature has refused to give them," stated John Zierold, the Club's Sacramento representative. "We've exhausted the legislative possibilities, and because of the unresponsiveness of government on this urgent issue, our only alternative is to turn to the people."

Working closely with the Coastal Alliance, a coalition of over 100 conservation and civic groups, the Club will stage an intensive campaign to obtain 325,000 signatures by June 9th to qualify the initiative. Major efforts will be concentrated in the Bay Area and the Los Angeles basin.

The Club turned to the initiative process when the coastal protection bill was killed for the fifth consecutive year in the Senate Natural Resources Committee.

Provisions in the initiative (the Coastal Zone Conservation Act) are almost identical to those offered in the Senate and Assembly bills. The measure would create a state board and six regional commissions which would institute permit controls over coastal development

in the area between 1,000 yards inland from the beach and three miles out to sea. It would also require preparation of a state master plan for coastal management.

"There will be nothing substantially different in the way of legislative membership in 1973 or 1974," said Zierold, "so we can expect the same kind of lassitude in the Senate that we've had for the past five years. There is very little purpose to asking the legislature to do its duty here in preserving the public trust. Only the people can save their coast now."

Four Corners power plants called health hazards

The Environmental Protection Agency has found that the environmental quality of the American Southwest will continue to be degraded by the operation of coal-fired power plants there unless more stringent air pollution control measures are enacted. "If present emission control technology is projected into the future . . . air quality standards can be expected to be violated soon at several locations, causing threats to human health, terrestrial biota, and surface water quality," EPA stated in draft reports on air and water pollution studies undertaken as part of the Southwest Energy Study, an inter-agency project ordered last year by the Department of the Interior. The project examined present and planned coal-fired electric generating plants and surface and underground coal mines on public and Indian lands.

EPA's comments suggested the plants be required to meet emission limitations exceeding present federal standards, and that stringent controls over strip mining, reclamation, ash disposal and deep mine waters be established.

In comments to the Interior Department, Sierra Club Southwest Representative John McComb accused the department's management team of ignoring or attempting to hide many of the facts developed by the work groups. "It is our opinion that these facts support the conclusion that serious environmental degradation is probably occurring

Editorial

THE PRICE IS TOO HIGH." This is what economic interests are claiming as they try to slow down pollution clean-up programs. Former Commerce Secretary Maurice Stans says, "Wait a minute. We must weigh environmental goals against economic reliability." Also the President's Council of Economic Advisors, in their latest report, worry about the "enormous" costs. Critics raise the specter of burdensome outlays, soaring prices, slowing growth, widespread plant closures, and job losses if clean-up programs continue.

Now the Council on Environmental Quality and others have come out with some figures to counter these fears. Their figures do make it clear that huge sums may be involved; perhaps as much as \$105 billion needs to be spent in the next half dozen years. But their studies, and others, also remind us that these figures need to be viewed in perspective. To begin with, \$43.5 billion is for solid-waste disposal, with much of this cost devoted to collecting garbage—an outlay that is already being made. Then too, half or more of the remaining outlays will be made by private industry, not by government, and they will be stretched out over a number of years. For another thing, much of the investment in control equipment is a one-time outlay to catch up with present requirements. Its effect upon the economy will not be prolonged. And the costs could be far less if economies of scale are achieved in producing this equipment, or better techniques are found, such as waste water spray irrigation. Moreover, while there are economic costs in meeting clean-up requirements, there are also offsetting benefits, many of which have economic expressions. In addition, new jobs and industries are being created in the pollution control field to offset job losses.

A CEQ study entitled "The Economic Impact of Pollution Control" predicts a temporary annual slowdown in growth of the gross national product over the next eight years of less than one-half of one percent. This study and others suggest that general retail prices will cumulatively rise over this period by less than two percent as a result of these added costs. Parallel studies done for the National Wildlife Federation suggest that benefits from the water pollution clean-up program will exceed costs by \$5.2 billion per year and that the excess benefits of air pollution control will total \$6.8 billion annually.

The CEQ study also looks at the problem of plant closures. Only about two percent of industrial plants may be unable to meet control standards and thus may close down, but the majority of them will probably go out of business before the end of the decade in any event. And in the next six years, more than six percent will go out of business for economic reasons alone. Thus, there may only be between 50,000 and 125,000 job losses during this period which are in some measure attributable to pollution controls. On the other hand, another study estimates that between 660,000 and 1,180,000 new jobs may be created by 1980 in the pollution control field, completely offsetting any losses (though not always in the same communities).

While environmental programs don't find their justification in economics, we should not shrink from dealing with economic arguments. These new studies suggest that the price of pollution control in the next few years will not be that difficult to bear and that the economy may even be better off.

Michael McCloskey, *Executive Director*

now and much more is expected in the future if the developments continue as planned," McComb stated. He urged Interior to discard the draft of the study management team and to prepare a new report "that presents the facts in a balanced fashion."

McComb cited four specific flaws in the department's report: (1) inclusion of materials favorable to development which were not present or were not stressed in the work group reports; (2) a rather obvious playing down of the negative impact of the developments; (3) a misrepresentation of the important statements in the work group drafts; and (4) serious omissions of the negative impacts reported by the work groups.

Awards

The Sierra Club Board of Directors made the following awards at the annual meeting May 6th and 7th in San Francisco:

John Muir Award: Dr. Edgar Wayburn

Distinguished Achievement Award: Congressman Paul N. McCloskey, Jr.

Honorary Vice President: David Brower

Honorary Vice President: George Marshall

Honorary Life Membership: Luella Sawyer

Special Achievement Award: Vicki Mattox and the Cumberland Chapter, for bringing the devastation caused by strip mining to national attention

Ansel Adams Award for Conservation Photography: Beverly Steveson

Francis P. Farquhar Mountaineering Award: Jules Eichorn

The Federal Power Commission is offering career employment to persons qualified to evaluate technical data for environmental impact statements. Positions may range up to GS 15. If you are interested, submit a resume to the office of the president of the Sierra Club, Mills Tower, San Francisco 94104.

Regional Rep's Reports

EAST

Those concerned with the ubiquitous problem of strip mining have been keeping a close watch on Congress lately and have reason to be both hopeful and anxious. On one hand, there are signs that Congress is at long last listening to the discordant tones of public indignation. But on the other, there are equally recognizable signs that strong strip-mining controls may become another casualty of election year politics.

Both subcommittees of the House and Senate Interior Committees recently completed relatively comprehensive hearings on the problems and possible solutions to the destructive process that now yields nearly one half of the nation's coal production. Numerous invited and uninvited industry and labor spokesmen, regulators, environmentalists and other expert witnesses have had their say. The committeemen, however, were less anxious to open their hearings to impassioned personal accounts of destruction. And both committees were extremely loath to view the problem firsthand, which leads many to speculate on the relevance of whatever laws are passed out of committee. On-site inspections, after all is said, cut through the murky claims of industry apologists and deflate scientific speculation about what is possible. Those on the scene know that given the state of mining technology in this country (as opposed to more enlightened practices in West Germany and Great Britain) and the profit structure of the U.S. coal operator, a strip mine is forever. Seeing is believing. And when it comes to strip mining seeing leads to conversion. Senator Fred Harris, for example, on returning from a recent tour of Appalachia was so appalled he announced he would introduce a bill prohibiting TVA from using or mining strip mined coal.

Nevertheless, the record is com-

plete and persuasive enough for the lawmakers to begin the monumental task of drafting legislation. And since more than two dozen bills have been introduced by their colleagues in both houses, and since several states have recently enacted or amended stiff controls, they should not be wanting for language. There remains, however, the question of will.

The strongest language and will

are still those of HR 4556 and its author, Representative Ken Hechler. The West Virginia Democrat proposes a total ban on the strip mining of coal, a position supported by the Sierra Club and many other citizens' organizations. Though no one seriously expects the legislation to win committee approval, the abolitionists and their legions have been the first to budge these traditionally mineral-oriented committees. As a result several milder but potentially effective measures that might otherwise have been ignored have earned some credibility. Of equal significance is that the authors of these measures, Representative Wayne Hays and Senators John Cooper and Howard Baker, like Hechler, all

Washington Report

THE WAY blame for the so-called "energy crisis" was heaped on environmentalists at recent Congressional hearings one might have thought that the high-compression internal combustion engine was invented by John Muir.

He didn't. Nor did Muir and other environmentalists invent the national oil import quota system. Environmentalists did not join with the Atomic Energy Commission, Westinghouse and General Electric in over-zealous promotion of untested nuclear power reactors as the panacea for fulfilling spiraling electric supply and demand. They did not advocate "all electric living," nor support the utility industry's advertising and pricing structure to encourage use of electricity. Environmentalists did not engineer the nation's fragmented, un-integrated and wasteful electric distribution system.

However, starting with Interior Secretary Rogers C. B. Morton, first witness at energy hearings of the House Interior and Insular Affairs Committee, testimony emphasized that the energy shortage was accentuated by those demanding a clean environment. He cited court suits against Gulf Coast offshore oil leasing and the Trans-Alaska Pipeline as "arbitrary and capricious" action by environmental groups.

Dr. Ralph E. Lapp, the nuclear physicist who described himself as an environmentalist, said the movement "was populated by people with some degree of extremism, with no willingness to compromise. If a Chicago factory worker comes home to a blank TV screen and a luke-warm can of beer, he will say, 'What do I care about the reproductive habits of fish in the Mississippi River? Turn the plant on.' There is severe danger of environmental backlash."

In all fairness, Dr. Lapp did express sympathy for environmental concerns. While urging more nuclear power plant construction, he emphasized this must be accompanied by greater efforts to solve safety problems. "Their safety is in doubt," he said.

That, of course, has been the thrust of environmental legal action on nuclear power plants. The objective of the suit involving the noted Calvert

represent coal regions.

So as the drafting begins there is a wide array of responsible support for tough regulation. The very least reformers seek are: a prohibition of all surface mining of coal in national forests and parklands and a prohibition of contour mining in mountainous regions; severe restrictions on strip mining on other lands of significant scenic, ecological, recreational or social value; specific criteria requiring reclamation of surface mined areas to their natural contour and best natural purpose.

In addition to recognizing these basic regulatory objectives, the committees must seek to construct a federal system of regulations that require improved technologies and

a higher level of corporate responsibility than has been either required or achieved by state law.

Your congressman and particularly members of both the Senate and House Interior Committees from your region should be reminded of your opinions. With continued pressure strip mining may become too hot to hold and too hot to drop, even during this frantic election year. Dramatic proof of the political potency of the strip-mining issue came in the West Virginia Democratic primary on May 9th. Abolitionists won decisive victories all across the state in a pattern which spoke unmistakably of the determination of West Virginians to end strip mining. Ken Hechler, a victim of reapportion-

ment, was forced into a four-man race against representative James Kee, Congress' number one coal-industry apologist, and two other candidates. Without industry backing or the support of the United Mine Workers, Hechler breezed to victory defeating Kee by a margin of 2½ to one.

The nomination for governor went handily to Secretary of State John D. Rockefeller IV who if elected has pledged to abolish strip mining "completely and forever" by executive order.

And in a dramatic bid for the state senate, a relatively unknown abolitionist and member of the House of Delegates, Warren McGraw, challenged State Senator Tracy Hilton, the state's largest independent strip-mine operator. The millionaire wheeler-dealer who has dominated the state political scene for years was just no match for the young McGraw and his following. In a vote that was taken to be a direct referendum on the strip-mining issue, McGraw defeated Hilton with 60 percent of the vote.

Nationally the West Virginia returns are likely to be viewed as a political imperative for strong congressional action. For once it seems the voice of the people is being heard.

Peter Borrelli

W. Lloyd Tupling

Cliffs plant was to get the AEC to comply with the law, namely the National Environmental Policy Act—not to block construction. This fact was overlooked at the hearing. Most nuclear plants were delayed for reasons other than environmental problems—construction, technical and licensing problems. As a matter of fact, the Federal Power Commission has found that of 114 major electric powerplants launched between 1966 and 1970, construction was delayed on only eight for regulatory reasons, including environmental impacts. Hardly a sufficient number to justify the frontal attack on environmentalists.

A note of reality was injected into the hearings by Vice Admiral Hyman G. Rickover, father of the nuclear submarine. "To sum up what needs to be generally understood, is that nature is completely unconcerned with man, his needs, or his desires," Rickover warned. "We are in a period of painful adjustment to a world which we can neither escape from nor control. Perhaps these hearings will help dramatize the energy problem which is simply finite resources versus consumption moving in geometric progression."

The admiral became the first witness to suggest a course of action for conservation of energy, rather than profligate development and use. He urged discontinuance of exporting enriched uranium, pointing out that about 2,000 million kilowatt hours of energy is needed for each reactor core we export. "For this we get money," he added.

But some of his proposals were more basic, including reduction of population growth, a prohibition on air conditioning "except where required for industrial or medical purposes," taxation of autos by weight and engine displacement, and electric rates that escalate as consumption increases.

Rickover's heresies were heightened by his closing comment, which even the most avid Sierra Clubber would be wary to expound. He told the Aspinall committee: "After all, life in America was very pleasant before we had automobiles, jet planes and electrified homes."

Rickover put his finger on the problem. What confronts us is not an energy crisis, but a consumption crisis.

SOUTHERN CALIFORNIA

Passage of the 1964 Wilderness Act was hailed as a landmark in this country's development of a national land ethic: for the first time, the concept of preservation of a significant portion of our national heritage was fixed into national law and definite management criteria were prescribed. Our national parks were established under the general mandate of preservation and wild and primitive areas were designated in national forests through administrative decision. But capricious choices by some public land managers and the "motor nature trail" made the need for statutory protection of unaltered land all too evident. Public Law 88-577, which was signed by President Johnson in 1964, was the legislative answer to this problem—

continued on page 27



And now, a message to our sponsors

For perspective, look again at the photograph on the opposite page: fog-fractured sunlight in the Redwoods, a scene selected from the Club's new *National Parks Centennial Portfolio* by Dennis Stock. The photograph is courtesy of the Club's publications program. So, to a certain extent, are the Redwoods. Two handsome volumes published by the Club (one is now out of print) contributed significantly to the creation of a Redwood National Park. Without that contribution, it is conceivable that Dennis Stock, arriving later in Redwood Country, might have been limited to photographing stumps. Words and photographs, books and portfolios—the bullets, a perceptive man once remarked, in the battle against those who have no regard for nature, natural equilibrium or the true necessities of human continuity on this planet.

It happens that necessities are built into the continuity of a publishing program, too. Fighting the good fight with words and pictures costs money, and part of the money necessarily must come from our sponsors, from the members of the Club itself. We're not looking for handouts. We want a fair exchange of value. We want you to buy Sierra Club books and prints, so that we can stay in the fight long enough and successfully enough to publish ourselves right out of business.

On the following two pages we present our spring list and a special prepublication offer on the first of the Club's new Landform Books, *Floor of the Sky* (available 15 September). Please note that the truculence of *Stripping* is tempered by the Tote-book practicality of *Mountaineer's Guide to the High Sierra*, the gastronomical indispensability of *Cooking for Camp and Trail*, and the inspirational appeal of *The National Parks Centennial Portfolio*. Note also, if you will, the new reduced member's prices for three Exhibit Format titles: *Baja California*, *Glacier Bay* and *Kauai*.

A "member's price" itself is new this season. Heretofore, members have purchased Club books on a discount basis while the Club has assumed the cost of postage and handling. Increased postal rates and warehousing costs now make it impractical for the Club to continue absorbing these costs. Thus a new pricing structure, wherein the member's price reflects much of the old discount plus a surcharge for postage and handling. And spares you the arithmetic agony of factoring discount percentages. (The order form/return envelope is bound in overleaf for your convenience. Please use this form only.)

Finally, a word about buying Sierra Club books closer to home. The Club is in the process of encouraging Chapters and authorized Groups to assume a larger role in the direct sale of books to the membership. If your Chapter has a book sales program, we urge you to patronize it this season. If not, order directly from the Club. Either way, *buy books*—we will do our best to see that your order is filled as fast and efficiently as possible.

JOHN G. MITCHELL
editor/books

The spring list

Twelve prints, two totes and a battler...

New titles calculated to bring the outdoors indoors, to get you oriented for the High Sierra, to fix your stew, and to stew the strip miners.

The National Parks Centennial Portfolio
BY DENNIS STOCK

Twelve gravure prints, 14 by 17 inches, celebrating the diversity and beauty of America's national parks. Boxed.

\$8.95. *Special member's price: \$7.65*

In observance of the National Parks Centennial Year, the Sierra Club assigned photographer Dennis Stock to assemble this portfolio of full-color scenes reflecting the natural heritage of our federal parklands. Stock's lens has captured storm clouds over the Grand Canyon, the interaction of mist and sunlight among the redwoods, the glint of ice at sunset in Acadia. Each handsome print is suitable for framing.

Cooking for Camp and Trail
A Sierra Club Totebook

BY HASSE BUNNELLE with SHIRLEY SARVIS

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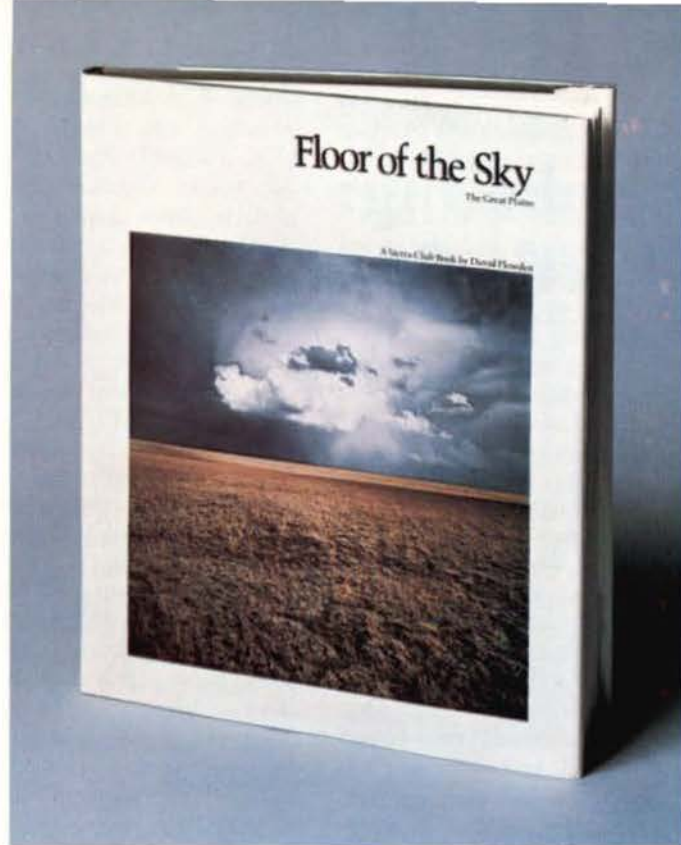
Floor of the Sky: the Great Plains

A Sierra Club Landform Book

BY DAVID PLOWDEN

128 pages. 76 photographs in color and black and white. 10½" by 12". \$19.75.

Special member's price: \$14.50 until 1 August 1972; \$17.50 thereafter.



There is this to be said of the Great Plains: they will never win any popularity contest. Misunderstood and unappreciated, they represent the most left-behind landform in the coterminous United States. People have been hurrying across the Plains for 120 years, often confusing them with the long-grass prairies to the east, always eager to leave both regions for the gold and glamour of the transmontane West. Once, the crossing took sixty days and every eye was alert for hostile Indians. Now, by nonstop jet, it is a matter of an hour and some minutes; in the pressurized cabins all eyes are on a movie screen. A few trains still glide across historic tracks, but in the dining cars the stewards pull down the shades. Why? Why because, the likely response might be, there's nothing out there for you to see.

So they say. And yet to such a sensitive eye as David Plowden's, there is more than enough to see and wonder at between the ninety-eighth meridian and the Rocky Mountain wall. For here is a piece of authentic America—a raw country dominated like none other by the awesome beauty of the sky, a place of short grass and tall grain, of windmills silhouetted against rain clouds, of pronghorns and prairie dogs, of indomitable people proudly living out their lives in Broken Bow or Wild Horse or Plentywood or Last Chance or Sun-down. With notebook and Hasselblad, David Plowden has pieced these essential elements into a powerful photographic and reportorial mosaic of the past and present of the Great American Plains.

Floor of the Sky is more than a loving tribute to this forgotten landscape. It is also a transcript of man's unending war against nature. From the time of the buffalo hunters and the earliest sodbusters, the Plains have been subjected to chronic abuse: rangeland overgrazed, semi-arid country soils depleted by humid-country farming techniques, aquifers mined, species slaughtered. Now, as the Introduction to this volume points out, agricultural irresponsibility is to be replaced in the northern Plains by industrial folly as plans proceed to strip mine the region's coal and oil-shale deposits.

Yet there are hopeful signs that the frontier ethic of the old West is on the wane. In Colorado, a cattle rancher with a "no-kill" policy toward predators and poisonous weeds is "letting nature do my work." And—with nature—he's succeeding. In New Mexico, a cowboy and his wife are deeply concerned about world population; if it continues uncontrolled, they fear the threat of famine will pull the plow—and protein crops—across the last remaining grasslands in America.

It was toward the ultimate preservation of these grasslands that the Sierra Club initiated this book, for grass is no less important to the natural North American way of being than are the more familiar textures of mountain rock and woodland tree. Popularity is not to be sought for the Plains; it could be their undoing. We simply hope this book brings understanding and appreciation of the subtle values of wide open spaces. As hard as we may try, we can no longer leave the Plains behind. They are too much a part of the national experience. Increasingly, we shall need them to be a part of our natural experience, too.

Mineral King: the Battle Goes On

A STAFF REPORT

THE BATTLE over Mineral King is entering a new phase. With the Supreme Court's decision in April, Disney enterprises is revamping its proposal, but the Sierra Club continues to pursue its lawsuit. Since 1965, the Club has struggled to keep this national game refuge from being turned into a huge, sports-oriented, year-round recreational resort, and since 1911 it has been trying to get this enclave, which is geographically and ecologically part of Sequoia National Park, included in the park. The long battle goes on.

The Supreme Court's decision was unexpected, but it left the case alive. By a 4-3 margin, the court ruled that the Club had not shown it was qualified to bring the case, but it indicated the Club could amend its complaint in district court to show that it is a user of the area and would be harmed by

the proposed resort. The Club will have no difficulty doing this. Hundreds of members use the area as a point of departure each year for outings. The Club did not plead such use in its original complaint for two reasons. First, it felt that abuse of public laws and injury to the public was the basis of the case and that reference to its own use would obscure the point. Second, it thought the proper basis of its standing was a theory arising in Eastern courts that citizens were qualified to bring suits as "private attorney generals" to aid in securing enforcement of statutes.

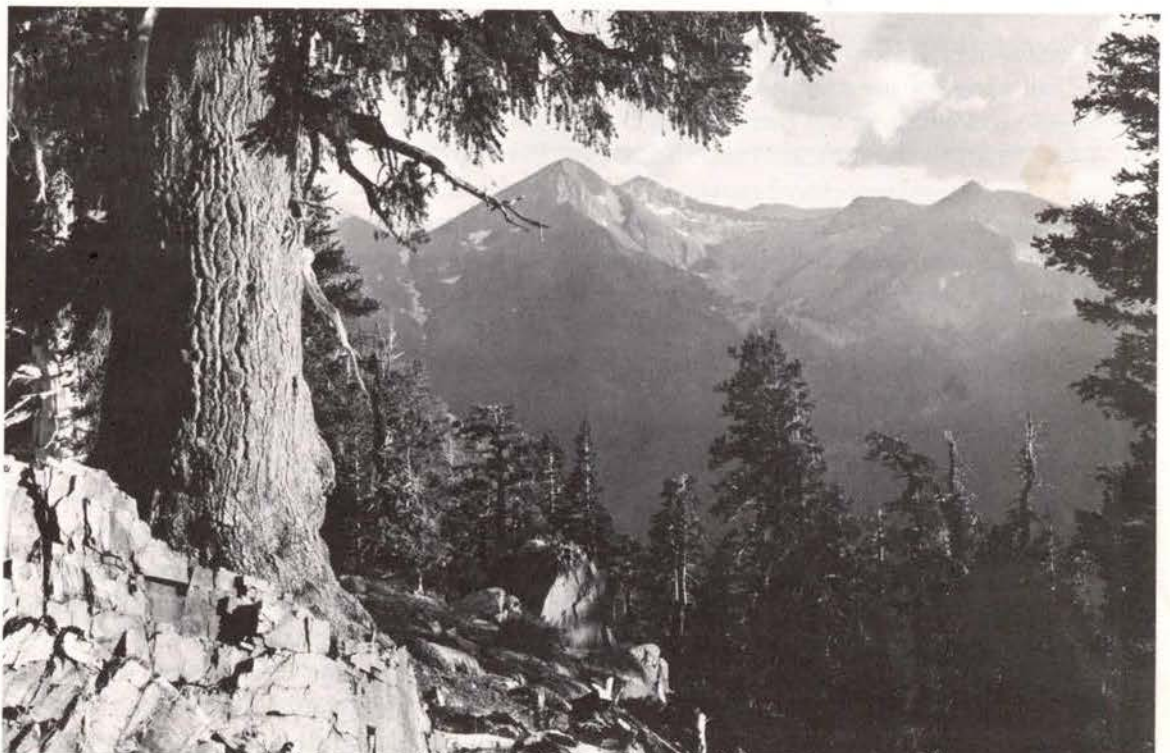
The Supreme Court turned down the theory of "private attorney generals" as a basis for standing, though it did make it clear that qualified litigants could seek enforcement of the laws, observing that its ruling "does not insulate executive action from ju-

dicial review. . . ." While the court held on to a traditional requirement of standing that the plaintiff must show he is adversely affected in some specific way, the court also made it clear that this test is not as difficult to meet as it used to be. It said that the interest that is adversely affected can be widely shared among many citizens and that it need not be economic.

The injury can be to a wide variety of interests: esthetic, conservational, recreational, ecological and environmental interests.

In a remarkable dissent, Justice Douglas urged a different basis for standing with far-reaching implications. He said: "Inanimate objects are sometimes parties in litigation. A ship has a legal personality, a fiction found useful for maritime purposes. . . . So it should be as respects valleys, alpine meadows, rivers, lakes, estuaries, beaches, ridges, groves of trees, swampland, or even air that feels the destructive pressures of modern technology and modern life. . . . Those people who have a meaningful relation to that body of water—whether it be a fisherman, a canoeist, a zoologist, or a logger—must be able to speak for the values which the river represents and which are threatened with destruction. . . ."

The Supreme Court decision dealt solely with the technical legal issue of standing, the determination of who is



Patriarch Grove, Timber Gap, Mineral King

a proper party to bring a suit. The court stated that it was not dealing with the merits of the Club's suit. In ruling earlier that the district court erred in granting the Club a preliminary injunction, the 9th Circuit did express opinions about the merits, as did the District court, but the case has not yet been tried on the merits. In his dissent, Justice Blackmun said, "The issues on the merits are substantial and deserve resolution." In deciding to amend its complaint to indicate its use of the area, the Club will now be moving forward to get a ruling on the merits. Regardless of the outcome, further appeals are expected by whichever side does not prevail.

In the face of protracted litigation, Disney enterprises decided to make a gesture to quiet growing opposition. At a press conference and in full-page newspaper advertisements throughout

California, it announced it is abandoning efforts to get a new highway built into the project. Instead, it is proposing a cog-railroad along the route of the existing road, with a power line also buried in the roadbed. It announced it is also scaling down the size of the project so that it will cost between \$18-20 million rather than \$35 million. It claims peak use would come down from 14,000 persons per day to 8,000. The Forest Service, which had insisted on a new highway, has yet to fully endorse the changes which Disney wishes to make.

The shift away from the highway was undoubtedly precipitated by the rising costs of construction, estimated by the state Highway department to have risen from \$23 million to \$44 million. Clearly too it is an effort to circumvent the Club's legal objections to a highway and powerline through

the park. Tulare County owns an easement to the existing road through the park and has intervened in the case on the side of development.

The basic problems with the resort are as glaring as ever. A game refuge is no place for a huge resort; railways and highways should not be routed through national parks for purposes extraneous to the park's reason for existence, and limitations on size, such as the 80 acre limit, should not be circumvented. The central issue remains: why should a fragile area that is a proper part of a great national park be turned into a synthetic resort complex, no matter how well planned it may be?

"Who really speaks for Mineral King?" reads the expensive Disney ad. Is there anybody who really believes that if Mineral King could answer, it would say: "Walt Disney Productions, Inc.?"

Southern California (continued)

or so we thought. But irresponsible choices by public land management agencies weren't destined to end with passage of the Wilderness Act, an examination of the National Park Service's wilderness proposal for Sequoia-King's Canyon National Park shows.

The National Park Service brought forth a preliminary wilderness proposal of 740,000 acres for Sequoia-King's Canyon Park and public hearings in 1966 were rather heavily attended because of the furor created by the Forest Service's plan to create a substantial community in the small alpine valley of Mineral King. Ten agencies and organizations and 19 individuals supported the Park Service's wilderness proposal and 25 organizations and agencies and 286 individuals testified that the Park Service's wilderness was inadequate and should be increased along the lines recommended by the Sierra Club. So what happened? The Park Service responded to this public mandate by decreasing the acreage they proposed for wilderness protection. Twelve thousand acres west of Mineral King Valley were excluded from wilderness in anticipation of the management necessary to accommodate the large numbers of people who will overrun Mineral King if Disney's development is ever built.

But the strongest change in the wilderness proposal was the addition of enclaves or islands or holes in the wilderness in order to accommodate development. The Park Service wilderness proposal speaks in a general way of water supply and sewage facilities which will be supplied in these "enclaves" but there is no language in their proposal which limits this development. Chalets, hostels and organized recreation facilities are a very real possibility within these holes in the wilderness. Chalets and developed facilities are fine but not when they sit in the middle of wilderness in our great national parks. The supporting rationale for enclaves is rather tenuous. The Park Service believes that the use of enclaves will localize crowds at certain sites where they can be accommodated. The more likely result will be greatly increased impact on the enclaves and degeneration of the surrounding wilderness. The Park Service plans four large enclaves and 25 smaller ones in Sequoia-King's Canyon.

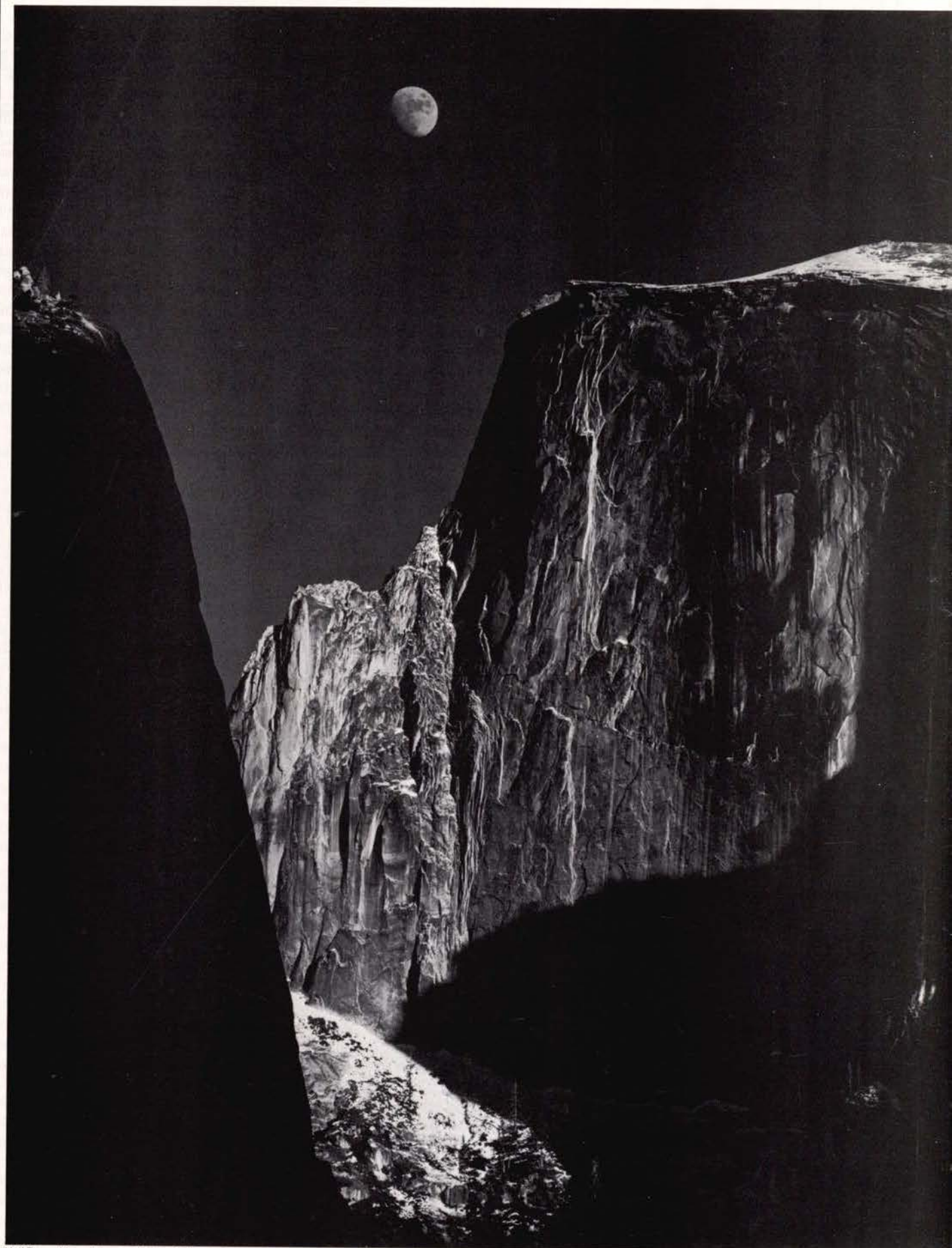
Another strange element in the Park Service wilderness proposal is the one-eighth mile management zone which has been arbitrarily placed around the boundaries and roads in the park except where the park abuts an officially designated Forest Service wilderness.

Both the eighth-mile management zone and the enclave are con-

cepts which the Park Service is attempting to implement in their wilderness proposals for most national parks and monuments. Hearings on the wilderness proposal for Sequoia-Kings Canyon were held in May by a sub-committee of the Senate Committee on Interior and Insular Affairs. Sierra Club testimony in opposition to the wilderness buffer and enclave concepts was well received. We need a reinforcing letter from each one of you to assure that the enclave concept dies now and we don't have to fight it each time a national park wilderness proposal comes along.

Write to Senator Henry Jackson, chairman of the Senate Committee on Interior and Insular Affairs, and ask that the wilderness proposal for Sequoia-Kings Canyon be enlarged along the lines suggested by the Sierra Club. Express your strong opposition to enclaves or holes in the wilderness and the arbitrary one-eighth mile management zone as management principles in our national parks. Send your letter to Senator Henry Jackson, chairman, Senate Committee on Interior and Insular Affairs, Washington, D.C., 20240. A copy of your letter should also be sent to George Hartzog, Director, National Park Service, Washington, D.C., 20240. It is important that the director knows what you think of holes in your wilderness.

Larry Moss



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Climbs to Come (continued)

the names of the party doing the first clean ascent.

Responsibility

I prefer to climb without wearing a hard hat. I won't argue the safety issue pro or con—it's just that my head feels freer and more receptive to the good things happening all around when I climb. I believe that the wearing of a crash helmet should be a matter of personal choice. However, in some climbing areas, like Devil's Tower, Wyoming, it has become governmental policy. The same thing is true with solo climbing in some national parks. We have no one other than ourselves to blame for these restrictive policies. We have allowed the overstressing of the safety aspects of crash helmets in the American Alpine Club accident reports, which insurance companies read. It won't be long before your life insurance will cover you only when wearing a crash helmet. It already applies to motorcyclists, to gardeners working along freeways, and to students in climbing schools.

We have also allowed the Park Service to feel directly responsible for climbing rescues to the extent that either rangers are on the rescue teams or the Park Service pays your friends to rescue you! Since Big Uncle has become responsible for our safety, he feels the obligation to legislate on matters that should only be a personal choice.

The responsibility for rescues should be with the climbers themselves, and should be handled on a voluntary, non-paying, non-charge basis. Helicopter costs could be paid for by an Alpine Club insurance policy as in France, or by a rescue-fund kitty, as in Britain.

The increasing frequency of rescues on big climbs goes to show that many climbers are showing an irresponsible attitude by attempting big walls before they are really equal to the problems involved. During the spring of 1971, there were over 30 attempts on El Capitan, with only four successful climbs! One of the failures involved climbers who had merely gotten wet, sat down and waited for a rescue while another party (on another route) continued to the top.

Population

One day last summer 65 people stood on the summit of the Grand Teton. These people had camped either on the Lower Saddle or in Garnet Canyon. This means that there were probably a hundred persons camping in the area, a timberline environment which is not capable of supporting more than ten groups without suffering severe damage to the fragile meadows, trees and wildflowers.

Already, the State of California is requiring reservations and is limiting the number of people allowed to go into a wilderness area. This will also happen in the Tetons and the climber will be the one to suffer.

The Alps are able to support far greater numbers of climbers than we are because of their hut systems. I agree that huts encourage even more people to go into the mountains, but the huts need not be as elaborate as those in the Alps. In any case, a hut on the Lower Saddle and another in the meadows of Garnet Canyon, plus a ban on open fires and tent camping, is the only way we can preserve the environment and still allow more than a few parties a day to climb in these areas.

Get back, Jo Jo

A party now starts up El Capitan with the confidence of knowing that if anything happens they can be rescued within a day or so from any point on the wall. The fear of the unknown, the fear of being unequal to the wall, of flaming out 1,500 feet from nowhere can still be a real fear, but the outcome is now a certainty.

We have our topo to make sure we won't come up against any unforeseen difficulties. Let's take our jumars so that we'll only have to climb every other pitch and thus save our strength for leading because that's where it's at. Don't forget the chalk for that 5.9 friction and a few bolts, mashies, bashies and a space blanket for security. And a hundred Moms and Dads down in the meadow ready to get that rescue going just as soon as you yell for it—maybe even before! When you come up to the A5 rump traverse, just smash in a few tied-off 1½-inch angles, plug up that hole with a mashie and you're up. In the bar remember to tell your friends that El Cap is a piece of cake—nothing over A3 and 5.8. Then go back to Iowa and quit climbing

because you've done the ultimate.

I'm trying to say that maybe Yosemite and El Capitan are not the ultimates. It was a spaced-out adventure once, when the odds were more stacked against you, but it's not such a big deal anymore. George Lowe thought that his winter ascent of the north face of the Grand Teton was a far more difficult climb than the Salathe Wall. If you want to experience the same adventures and the same difficulties that the El Cap pioneers had, then you've got to go somewhere else, where there are virgin walls, where you are going to feel the same loneliness of being five days from the bottom and five days from the top.

The Bavarian climber Wilo Welzenbach was the greatest climber of the post-World War I period. He was a complete alpinist, equally adept on rock and ice. In 1925 he put up over 20 new routes in the Alps. He made the first ascents of six of the greatest north walls of the Bernese Oberland. His routes were characterized by their logic, audacity and beauty. Objective dangers, foul weather, bad conditions and rotten rock—these were not absolute obstacles for him. Caught on a wall many times by bad weather, he would wait out the storm, then continue to the summit.

All of his climbs were done in impeccable style, without fixed ropes, bolts, crash helmets, topos, radios or even down gear! These were climbs encompassing all the techniques and difficulties of Grand Alpinism: steep ice, hard free climbing, avalanches, rockfalls, storms . . . and most of all, fear of the unknown.

This was the golden age of climbing; this was the pinnacle of the art, perhaps never to be equaled again. Since Welzenbach, Gervasutti and Salathe, more difficult climbs have been made, but generally as a direct result of better equipment and consequent use of that equipment.

We are entering a new era of climbing, an era that may well be characterized by incredible advances in equipment, by the overcoming of great difficulties, with even greater technological wizardry, and by the rendering of the mountains to a low, though democratic, mean.

Or it could be the start of more spiritual climbing, where we assault the mountains with less equipment and with more awareness, more experience and more courage.

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**Paul Petzoldt is a Teton guide, legendary mountaineer, and Director of the National Outdoor Leadership School with headquarters in Lander, Wyo. Equipment for this expedition was produced under his direction using material given to him by Du Pont.



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