

# High Country

# News

Vol. 3, No. 16

Lander, Wyoming

Friday, Aug. 20, 1971

## The Stars Are Dying

by Ed Will

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Ed Will is a free-lance writer who lives in Lander, Wyoming. He worked as a cowboy and, during the 1930's, once rode horseback from Wyoming to Arizona and back. He has written for the now defunct Saturday Evening Post and various farm and ranch publications.

The editor.

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At first I couldn't pinpoint what was wrong. The Wyoming night was as crisp and clear as those well remembered nights of almost forty years ago when as a wandering cowboy I spent many nights in the open. Now the dim starlight reflected from the glassy surface of the lake, dimly outlining the tent on the shore and suddenly I saw what was wrong. The tiny stars, those pinpoints of light that should be shining between the brighter stars were gone! It had happened at last, pollution had come even to the skies of the Wyoming wilderness. The stars were dying.

A Phoenix editor recently wrote, "Now that the hysteria about environment is dying we can get along with the business of progress." But progress toward what? How long can this Chamber of Commerce type of thinking continue to play mankind's favorite, but most deadly game, the game called "Let's kid ourselves?" How long can we continue to look the other way rather than face the hard facts of the ecological crisis that faces us?

Let's look at some facts!

**FACT:** The resources of the earth necessary to man's very survival are being consumed by man at a rate far faster than nature can restore them. The complacent idea that when they are gone science will find something to replace them is wishful thinking of the most dangerous kind.

**FACT:** Some very prominent scientists believe that we have already passed a point of no return, that we have already damaged the delicate ecosystem that supports ALL life, including humans, to a point that the process is irreversible and we are on a dying planet. Most scientists acknowledge that there is such a point but say we lack enough knowledge to know just where the point is. But if that point is ever learned by experience it will be too late to save our planet. Of the small minority of scientists who dispute this theory, most are employed by interests that **STAND TO LOSE ECONOMICALLY** by the readjustments necessary to reverse ecological disaster.

**FACT:** Despite propaganda claims and great advances in agriculture, world population grows faster than food production. And to meet such demands for food, farming methods that ultimately destroy land are being used.

**FACT:** Resources of usable water are being destroyed at an alarming rate. We cannot only

### Notice to Readers

Beginning with the September 3 issue, your **HIGH COUNTRY NEWS** will not come in an individual sack. We have learned that postal regulations do not require individual wrapping. We will do up one wrapped bundle for each zip code number. The package will not be opened until it reaches your post office. This new arrangement will require more time and work on our part but will save the paper which goes into each individual sack. We are willing to make the effort. However, if you do not receive your paper, we would appreciate your letting us know.



Men are dwarfed by huge machines and this awesome hole in the earth, located north of Sheridan, Wyoming, and in full view of the beautiful Bighorn Mountains. Strip mining for coal is going to make a tremendous impact upon the land throughout the Powder River Basin in both Montana and Wyoming. Neither state has adequate strip mine reclamation laws to cope with the devastation which seems inevitable.

## Mines and Power Make Impact

by Tom Bell

"Firm Will Open Hanna Coal Mine" . . .  
"Gillette Power Plant New Type" . . . "Kemmerer  
Coal Awards Major Mining Contract to M-K" . . .  
"New Era for Coal Power" . . .

These are the headlines which hit the reader's eye almost daily, and certainly weekly, in newspapers of Montana, Wyoming, Utah, and Colorado. The Southwestern states are treated to comparable fare.

Strip mining for coal has suddenly hit the wide-open spaces. Widely dispersed operations have been going for some time. They were little noticed by the public because their separate impacts on the environment were minor within the vast reaches of the western landscape.

The demand for energy has changed all that. Much of the coal being mined today is destined for power plants in Illinois and beyond. Tomorrow, it will be for huge steam-electric generating plants at the site. The impact of both mining and power generation is sure to make irrevocable changes across the face of the land. Few realize the scale of such changes and the potential for damaging change.

The public, getting the news in bits and pieces, does not realize the full extent of what is happening. Furthermore, what news the public sees is managed and tailored. Much that is newsworthy, if the public is to be fully informed, never appears before the public eye.

Strip mining and power generation on a vast scale seems to be inevitable for Montana and

Wyoming in the decade of the 1970's. Yet, no Wyoming newspaper has treated the subject with any serious consideration. No in-depth reporting on the meaningful issues of such large-scale developments have appeared in print. Montana, Colorado and Utah are more fortunate, possibly because of their larger newspapers and wider circulation. But even these, to my knowledge, have not dealt with the subject adequately.

Normally, the public only sees what the smoothly operating public relations experts for the power companies and energy firms wants exposed. Quite often what is not said or does not appear in print may be more meaningful than what is spoon-fed to the public.

Thus, Pacific Power and Light Co. and Idaho Power and Light, in announcing their new \$300-million-plus, Jim Bridger steam-electric power generating plant and strip mine near Rock Springs, Wyoming, extolled its many virtues. Among them:

- During the six years of construction, the actual building payroll will total \$84.5 million.
- The plant will almost double the tax valuation for Sweetwater County in the next five years.

- The finished 1,500 megawatt plant will permanently employ 100 men; the strip mining will employ another 100 men.

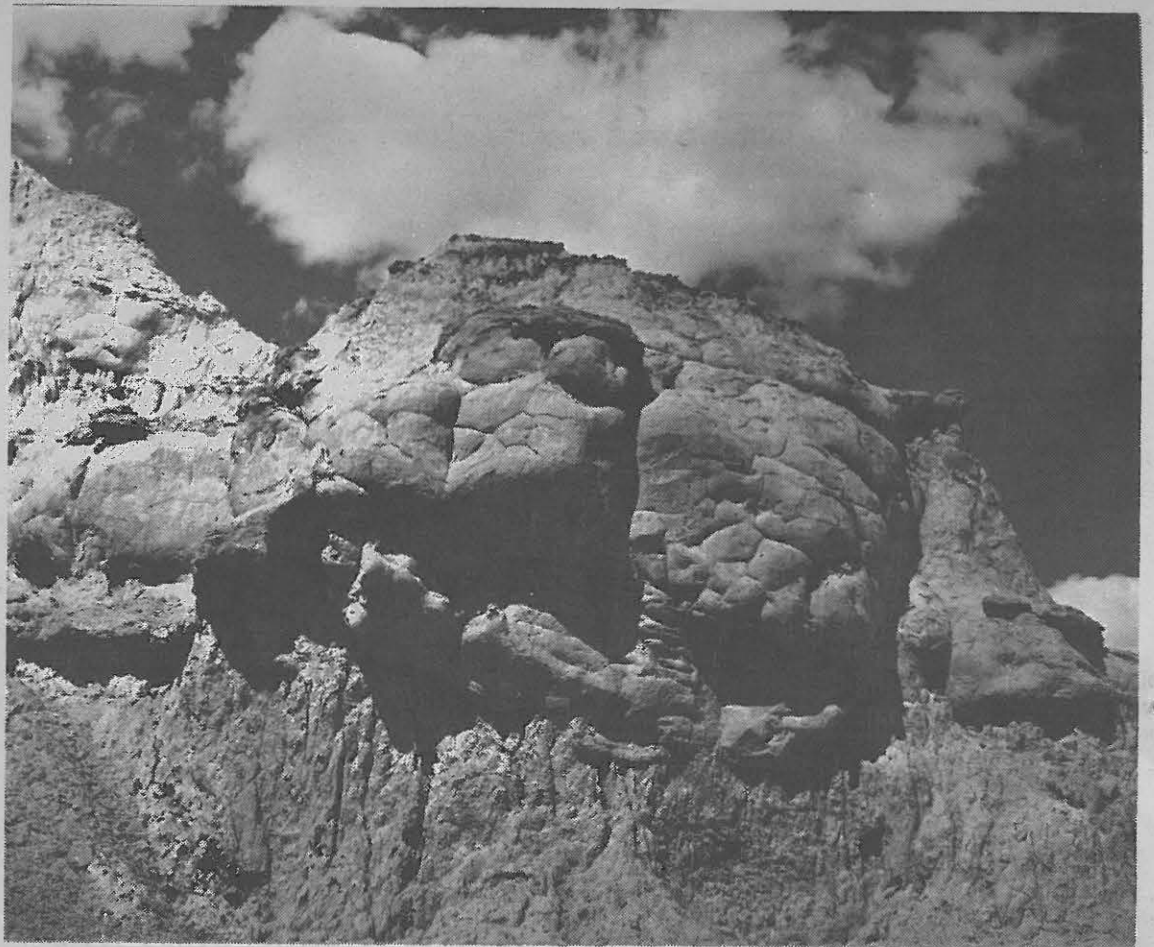
Some statistics of the plant were also revealed:

- The plant will consume water at the rate of

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# HIGH COUNTRY

By Tom Bell



The face of the earth takes many forms. These rounded, mud-ball formations are found interbedded with clays in the Honeycomb area of Wyoming's Red Desert.

The western states and Alaska face an impending chaotic situation unless planning is initiated immediately. Alaska is critical at the moment because of native claims legislation. But the western states are no less critical because of other circumstances. **COMPREHENSIVE LAND USE PLANNING IS A MUST.**

The ecology of a pipeline and the pressure to get native land claims settled has focused attention on Alaska. In that great state, the federal government holds title to about 330 million acres. That means it is public land which belongs to all of us.

However, the State of Alaska has claim to about 78 million acres, granted through its statehood act. It has already selected about 25 million acres, some of which is on the oil-rich North Slope. (Former Secretary of the Interior Stewart Udall froze all land selections in 1969 pending settlement of the native claims.)

Legislation now in Congress would allow Alaskan natives to claim anywhere from 10 million to 60 million acres of the remaining land. In addition, the various bills would provide cash settlement and royalty payments to the natives of up to \$1 billion.

The public has a great stake in all of this. Without comprehensive land use planning, the selection of lands by the state and by the natives could be disastrous in terms of the overall public interest. Continued operation of the public land laws, governing mining, homesteading, mineral leasing, and so on, could be equally ruinous. Land planning must be done before selection of lands is done by both the state and the natives, and before wholesale development begins.

The Alyeska Pipeline Service Co. which wants to build the Trans-Alaska pipeline has mounted a massive campaign to get the native claims question settled now. The company obviously has much to gain by a quick settlement. But it is apparent that this would be a classic case of locking the barn door after the horse was stolen. Planning must be done beforehand so that land selections and the accompanying development can be made on the basis of what is best for everyone concerned.

To do otherwise would be to repeat many of the mistakes we have made in the past. Had land use planning been in effect when the Union Pacific Railroad was granted lands in the 1860's, it is doubtful that the company would have received the land in the checkerboard fashion it did. Today, as a consequence, the public has to live with a serious land use error.

What happens in Alaska could have far-reaching consequences on the 11 western states of the Lower 48. Sound land use planning legislation for Alaska could have a carry-over effect for our states with all of our huge public land acreages. We should heed those consequences.

A shrinking land base (ie those lands where good land planning can still precede development) and an expanding population base makes action imperative.

Action on the Alaskan native claims has taken place. Hearings have been held in both the House and Senate on the various native claim bills. When Congress reconvenes after the summer recess, it is expected that legislation will come up for a vote.

The public needs to make itself heard now. The Senate Committee on Interior and Insular Affairs is composed almost entirely of western senators. We need to let them know that comprehensive land use planning is a must not only for Alaska but for our own sakes. We need to let them know that planning for Alaska must precede development and exploitation.

Congressman John Saylor has proposed an amendment to the House bill which would provide for land use planning before final settlement of the native claims. We should write our congressmen asking them to support the Saylor amendment. It is especially important that we write those congressmen who sit on the House Committee on Interior and Insular Affairs.

One of the most effective means of influencing what happens in Alaska is to write President Nixon. Simply tell him to disapprove of any legislation which does not provide for comprehensive land use planning BEFORE land selection and development can proceed.

The President and the Interior Department are said to be sympathetically considering the planning phase before any other action is taken. A letter now would let the President know he was in tune with people who care.

For convenience in writing the President and your congressman on this issue, please refer to the box on the opposite page.

**Letters To  
The Editor**

John Sloan  
August 1971  
States  
Oceano

Editor:

When you first increased your subscription rates I didn't think, as an Easterner, that I could "afford" the new rate. I am convinced now, that I cannot afford to be without your excellent paper. Ever since reading the Muries' "Wapiti Wilderness" I have been especially interested in Wyoming and its wild beauty. Having only ridden through on the train, I now would like to plan a winter visit and hope that there may be some indication in your paper in the early winter as to when visitors may watch the elk being fed on the Elk Refuge in 1972.

Enclosed is a second editorial from the Syracuse evening newspaper, and there have also been letters to the Editor on the subject of predator control in the west, so you see those of us who are conservation-minded, and also are mindful of the humane issue involved, are very much concerned as far away as New York State.

Mr. Mau, President of the Wyoming Woolgrowers Association, says "Emotion, politicians, and over-zealous reporters have caused the sheep industry in the western states to suffer. . ." And why should this not be an emotional issue? Everyone knows that the ranchers, too, have their problems, but it does seem they are too powerful when they can actually flout laws.

The father of all theologians—Dr. Paul Tillich—has a chapter in his "enduring masterpiece" titled "The Shaking Of The Foundations"—a chapter entitled "Nature, Also, Mourns For a Lost Good." Perhaps if more of us understood this insight, our values might be reoriented. Will the lion ever lie down with the lamb? Perhaps the answer lies more with us than we think.

Thank you for letting me express myself. Continued success with your excellent news reporting.

Yours very truly,  
(Miss) Marion Byrne  
Liverpool, N.Y. 13088

exaggerations and half truths.

Sincerely,  
H.D. Waterman  
Casper, Wyoming

Editor's Note: We take the flowers with the brickbats. Sorry that Mr. Waterman disagrees with our "generalizations", and especially the statement that "oil and gas exploration and development have scarred and fouled the earth." I can only assume that he is not aware of a paper prepared for the Environmental Quality Conference for the Extractive Industries of the American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., which was held in Washington, D.C., June 7-9, 1971. Authors Edwin H. Montgomery and Terry A. McGowan of the Bureau of Land Management say their studies of oil and gas operations on public lands of the West are "believed to be representative of the situation over much of the public lands."

They point out that, "Prospecting for new sources of oil and gas has, in the past, sometimes left a highly visible impact on BLM-administered lands. Areas scraped clean of vegetation on trails up steep, highly erodible lands will continue for many years to contribute sediment to rivers and streams. Destruction of innocuous-appearing desert vegetation has, in some cases, destroyed high-value big game winter habitat, not to speak of habitat for the non-game species."

They also say there is a lack of planning when development ensues: "The most obvious cause of environmental degradation problems in oil and gas development areas stems from the helter-skelter, unplanned nature of the development insofar as the environment is concerned. There is little or no coordination of the many facets of oil field development with other resource values. The typical field gives one the feeling that roads, pipelines, etc., are dozed out at the utmost speed over the shortest distance with little consideration except for the (Please turn to page 5)

## HIGH COUNTRY NEWS

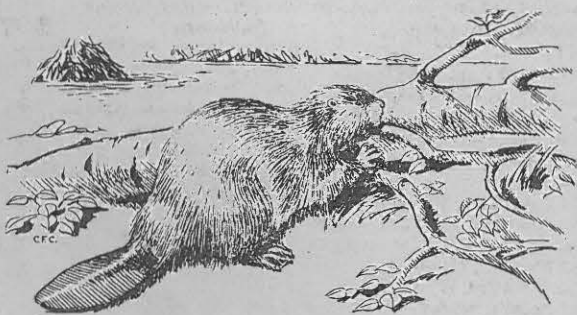
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EDITOR Thomas A. Bell  
OFFICE MANAGER Mary Margaret Davis  
CIRCULATION MANAGER Marjorie Higley  
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Editor:

Please cancel my subscription to the High Country News. The generalizations that appear in your writings have finally broken the straw. The statement "oil and gas exploration and development have scarred and fouled the earth" was too much for this geologist to swallow.

I notice your paper advertizes a subscription for a school library. I believe I can teach my children respect for man and his earth without resorting to philosophy of "the end justifies the means," when the means used are often



# Guest Editorial

## The Loci of Conflict and Compromise

### Preservation and Consumption

by Russell A. Brown

The following was presented as a speech to the Northwest Mining Association, Spokane, Washington, December 5, 1970, and reprinted in *Vital Speeches of the Day*, February 1, 1971. It is reprinted here, courtesy of the author.

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Good morning ladies and gentlemen. I am pleased to be here this morning and to explore with you some of the areas of interest common to your profession and to the conservation organizations of our nation.

I am, at the request of its Northwest Representative, representing the Sierra Club today. The Sierra Club is one of the oldest and one of the largest conservation organizations in the world. It was organized by John Muir in 1892, "to explore, enjoy, and preserve the Sierra Nevada and other scenic resources of the U.S. and its forests, waters, wildlife, and wilderness." The Club's motto is, "Not Blind Opposition to Progress, but Opposition to Blind Progress." There are now 26 Chapters in the Sierra Club, located in all parts of the country. Its growth has been remarkably rapid, expanding from 7000 members in 1950 to 57,000 in 1967 to more than 100,000 in 1970. In addition to its well-publicized conservation activities, the Sierra Club runs extensive outing and publishing programs. A brief review of some of the terms used would be particularly useful in the context of our discussion today.

Actually "conservation" is a term with so broad an application that it is essential for the Sierra Club to carefully define its own particular goals and identify with its kin in the conservation movement. Although the driving force behind all of conservation was wisdom and care in the use of resources, even before 1900 two very different schools viewed the problems and solutions quite differently. Those advocating "wise use" used restraint and "the greatest good to the greatest number of people." They advocated multiple use and sustained yield of resources.

On the other hand the preservationists, of whom John Muir was one of the clearest voices, saw a basic incompatibility in certain combinations of multiple use. They demonstrated the fragile and irreplaceable nature of such resources as wilderness forests, mountain meadows, desert, tundra and certain wildlife and plant species. They finally concluded that such natural resources must be essentially preserved—certainly from exploitation, sometimes from development and occasionally even from extensive human visitation, if they were to be retained for generations to come.

These two kinds of conservation, wise use and preservation of wildlands, are not always incompatible. They may occasionally complement each other. On a given land area, timber harvest, recreation, wildlife and livestock use, and even water use and water storage can be manipulated compatibly. But the basic qualities of wilderness require that its preservation cannot accommodate substantial utilization if the essential long-range values are to be perpetuated. And the preservationists value these scarce, diminishing, scenic, and wilderness resources too highly to accede easily to their consumption or destruction.

Such dedication to wilderness and the natural scene has led the Sierra Club into the headlines, into trouble with the Internal Revenue Service, into publishing award-winning books about beautiful places, and into contests whose results will determine the future of choice parts of the natural landscape, "America's crown jewels."

Such a dedication, which has given birth to a multitude of smaller "ad hoc" conservation organizations, is the reason for the conflicts which have arisen around mining ventures during the last decade. An examination of the motivations and objectives of the two forces involved may lead us, if not to agreement, at least to a partial understanding of the issues. It may allow us to anticipate our areas of conflict and, in so doing, make our future activities more efficient. We will not resolve our mutual problems, but will certainly eliminate a good deal of the attendant wheel-spinning if we accept the hypothesis that in certain situations, conflict is inevitable and compromise is impossible. If the hypothesis is radical, revolutionary, or rear

sense. Between the hunter and the prey, between fire and water, or even between two political candidates, there are no compromises. One must emerge victorious. In such situations, conflict and controversy are the natural state of affairs; he who either gives or asks for quarter from his opponent has failed to recognize the nature of the battle. In this complex world, where issues may have a hundred facets and men may pose a thousand solutions, there is a refreshing, albeit frightening simplicity in this. Victory or defeat . . . Life or death . . . Success or failure . . . Through the haze of conflict, the surging roars of rhetoric, and the thunder and thrust of charge and counter-charge, a simple bitter message may be perceived. Compromise is for losers!

In the same way that one does not become half-pregnant or half-dead, you gentlemen of the mining industry can not be expected to operate half an open-pit mine; neither can the conservationist conceive a partial wilderness or a compromised National Park. In these rather unique situations, we can only think of compromise after we have lost. If the creation of a large mining operation becomes a foregone conclusion in a de facto wilderness area, or if such an operation already exists, then, and only then, can the conservationist consider the methods of mitigation; only then will he seek an accommodation which will minimize the environmental impact, reduce pollution, or develop some system of restoration. If, by new legislation or by a judicial ruling on existing laws, a mining corporation is prohibited from operation, only then will that corporation seek compensation for its investment in the venture. To do otherwise would be to woo and win defeat.

To put these ideas in a conservationist's perspective, the words of Grant McConnell, presented at one of the Club's Biennial Wilderness Conferences, are very much to the point, "We have been subjected to counsels of compromise in situations where the only responses to offers of compromise have been demands for further compromise, and so on to corrupt infinitum . . . In a multitude of ways, large and small, we repeat that we must be realistic, that is to say, neither seek too much nor give offense. I suggest that this attitude is wrong. I believe that it is both morally wrong and contrary to the American ethos."

This is the attitude that you must face in a wilderness conflict. Expect nothing less. Accommodations and dispensations are luxuries that only the rich can afford. The modern conservationist realizes that he is on the short end of both common and statutory law when dealing with the mining industry. He realizes, that with too few financial resources and too many battles to fight, that the process of changing the laws is too slow and the probability of success too low for that to be the major goal. His choice is then reduced to fighting those most important battles for those few precious areas left unspoiled, using existing laws, and seeking, when controversy is sharp enough, to accelerate the change of those laws which were created for another era. The conservationist of today, the man which some of you have faced, is armed with the rather pugnacious philosophy of David Brower, who said, "Polite conservationists leave no mark except the scars on the land that could have been prevented."

A knowledge of why conflict occurs tells us where it will occur. When a potentially destructive operation moves into a first-class wilderness or scenic area, the stage is set. There are many other situations where the mining and refining industry may encounter opposition, but most of these will fall into the class requiring modification, correction, or improvement of existing industrial processes. SO<sub>2</sub> pollution, particulate emissions, discharge of waste solutions into waterways, and many other old practices are being and will be challenged. These problems are not peculiar to the mining industry. All industrial impact on the environment will be subject to much closer controls during the years to come. The industry in which I am presently involved, the nuclear power industry, is particularly visible and is widely challenged. But these problems, common to both your industry and to mine, are basically technical in nature, and, as such, are susceptible

(generally) to technological solutions. The research programs of the Atomic Energy Commission for the next five years involve a heavy commitment to safety and pollution control. In a similar manner, the minerals industry is beginning to devote far more attention to such problems; this morning's session of your conference is certainly an example of that.

What then, of that far more difficult class of problem, the wilderness encounter? Can reasonable men sit down and work out mutually acceptable agreements on what can be done? Probably not! There is no rational middle ground. Armed with such bleak prospects (assuming you buy the original premise), what useful strategy for action can we choose?

I will propose what, at first glance, and perhaps second and third, seems to be a distinctly unpleasant and unsatisfactory alternative. If, in a few, a very few situations, a major battle is imminent; if, because of the special environmental values, a national controversy may develop, e.g., in the North Cascades in Washington or the White Clouds in Idaho, consider both the probability and the price of victory or defeat. If, in the development

(Please turn to page 5)

## Who Do You Write -- And Where?

How does one express his views on an issue of this kind? Who do you write? And how do you address him? These are questions commonly asked by citizens who would like to be a part of the decision-making process.

As this flyer indicates, decisions are coming up in the Congress and at the White House. You may want to write your congressman, your two senators and the President. Or just one of these.

The President's address is:

The President  
The White House  
Washington, D.C. 20500

Members of the Senate have this address:

The Honorable \_\_\_\_\_  
Senate Office Building  
Washington, D.C. 20510

Members of the House have this address:

The Honorable \_\_\_\_\_  
House Office Building  
Washington, D.C. 20515

Of special importance on native claims legislation are the members of the House and Senate Committees on Interior and Insular Affairs. They are:

Senate Committee on Interior and Insular Affairs

Henry M. Jackson, Washington  
Clinton P. Anderson, New Mexico  
Alan Bible, Nevada  
Frank Church, Idaho  
Frank E. Moss, Utah  
Quentin N. Burdick, North Dakota  
George S. McGovern, South Dakota  
Lee Metcalf, Montana  
Mike Gravel, Alaska  
Gordon Allott, Colorado  
Len B. Jordan, Idaho  
Paul J. Fannin, Arizona  
Clifford P. Hansen, Wyoming  
Mark O. Hatfield, Oregon  
Ted Stevens, Alaska  
Henry Bellmon, Oklahoma

House Committee on Interior and Insular Affairs

Wayne N. Aspinall, Colorado, Chairman	John P. Saylor, Pennsylvania, Ranking Minority Member
James A. Haley, Florida	Craig Hosmer, California
Ed Edmondson, Oklahoma	Joe Skubitz, Kansas
Walter S. Baring, Nevada	John Kyl, Iowa
Roy A. Taylor, North Carolina	Sam Steiger, Arizona
Harold T. Johnson, California	James A. McClure, Idaho
Morris K. Udall, Arizona	Don H. Clausen, California
Phillip Burton, California	Philip E. Ruppe, Michigan
Thomas S. Foley, Washington	John N. Happy Camp, Oklahoma
Robert W. Kastenmeier, Wisconsin	Manuel Lujan, Jr., New Mexico
James G. O'Hara, Michigan	Sherman P. Lloyd, Utah
William F. Ryan, New York	John Deilenback, Oregon
Patsy T. Mink, Hawaii	Keith G. Sebelius, Kansas
James Kee, West Virginia	James D. McKeivitt, Colorado
Lloyd Meeds, Washington	John H. Terry, New York
Abraham Kazen, Jr., Texas	Jorge L. Córdova, Puerto Rico, (Resident Commissioner)
Bill D. Burlison, Missouri	
Robert G. Stephens, Jr., Georgia	
Joseph P. Vigorito, Pennsylvania	
John Melcher, Montana	
Teno Roncalio, Wyoming	
Nick Begich, Alaska	
James Abourezk, South Dakota	



BY TOM BELL

# Our Editor

## Says...

Six months have passed since HIGH COUNTRY NEWS changed direction and became an environmental newspaper, supported by subscription only at \$10 per year. Since you, our readers, are in effect our stockholders, I want to report to you.

The long-term outlook for the paper appears optimistic. It seems to have filled a void which most of you appreciate. Time and finances permitting, I am hopeful that the paper will become more valuable in keeping you informed on environmental matters in the Rocky Mountain area.

We are fortunate in this region to still have relatively clean air, pure waters and unbounded space. But the portents are ominous. Our region is a vacuum into which people, industry and "progress" are moving. How long it will be before we are compromised into the same sad state of affairs as some of our sister states is unknown.

What we do know is that most of the remaining primitive and wild areas are found here. All that we can protect now is all that our kids will ever have.

Vast amounts of open space are found here, with all the wildlife, historic and archeologic treasures, scenic views, and clean, clear air once associated with America the Beautiful.

We still have great, free flowing rivers where salmon come to spawn and the magnificent steelhead makes its run from the sea. We have smaller streams such as the Teton in Idaho, the Big Hole in Montana and the Green River in Wyoming which are treasures in their own right but which developers covet.

We also have common problems. Strip mining and electric power installations are going to affect most of our states. Here is where most of the public lands and all of their attendant problems are located.

It is a constant battle involving us all. Wherever there is value in the timber, the water, the coal, and all the other natural resources, there you will find a man ready to take advantage of the value for his own self interest. And this is what HIGH COUNTRY NEWS is all about. Our effort is to expose the selfish interests, the hypocrisy of elected and/or appointed officials, the perfidy of big companies, the inadequacies of laws, and the shortcomings of each of us if we are to ever solve our environmental problems.

The short-term outlook for the paper is not so optimistic. As editor, I have never drawn a regular salary and have been paid a total of \$1,000.00 in salary and expenses since June, 1970. On the other hand, my wife and I have put much of our accumulated material wealth into the paper. We do not have sufficient reserves to last much longer. The paper must become self supporting very soon.

We have formed a new, non-profit corporation which became effective around July 1. This does not mean the corporation is a tax deductible one. We want to be able to say what needs to be said without having to worry about an IRS rating. It also means that all of us who have money invested in the predecessor corporation can never hope to make a profit from that investment. Hopefully, we can recover our investments at some future time.

Our staff is at the absolute minimum. Mary Margaret Davis is the office manager while Marge Higley takes care of circulation and our darkroom work. Both help me on many editing duties. Both earn \$300 a month or less. We keep all other expenses to a minimum.

Besides editing the paper, I served as executive director of the Wyoming Outdoor Coordinating Council until about six weeks ago. The two jobs were more than I could handle. Now that my successor, Keith Becker, is working full-time, I am able to put more time on the paper. I am slowly working through a backlog of stacked-up correspondence, projects and articles.

When we changed over to our present system around March 1, we had 2,931 subscribers. Many of these subscribers we had obtained through advertising in large metropolitan dailies, mainly in the Midwest. The predecessor paper had been aimed at people who wanted to travel to the Rocky Mountain region for recreation, hunting,

fishing, and other outdoor pastimes. We have lost many of those readers in the past six months when they came up for renewal.

We mailed 1850 papers in the last mailing. Of these 1,771 are paid subscribers.

(We sent 48 complimentary papers, mainly to congressmen and environmental organizations, exchanged with 20 newspapers and environmental bulletins, and sent the paper to 11 people who have helped us out with articles or photographs.) Since March 11, we have picked up 382 new subscribers and have had 383 renewals. However, of these new readers, 165 are at a \$5.00 rate. This came about through a special mailing campaign to members of The Wilderness Society which was launched BEFORE we made the change. We felt we had to honor that commitment. We also received some at a \$5.00 rate through an ad in the Rocky Mt. Chapter of the Sierra Club bulletin. Those also were honored because the ad was run before our change.

Our subscription rates are now \$10.00 per year, \$18.00 for two years or \$25.00 for three years. When we changed over, we determined that we must have a minimum of 3,000 subscribers in order to cover all expenses, including a salary of \$500.00 per month for myself. In the meantime, other costs have gone up since we raised our subscription rates.

As we increase circulation, we hope to improve the paper and render greater service to our readers by having paid correspondents in the field who can give better coverage of problems and issues. In the meantime, I am taking this means of soliciting volunteer articles (with good black and white photos whenever possible) from any of you who are acquainted with environmental issues in the Rocky Mountain Region.

Obviously, we need to increase our circulation. And we need your help in doing this. If you can spread the word in any way, we would appreciate your doing so. I would also entertain any ideas any of you might have to increase our circulation.



## Cats Are Game

For the first time in Montana's history, mountain lions, locally called pumas, cougars, and catamounts, may be hunted by license holders only this fall. The big cats which drew a bounty as late as 1963 and were classed as predators this time last year are now legally game animals.

Max Stone, chief of information for the fish and game department, said that the season on mountain lions will be October 17, 1971 through April 30, 1972. Lion hunters must get a free, special license from fish and game offices in Helena. Resident citizens of Montana will also need a Conservation license, and nonresidents will need a \$151.00 license. Nonresidents must meet requirements of the "Guide Law".

Regular big game hunting hours and clothing color requirements will apply. The limit will be one lion per year per license holder and no females accompanied by offsprings nor juveniles with body spots may be killed.

Dogs will be allowed for hunting of lions, and the meat does not have to be used.

There really isn't a great deal known about mountain lions in Montana. Information about their abundance, age classes and ranges is very limited. In order that fish and game personnel can get needed information, hunters are required to present skulls of bagged lions to the fish and game department within ten days after the kill. The skulls and hides will be tagged and eventually returned to the hunters.

The big, tawny cats are the fourth largest members of the cat family and the second largest member of the family on this continent. At one time they were widely distributed in a variety of habitats from the swamps of Florida to deserts of the southwest. They ranged north to British Columbia and south to Argentina.

The range of mountain lions has steadily shrunk and most states now offer protection for them.

## 'Close The Road'

The following letter is self explanatory. It was written to William J. Lucas, Regional Forester, Denver, in response to requests for citizen comments on the reclassification of the Glacier Primitive Area in Wyoming. It clearly expresses the sentiments of those amongst us who hie to the wilderness, taking only what we need and leaving only footprints.

The editor.

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Dear Sir:

As a registered professional architect and part-time mountaineering guide, I am doubly concerned with the quality of our nation's lands and environment. My guiding activities for the past five seasons have involved extensive use of the Wind River Range including the Glacier Primitive Area, and while I was on an expedition and unable to attend the hearings in Rivert Wyoming, on 28 June, I was delighted upon my return to learn of the proposed closure of the Ross Lakes Jeep Road. It is my understanding that this decision is now being questioned and I would like you to know of my strong support for your original determination that this road is detrimental to the wilderness values in the area. It most certainly is!

My guiding operation is a small, backpack and mountaineering oriented program. We use no stock, cook with fuel, camp above timber and often on snow. We stay in an area for only a day at a time and remain in the wilderness for two weeks without re-supply of any kind. We carry about 60 lbs. in and have room and energy for nothing but necessities. We burn nothing - bury nothing except human waste - and bring everything else out. We use no soap, nor wash dishes in lakes or creeks. In short, we go to considerable lengths to insure the next season's wilderness will be as wild as this season's. Not all of the wilderness users go to such lengths, but most of the packers and backpack outfits are good and getting better. Vehicle users are not.

Four years ago I bushwhacked around the east shore of Lower Ross Lake with Paul Petzoldt. The bushwhack is a nightmare - but the west shore is worse - but the country was wild and free from any visible signs of abuse. Under these circumstances even the bushwhack heightened the sense of wilderness and we were thankful that there was no trail. Early this month, I made my second visit to Lower Ross Lake with a small group of young people hungry for the wilderness experience I have remembered so vividly. I was shocked and sickened by the change that four short years has brought. Now: a well worn foot trail from the Jeep Road to the narrows between Upper and Lower Ross Lakes - not cleared high enough for stock. Now: fire rings complete with aluminum foil and tin cans everywhere! Now: several established fisherman camps with metal grates, vinyl plastic sheets over lean-to structures, sizeable garbage dumps, plastic bags, and, in one shelter, a full case of empty beer cans. One does not have to be a "purist" or wilderness nut to conclude that wilderness values have been seriously - though not irretrievably - compromised at Lower Ross Lake. Like most backpackers in this drainage we continued around the Upper Lake - indeed the terrain presents few alternatives. The bushwhack around the Upper Lake is even more difficult and - not surprisingly - we found no trail, no camps and no garbage beyond the narrows.

Now it is possible that non-vehicular wilderness users contributed to the degradation of Lower Ross Lake - but I submit that it is very unlikely. Backpackers face a very difficult bushwhack to and around Ross Lake unless they approach via the Jeep Road - in which case they would most reasonably approach via a Jeep! There is no stock trail to the narrows to my knowledge and no evidence of stock in the area - and no feed in any case. No sir: I submit that the vinyl plastic, garbage, beer cans, etc. is the legacy of the man who drives to within a half mile of one of the most magnificent high lakes in the Wind Rivers, strolls downhill from his vehicle to the lake and sets himself a comfortable base camp for a week of fishing. (Which, by the way, is also noticeably less rewarding than 4 years ago.)

Perhaps I am prejudiced in my view - but I am not opposed to vehicular recreation of fishermen! The conditions at Lower Ross Lake speak for themselves. Closure of this road will work an honest hardship on no one who shares our commitment to wilderness values in the wilderness. Thank You.

Respectfully,

Vincent R. Lee  
Box 270

Jackson, Wyoming 83001

# Conflicts and Compromise...

High Country News—5  
Friday, Aug. 20, 1971

of the Kennecott mine at Image Lake or the ASARCO mine at Castle Peak, the resulting national publicity accelerates the process of change in the laws controlling mineral entry and mining on public lands, will the short-term gains be worth the long-term losses? If public reaction to a highly visible destruction of a scenic wonder is strong enough to cause passage of highly restrictive laws, will the expected return on a particular corporate investment (as opposed to some other venture) be worth the price? If, in the process of losing such a battle, such unpalatable changes occur, could the pursuit of the battle ever be justified?

The answers to these questions are not simple. The answers must include an analysis based on frequency and probability of occurrence and outcome, respectively. They must consider the fact that most Americans do not yet realize that the public lands and national forests may be acquired and reduced to private ownership without compensation. They must, above all, note and act upon the knowledge that a dramatic conservation conflict will cause men to say, as Stewart Udall said in 1969, "I have come to the conclusion that the most important piece of unfinished business on the nation's resource agenda is the complete replacement of the mining law of 1872."

"Put simply, this obsolete and outdated statute inhibits the best kind of multiple-use management. It operates as an outright giveaway of vital natural resources." These are strong words and could be translated into strong action.

We have examined why conflicts occur and

where they occur. A brief look at the two opposing philosophies might be helpful to complete the picture. Is the conservationist the emotional, hysterical, rich, radical bearded Thoreau (as he has occasionally been described), bent upon opposing all mining and resource uses, wherever they occur? Is the preservationist intent on "locking up" all of the nation's resources, thereby crippling our economic system and threatening national security? I assure you that the answer is no... Are the people of the mining industry evil blasters or compulsive destroyers, whose dislike for wild country and clean waters manifests itself in purposeful desecration? The answer again is no... No truth or utility can be found in such stereotypes. What is true is that there are two incompatible ethical systems involved, one economic and one aesthetic. Both are valid, but where they interact must, by their nature, conflict. The results of these conflicts will not be decided on the basis of which is the ultimate truth, for truth is not the issue. Each conflict will be decided on the basis of the values involved and the quality of their presentation to the public.

As both wilderness and resources become more scarce, the ensuing debates will become more acerbic. The prizes will become more valuable for their rarity. What we are fighting, and I now mean we collectively, is the fact that man, as he becomes more numerous and consumes at an ever increasing rate, is depleting his resource base. We are, as we must, converting our system from a higher to a lower state of order (increasing our entropy). "In this century, the world has used up, and lost forever

more natural resources than has all previous history." The inevitable result is that we must some day face the prospect of a declining standard of living. We may delay that day of reckoning, but come it must. The task that the preservationist has assumed is that of saving what little he can of our better bits of land as a sort of spiritual capital to draw upon when our material capital has been diminished. David Brower wrote of "the dawning realization that Growth without end is soon monstrous, then malignant, and finally, lethal - that an economy based upon incessant growth may well turn out, in the long run, to have been a chain-letter economy, in which we pick up the handsome early returns, and either our children or theirs find the mailbox empty, their resources expended by us."

There are no simple or easy answers to these ominous problems. The conservationist must follow the dictates of his conscience, saving what he can while it lasts; those involved in the business of obtaining and converting our resources for the uses of man must, to serve their own industry, begin to develop the technology for the recovery of those dispersed resources. The industry that is mining today must become the more broadly defined resource provider of the future.

Preservation and consumption will conflict wherever they interact. I have spoken today, not with the hope of peace, but rather in the interest of improved understanding. Perhaps, with that improved understanding, we can, just once in a while, avoid those interactions which are and will be the locus of controversy.

## Mines and Power...

18,100 gallons per minute; 40 cubic feet per second.

- The three smokestacks will be 700 feet high. (This is presumably to carry off much of the stack gases which technology can't get rid of. It is no longer creditable because of research done at the TVA.)

- The strip mine will be approximately 15 miles long, with seams approximately 30 ft. deep, and with 35 years of coal by stripping to 120 feet.

- The plant will burn 18,000 tons of coal a day.  
- The plant is designed to remove 99.5 per cent of the particulates from the smokestack effluents.

Wyoming is justly proud of its relatively clean air. (Only today, Wyoming's Governor Stanley K. Hathaway bragged to President Nixon in Jackson Hole on the clear, clean air.) What Wyoming people have not been told is that with all of its expensive air pollution equipment, the Jim Bridger plant will have quite an impact on the ambient air in that region.

For instance, a qualified engineer has

determined that even with 99.5 per cent efficiency, which is practically unattainable on a sustained basis, there will be 7.2 tons of fly ash dumped on the surrounding countryside every day. And because of the method of removing the particulate matter, the one-half of one percent ash which escapes is the finest of particles (termed submicron). These are the ones which are most damaging health-wise, and which affect visibility over a wide area because they are so fine and light. A comparable sized plant in Los Angeles would be required to emit no more than .12 tons per day into the air.

Sulfur oxides, the most damaging gases for animal and plant life, would be produced from the plant at the rate of 216 tons per day. Los Angeles requirements would limit such emissions to 2.4 tons per day. In other words, the Jim Bridger plant will produce 90 times the amount of sulfur oxides that would be allowed from a comparable sized plant in Los Angeles. Experts have also determined that the amounts of sulfur oxides emitted will be double the amounts now allowed by Wyoming's air quality

standards, and will exceed the amounts considered by the Environmental Protection Agency to be dangerous.

Nitrogen oxides which cause visibility problems (smog in some places) will be produced at the rate of 109 tons per day, or ten times the amount which would be allowed in Los Angeles. Again, experts, have determined that nitrogen oxides will be produced at two to three times the level permitted by Wyoming's air standards. Undoubtedly, the plant will have to ask for variances from the standards. You can bet that they will get them.

Pacific Power and Light Co. need not be singled out. There are other power companies who are now operating or who expect to operate in Wyoming. All should be required to make full disclosures to the public as to the TOTAL impact of their projects.

We can possibly stand one Jim Bridger plant without seriously reducing visibility across south-central Wyoming. But how many more we can accommodate would be open to serious question.

The time to tell the public is before the permit to build is issued. Only when the public is given a full disclosure and given a chance to comment on their own future should any more plants be authorized.

## Letters to the editor...

dirt to be moved today-tomorrow is another day."

They go on to point out that there are excessive roads, and pipelines of poor design, poor drill hole locations, erosion problems, water problems involving briny production water and evaporation pits, oil spills, aesthetic losses, damage to fish and wildlife, and air pollution.

The photos used to illustrate their paper were taken at the LaBarge field near Big Piney, Wyoming, and at the Recluse and Hilight fields in Campbell County, Wyoming.

Their statement and photographs reinforce the photos and statements made in HIGH COUNTRY NEWS. I might point out that at this moment, we are engaged in a holding action on an oil and gas exploration project on Long Hollow Creek, a tributary to La Barge Creek, in which Belco Petroleum wants to drill a wildcat test hole high up on the side of a steep hill. It would be a mountain in the East. The road and the test hole will penetrate a very important elk winter range on BLM lands. We were forced to call in the Environmental Protection Agency because the hands of the BLM are tied and the U.S. Geological Survey deliberately looks the other way. The company evidently feels no responsibility to the land and the other natural resources.

I will stand on my "generalizations" until the majority of the oil and gas industry display more ethics in their use of the land and the natural resources incumbent upon it.



The site of the \$300 million, 1,500 megawatt, Jim Bridger power plant in southwestern Wyoming is on the edge of the Great Divide Basin. This new plant is a forerunner of many more to come. Wyoming's citizens are already asking how many plants of this size and larger can be accommodated without sullyng the clean air. In the background are the hills along the Continental Divide. It is there that a strip mine approximately 15 miles long will supply the 18,000 tons of coal per day needed by the plant when in full operation.

# Floating Western Rivers

by Verne Huser

The Grand Canyon of the Colorado, Hell's Canyon of the Snake, the main Salmon, the Snake in Grand Teton National Park—these are among the most frequently floated western rivers, but they are by no means the only ones. Dozens of other rivers, big and small, and other sections of these same rivers are getting more and more traffic each year, both commercial and private. This series doesn't pretend to be totally comprehensive, covering all rivers in the West nor will it attempt to mention all commercial floaters, but for a better view of the total picture, a few other rivers need to be mentioned before I launch into a philosophical discussion of the future of river running.

Here on the Snake River in Jackson Hole there are roughly twenty different commercial float trips operating within Grand Teton National Park, most of them between the dam on Jackson Lake and Moose. But John Simms and Charlie Sands run a couple of interesting and exciting float trips in the Corridor between Yellowstone and Grand Teton national parks. Headquartered at Flagg Ranch where the Snake River is crossed by the main Yellowstone-Grand Teton Highway (89-287), the Simms-Sands operation includes a short (one hour) white-water trip through a narrow canyon between the South Entrance to Yellowstone National Park and the Flagg Ranch and a longer, (four-hour) more placid trip from Flagg Ranch down the river to the head of Jackson Lake, a really great wildlife trip with elk and eagles, otter and osprey, sandhill cranes and moose and deer. They also run an occasional white-water trip through the Grand Canyon of the Snake south of Jackson.

But for the past several years the Grand Canyon of the Snake between the Bridger and Targhee National Forests has been the domain of Denny Becker and John Cooke, whose Becker-Cooke Expeditions consists of a 12-mile run in Green River rafts and a gourmet lunch on the four-hour run. The canyon is something like Hell's Canyon in general appearance, but there is a main highway (U.S. 89 and 26) along the whole route that may detract from the trip for some who prefer wilderness waters. It may be a little like floating the Lochsa along U.S. 12, but the highway takes nothing away from the thrills of the white-water experience. ((P.O. Box 371, Jackson, Wyoming 83001))

Not far down the Snake in Idaho—just below the Palisades Reservoir that backs up into Wyoming almost to where the Becker-Cooke Expedition pulls out of the Snake—Wilderness Encounters (the same outfit that runs Hell's Canyon) operates both scenic and fishing float trips. They run both overnight trips for 35 miles through the scenic lava canyons and one-day trips from Conant Valley. ((P.O. Box 274, Idaho Falls, Idaho 83401))

Thus the Upper Snake has plenty of float trip business; much of the remainder of the Snake is no longer river. More than twenty major dams block its free-flowing, thousand-mile course to the Columbia, and other dams are being planned for the few remaining free-flowing stretches and tributaries, one just below Conant Valley and another on the Teton River (I'll float that stretch August 21 and include it in my next—and final—article in this series).

Another great river canyon that flows into the Snake near Mountain Home, Idaho, is the Bruneau. I've never known anyone who floated it though friends of mine have talked about it. I know that it has been run, but I know of no commercial trips that float this wild and spectacular canyon in southwestern Idaho. I'll be happy to accompany someone who has the boats and the interest to try it.

Just down the Snake from the confluence of the Bruneau lies the proposed Snake River Birds of Prey Natural Area, which will be dedicated by Secretary of the Interior Rogers Morton August 24, a section of the Snake River that provides the nation's most significant nesting habitat for the golden eagle and the endangered prairie falcon.

And since Hell's Canyon of the Snake has been covered in an earlier article, let's move north to the Middle Fork of the Salmon in central Idaho. This is one of the officially-designated Wild Rivers of America. Wild in both a wilderness sense and in a white-water sense, the Middle Fork flows through four national forests: Boise, Challis, Payette, and Salmon. Born at the confluence of Marsh and Bear Valley Creeks not far from Stanley, the Middle Fork rushes for more than a hundred miles to the main Salmon. It flows through the more-than-a-million-acre Idaho Primitive Area (soon to become

experience to run the Middle Fork, and more people are doing so every year, usually from July through September (earlier in the spring the water is often hazardously high and later in the year it may be too low).

Fishing for salmon, steelhead, and cutthroat, rainbow, and Dolly Varden trout is popular, but the sheer joy of running white water is enough in itself. Deer, elk, bighorn sheep, and bear live along the river as do cougar, lynx, bobcats, coyotes, fox, porcupine, badger, beaver, marten, mink, otter and skunks. Bird life includes the pileated and the Lewis woodpecker, the imported chuckar and the native spruce and blue and ruffed grouse and dozens of woodland and raparian birds.

Probably more private parties float the Middle Fork than commercial outfitters, but it can be dangerous. It is heavy white water with lots of rocks and logs and such rapids as Artillery and Cannon Creek and Pistol Creek, Tappen Falls with its triple rapid, and Haystack and Waterfall Creek and Cliffside and Ouzel and Rubber. I haven't floated the Middle Fork myself, but I've talked many who have, and it seems to be a real white-water run that wilderness nuts love for its lack of jet boats and outboard motors. But even the Middle Fork is beginning to be over used. Where will it end? Will we destroy even these wilderness waters with too much use?

It's been ten years this week since I floated the Rogue River from Grants Pass, Oregon, with Bob Pruitt on a one-day run through Hellsgate Canyon, I wasn't sure whether or not Bob was still running so I wrote to the Chamber of Commerce and got a stack of brochures including one from Bob Pruitt, and he's still running rivers. In addition to the Rogue, he runs the Owyhee, the John Day, the Minam and the Grande Ronde in McKenzie boats, and jet boats, he runs the Rogue, the Willamette (Eugene to Portland), the Columbia and the Snake. His Rogue River trips include three-and four-day trips (June through November) and one-day trips both through some state parks and on the upper Rogue like mine back in 1961.

I'll never forget picking blackberries from the boat as we drifted along on the quiet stretch of the Rogue just below Grants Pass nor the hamburgers Bob broiled over an open fire for lunch. We ran some nice little riffles in Hellsgate Canyon and had a good swim in the cool clear Rogue just below the canyon. The birding was great, and we got back in time to take in a Shakespearean play at nearby Ashland that evening. ((Bob Pruitt Guide Service, 13234 Antioch Road, Central Point, Oregon 97501))

Other outfitters on the Rogue include Sid Pyle (2686 Demarary Drive, Grants Pass, Oregon, 97526), who runs McKenzie boats from May through December on three-four, and five-day

trips on the Rogue: a quiet day through Hellsgate and Dunn's Rapid, a white-water day through Rocky Gulch Rapids and Almeda Falls and Argo and Rainey Falls, great fishing and Kelsey Falls, Horseshoe Bend and Winkle Bar. (1810 Corona Avenue, Medford, Oregon 97501)

Irv Urie (1810 Corona Avenue, Medford, Oregon 97501) advertizes jet or drift boat fishing on many northern California and southern Oregon rivers including the Rogue, the Owyhee, the Smith, Klamath, Chetco, Illinois, Umpqua and Suislaw rivers as well as the Middle Fork of the Salmon. B. E. and Elaine Hanten (Merlin, Oregon 97532), who operate Morrison's Lodge and cottages just below Hellsgate Bridge, advertise one-, two-, and three-day trips, shuttle service for cars, and support trips for private parties, rafts or kayaks.

Then there are the Oragne Torpedo Trips (P.O. Box 1111, Grants Pass, Oregon 97526), unique white water trips on which each boater takes command of his own craft, supplied by the outfitter. Four different trips, three two-day and one one-day, vary from wild to not-so-wild and from camping to scenic, depending on the stretch of the river.

Still another guide service on the Rogue is Jerry Briggs' (2750 Cloverlawn Drive, Grants Pass) four-day fishing trips and three-day scenic trips. Obviously the Rogue has plenty of float trip and jet boat business, both scenic and fishing. Is it over used? Over fished?

The Stanislaus River in northern California is another river that has become more and more popular with white-water nuts. Short and fast, it too is threatened by proposed dams for hydroelectric power. A recent article in the Santa Barbara (California) News-Press by Robert H. Sollen (30 May 1971) gives that story. Must we dam them all?

The Grand Canyon of the Colorado is, of course, the best known white-water trip, but other sections of the Colorado and its tributary the Green are being floated more and more as the white-water craze increases. Jack Curry's Western River Expeditions, Inc. (1699 East 335<sup>th</sup> South, Salt Lake City, Utah 84106) offers trips in Westwater Canyon and in Cataract Canyon (in Canyonlands National Park) as does Ron Smith's Canyonlands Expeditions (P.O. Box 21021, Salt Lake City, Utah 84121). Both also offer trips on the Green and on the Yampa in Dinosaur National Monument, where more than ten thousand people floated last year. Overuse of this area will be covered in the next and final article in this series.

Hatch River Expeditions, Inc. (411 E. Second North, Vernal, Utah) have a complete schedule of trips in Dinosaur National Monument ranging from one to six days on the Yampa and the Green including runs through the Canyon of (Continued on page 7)

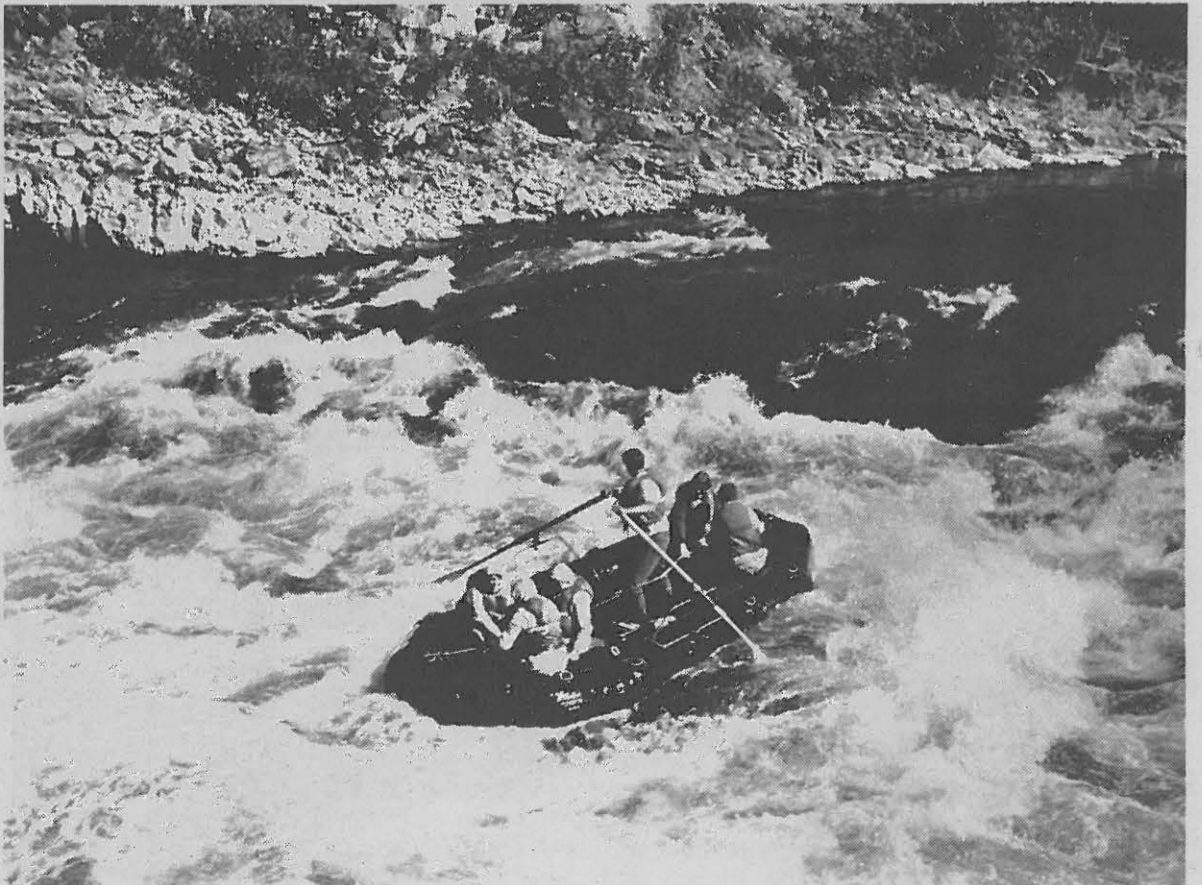


Photo by Verne Huser

Denny Becker guiding a small rubber raft through one of the white-water sections of the Grand Canyon of the Snake where the whole river flows through a gap less than fifty feet wide. A few years ago, Becker was the only outfitter running this stretch of river commercially. Today, there are as many as five

# Floating Rivers...

Lodore, through Split Mountain, through Echo Park (where conservationists won their first major battle to stop a dam), through Red Canyon. The Hatch brothers also run the Grand Canyon—in fact, took more people down the Colorado through Grand Canyon in 1969 (1,247) than any other outfitter. (Hatch was also the biggest Grand Canyon runner in 1970 with 1,672 passengers last year to 1,612 for Western Rivers Expeditions, 1,445 for Sanderson Brothers River Expeditions, and 1,178 for the American River Touring Association.) But more of that later.

The Green River in Wyoming—an area not frequently floated except for fishing—is in danger of being dammed. So is the Teton River in Idaho. So is the Snake in Hell's Canyon. So are many of the floatable Western rivers. Glen Canyon of the Colorado was dammed because too few people knew enough about it to save it from the dam builders. It was the place no one knew well enough to fight the battles to prevent destructive dams.

So we float Western Rivers and invite friends along. We have commercial operations that get more and more people on those rivers, into their spectacular canyons—enough people to fight for the freedom of our rivers, for the free-flowing stretch of stream. But by getting more and more people into these isolated places, do we not often destroy the very qualities that make them worth saving?

How do you save a river? What do you have to save it from? Dam builders! Yes, but perhaps from jet boaters, too. Perhaps from fishermen. Perhaps from floaters. Perhaps from hunters. Perhaps simply from people. An yet it is only the people who know a river and know it intimately that can possibly save it. Save it from what? Save it for what? These and other questions will be considered in the final article in the Floating Western Rivers Series. The author welcomes comment from readers of the series concerning rivers that need to be saved, rivers that are worth floating, overuse and abuse of rivers. Let's share our information and coordinate our efforts.



## Platte Endangered

Conservationists and local landowners are seeking a halt to the Nebraska Midstate Irrigation Project on the grounds that it is not needed and would essentially dry-up a large section of the Platte River for extensive periods during the year, according to the Wildlife Management Institute.

Congress passed and the President signed a bill authorizing the Bureau of Reclamation Project in 1967. The action received almost no publicity or attention outside Nebraska. Reclamation engineers are busy planning the project now, but no funds for construction have yet been appropriated.

The project would consist of a diversion dam and canal near Lexington, Nebraska, that would transport most of the water out of the Platte into reservoirs for irrigation purposes and to "arrest the declining water table." The Mid-State Irrigators, Inc., an organization of 1340 farmers and landowners in the area, are vigorously opposing the project. They say that water needs are adequately supplied by some 5,200 wells and that the water table is not declining.

The threatened section of the Platte is a wide, shallow, multichanneled river that affords one of the few great wildlife spectacles remaining in this country. Each spring, more than 90 percent of the continental population of sandhill cranes concentrate in the bottom lands, coming from wintering grounds in Texas, New Mexico, and Mexico. More than 200,000 strong, they feed by day in the wet meadows and marshes and in harvested grainfields. At night, they roost in the river's shallow waters. The rare and endangered whooping crane uses the area as a stopover point on its way to and from nesting sites in Canada. Wild ducks and geese by the tens of thousands depend on the shallow waters as do bald eagles and various shorebirds. Habitat of this type and use would be almost impossible to recreate—even at enormous cost.

Leading American conservationists have stated that we must think long and hard before destroying this island-studded stretch of the river. They said that we must evolve some special kind of protected status for the Platte and its remarkable concentrations of birdlife while there is still time to reconsider the project.

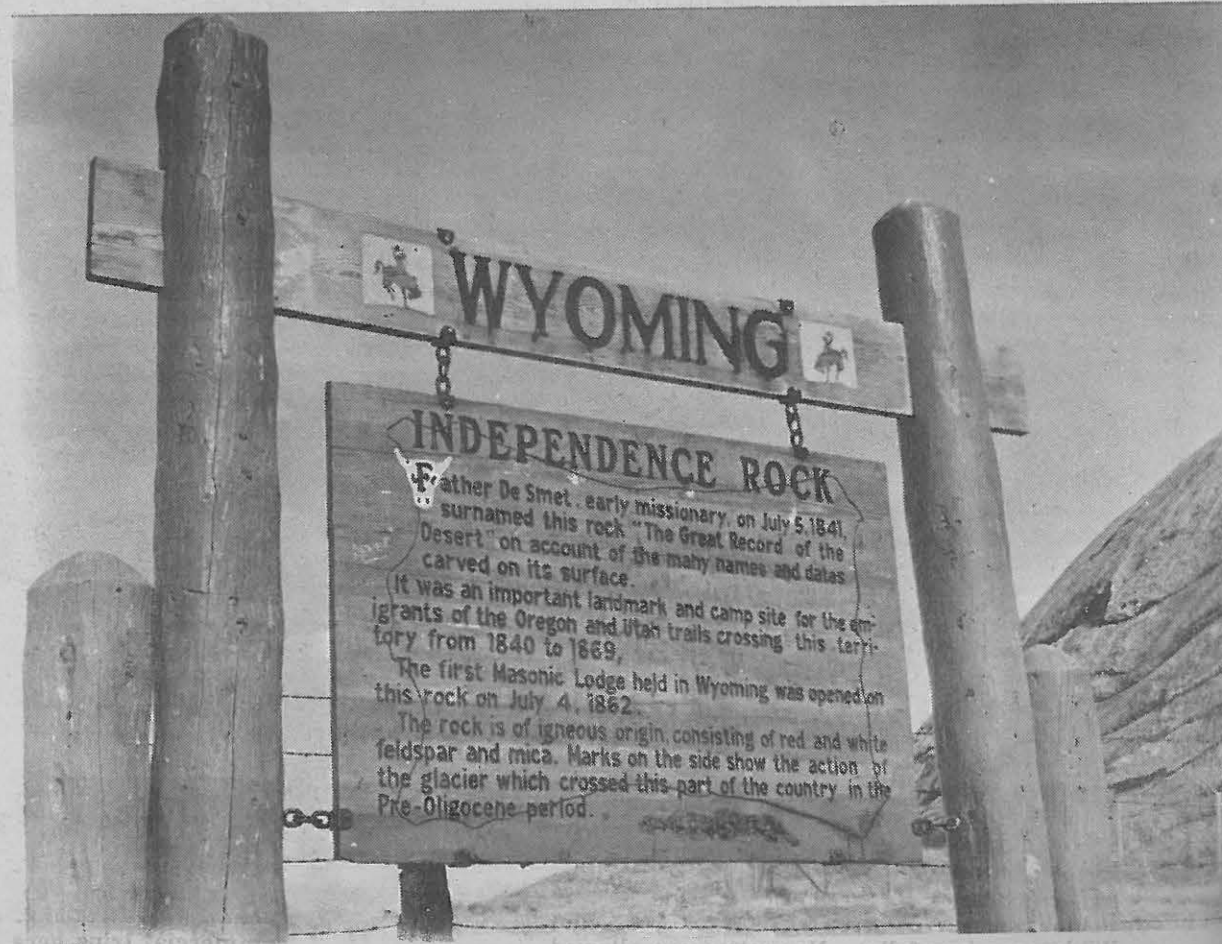
# "Register of the Desert"



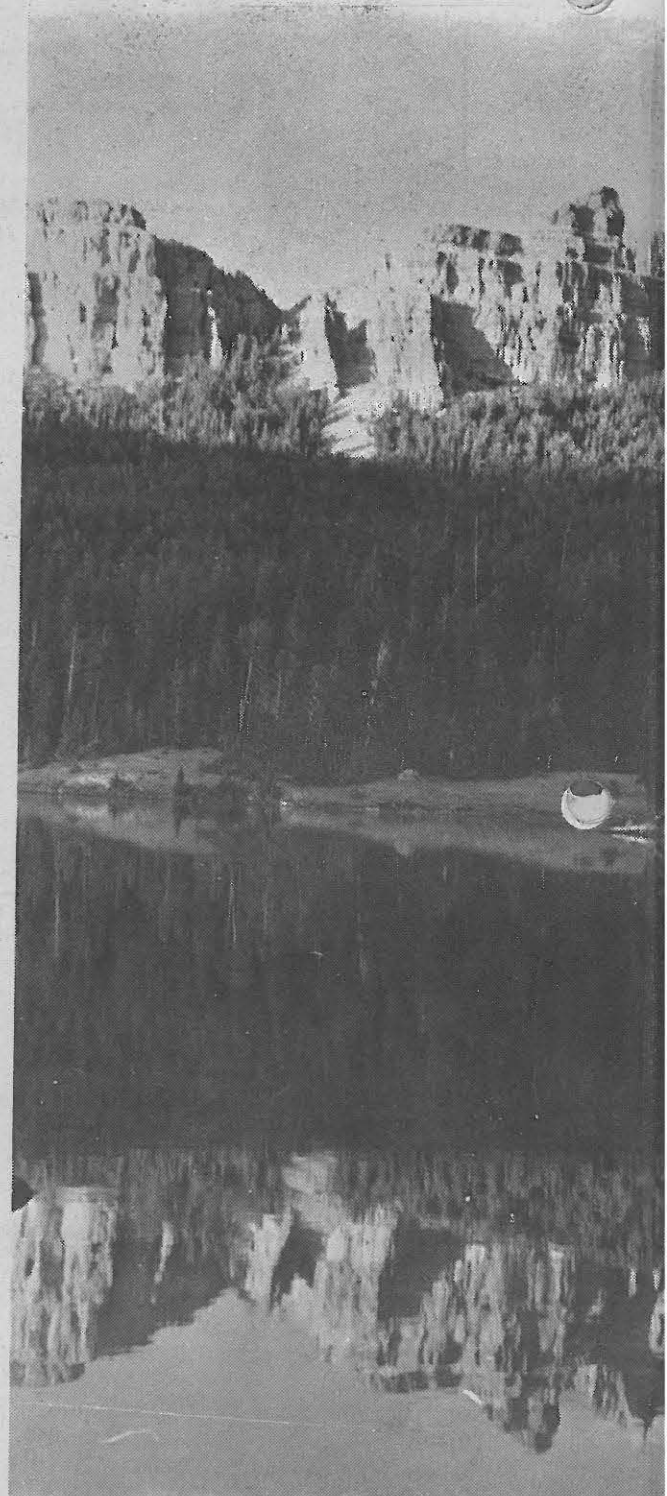
Independence Rock is a big, granite monolith sitting almost beside the Sweetwater River. Pioneer travellers along the historic Oregon-Mormon Trail used this landmark to post their names, where they remain today. The Rock is seen in this photo from Wyoming State Highway 220 west of Casper.



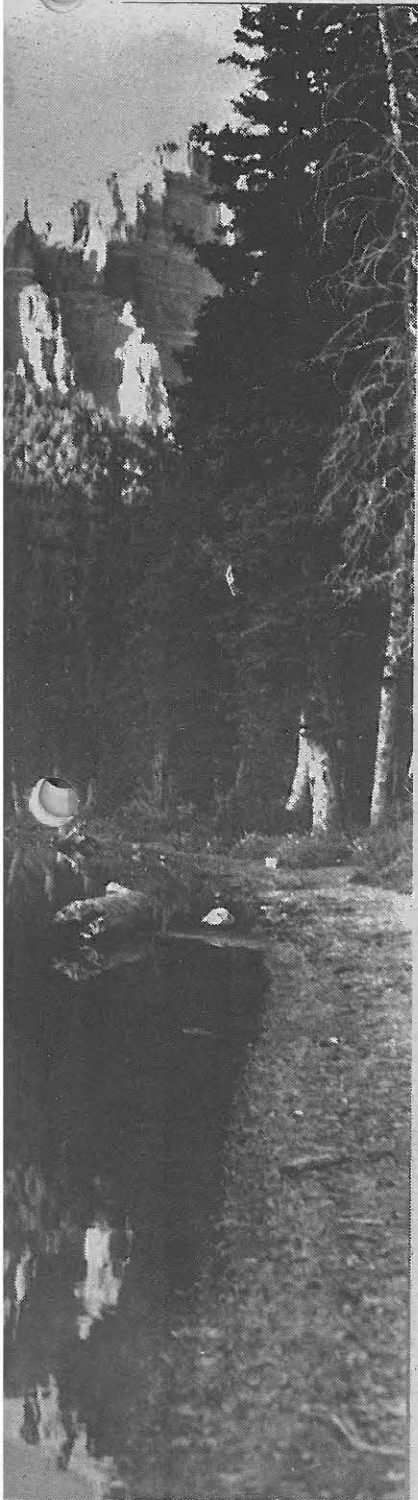
Various bronze plaques have been placed on the Rock in commemoration of its historic significance. The sign, shown below, recounts some of the history associated with the "Register of the Desert."



REFLECTION  
REFLECTION







# The Stars Are Dying...

consider such uses as human, agricultural and industrial needs for water but the far more vital role water plays in creating 60% or more of the oxygen we breathe.

**FACT:** Even if worldwide air pollution is controlled to the absolute minimum possible our present consumption of carbohydrate fuels is consuming the vital oxygen of the atmosphere faster than the ability of nature to replace it. Unless this cycle is reversed it is a **MATHEMATICAL CERTAINTY** that in time we will run out of oxygen to breathe.

Even cruel facts must be faced. It would be nice to ignore them, secure in a belief that they are the rantings of radicals trying to upset progress. But an honest look at what we have already done to our planet demands even the most conservative thinker assess what we have done.

Mankind has had a long dance with the resources of the earth, recklessly squandering them since prehistoric times but he who dances must pay the piper and it is in our own time that the bill is falling due. For the first time in history we are rapidly running out of new resources to exploit as we strip our planet. It can be assumed that every effort will be made to pass this bill on to future generations as our forebears passed it on to us. But unless in our own generation we say to ourselves, "The buck stops here," it is very questionable if there will be enough for future generations to survive to pay it.

In known historic times man has increased the totally barren desert areas from 10% to 25% of the total earth's surface. In Roman times most of the Sahara was forest and grassland supporting a population that included substantial cities and agriculture. The Empty Quarter of Arabia, the world's most barren area, is dotted with the ruins of cities once surrounded by farms. At the present time we are accelerating this pace of destruction to an alarming degree. In Africa, India and our own Southwest, millions of acres of semiarid land are being stripped of the scrub brush cover that protects it against erosion. Vast amounts of underground water are being pumped to irrigate this land. The food produced is vitally needed but the end result will inevitably be vast amounts of new desert. Heavy pumping will eventually lower water tables until irrigation will become infeasible and the land, deprived not only of its brush cover but of subsoil moisture as well, will succumb to erosion.

No agricultural land lasts forever. Modern soil conservation methods may have greatly extended the life of such land, where used, but it cannot perpetuate it. Even if such methods can make a good area of land produce for a thousand years, it took nature a million years to create it. Where nature has used its own methods to rejuvenate land, such as the flood plains or the Nile Valley, some land has been farmed throughout historical times. But man has succeeded in preserving farm land for such long

times only in small tracts under intensive hand care. Not only do we use up land, we also hinder nature in the process of creating new land to replace it, damming rivers to stop buildup of delta soils and natural rejuvenation of flood plains. The Colorado River has been dammed to the point where the delta is actually retreating upstream, becoming a potential threat to the rich but below sea-level farmlands of the Imperial Valley.

Hills and mountains are stripped of the timber that naturally rots down to become soil nutrients, both for new timber growth on the site and to wash down to build new soil in valleys below. Cattle feeding is moving towards vast off-farm operations. Instead of the manure being used to preserve soil, it becomes a pollution problem in the centralized feeding areas. Volumes can, and have, been written on the hundreds of ways we are preventing nature from mending itself from our ravages.

What is happening to our rivers and lakes is old hat in the news. Still, little but lip service is being paid to the job of stopping the pollution. Lake Erie should be producing enough oxygen to keep 200,000 people supplied with oxygen. Instead, it takes oxygen from the atmosphere. The very vastness of the oceans themselves cannot forever cope with the masses of poison being poured into them. Once they cease producing oxygen we truly will live on a dying planet.

Nature itself is a source of pollution. Animals breathe, vegetation decays, volcanos erupt, all creating pollution, but over the ages nature has geared itself to handle its own pollution. It is the overload caused by man that cannot be handled.

Before the beginning of the industrial age, a couple of centuries ago, the destruction of environment was a relatively slow process. Since then, it is increasing in hyperbolic proportions.

A century ago we passed a vital point. The vast amounts of coal and other fuels being used began to consume oxygen faster than the plant life of the earth could restore it. This consumption of oxygen is entirely separate from pollution. Should all pollution be stopped, this consumption of oxygen would still go on. Measurements taken at such remote points as the Antarctic and the slopes of Mauna Loa in Hawaii during the recent Geophysical Year confirm that carbon dioxide in the atmosphere is increasing at a rate of 3 1/2% a year with a corresponding decrease in oxygen. True, at this rate we have many centuries to go before air becomes unbreathable. But every indication is that this rate will greatly increase. Every power company producing electricity from coal, every oil company producing petroleum products, in fact every producer of carbohydrate fuels, the villain that is robbing us of our oxygen, is predicting vast increases in the use of such fuels. And this means vast increases in the amounts of oxygen being drawn from the atmosphere. If these increases are allowed to go unchecked a

critical level of carbon dioxide might be a matter of decades instead of centuries. As for visions of science converting vast amounts of carbon dioxide back to oxygen, forget it. For all its achievements, compared to the complex process nature uses to restore oxygen, technology is still only slightly ahead of the stone age.

Long before air becomes unbreathable, the change in air content could produce disastrous climatic changes. At present the millions of tons of smoke and dust man is pouring into the atmosphere is already altering climate. For several years average world temperatures have been dropping as this tremendous accumulation of dust and solids in the upper atmosphere reflects some of the sun's heat back into space. At times nature itself has done the same thing. In the late 1780's a series of volcanic eruptions that polluted the upper atmosphere with volcanic dust created a severe cold cycle. In the period between 1812 and 1826, a worldwide drop in temperature co-incident with another series of eruptions, one of which is estimated to have poured 137 cubic miles of dust into the atmosphere. The famous New England "Year without a summer" was caused by the dust of these eruptions. The famous, violent eruption of Krakatoa in 1883 caused average world temperatures to drop 2 degrees Cent. for several years enough drop in temperature to make the difference between an ice age or no ice age if prolonged long enough. We face a very grave danger of climatic changes that could be disastrous should our new man-made pollution combine with that caused by a new natural disaster, another Krakatoa. Such climatic changes could wipe out a large portion of the food crops of the world with unseasonable freezes.

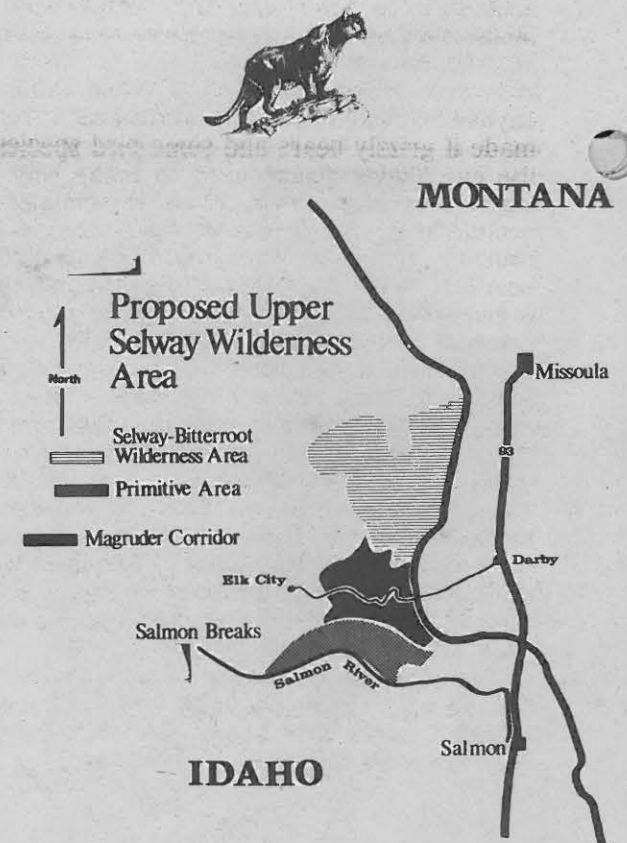
When the conservationist fights to preserve a bit of wilderness, to prevent a stream from being dammed, he is not fighting for a playground for nature lovers. He is fighting for the right of future generations to live. To nail it down in

(Continued on page 11.)



Photo by Stacy Gebhards

This photo, looking into the Magruder Corridor, shows the low quality timber in this region of the area which has been so much in contention. Conservationists want the area protected in wilderness. The U. S. Forest Service wants to manage the area for timber and for developed recreation.



## Wilderness Proposed

On August 2, Senator Frank Church of Idaho and Lee Metcalf of Montana introduced legislation to designate the Magruder Corridor on the Idaho-Montana border as the new Upper Selway Wilderness Area. Located between the existing Selway Bitterroot Wilderness Area on the North and the Salmon Breaks Primitive Area on the South, the Magruder Corridor contains some of the finest wilderness left in the United States. It is here that the Selway River-one of the original wild rivers-rises.

By designating the Corridor as wilderness, the legislation would protect the area from ecological damage from road building and logging-now a distinct possibility even though the timber is of negligible value.

Senator Church, in commenting on the legislation, said, "Aside from the wilderness values inherent in the Magruder Corridor by itself, there are two main reasons for including this tract of land in the Wilderness System. The corridor is the heart of a major block of wilderness area and if excluded from the wilderness system would detract from the surrounding wilderness. The corridor also contains the upper watershed of the Selway River, one of the last wild, unspoiled watersheds in the Columbia River Basin. Logging and road building would lead to the pollution of the Upper Selway with silt endangering the spawning beds of the salmon in the Selway, and important fishery resource, and change the character of the area."

## The Stars...

blunt language either we conform to nature's scheme of things or we perish. That doesn't mean we have to go back to the woods and dress in deerhides. But it does mean that we accept the fact that we do owe a morality to nature, that we must try to keep our consumption and use of natural resources in line with the ability of nature to restore them. It does mean an end to the senseless waste of resources now going on, especially the folly of 'Planned Obsolescence', the tremendous waster of resources to artificially bolster economy. It means more reuse and salvage and less primary production.

It means that consumption of carbo-hydrate fuels must be brought in line with production of oxygen by natural means, whatever adjustments in living standards that might necessitate. Above all, it means that we can no longer afford to use strictly economic yardsticks, such as the Gross National Product, as measures of progress. If it is necessary to sacrifice economic gain for living quality, it must be done.

We have a choice-planned and orderly adjustments to a way of life in balance with nature or nature's own drastic means of bringing things into balance. For we, too, are Nature's creatures. Even the city, in its own way, is a natural habitat of the animal called man. We are as subject to the laws of nature as is the wild deer starving on an overgrazed range. If we do not try to adjust ourselves to our ability to produce without destruction, nature will use its own drastic and terrible ways to make the adjustments for us.

Two things are necessary for survival of life. First is an acceptance by the people of the world of the need to recognize that natural balance is necessary for survival. Second is leadership to take the initiative in bringing it about. If the usual pattern prevails, leadership will lag behind public acceptance. Unfortunately, the high order of intelligence necessary to understand the overall picture of the ecological crises is not as much a requisite for success in business or politics as is driving ambition and financial acumen. In February, 1971, an official of Monsanto Chemical Co. appeared on a national news TV broadcast. He baldly stated that 'While he was as much interested in conservation as anyone he couldn't see what difference it really made if grizzly bears and some bird species in the everglades disappeared to make way for man's progress.' Trying to get the facts of the ecological crisis across to such men would probably be harder than explaining to a man born blind what the color red looks like. Since he is geared to a lifetime of worshipping expanding economy above all other considerations, it is beyond him to comprehend a society where quality of living is more important than the almighty dollar. They are probably as sincere as they are wrong in their belief that the ecological crisis is something dreamed up by radicals to gain attention and power. But then who among us has not turned their face from unpleasant facts rather than face them? Sometimes the unpleasant facts even go away in time, but the facts of the crisis in ecology are here to stay. They may even outlast mankind.

But hope springs eternal. Maybe the powers that be will see the light, and if I live long enough I might even see a Wyoming sky with ALL the stars in it.



## LWV Names Priority

The Idaho League of Women Voters has named water quality protection in the White Cloud, Boulder and Sawtooth Mountains as its number one priority.

State League President Mrs. Joy Buersmeyer of Boise stated the official League position:

"The League of Women Voters of Idaho is convinced that the quality of Idaho's water must be protected. League members believe that land uses such as mining, logging, grazing and other detrimental activities in the uplands of the Sawtooth, White cloud and Boulder ranges as well as unregulated development of the Sawtooth Valley constitute a genuine threat to the quality of the water in these areas. Therefore, the League supports measures which will provide maximum protection of these watersheds, endorses an immediate moratorium on mineral entry to provide interim protection and urges prompt revision of the 1872 mining law."

Mrs. Buersmeyer said the League views the introduction of H. B. 6957, proposing the creation of a Sawtooth National Recreation Area, as only the first step in providing protection of the watersheds. She said the bill which was cosponsored by the Idaho congressional delegation was deficient in several areas.

# Pollution Tax Proposed

The following statement was made before the Joint Economic Committee of Congress on July 12, 1971, by George Alderson, legislative director for Friends of the Earth in Washington, D. C.

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I am George Alderson, Legislative Director of Friends of the Earth, an international organization of 25,000 members, committed to the preservation, restoration and rational use of the earth. Our Washington office has just occupied new quarters at 620 C Street, S.E.

The Joint Economic Committee is rendering a vital service to the Congress and the Nation by holding these hearings to explore the use of economic incentives to curb degradation of the environment. Friends of the Earth believe that pollution taxes would be a productive new step in restoring the environment. Specifically, we are prepared to support a tax on sulfur emissions as an immediate application of the tax strategy.

During the past several years the public has become increasingly aroused against air pollution, only to find that in spite of our clean air laws, the air seems to be getting dirtier. Implementation of the clean air laws has involved citizens all over the country in hearings, in dealing with air quality agencies and other local officials, and in elections. In city after city, from coast to coast, people have been dealing with air quality agencies and other local officials, and in elections. In city after city, from coast to coast, people have been devoting their spare time, and even stealing time from their own jobs, to work for clean air. As a result there is a cadre of citizens who know the basic technical facts on air pollution, and who know quite a bit about local politics. Clean air now, at least, has a constituency that is organized.

What do we have to show for all this citizen action? Some of the air quality regions designated under present law have got part way through the standard-setting and implementation procedures. Some states have been adopting more stringent laws to prevent deterioration of air quality. In fact, even these initial victories have evidently concerned the polluters enough that they are seeking relief, such as through S. 907, the so-called Interstate Environment Compact bill now before Congress. The compact proposed in S. 970 would allow polluters, working through compact agencies, to enter collusive agreements to subvert the individual states' air quality laws.

In recalling the tremendous amount of effort our citizens have devoted to clean air, we should also recall that they have been fighting an uphill battle. Citizen groups have had to cope with die-hard opposition by industries, all the way through the procedure. Instead of fighting pollution by finding and installing abatement equipment, industries have been fighting the public, trying to water down and delay the tough controls that are so obviously necessary to restore clean air.

In the quest for incentives that would put polluters on a more constructive track, the Congress, in the Clean Air Amendments of 1970, took a bold step forward by setting a 1975 deadline for clean automobile engines. Such a deadline is not susceptible to the delays that have thwarted the public at the local level; it is supposed to spur the auto makers to develop a clean engine. However, just over the weekend, we have heard that the auto firms are still trying to find some political muscle downtown that will get them out of the deadline. This is typical of the constant battle citizen groups have had to wage. At every decision point, the polluters are ready to try again, with plenty of influence and with their own captive experts, to argue for laxity.

It is time to turn the tables on the polluters, by instituting pollution taxes on suitable substances. Where the conditions are right, as we believe they are with sulfur, the incentive created by a tax gives the polluter a reason to stop polluting immediately. It also makes delaying tactics ineffective. As the National Academy of Engineering study said, instead of debating clean air groups, the polluter is in debate only with himself, having to decide which alternative will be the most economical for his business.

The tax also exerts a steady pressure to eliminate the last of the pollutant, instead of leaving the amounts permitted by clean-air standards to go untouched. The last pound of sulfur is taxed just as much as the first pound. This means that there is an incentive for pollution-control devices to be invented and installed that will eliminate the taxed pollutants completely. Enforcement becomes significantly easier.

under a pollution tax than under an equivalent standard. The state air pollution agencies, being close to the influence of industries, have a history of laxity in enforcing even the laws the states already have on the books. These agencies have too few staff to prosecute all violators, and the big polluters often have enough influence to get themselves overlooked when the agencies pick their targets. By contrast, the pollution tax is self-enforcing. As long as routine spot checks are done, as with any tax, all polluters have to pay; therefore all feel equal pressure to stop polluting.

Let us bear in mind that the goal is to have no money coming into the Treasury. If the tax were completely effective, within a few years all emissions of the taxed substances would have stopped. What we actually anticipate is a declining curve over several years' time, with a small amount continuing to come in afterward. The amount will depend largely on the development and use of the new abatement technologies.

As a pilot project to prove the value of the pollution tax, Friends of the Earth support the President's proposal for tax on sulfur emissions, provided that (1) the tax reach 20 cents per pound of sulfur by 1975, (2) the tax be uniform across the nation, rather than regionally varied, and (3) the receipts not be earmarked for any special purpose.

Before closing, let me suggest that it is essential to avoid getting caught up in economic theory in the consideration of pollution taxes. We regard these taxes first and foremost as an effective way to stop pollution. If economists think of them as a means of "internalizing the externalities," that is fine, too. But the real value of the pollution tax that makes it important to people all over the country -- and in other countries that may follow suit -- will be its effectiveness in restoring clean air. We think it will work, and it's time to give it a try.

## Water Contested

Whether the Bureau of Reclamation or private interests will control the vital water supply for the Tule Lake and Lower Klamath National Wildlife Refuges has not been decided, the Wildlife Management Institute reports. The important question is still being pondered within the Interior Department.

Three irrigation districts in northern California are seeking control of irrigation facilities which regulate the water supply in the refuges. The refuges are mainstays of the Pacific Flyway including Canada, Mexico, and Central America and are dependent upon the proper regulation of water levels to meet waterfowl requirements. Conservationists have requested that Interior Secretary Rogers C. B. Morton require the reserved facilities to be operated and maintained by the Bureau of Reclamation for the benefit of the refuges and international interests.



Wilma Kaul, wife of postmaster Jeff Kaul at Pinedale, Wyoming, won the beautiful wildlife painting which was raffled off by the Wyoming Outdoor Coordinating Council. The painting, shown above, was done by noted wildlife artist, Betty Thomas of Jackson, who donated it to the Council. Proceeds from the raffle sale will go to finance the conservation and environmental activities of the Outdoor Council. Mrs. Thomas is the wife of Dave Thomas, deputy game warden for the Wyoming Game and Fish Department.

When notified of her prize, Mrs. Kaul exclaimed, "Really wonderful! I like Betty's paintings very well. I've always wanted one." She said the painting would go over the fireplace in a new home they are building west of Pinedale. She and her husband are avid outdoorsmen.

The 22 X 30 inch painting is a full-color depiction of a bull elk and his harem.

Thoughts

from the

Distaff Corner

By Norma R. Hentges

Forts and Historical Sites Along Old West Trails

Soldiers, pioneers, Indians, forts, trails, all form the heritage of the West. Why not center your vacation around some of our Western history?

Traveling West, the Missouri River is a good point of departure today, just as it was for thousands of emigrants bound for the new life over a hundred years ago.

North of Omaha, Nebraska is the Mormon Cemetery. This is the burial place of nearly 600 Mormon emigrants who died at "Winter Quarters" in the winter of 1846-1847.

The California, Oregon and Santa Fe Trails began at Fort Lexington. This fort was the general supply depot for all forts in the Rocky Mountain Area. Fort Lexington is the oldest post established by the United States, west of the Mississippi River that is still operative.

Across the great grasslands of Nebraska, the pioneers headed West into the unknown—the land of hope.

In the center of Nebraska, on the South bank of the Platte River, is the site of Fort Stephen Kearny. Built to protect travelers on the Oregon Trail, it was first christened Fort Childs. On Dec. 30, 1848, the name was officially changed to Fort Stephen Kearny.

Records show that in the first six months, 4,400 wagons passed the fort on the south side of the river. There is no record of those that traveled on the Mormon trail on the north banks.

By 1857, the 19 sod and adobe buildings and the five unpainted wood houses were in deteriorated condition. The parade ground was square and consisted of four acres, around which were planted cottonwood trees.

As the fort grew, it accumulated large stores to supply the forts further west. The commanding officer was allowed to sell supplies to the emigrants.

In 1850, Fort Kearny became the middle stop of the stage coach run from Independence, Missouri and Salt Lake City, Utah. It then had a regular once-a-month mail and passenger service. Between 1860 and 1861, it was an important stop of the Pony Express.

No direct attack by Indians was ever made on Fort Kearny. However, in 1854, the Cheyenne and Sioux broke out in violence along the Platte and the Little Blue Rivers. They attacked trains, killed, scalped and set fire at many ranches and settlements. In preparation for possible attack the earthwork fortifications were thrown up.

Fort Kearny remained in importance until the Union Pacific Railroad was built in 1866-67. On May 22, 1871, orders were issued for the fort to be discontinued. In 1875, the buildings were torn down and the land went into disposal under the homestead laws.

Funds were raised in 1928 and the Fort Kearny Memorial Association purchased 40 acres where the buildings had stood. They, in turn, gave the site to the State of Nebraska. Research and development began in 1960.

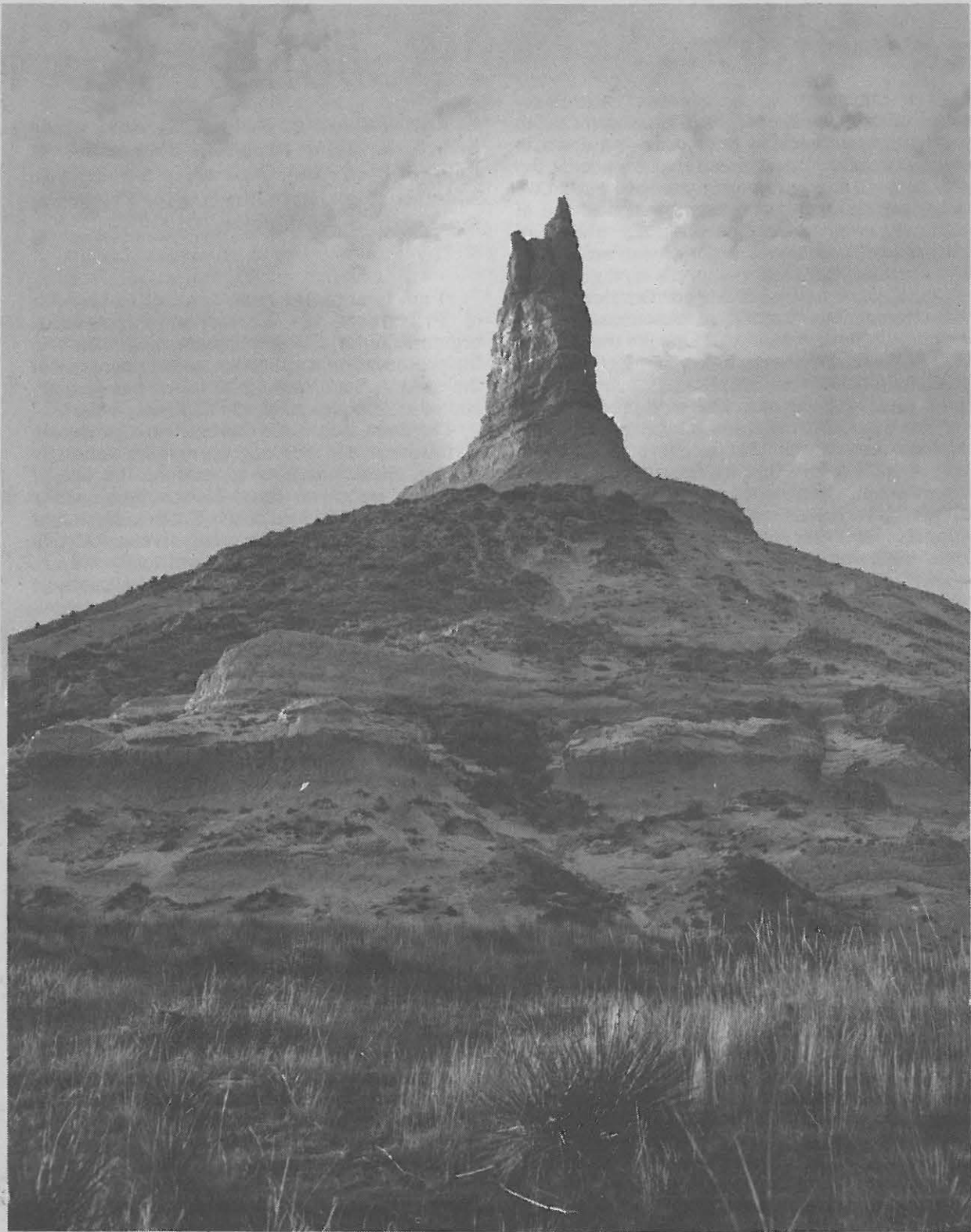
Today a visitors center offers a 15 minute film on the fort. The center also houses a museum of Fort artifacts. The blacksmith shop has been reconstructed out of adobe blocks that were made just as they were in the days of the early fort. The shop contains relics and blacksmith equipment.

There is a stockade with block house that has been erected. The big old cottonwoods can still be found around the parade ground. Markers are placed where important buildings stood in 1864 and the earthwork can still be seen.

Sept. 27, 1863, about one hundred miles west of Fort Kearny, Fort McPherson was established. This fort sat on the south bank of the South Platte River, two miles west of Cottonwood Creek and eight miles above the confluences of the North and South Platte Rivers.

It was first known as Cantonment McKean, then Fort Cottonwood, before it became Fort McPherson in 1866. At that time it was a dreary collection of adobe and log buildings. Its purpose was to prevent the Indians from fording the river at this point and to protect the emigrant trains. In 1873, the burial grounds were declared a National Cemetery and so it remains today.

From the plateau of the North Platte River, the Oregon Trail descended abruptly. A few ash trees were scattered in dry ravines of this dry, arid region. The emigrants named this Ash Hallow. It was here, about 26 miles northwest of Ogallala, Nebraska, that the covered wagons had



Chimney Rock rises 500 feet from the valley floor along the North Platte River in Nebraska. Pioneers travelling the Oregon-Mormon Trail could see the landmark for two days along their journey. It is protected as a national historic site.



to be lowered from the crest of the hill to the valley floor by windlass. Today, scars are still visible on the hillside. The grave and marker of 18 year old Rachel E. Pattison, who died June 19, 1849, can be found here.

At the mouth of Ash Hallow, Fort Grattan was established on Sept. 8, 1855, by Col. Wm. S. Harney. The fort consisted of two earthwork bastions about 100 feet across. These were erected at the time when the soldiers of the 3rd encountered the Sioux at the battle of Blue Water. The soldiers killed 86, wounded 5 and took 70 women and children captive. The fort, as such, was abandoned Oct. 1, 1855 and leaves only a brush covered mound to mark its having been.

A rock formation described in pioneer journals is found south of Bridgeport, Nebraska. From Nebraska 88, good views of this rock, known as Courthouse Rock, can be seen. The formation appeared 300-500 feet high and about a mile in circumference. The rock gives the ap-

pearance of a great architectural designed court house, hence its name.

From the floor of the valley of the North Platte River, rises a landmark that looks like a giant inverted funnel. Known as Chimney Rock, this formation is composed of Brule clay, interlaced with volcanic ash and Arickaree sandstone. It rises to the impressive height of 500 feet. This solitary spire was visible for two full days by approaching wagons.

Chimney Rock has been recorded in hundreds of pioneer journals. It was a welcome respite to travel weary emigrants crossing the sea of grass prairie land.

There is no accessible road to this historic site. A word of caution: if you intend to hike to the base of the site, wear boots. The terrain is extremely rough and is a popular spot for rattlesnakes and sword plant. The location is about two miles south of Baynard, Nebraska, off U.S. 92.

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Photo by Stan Rice



The eagles are dead; no one can bring them back. Nor can anyone bring back the nearly sixty antelope killed by the Wyoming rancher responsible for the death of more than twenty eagles. The sheepmen have won another round in the destruction of the west. In a state where only one out of a thousand is a sheep rancher, the wool growers still run the show.

Last year they coerced Gov. Hathaway and Senator Hansen into pressuring Secretary of the Interior Walter Hickel into opening the season on golden eagles. This despite the fact that Under Secretary Leslie Glasgow (in charge of wildlife) could find no real evidence—in a year-long study—to support the sheep ranchers' contention that the eagles were major predators on lambs.

The Cooperative Livestock Report for Wyoming last year suggests that sheep ranchers in the state lost 8400 lambs to eagles. I personally doubt that they lost 84, and I have more evidence to support my doubt than any sheep rancher in the state has to support his estimates—for the Cooperative Livestock Report is based on a 38% return of questionnaires asking ranchers to estimate their losses.

Such estimates are based upon personal prejudices rather than upon any real evidence, upon circumstantial evidence rather than upon fact. A rancher sees an eagle feeding upon the carcass of a lamb or sheep and immediately jumps to the conclusion that the eagle made the kill. Such is rarely the case if the dozen or more ecological studies on the subject are worth the paper they are printed on—and they come from several major universities as well as the Smithsonian Institution and from the Department of the Interior. Even Fred Christensen, Wyoming Director of the Division of Wildlife Services (the Federal predator control agency), has told me that the eagle cannot be considered a major predator upon lambs in Wyoming—though they may be in West Texas.

In the Trans-Pecos country of West Texas many migrating eagles winter in sheep country. One study indicated that 5% of the total lamb loss was due to eagle predation (and that in an area of intense eagle concentration—much higher than in Wyoming) When the rancher was asked to estimate his losses for the researcher, he estimated a 13% loss, but when the same rancher turned in his Cooperative Livestock Reporting questionnaire, his estimate suddenly rose to 43%.

This is the kind of statistical evidence that Wyoming sheep ranchers use to support their claims that eagles are putting them out of business. I can't accept their evidence. Since the factual evidence does not support the sheep ranchers, who does?

Why, the Federal Government, of course, in the way of wool subsidies. You and I—as taxpayers—support those rich ranchers (who hate welfare programs for people) by paying them hundreds of thousands of dollars each year to continue to raise sheep on our land (in some cases they even fence the public off the public lands). We also pay for their predator control programs (killing our coyotes on our land while they overgraze it for a fee of 13¢ per sheep per month).

The State Government supports them too: the Wyoming Game and Fish Commission contributes some \$40,000 a year to the predator control programs. But that's not the half of it. State law requires that the Game and Fish Commission pay ranchers for damages to privately owned range due to the grazing of wildlife. The same Wyoming rancher who was found guilty of 29 counts of selling Wyoming wildlife—moose and antelope—to an Idaho game rancher has recently hit the Commission with a big bill for wildlife damages.

Out of one side of his mouth the sheep rancher says, "If it weren't for our predator control programs, you sportsmen wouldn't have any deer and antelope to hunt." Yet, out of the other side of his mouth that same rancher says, "These damn deer and antelope are eating us out of house and home." Which side of the mouth do you listen to?

An ecologist at the Smithsonian Institution who studied antelope in the Trans-Pecos country of West Texas—that country so heavily infested with eagles—concluded that the main reason that antelope were not increasing their numbers and extending their range was the competition from domestic sheep overgrazing the range. Basically, what is more important to Wyoming's long-range economy: a domestic sheep or a free-ranging antelope?

And just where does the eagle fit in? An ecological study conducted in Utah by a student at BYU revealed that of 521 prey items found in golden eagle nests, there was not a single lamb carcass though several of the nests were located immediately above lambing grounds. He did find that rabbits were the primary prey species taken by the eagles (389 of the prey items). He calculated that if five (5) rabbits eat as much as one sheep, the eagles were actually providing grazing for 78 more sheep. It appears that the sheep ranchers are actually operating at cross purposes with their own best interests. Old wives tales are harder to kill than coyotes or eagles.

No wonder sheep ranchers hate ecologists—those people who are trying to discover the true relationships between organisms—for they uncover facts the sheep ranchers don't like to face, facts that rock the very foundation of their mythology. And any clan or tribe that can no longer believe in its mythology has lost its hold



This young fellow is heading for parts unknown. Young bull moose aren't often seen in open, sagebrush country but when travelling, they will take to the hills.

## More Eagle Business

WASHINGTON, D.C., -- Stirred by the disclosure that at least 770 bald and golden eagles were killed in one eight-month period by hunters shooting from helicopters, Congressmen David R. Obey (D-Wis.) and John Saylor (R-Pa.) have urged rapid Senate hearings on House-passed legislation to prohibit the shooting of any wildlife from aircraft.

Legislation to that effect authored by Obey and Saylor passed the House by a vote of 307 to 8 in May. Similar legislation was introduced in the Senate by Senator Gaylord Nelson.

In a letter to Senator Philip Hart, Chairman of the Senate Commerce Subcommittee on the Environment, the two Congressmen told Hart they "share fully" the outrage expressed at the recently revealed killing of at least 770 eagles from helicopters.

"While the shooting of eagles from helicopters is already against the law," they wrote, "the shooting of other wildlife from aircraft is not. Thousands of coyotes, wolves and other animals are shot from airplanes each year, sometimes for purposes of predator control. But all too often," they said, "this killing is done by human predators who consider the slaughter of animals from aircraft to be legitimate sport."

Obey and Saylor told Hart "there is no better time to bring this issue before the Congress and to pass legislation that will deal adequately with it. We know that your active and rapid efforts on this problem will meet with enthusiastic support across the country."



MINNEAPOLIS -- Citizens interested in helping to save America's bald and golden eagles can play a part in this effort, the U.S. Fish and Wildlife Service says.

"We are increasingly concerned about the nationwide decline in eagle populations," Travis Roberts, F&WS regional director, said in Minneapolis.

"We need prompt reports on any dead or injured eagles found by citizens," he said, "if we are to be able to investigate and determine the cause of death or injury."

Roberts said recent reports from Colorado indicate a much higher loss among both bald and golden eagles from power line electrocutions than was suspected previously. He said this is only one of many factors contributing to the sharp decline in eagle populations.

The Fish and Wildlife Service is working with power companies, landowners, citizens groups and other government agencies now in an effort to pinpoint and investigate eagle losses. Delay in reporting known eagle losses makes it more difficult to determine the cause of death or injury.

U.S. game management agents have been assigned the work of coordinating the reporting and investigation program. Citizens should contact the nearest federal game agent. They should be sure the bird they are reporting is an eagle.

To report a sighting to the nearest game agent, call the central offices at Denver, phone 303-233-3611 (ext. 6631); at Salt Lake City, phone 801-524-5632, or at Minneapolis, phone 612-725-3530.



## Areas of Action

The Alaska native claims settlement will be coming up for congressional action early in the fall. Many concerned citizens want land use planning to precede final settlement (see editorial, page 2). Letters to the President and to congressmen are needed expressing the need for planning before further action is taken.

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The House Subcommittee on Mines and Mining, chaired by Mr. Ed Edmondson of Okla., is holding hearings in Washington on Sept. 21-24 on strip mining legislation (specifically H. R. 4556 by Mr. Ken Hechler to abolish coal strip mining). Written statements on the proposal should be addressed to Mr. Edmondson by Sept. 10. Letters and statements are needed expressing concern for the impact of strip mining on our western states and the difficulty of reclamation.

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Expressions of concern are needed on two proposed bills dealing with the management of forest lands. Sen. Mark Hatfield of Ore. has introduced the "American Forestry Act", S. 350, which is a modified re-run of the infamous National Timber Supply Act. Sen. Lee Metcalf of Mont. has introduced S. 1734, the "Forest Lands Restoration and Protection Act of 1971." The Metcalf bill provides for timber harvest and land management in consonance with environmental quality and the principles of multiple use. It would provide controls on clearcutting and protect de facto wilderness until reviews can be made of the areas. Hearings have been held in Atlanta, Ga., and Portland, Ore., with one more scheduled for Syracuse, N. Y., on Sept. 24. The timber industry supports the Hatfield bill while conservationists are in almost total agreement that Metcalf's bill is more in the public interest. Address letters to the Public Lands Subcommittee, Rm. 3106, New Senate Office Bldg., Washington, D. C. 20510.

## Parkway Proposed

Regional Forester Vern Hamre has announced at Forest Service Intermountain Regional headquarters in Ogden, Utah, that a study of the Teton National Forest Corridor area between Yellowstone and Grand Teton National Parks has been completed.

"As a result of this study and additional evaluation," said Mr. Hamre, "we are recommending and supporting transfer of approximately 23,000 acres for National Park Service administration."

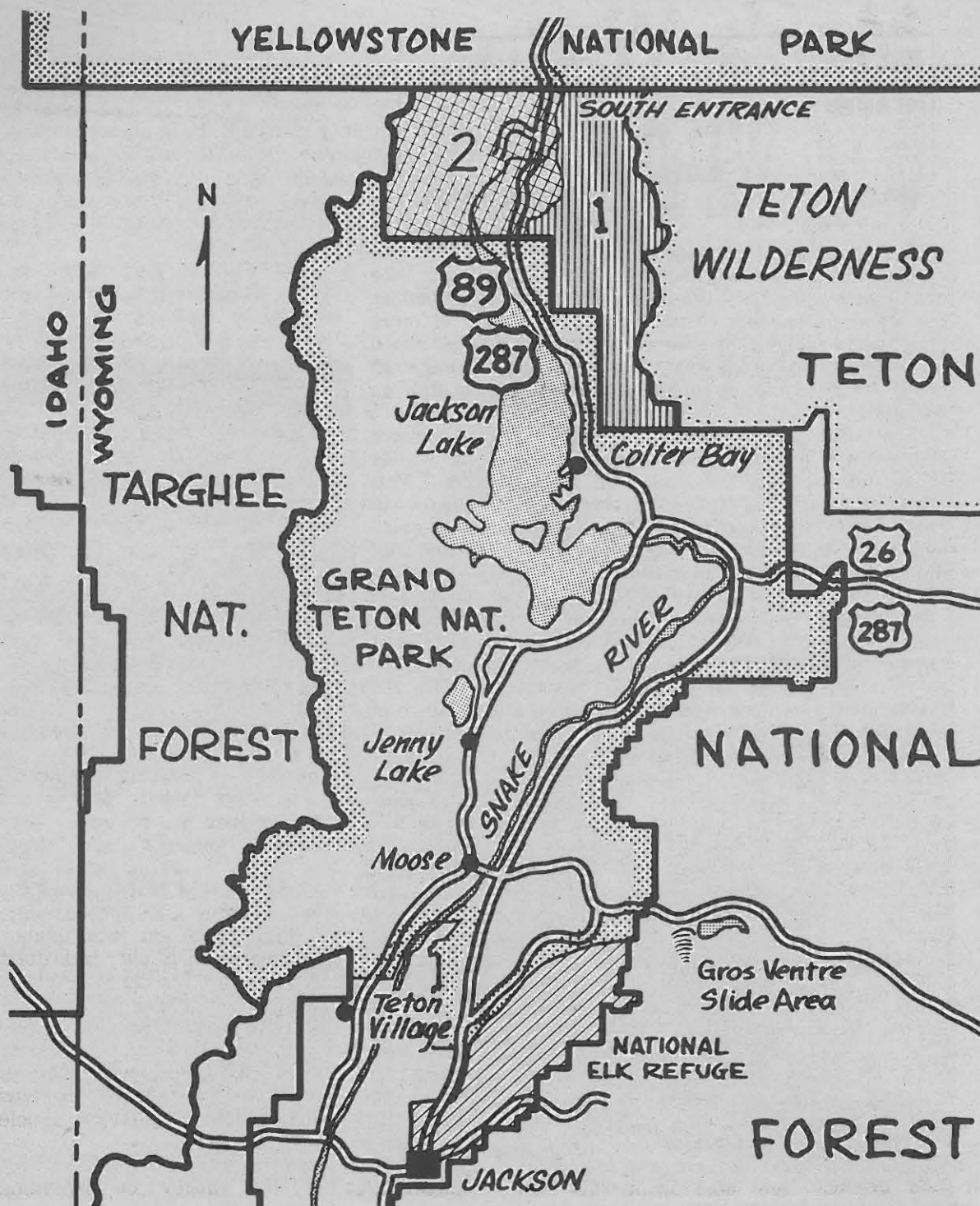
"The basic objective of this transfer would be to permit establishment of a National Memorial Parkway and to facilitate recreation development related to the Parkway and the two National Parks."

"Another major objective is to provide that all the National Forest lands remaining between the proposed eastern boundary of the transfer area and the existing Teton Wilderness be given Wilderness status and made part of the Teton Wilderness. This would add approximately 29,000 acres to the existing Wilderness," he said.

The transfer area includes all of the Teton National Forest in the Corridor area from its western boundary to a proposed, revised west boundary of the Teton Wilderness. Special legislation will be required to accomplish the transfer. It is proposed that the entire matter be handled by a single legislative measure, to establish a National Memorial Parkway and to facilitate management of the Teton National Forest lands lying immediately to the east of the transfer area.

"It is our understanding," said Mr. Hamre, "that the proposed transfer area would remain open to public hunting, and existing special-use areas will continue, and that the recreation potential will be developed by the National Park Service. The two agencies will need to work together for development of camp and other facilities to accommodate visitors going into the Teton Wilderness from trailheads at Sheffield Creek, Arizona Creek, Bailey Creek, and Pilgrim Creek. These facilities would be located on lands under jurisdiction of the National Park Service."

The above proposal is supported by Secretary of Agriculture Clifford Hardin and was transmitted to Secretary of the Interior Rogers C. B. Morton in a letter dated August 6, 1971.



1. PROPOSED ADDITION, TETON WILDERNESS (29,000 ACRES)  
2. PROPOSED NATIONAL MEMORIAL PARKWAY (23,000 ACRES)

Reprinted courtesy INTERMOUNTAIN OBSERVER, Boise, Idaho, July 31, 1971

## Man's War Against 'Predators'

by Dwight Wm. Jensen

Upon reflection, one realizes that Jackson Canyon is no more prepossessing at first glance than is any one of scores of narrow, steep canyons in Idaho, Wyoming, and Colorado. I had driven past it a dozen times without noticing it. But now I came to it because I wanted to see where the eagles had died, and now it took on aspects of the unique, even the spectacular.

The Audubon Society members and their friends who entered the canyon to recover the bodies of the poisoned eagles went in from the bottom, where the canyon opens abruptly out into flat Wyoming farm and desert land. Eleven miles from the mouth of that canyon, on or about the first of March, the eagles had found and eaten from poisoned carcasses of antelope. Then they had flown to the canyon to roost.

My guide, one of the Audubon Society members, Barbara Dobos, took me into the canyon by an easier route. We drove along a rough, rutted dirt road parallel to the canyon until we reached a point opposite the upper end of the wild part of the canyon. We parked and proceeded on foot, climbing up a decided hill to the rim of the canyon itself.

She explained why so many eagles should be found in this particular canyon. The same upward slope that was causing me to breathe hard helped create air currents that moved upward, and birds found these currents helped them fly over the line of the canyon. If they were roosting, the currents helped them lift off to a quick flying start, with the least effort.

Moreover, the canyon lies on the path of the flyway by which eagles move between British Columbia and winter homes in the south. It is a convenient way station, a good overnight roosting place. It is not a nesting area for eagles.

These eagles, though, had roosted here after feeding off antelope carcasses poisoned with thallium sulphate. Dead and dying, they had fallen from their perches into the canyon below. Spring runoff had carried and mangled their decaying bodies. On May 1st, about two months after they died, they had been found by two

ecology-minded teen-age boys and reported. Other boys might never have reported the find, and the case might never have achieved national notoriety. But as it happened, the eagles did what others had tried unsuccessfully to do: they focused national attention on the issue of the widespread use of poisons on the western range and forest land.

It is a problem, though, of long standing, and the current drive against it may only be the climax of a fight that first began to attract widespread notice about seven or eight years ago. But the fight itself is more than 40 years old.

The federal government began subsidizing the killing of predator animals during World War I, when it hired hunters to shoot wolves - the rationale being that beef cattle needed for the war effort should be protected. The protection was extended to sheep, with hunters killing coyotes. Money for this kind of work, which started at \$125,000 a year, built up until, in 1930, a million-dollar appropriation was proposed.

That brought out the opponents. Scientists dealing with wildlife urged Congress to initiate a scientific study of the possible effects of their poisoning and hunting before continuing with it. But they were outmaneuvered by the livestock interests, and by 1950 the annual appropriation was up to \$4.6 million.

From 1945 on, the Fish and Wildlife Service, which handles the predator control program, had a powerful new tool: sodium fluoracetate, popularly known as 1080 (which was originally its inventory number when it was being tested in Denver). Up to that time, the major poisons in use had been strychnine and thallium sulphate.

Sodium fluoracetate is a white salt - odorless, tasteless - that is mixed in a liquid solution and injected into meat, which is then laid out where predators are likely to find it. It is amazingly lethal. To kill rodents, grain can be soaked in the solution and left out.

Ten-eighty has the further property of being extremely stable. Consequently, it does not break down in the body of the animals it kills. Their carcasses become poison baits themselves. California condors have died from eating

ground squirrels that had eaten grain poisoned with 1080.

By 1969, the appropriation for killing wildlife was up to more than \$7 million. More than 750 men were employed at the job.

During the Kennedy years, a major effort at a turn-around began. Beseated by a number of people who thought the poisoning program was wrongheaded, Interior Secretary Stewart Udall set up a study panel. That group reported back saying that all native animals are resources of value to the American people but that if animals cause significant damage, population control measures are justified. More important, it found that the people employed by the U.S. government to kill wildlife were promoting the killing of wildlife as though they were salesmen for the idea. On numerous occasions, control people kill wildlife where there are no domestic animals on which they could have been preying. The board found that "far more animals are being killed than would be required for effective protection of livestock, agricultural crops, wildland resources and human health." Moreover, it said, private and local government efforts were killing even more animals.

The amount of killing done by the government is massive. Some figures: During the decade of the 1960's, the federal government alone put out 6.5 million strychnine baits; left 140,000 pieces (usually 50 to 100 pounds, enough to last all winter) of 1080-poisoned meat lying about; maintained 410,000 cyanide poisoning stations for one year each - replacing the poison after it had been used.

In one year, counting only the number of dead and poisoned animals actually found (1080 takes half an hour to work its magic, so the animal may be a long ways from the bait station before it dies and may not be found), Fish and Wildlife came up with this list of dead animals:

- 89,653 coyotes
- 20,780 lynxes and bobcats
- 19,052 skunks
- 24,273 foxes
- 10,078 raccoons

(Continued on page 15.)

- 7,615 opossums
- 6,941 badgers
- 6,685 porcupines
- 2,779 wolves
- 1,170 beavers
- 842 bears
- 294 mountain lions
- 601 other animals

Thallium sulphate is not as deadly as 1080. Indeed, it kills only about half its victims. The rest go blind or suffer other painful ill effects. Thallium also remains in the bones of animals it kills, and even in the soil where it has been used. Bill Hepworth of The Wyoming Game and Fish Laboratory says animals have died from gnawing six-year-old bones of other animals that died from thallium sulphate.

For these and other reasons, the Bureau of Sport Fisheries and Wildlife gave up the use of thallium sulphate for animal control work in the continental United States back in 1956 or '57. But not until ten years later did it close out all its other uses and get rid of its supplies in storage. The thallium sulfate used in Wyoming came from the American Smelting & Refining Company (the White Clouds company, you might remember) and was sold in Denver.

The pressure for poisoning and shooting real and imagined predators comes almost exclusively from livestock men, although now and then a "sportsman" gets into the act by claiming that predators cut down on the supply of game animals. (A number of fish and game experts, however, contend that predators are needed to killoff dying animals, clean up the herd, and keep it healthy. They oppose the poisoning programs.)

An example of the attitude of the stockman was shown when the Idaho legislature's resources committees pondered the question of making the cougar a game animal rather than a predator. Substantially no one advocated protecting the critter. Stockmen weren't happy about having him put on a protected list; they acquiesced only after being granted the agricultural exemption (stockmen may, at any season, pursue cougars they contend are dining on their produce) and after being told that making the cougar a game animal was likely to increase the number killed.

Sheep ranchers have been especially ardent in their urgings that a predator control program continue. The sheep industry has been in decline for years, and that has had both real and psychological effects on its owners vis-a-vis coyotes and other wildlife. Psychologically, the sheepmen are looking for all the scapegoats they can find. In real terms, declining profits have forced sheepmen to cut down on the number of herders and put more sheep behind fences. Both moves increase the vulnerability of herds to predators and so increase the actual losses to wild animals.

But how great are those losses? Large enough to justify this kind of extermination program? It's difficult if not impossible to find out correct figures. We can only offer some widespread parameters and suggest that the real answer lies somewhere between them, probably toward the lower end of the scale.

The Idaho Sheep Commission has put out some figures that it labels as conservative. Veterinarian in charge R. E. Simmons cautions, "Please remember these are only the losses seen by our field people. They by no means represent the total losses to predators in the state. To obtain a total you would have to contact all of the livestock people in the state."

According to his figures, 2,465 lambs and sheep were killed by predators during fiscal year 1970 - 1,991 of them by coyotes. They had a market value of \$73,050, and thus constituted the bulk of predator losses observed by field men, which he lists as 2,894 animals and poultry with a market value of \$79,250.

Wyoming's figures are more flamboyant. They were gathered by sending questionnaires to sheep ranchers and asking how many animals they lost to predators during 1970. The answers total up to more than 130,200 out of total losses of about 300,000 sheep from a state sheep population of 1.8 million. Many people tend to doubt the accuracy of the Wyoming figures. One Wyoming sheep official estimated that the 125 pairs of eagles that nest in the state, plus those who migrate through it, killed 8,200 lambs last year. Those who know eagles scoff at the very idea.

But if Wyoming's figures are correct, predators cause a loss of about \$2.24 million a year there, and most of this is caused by coyotes.

Coyotes are the chief targets of the exterminators, whether they use poison or hunt them down - often shooting them from helicopters.

But there's a side effect of cutting down the coyote population. Coyotes also (presumably, when they can't find sheep) eat jackrabbits. When the coyote population is cut, jackrabbit numbers tend to increase. The old story of upsetting the ecology, the balance of nature. Farmers who don't complain about coyotes (and some who do) get unhappy about jackrabbits eating their hay and other crops, and sometimes mount rabbit drives of the type made notorious by an INTERMOUNTAIN OBSERVER article last January.

Sheepmen, however, will continue to press for expenditures of tax money on poisoning programs. One supporter of poisoning contends that "Without a predator control program, (the sheep industry) cannot survive."



## Pheasants Change

Urban living evidently has changed more than the habits of a population of pheasants residing within the city limits of Seattle, Washington, according to the Wildlife Management Institute. The birds, located on the Sand Point Naval Air Station, have adapted physically to a year round diet of primarily green plants.

Studies have shown distinct differences in the digestive tracts which allow the birds to extract increased amounts of carbohydrates from their green feed, and also eat larger amounts than the usual seed-eating pheasant.

# Environmental Eavesdropper

LOONEY LIMERICKS

by Zane E. Cology

Mad scientist, Phineas Hyde  
Lined his test tubes up, side by side.  
"With this great invention,  
It is my intention  
That the world will commit suicide!"

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Dr. Milton Eisenhower, acting president of Johns Hopkins University, and former Senator Joseph Tydings have announced the formation of a Coalition for a National Population Policy. Their announcement said America's population density could be as great as India's in 100 years unless families are limited to two children each. The day following their announcement, the Catholic Church accused the Coalition of "steering the country toward coercive government policies that will affect the decisions of parents in regard to family size and the frequency of birth."

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An assistant professor of finance and economics at Baruch College, John Marlin, is doing a study which already shows environmentally concerned businesses may be more financially profitable than unconcerned businesses. Marlin found that a good environmental record may result in lower operating costs in such management areas as labor, maintenance, health insurance, local taxes, legal fees and fines.

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The National Science Board of the National Science Foundation has reported to President Nixon that science can't meet the need for definitive information because existing information and theoretical models of environmental situations are inadequate. The board says there will be an increase in the number and severity of environmental problems over the next few years as "piece-meal" solutions are applied.

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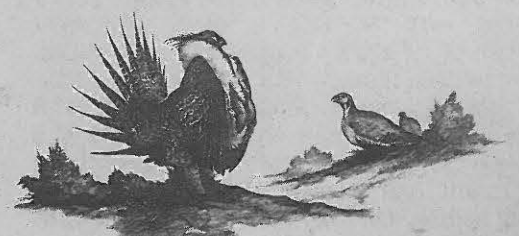
A grasshopper which can secrete a protective froth of man-made chemicals has been discovered by scientists at Penn State and Cornell and reported in SCIENCE magazine. Dr. Lawrence Hendry says, "It's a little like equipping a skunk with Mace." Hendry says the grasshopper has managed to incorporate the powerful new ingredient into its own defense mechanism. He commented, "our chance discovery should prove sobering to people who like to play down the long-range effects of man's chemical enterprise."

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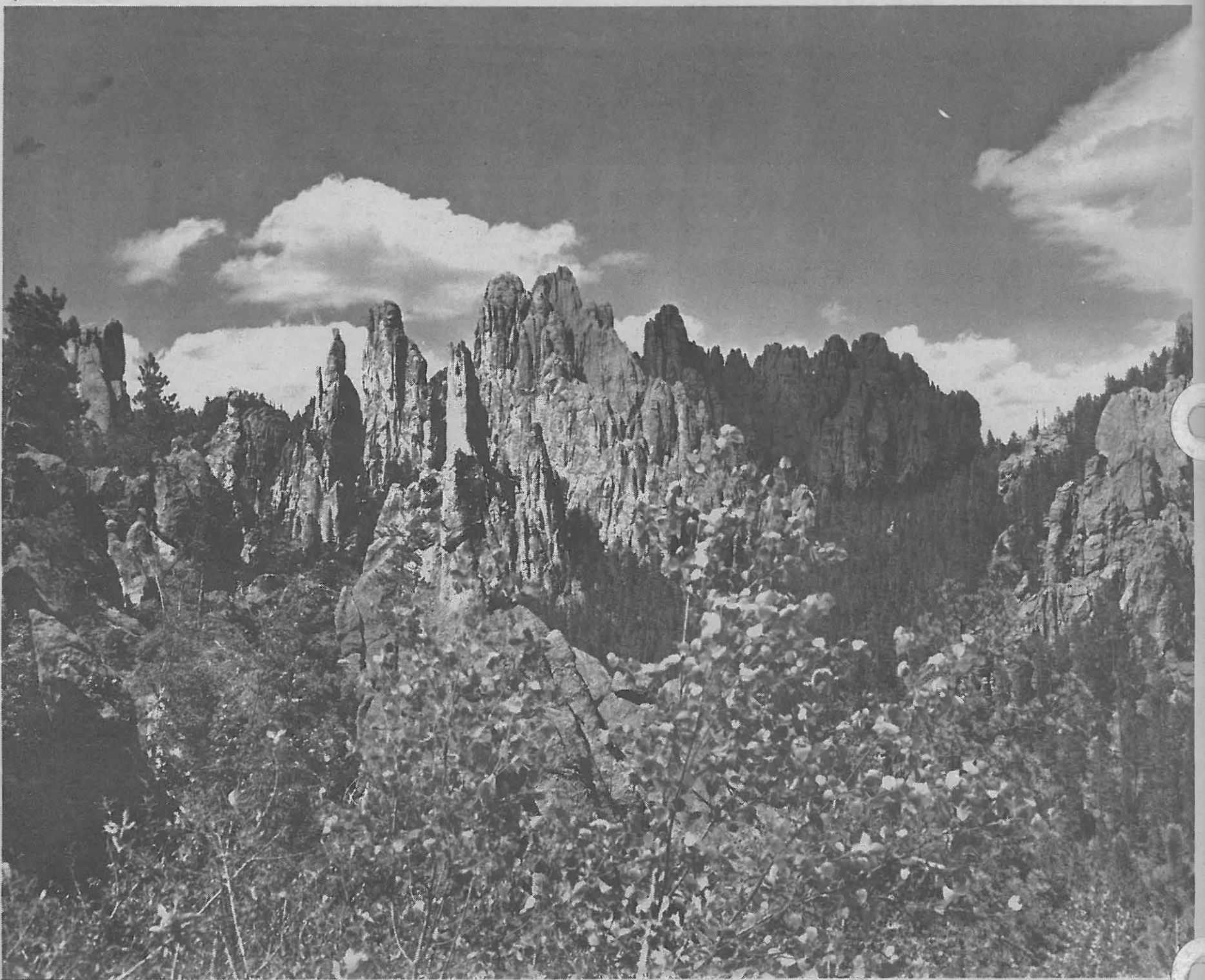
An oceanographer from the University of Hawaii, Dr. Brent Gallagher, says the idea that the world's oceans are going to be a future food supply for millions is "a lot of baloney." He said a great part of the oceans is a biological desert.

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A Denver-based firm, Transportation Technology, Inc., has announced plans to develop and manufacture an air-cushion vehicle system designed for inner-city travel. The company was awarded a \$1.5 million contract by the Department of Transportation. The system could alleviate traffic congestion problems for the larger cities, as well as be used around airports, university campuses, and other congested areas.



A lone golden eagle sails above Wyoming's rimrock. Losses from electrocution, poisoning, and shooting may have critically reduced the numbers of the big bird throughout the West.



These serrated granite spires are found in South Dakota's beautiful Black Hills.

## Says "Biological Desert" Charge Not True

LINCOLN, Nebr. -- Charges that the Missouri River below Omaha is a "biological desert" made by an official of the Nebraska Public Power District have been vigorously denounced as a distortion of the facts by Willard R. Barbee, director of the Nebraska Game and Parks Commission.

The "biological desert" statement was attributed to L. John Cooper, health physicist for the Nebraska Public Power District, in an article appearing in the July 11 issue of the Des Moines Sunday Register. The article said a plant official, ostensibly Cooper, made the statement that the Missouri below Omaha is almost devoid of fish life and cannot be harmed by any heated water from the nuclear power plant now under construction near Brownville by the Nebraska Public Power District.

"Perhaps the Nebraska Game and Parks Commission would not have any official concern if Mr. Cooper's statement were true . . . However, all the facts in our possession indicate that the Missouri River in the Brownville area is quite productive," Barbee said.

To back his stand, Barbee cited records of commercial fishermen working the Missouri from Plattsmouth to Rulo under Nebraska permits. The commercial take from that stretch of the river was reported as high as 91,000 pounds in 1968 or about 1,000 pounds per mile, according to Game Commission records.

"This data is the amount reported by the fishermen themselves, which is the basis on which they pay their income taxes, so I feel that it is the very minimum. It does not take into account the take by commercial fishermen in Iowa or Missouri, nor the catches by sport fishermen," Barbee said.

Cooper based his "biological desert" contention on the fact that channelization of the Missouri by the U.S. Army Corps of Engineers has increased the velocity of the river to "an average of 7 to 8 miles per hour . . . too fast to maintain fish life."

While channelization has increased the speed of the Missouri, the effect on the rate of flow has not been as drastic as implied by Cooper, according to Barbee. Game Commission studies

show the current in the Brownville area to be about 3 1/2 miles per hour, and U.S. Geological Survey readings at Rulo over a 24-day period averaged from 3 to just under 3 1/2 miles per hour. The speed of an unchannelized stretch was measured at just under 2 1/4 miles per hour.

Barbee conceded that the fish population in the Missouri is now lower than in pre-channelization days, but not because of the faster flow. He attributed the decline in fish population to a two-thirds loss in surface area after straightening and channelization. "The Missouri's loss of fish is evident, but it certainly does not rate the 'biological desert' label," he said.

The Nebraska Game and Parks Commission is the co-ordinator of an 11-agency study currently being conducted on the ecological effects of the nuclear plant near Brownville and one being built near Fort Calhoun by the Omaha Public Power District. The Nebraska Public Power District is one of the 11 agencies involved. Others include the Federal Environmental Protection Agency, U.S. Fish and Wildlife Service, U.S. Geological Survey, the Army Corps of Engineers, the Nebraska Department of Environmental Control, the Omaha Public Power District, the University of Nebraska, and the fish and game management agencies of Nebraska, Iowa, and Kansas.

Field work on the pre-operative stage of the study will end in November, and samples taken so far do not bear out the "biological desert" contention. After the plants are in operation in 1973, the tests will be duplicated to get a before-and-after picture of the river's ecology.

Purpose of the study is to gather information that will help predict the effects of future power plants along the Missouri and to aid in designing and locating them for a minimum ecological effect on the river.

"Since Mr. Cooper has access to the results of the pre-operative portion of the study, and other fisheries surveys on the river, it appears to me that he or the Nebraska Public Power District may be fearful of the effects their plant's heated water discharges will have on the fish life in the river. They are apparently attempting to convince the public that there are no fish in the Missouri to be harmed," Barbee concluded.

## Travel Halted

The U. S. Forest Service has announced it soon put a halt to environmental degradation caused by off-road vehicles on 16 national forests in Colorado and Wyoming.

William J. Lucas, regional forester in Denver, said the overall thrust of the proposed regulations is to keep four-wheel drive vehicles on roads and trails but not to prohibit their use.

The forests are simply being overrun by sheer numbers of vehicles in some areas and a web of unmanageable roads is being developed as one motorized adventurer follows the trail of another. Area closures will follow two general patterns. Some will be closed all year and others will be restricted periodically.

Access to hunting and fishing areas could be cut off unless the users of off-road vehicles stay on roads and trails.

The Wyoming Game and Fish Department urges recreational vehicle users to stay on established roads. In doing so, valuable habitat and food for the state's wildlife will not be destroyed. The chances of restricted public access to recreational sites will also be lessened.

