

The Environmental Bi-Weekly



# High Country News

Vol. 7 No. 22

Lander, Wyoming

Friday, November 7, 1975



## FROM HAY WAGONS TO COAL-BASED FERTILIZER

Years ago, it was not uncommon to see a hay wagon such as this rolling across the flat lands of eastern Montana. The farmer or rancher depended upon the energy of himself, his family, and a team of strong work horses. Now agriculture is dependent upon fossil fuels not only for powering the combines and the hay trucks, but also for providing the feedstock for fertilizer to boost the hay production. Thus today's agricultural industry becomes easy prey to the energy crisis.

Photo near Birney, Mont.,  
by Terry Moore.

## Boasts of benefits to Montana agriculture BN proposes fertilizer from coal

by Marjane Ambler

A railroad company that plans to strip coal to make fertilizer is putting the remote ranching community of Circle, Mont., in the national headlines. Publications ranging from the *Chicago Tribune* to *Colorado Business* to the *Havre, (Mont.) Daily News* are discussing Burlington Northern's plans to help both the fertilizer shortage and natural gas shortage by building a coal gasification plant, the first in this country to make fertilizer from coal. Future plans also include producing methyl-methanol fuel and synthetic diesel fuel.

In addition to the technological uniqueness of the project for this country, the BN proposal, known as Circle West, is also getting attention because of its emphasis on helping agriculture by strip mining. Some ranchers and farmers in the West have organized in recent years to regulate strip mining. Two organizations, the Northern Plains Resource Council and the Powder River Basin Resource Council, have earned

national reputations for their efforts in lobbying in Washington, D.C., and in their own states, Montana and Wyoming, for strip mining legislation. They have also launched extensive campaigns to educate others about the hazards of strip mining and to research natural resource issues.

Into this atmosphere entered Burlington Northern. From the first press release about the project in June of 1974, BN touted the advantages to the agricultural industry: plentiful, cheap fertilizer for the state; a diversified economy for McCone County where Circle area ranch families could supplement their own incomes; and financial help with an irrigation project for area ranchers.

The Circle West proposal would involve the manufacture of three coal-based products. Coal would be burnt in the presence of water to form hydrogen gas. The hydrogen gas would then be combined with nitrogen from the air to form ammonia (NH<sub>3</sub>). BN has not decided whether to process the anhydrous ammonia further to produce a form of fertilizer more usable in

Montana or whether to have it processed elsewhere.

The fertilizer plant is the top priority. Later BN will manufacture methanol-methyl fuel. Synthetic diesel fuel oil would be the last material to be produced.

BN has consistently down played the importance of the two other products and emphasized the fertilizer. BN apparently thinks the fertilizer is more attractive to Montana than the two fuels. The methyl-methanol and the diesel are designed primarily for BN's own use, according to a letter from BN to the Montana Department of Natural Resources.

In that letter, BN said the technology for the methanol-methyl fuel production ex-

ists today, and the plant could be started in three to five years. Technology for the synthetic diesel fuel plant is not as well developed, and construction of that plant could begin within five years.

Speaking before a group of ranchers and farmers in Billings in December 1974, a BN official, E. E. Thurlow, discussed the "comfortable tradeoff" that BN was offering the agricultural industry. By taking a single acre of land out of agricultural use and "temporarily" devoting it to strip mining, Thurlow said BN fertilizer would add the equivalent of 280,000 acres through improved yields on hay land. He used Montana State University figures on increased

(Continued on page 4)

Burlington Northern is offering a "comfortable tradeoff": taking land temporarily out of agricultural production to devote it to strip mining in exchange for increased production from the fertilizer produced from the coal.

# HIGH COUNTRY

By Jane Bell

It is early November and the cottonwoods and aspen are wrapped in flaming gold. Snow tints the high mountains to the east in Idaho. A few fluffy clouds are scattered carelessly across the blue heavens. In other words it is a beautiful, glorious day here in this peaceful valley. The cares of New York City and the implications of cabinet shuffles are very far away.

When the cow was milked (a pretty Jersey named Bubbles), the rabbits and chickens fed and watered, and a few odd chores done, I took a short walk around the place. A few observations: the grass is not growing fast enough to keep up with the cow, two heifers, and the kid's pony — I may have to start feeding sooner than I thought. The water is off in the ditches above us — a problem for stock water in the late fall. There is a good site for a small reservoir high above the house — it could supply domestic water in the eventuality (and probable inevitability) of lack of electricity to pump water from the well. Everywhere I look there is work to do — more winter wood to split and chop, every fence on the place to be rebuilt or repaired, the garden and berry patches to be manured, the orchard to be pruned, irrigation ditches to be rebuilt or cleaned, and a dozen lesser exercises of the body, spirit and mind. (It makes me wonder, what in the world have I been doing in the past few months?)

It is fun to plan the work and anticipate the finished job. But there is also a sense of urgency. Besides the fencing and all the rest, I need to build some new farm buildings and hopefully a solar-heated greenhouse. The sooner I can get those jobs done, the closer we can be to some semblance of self-sufficiency.

The problem is not so much time as the finances and resources that it will take to do all these things. Our

family is faced with the same problems as most other families — inflation, reduction in income, and not enough capital in sight to do everything we might want to do. And so it is a matter of priorities.

New York City's problems may seem far away, yet they are not. They are as close as the checkbook. We are not in debt for any amount that we cannot now cover. But our financial planning must be meticulous from here on out if we are not to be in trouble.

Our present income is only slightly more than \$400 a month. And that is rapidly being eroded by the escalating prices of sugar, kid's shoes, and a few other niceties of life that seem to have become necessities. Obviously, some are no longer to be considered necessities.

The situation in which my family now finds itself is much like that which I anticipated. This country is in for some rough sledding, thanks mainly to our materialistic society and the thoughtless (sometimes ruthless) squandering of our national wealth. We have not seen anything yet. The plight of New York City and the thousands of yet unemployed are only straws in the wind.

My deepest senses told me several years ago that it was only a matter of time until every American family would be faced with a severe reduction in its living standards. Many others had the same gut feelings (including thousands of young people from middle-class to affluent families) and looked to the land for some security.

None of us are going to find all the security we once anticipated in the land itself. All of us are tied too inextricably to all of our fellow Americans. In a sense we all live in New York City, and the fate of those fellow men could be our fate, too. Reality is coming too close for comfort.

But if the land cannot give us all of the human security we think we need, it does give a lot of satisfaction. Here, it is easy to live one day at a time. The pleasures you get are in watching the ever-changing panorama of God's great creation. And by putting your trust in Him, the future loses its awesome aspect.



## HCN Letters

### FULL OF BALONEY

Dear High Country News,

I think Peter Wild's review of *The Monkey Wrench Gang* is full of baloney. Like most people I read the book straight through the first time because I couldn't put it down. But now my friends and I like to get together and get a little high and then we read parts of the book aloud to each other until everybody is about sick with laughter. Scenes like Doc's race with the cement mixer, Bonnie's meditation in her dome, Seldom's prayers at Glen Canyon Dam, and Hayduke's escapes from Bishop J. Dudley Love and the San Juan County Search & Rescue Team are the funniest things I have read since Mark Twain. *The Monkey Wrench Gang* will be read and re-read by many many people for many many years. There's no doubt about it, Edward Abbey is a very sexy writer.

Sincerely yours,  
Lucy Kerrigan  
Phoenix, Ariz.

### SOUR GRAPES

Dear HCN:

Please tell Mr. Peter Wild to add a cupful of sugar to his sour grape juice each morning. That should help his colic.

Yours,  
Ed Abbey  
Wolf Hole, Ariz.  
\* Is that really his name?

### BLM POSITION CLARIFIED

Dear Editors,

During the course of my travels across the State of Montana the past few weeks, I have discovered widespread confusion concerning my recent opposition to proposed legislation which would include the Upper Missouri River in the National Wild and Scenic Rivers system (see HCN, Oct. 24, 1975, page 13). I would like to set the record straight.

I fully supported Senator Lee Metcalf's Bill (S. 1506) as it was originally proposed. I also support the final version as it was so clearly outlined by the Senator in the October 19 issue of the *Great Falls Tribune*. I have no quarrel with S. 1506 as it is presently worded.

The confusion, however, centers on a proposed amendment which was inserted into the bill unbeknownst to me shortly after the August 25 hearing in Billings. The amendment would have split managerial responsibility between the Park Service and Bureau of Land Management.

After wrestling with split jurisdiction on the Charles M. Russell National Wildlife Range for nearly 40 years, I know it for an inefficient, unworkable, and undesirable situation that should be avoided at all costs. Trying to blend Bureau of Land Management's multiple-use approach with other single-use philosophies is, in my opinion, wasteful expenditure of scarce manpower.

Sen. Metcalf has since reworded that amendment eliminating the specter of overlapping jurisdictions on the Upper Missouri. Under the provisions of the final version of S. 1506, BLM would have overall management responsibilities along the river including livestock grazing, interpretation of historic, archeologic, scenic, natural, and fish and wildlife resources.

I commend Sen. Metcalf for his wisdom and farsightedness in restructuring S. 1506, thereby shortstopping the problems that are inherent in dual administration. I look forward to a speedy passage of the bill as it is now worded and will give it my full support.

Edwin Zaidlicz  
Montana State Director  
Bureau of Land Management  
Billings, Mont.



## TVA debt bill would push Western fuel shift

The U.S. Congress is now considering a bill that would raise the Tennessee Valley Authority debt ceiling from \$5 billion to \$15 billion. The bill easily passed the House. Only a few nuclear power opponents realized the national significance of the bill. They know that almost all the money is going into new nuclear power plants, and the safety reasons for opposing nuclear expansion are clear.

People concerned about natural resources in the West apparently are not seeing the ramifications of the bill here. But the mayor of Charleston, S.C., John Hutchinson, soon felt the vibrations of the proposed bill impacting his region's coal mines.

He knows TVA is the biggest coal buyer in the country, and he knows financial help is needed to open new mines in his region. As a member of the Coal Advisory Board of the Federal Energy Administration, he challenged the

apparent lack of coordination between federal agencies in the nation's attempt to achieve energy self-sufficiency.

"It appears absurd to me that this federal agency located in the middle of the Appalachian coal fields would plan such an immense capital expansion without the use of coal. The power expansion can be adequately supplied by coal, and it can be built and operational in less than half the time . . . and at one half the cost (of nuclear plants)," Hutchinson said.

Mayor Hutchinson's concern likely stemmed from self-interest — the well-being of the economy of his region. Yet it should jolt those of us in the West into taking a second look at the bill (HR 9472). The fates of Appalachia and of the West are closely tied, as the Administration tries to shift the national energy focus from Appalachia to Western coal fields.

Up until now, coal-fired TVA generators have produced over 97% of its power output, according to the mayor. TVA's planned new generating capacity will be 95% nuclear. TVA nuclear plants now under construction were reported in April to have a cost overrun of nearly \$1.5 billion, according to the *Birmingham News*.

Mayor Hutchinson points out that if TVA would put the money into coal instead of nuclear plants, it would be a

vital economic stimulus for eastern coal. Presently, capital for new coal mine development is more crucial to the future of coal than manpower needs or any other physical, economic, financial, or political factors, according to the current quarterly Energy Memo by New York City's First National City Bank.

If the Congress approves raising TVA's debt ceiling from \$5 billion to \$15 billion, TVA will be getting its money from the private money market, as specified in the bill. This will mean less capital will be available for expanding eastern coal mines.

If eastern coal mines fail to produce more coal, it will be a self-fulfilling prophecy for the Administration which said in the Project Independence blueprint — to the consternation of Appalachian states — that the East could not supply the nation's coal needs.

In the past, TVA has provided financial help to Midwestern coal operations mining its coal by guaranteeing certain profit margins in its contracts. It could do the same in the East.

However, TVA will be building no new coal-fired plants. Thus, unless Westerners sound their protest to their Congressional delegation, TVA will have the potential for getting \$10 billion. This money — at least indirectly — will be subsidizing mining of Western uranium over which there is less federal or state control than there is over even coal strip mining. —MJA



### CUT BAD PROJECTS NOW

Dear HCN,

During November we have an excellent opportunity to get the budget of the Army Corps of Engineers, the Bureau of Reclamation, and the Tennessee Valley Authority cut way back as well as having certain disastrous water projects eliminated altogether. Here is the situation: President Gerald R. Ford has pledged to cut the budget by \$28 billion and the Office of Management and the Budget is looking at the places where it can cut the budget and get some political support. OMB is readying its final recommendations. Last year OMB wanted to make big budget cuts in the pork barrel water resources budget, but the White House, fearing Congressional reaction, put the money back in. This year we want to show the White House there is great political support for cutting off bad dam and canal projects.

Any of your readers fighting bad water projects should send in letters now urging an end to funding of specific projects and stating your reasons. Send letters to: President Gerald Ford, The White House, Washington, D.C. 20500. Send a copy to James Lynn, Director, Office of Management and Budget, Washington, D.C. 20500.

Brent Blackwelder  
The Environmental Policy Center  
Washington, D.C.

### CHEERS FROM GRASSY BUTTE

Dear HCN:

Just a note to say I think *High Country News* is doing a super job for the citizens of this region.

I live in the middle of the great Northern Plains coal rip-off and believe we are being taken for a ride by the eastern energy companies, with the blessing and aid of the Federal Government. At least *High Country News* provides the other side of the news, and does a fantastic job.

John A. Heiser  
Grassy Butte, N.D.

### LIKES NEW PACKAGING

Dear HCN,

Congratulations on your new look! *High Country News* has consistently provided the environmental information the general public needs if sound judgments are to be made. I hope that your up-graded packaging of the information will serve to entice more people to read your content.

Meantime, keep up the good work.

Best wishes,  
Thomas L. Kimball  
Executive Vice President  
National Wildlife Federation  
Washington, D.C.

## Guest editorial

### Bureaus bred by careless corporations

Reprinted from the LOS ALAMOS MONITOR

by Dr. John R. Bartlit,  
New Mexico Citizens  
for Clean Air and Water

When you buy a treat for a nickel, you have to trade the whole coin. You can't spend the buffalo and keep the Indian.

Regulation is a dirty word in the lexicon of American business and industry. Yet few realize government regulation is merely the other side of the coin taken when avoiding moral judgments. Today's guiding principle of business decisions, on everything from income tax deductions to pollution emissions, is: "If it's not forbidden by law and some enforcing agent, it's okay to do." The result of this philosophy, of course, must be interminable stacks of written rules and government agencies.

Kennecott Copper Corp., a business associate of ours, seems totally unaware of this correlation between corporate irresponsibility and the proliferation of costly government bureaus. A recent editorial in Kennecott's local house journal, *Chino World*, complained about government regulation. The editorial listed 20 governmental groups having regulatory authority over some part of their copper business, and concluded "... each of us as citizens pay the bill for these regulatory 'services.'"

To find the cause of regulation, however, one need look no farther than an article against U.S. emission standards, published in the same *Chino World*, Feb. 21, 1972. Kennecott said it all, which was a bit more than they had intended, in one short sentence. They said, "Already some copper concentrates are being diverted to other countries for smelting where emission standards are lower or are ignored." As long as government enforcement of government rules remains industry's only ethical guidepost, the growth of burdensome bureaus is inevitable.

A time-honored claim to environmental responsibility made by many polluters is "We will meet all applicable state and federal standards." On its surface, that sounds pretty good. But a minute's thought will convince you it translates the same as the paraphrase "We will do nothing but what is compelled by government." That doesn't sound nearly so pretty, but it says the same thing. Think it over.

This week the results of a government study were revealed indicating that drinking water supplied to uranium workers in the Grants, N.M., area contains excessive levels of selenium and radium-226. One company's response shed light. "Kerr-McGee Nuclear Corp. is not in any violation of any of the license conditions required by the radiation division of the N.M. Environmental Commission standards. In the future, as standards are promulgated by appropriate state and federal agencies, Kerr-McGee will take the necessary steps

to see that its operations comply with such regulations." Think it over.

The views of Mr. M. A. Wright, board chairman of Exxon Corp., on government regulation are uncommonly thoughtful and frank, he has said:

"Business should not be expected to establish national goals. Certain public-spirited groups ask corporations to do this, especially in response to major social problems. In my view, the idea is unrealistic. For one thing, economics may work against it. It is difficult for any company to sustain activities in the interest of social responsibility if doing so puts it at a competitive disadvantage. Secondly, business does not have the franchise to set national goals. To illustrate this latter point, the judgment as to just how clean air and water should be in the United States cannot be made by corporations when it is the legitimate concern of the entire American public."

Like Jackie Gleason's quarreling 'Honeymooners,' in the end free enterprise is more comfortable living with noisome government regulation than living the celibate life of self-responsibility.



Published biweekly at 140 N. Seventh St., Lander, Wyo. 82520. Telephone 307-332-4877. Second class postage paid at Lander.

|                     |                     |
|---------------------|---------------------|
| Publisher           | Thomas A. Bell      |
| Managing Editor     | Joan Nice           |
| News Editor         | Bruce Hamilton      |
| Associate Editor    | Marjane Ambler      |
| Office Manager      | Mary Margaret Davis |
| Advertising Manager | August Dailer       |
| Circulation Manager | Georgia Nations     |
| Design Consultant   | Jeffrey Clack       |

Subscription rate \$10.00  
Single copy rate 35¢

Material published in *High Country News* may be reprinted without permission unless it is copyrighted. Proper credit should be given to *High Country News*. Contributions (manuscripts, photos, artwork) will be welcomed with the understanding that the editors cannot be held responsible for loss or damage. Articles and letters will be published and edited at the discretion of the editors. To send a sample copy to a friend, send us his or her address.

Box K, Lander, Wyoming 82520

4-High Country News — Nov. 7, 1975



**FUEL FOR TRAINS.** Two of the products of the Circle West project will eventually be methyl-methanol fuel and diesel fuel. BN is interested in making methyl-methanol, a liquid hydrocarbon fuel, primarily for its own use. It could also be used as gasoline blending stock, a substitute for liquid petroleum gas, and as one of the basic petrochemical feedstocks in resins and glues. The diesel fuel would also be primarily for BN's own use.

Photo of train carrying oil near Cody, Wyo., by Lynne Bama.

## BN fertilizer. . .

(Continued from page 1)

yields to be expected from fertilizer application of 20 pounds per acre to substantiate his claim.

Referring to shifts in the economic base of Montana, he said times are changing and water is no longer developed just for agriculture. He implied this situation shouldn't worry them because BN sees agriculture as the "senior sharing partner" along with industry, domestic use, and recreation for diversified water uses. He said BN is eager to help McCone County ranchers get water for irrigating. A previous report had said 200,000 acres in the county were suitable for irrigation but could not be developed without a willing industrial partner.

In closing his speech, Thurlow said simply that the process would be "clean and compatible" with surrounding farming, ranching, and community activity.

The audience made no attempt to question the BN arguments. Nor did the *Chicago Tribune* or the *Billings Gazette*, which subsequently endorsed the project. Montana Gov. Tom Judge, who has gained a reputation outside his state for defending only well-thought out, ecologically sound development of his state's natural resources, also spoke favorably of BN's idea.

However, some of the ranchers who live in McCone County did not automatically

accept BN's argument that it was offering a "comfortable tradeoff." A few, such as Tom Breitbach, were upset as soon as the plans were announced. Breitbach, a rancher near Circle, said he immediately thought of the possibility of valuable ranch land being destroyed. Many of the ranchers had questions. But when they took their questions to BN, they became frustrated.

When the complaints from the ranchers reached the press, BN insisted that it had always made every effort to keep the public informed at each stage of progress. BN Vice President Thomas Kryzer said BN had worked with federal, state, and local governments and had informed the public through several press releases and through public discussions at meetings throughout Montana.

No one challenged the fact that BN had discussed the project with the public. However, they did question the value of the information given out at these meetings. "There was a difference in ideas in what Burlington Northern thought was information and what we thought was relevant," Breitbach told HCN. The ranchers wanted to know when the plant would be built, when it would be completed, how many people would be employed, and what the possible emissions into the air might be, but BN did not supply them with that information. Some of the ranchers met with BN this summer and still did not get answers.

BN said it has not completed the studies necessary to determine these specifics. Company officials have told the state they

anticipate the construction period will take about three years and that approximately 2,000 construction workers and 200 permanent employees will be needed, but these figures are estimates. McCone County now has a population of 2,875.

Breitbach says he can do little except accept BN's word that it doesn't have the information the ranchers need. But, he says, he'd think that "an outfit of this size would know more by now."

Breitbach is a member of the Garfield-McCone Legislative Association, which is composed of 70 ranchers and farmers in the two counties who are interested in having input in the state legislative process. The association is not formally for or against coal development. However, at the same time, they have made it clear that they are not willing to accept vague assurances that the Circle West project will be "clean and compatible."

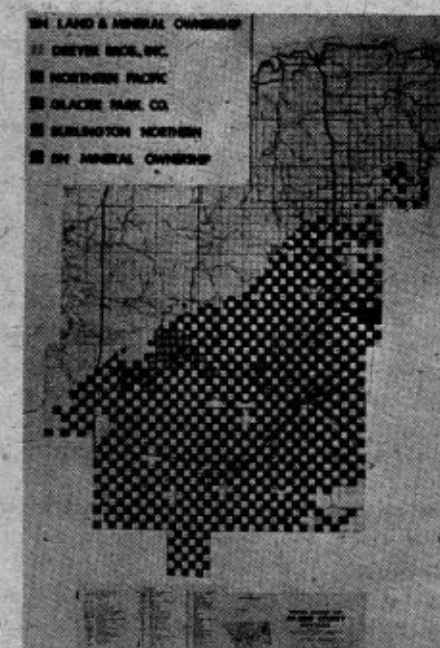
### DIVERSE ECONOMY

BN has always had an influence on the future of the county. It is the largest landowner in the county with more than 115,000 acres, and it owns the mineral and coal rights on every other section of the southern two-thirds of the county (see map).

BN seems to also assume that it knows what is best for the area economically. Kryzer told HCN, "We think a development of this type that will be long lasting (50 years or more) can provide stability to the economy of the area. I think it is also a benefit to have the diversity. Any area that has a more diversified economy is healthier than one that is based on a single activity."

Breitbach doesn't necessarily accept the argument that his community needs more diversity. Almost the entire labor force of the area is employed directly or indirectly in farming and ranching. However, Breitbach points out that it is agriculturally diversified, since some raise grains, some livestock, and some have feeding operations. This means that drought or bad market years for particular farm products don't necessarily mean economic hardship for the county as a whole.

"Whether there's a need for more diversity is up to question. Mr. Kryzer believes there is. I don't think so," Breitbach told HCN. He said that people driving through believe that it is a fairly well-to-do area. All the streets in Circle, a town of 964, are paved. There is a library, a museum, a community hall, and a hospital. He admits, however, that not all the local residents share his views. He thinks concern is grow-



**BIGGEST LANDOWNER.** Burlington Northern and its subsidiaries, Dreyer Brothers, Northern Pacific, and Glacier Park Co., own more land than anyone else in McCone County where the fertilizer plant and strip mine would be.

ing but says that on Main Street in Circle, most of the businesses want the project. They figure that when there are more people in the county, then they'll get more business.

The Garfield-McCone Legislative Association thinks it is essential that local viewpoints be taken into consideration. The members stated that they would like to have "a great deal of input in the decision-making process. Before any development begins, we the people should have the opportunity to study the effects development will have on existing social, economic, and natural resources. . . ."

### SUPPORT SITING ACT

To facilitate planned development, the association's board of directors voted unanimously to support an amendment to put the proposed fertilizer plant under the Montana Utility Siting Act. The state representative from the area, Ed Lien, sponsored the amendment in the 1975 Legislature, and it passed. The siting act requires BN to seek a permit from the Montana Department of Natural Resources. The department conducts a 600-day study to explore possible impacts and then releases the environmental impact statement for the public's comment. The Board of Natural Resources decides whether the provisions of the permit should be changed or whether the plant can be allowed at all, based on whether or not the facility will serve the "public interest, convenience, and necessity."

BN lobbied strenuously against being included under the siting act. According to a *Billings Gazette* report, BN said it had no quarrel with the act's provisions requiring environmental compatibility. However, BN said it did object to the "public need" requirement of the act. BN argued that as a competitive business, the law would penalize BN much more than it would a utility. Kryzer explained to HCN that a utility has a franchise to operate in a specific market territory. On the other hand, he said, it is "virtually impossible" to prove a public need for a business that is operating competitively since another fertilizer manufacturer could fill the need, although perhaps not as effectively or as cheaply.

"As long as you comply with the laws . . . I don't think that it's the prerogative of the state to make the decision about whether you're in business or not," Kryzer said. He doesn't think the siting act would do anything to help the impact on the community. "I believe all laws should be problem solving. . . . Just having a siting act that identifies some problems doesn't solve the problems. . . . The fact that you have all this time in many cases doesn't solve the problem either," he said.

Kryzer said that if BN were put under the siting act and were forced to divulge specific market information, other fertilizer companies would be at a competitive advantage. BN also argued that it was unfair to include the coal plants and exclude oil and gas from the siting act.

Gary Wicks, director of the Department of Natural Resources, explained to HCN why he supported including Burlington Northern under the siting act. "The whole thrust of the act is to analyze these projects because the extent of their impact is greater than the impact for oil and gas." He pointed out that the BN project involved large scale water diversion (67,000 acre feet per year) as well as strip mining, reclamation, and air emissions. Oil and gas plants will probably be covered in the near future, he said, but the possibility of having a great number of coal plants is greater than for oil or gas. In response to a question about BN's concern about confidentiality, Wicks said, "We're not trying to get into trade secrets . . . that's not the intent of the

"I believe all laws should be problem solving. . . Just having a siting act that identifies some problems doesn't solve the problems." —Thomas Kryzer, vice president, Burlington Northern.

act. We're interested in input-output data and what environmental problems we'll have to deal with."

Ammonia fertilizer factories in other locations have caused water pollution with nitrates, ammonium sulfate, and ammonia as well as air pollution with ammonia and nitrous oxides. Presently there are fertilizer plants using coal in South Africa, India, Greece, Spain, Turkey, Yugoslavia, Finland, Japan, Korea, Pakistan, Thailand, and Zambia, but none in this country. The first was built in 1950.

Asked in March if there were anything that could stop the project, Kryzer said, "Sure, they could legislate us out of existence." He said he was referring to the siting act as well as unknown other legislation that could be introduced. "If for some reason Montana doesn't think this is a good plan, we've got other things to do. . . we're not going to beat our heads against the wall," he said.

Now that the siting act has been amended to include Circle West, Kryzer says that he anticipates construction will be further delayed — if BN decides to proceed. When asked how much longer it will take, he said, rather testily, that HCN should ask the people doing the study.

#### GO OR NO GO

"Whether the project is go or no go won't be determined for some time," according to Kryzer. He says BN is awaiting coal sample evaluations, environmental baseline data, further engineering studies, and the state's decision on its application for water from Fort Peck Reservoir before deciding.

BN applied in June 1974 for 67,000 acre feet of water per year from Fort Peck. Half of the water would be for industrial use and the other half for agriculture, primarily reclamation of strip mined land. The state has not made the decision on the application yet.

Three other factors not mentioned by Kryzer which could affect the economic feasibility tremendously are: 1) fertilizer supplies, 2) natural gas supplies, and 3) the proposed federal loan guarantee program for synthetic fuels.

The continued demand for fertilizer appears to be certain. A two-year shortage of fertilizer pushed the prices for a ton of anhydrous ammonia from \$90 in 1973 up to \$265 this spring. It was as high as \$400 on the black market. The U.S. became a net

importer of fertilizer for the first time in 1974-75.

The increased demand for fertilizer was caused by higher crop prices and government programs encouraging more planting. When prices for fertilizer, however, escalated by 190%, the tradeoff of increased crop returns v. fertilizer costs was not as favorable. Consequently, farmers bought less fertilizer, supplies increased, and headlines this fall announced that the shortage was over.

A report funded by the National Science Foundation which was issued this summer showed that there was no difference in the crop production returns between farms using fertilizer and pesticides and those using neither. This was attributed to the high costs of production on the former. However, this fact is not likely to lessen the demand for fertilizer significantly in the immediate future.

#### SAVING GAS

More fertilizer plants are being built, which presumably would lessen the shortage somewhat. However, the same newspaper accounts that announced the end of the shortage also admitted that the situation next spring will depend upon the severity of the winter and how much natural gas is funneled away from fertilizer production to heat homes.

Presently, 95% of domestic ammonia is derived from natural gas. Kryzer says that it makes good sense for BN to use a resource that is abundantly available, such as coal, as the feedstock for ammonia instead. He points out that by making fertilizer out of coal, enough natural gas is saved each year to serve about 90,000 homes.

The supply of natural gas and its cost are the key to whether or not Circle West fertilizer can be competitively priced. A study commissioned by the state of North Dakota indicated that ammonia produced from lignite coal can be competitively priced with ammonia produced from natural gas if natural gas rises to \$1.75 per MMBtu and if it averages \$2.00 MMBtu over 15 years. (MMBtu means a thousand cubic feet of thousand Btu natural gas.) Congress is now considering temporary ceilings on the price of purchasing natural gas this winter, but in general the move is toward decontrol of natural gas prices, which makes it more likely they can reach those levels.

However, these considerations of fer-

tilizer and natural gas supplies could both be largely ignored if the third factor — the federal guaranteed loans — becomes a reality. The U.S. Congress is considering an amendment to an appropriations bill which would authorize \$6 billion in loan guarantees for firms building synthetic fuel plants. (See HCN, Oct. 24, 1975, page 12.) Kryzer professes little interest in the bill, but others expect that if it passes, BN would quickly shift public emphasis back to its plants for producing methylmethanol fuel and synthetic diesel fuel.

Asked about whether BN was lobbying for the bill, Kryzer told HCN that BN hadn't taken a position yet. He couldn't predict how it would affect the BN project, saying there are so many bills considered by Congress that he doesn't evaluate their possible effects until he sees which bills pass.

#### SHOULD IT GO?

The members of the McCone Agricultural Protection Organization (MAPO) are watching for their chance for input in decision-making. MAPO was formed this summer by some of the ranchers and farmers. One of its first formal actions was to join a petition to the state land board which asked for a specific rule on reclaiming land with high sodium content. Sodium presents severe problems in revegetation, yet the Montana Department of State Lands is doing little about it through reclamation requirements, according to *Plains Truth*, a publication of the Northern Plains Resource Council. The council is working closely with MAPO. Thurlow's promise that BN was taking land "temporarily out of agricultural production" would be broken if revegetation proved impossible.

MAPO is anxious that others not jump to conclusions about the value of the project. When Gov. Tom Judge made a statement favoring the project, MAPO President Charles Yarger wrote him a letter concerning BN's promise of increased fertilizer supplies for Montana. BN will be producing 1,000-2,000 tons of ammonia per day. Although much of the fertilizer used in the West is based upon ammonia, very little of it is pure ammonia. It must be blended with other ingredients to maximize agricultural yields. Ammonia is used alone more commonly in the Midwest on row crops.

The North Dakota study indicated that distribution and processing are costly and generally result in a 100% markup from the production costs of ammonia alone. Therefore, unless Circle West also includes blending in its operation, its fertilizer will not necessarily cost less by the time it is shipped out, processed, and then shipped back to Montana.

Kryzer told HCN that BN hasn't decided

whether or not it will include blending. "That decision has to come after we see whether it would be economically favorable or not," he said. He said the decision would be strongly influenced by fertilizer use within the market territory. However, he made a point to say that most fertilizer plants do some of their own processing for distribution. "If this site would be typical," he said, "it would have a combination of on-site blending and of distribution to local blending plants."

#### IRRIGATION DESIRABLE?

Another big question mark associated with the value of the project is the potential benefit of the proposed irrigation project. BN has said that it could help with a major irrigation project for ranchers and farmers near Circle West through cost-sharing on pumping equipment and pipelines. This is another selling point often used in BN public relations statements telling of benefits to the Montana agriculture industry.

Ranchers in McCone County are interested but they don't know whether or not they would want the irrigation project until they get information on its possible effects. Breitbach, an officer of MAPO, says he hasn't formed an opinion but is concerned about sodium. If the sodium content is high and the permeability of the soil is low, then saline seep can result if irrigation raises the water table. Saline seep destroys the productivity of the land.

There is also a question of whether or not the project would be economically feasible. A preliminary study by the U.S. Soil Conservation Service indicated the cost of the project would be higher per acre per year than the expected increases in crop returns. A study done by an engineering firm for BN arrived at much lower capital costs. When asked about the irrigation project, Kryzer told HCN that a very detailed, in-depth study would be necessary.

In promoting the Circle West project, BN points to the benefits to the agricultural industry through availability of fertilizer and through possible irrigation, to the county and the state through a diversified economy, and to the nation through alleviating part of the demand for natural gas. Yet to weigh these benefits, the community and the state need information which BN says is still being studied. They need to know whether or not BN will include a blending facility in the fertilizer project. They need to know whether the irrigation project is feasible and what potential hazards exist with sodium content for both strip mining reclamation and the separate irrigation proposal. And they need specific figures on social impact and on air emissions.

Only then can they evaluate the costs and benefits of Circle West.

## Who is Burlington Northern?

A hundred years ago the railroad changed the face of the West by bringing buffalo hunters, farmers with their plows, and leaving behind miles of shining tracks. Today the railroads still exert a tremendous influence on decisions regarding the usage of the region's natural resources.

Burlington Northern, for example, owns 2.4 million acres of land in fee, 1.9 million of which are from land grants. It also has 6.1 million acres of mineral ownership. The company's revenue comes from not only these minerals and transportation but also from timber and real estate. Its total revenues in 1973 were \$1.3 billion.

In Montana, BN's influence is strongest. It owns nearly 1.3 million

acres in that state alone. Much of the 62 billion tons of coal it owns is in eastern Montana. When coal companies want to develop large tracts or when ranchers want contiguous grazing operations, they must often go to BN for leases since it owns land in a checkerboard pattern. (When the West first opened, the federal government gave every other section of land on both sides of the tracks to the railroads.)

BN is one of the five principal corporate owners of the controversial Big Sky ski development, which involves hundreds of acres in subdivisions in southeastern Montana. BN received stock in the development in exchange for land that BN had traded with the

Forest Service. The Forest Service ended up with scattered sections of remote, undevelopable land, according to *Montana Outdoors*.

Because BN is so large and because it has such a "profound importance" for the future of Montana and the region, the Center for the Public Interest (CPI) has selected BN as the subject of a major study. Much of the information cited above comes from preliminary research by CPI. CPI is an advocacy research, public interest law center based in Bozeman, Mont.

Preliminary fact sheets issued by CPI cite Congressional documents listing the largest holder of BN stock as the Chase Manhattan Bank (6.7%) followed by five other major eastern banks and brokerage firms, which

hold a total of 26.2%. There are 62,000 other stockholders. CPI says, "This suggests — but does not clearly establish — that corporate policy is not determined by anything resembling a shareholder democracy and certainly not influenced to a great extent by Montanans." A BN official responded in a *Billings Gazette* report by saying it is not unusual for banks or brokerage firms to hold major shares of stock in corporations.

Rick Applegate, director of CPI, says they have not drawn conclusions yet from the study. They are seeking BN's cooperation with the study and will give a draft copy to BN for its comments, which will be included in the final report.

85 million acres at stake

# New group to fight for roadless areas

While most conservationists are focused on the possible wilderness areas now under formal study, two thirds of the nation's wild roadless areas could be ignored. The Bureau of Land Management (BLM) and the Forest Service are now making permanent land use decisions affecting these 85 million acres with little public scrutiny. These decisions to build roads, to allow timbering, to approve ski areas, or to provide for other development are, in effect, decisions against wilderness even though wilderness designation has never been formally considered, in many cases.

The Wilderness Society has recently awakened to this danger. However, recognizing the limited resources of existing conservation groups to attack this size of project, Wilderness Resources Institute (WRI) has formed to serve as watchdog over roadless areas.

## HOW MUCH WILDERNESS?

No one — and this includes environmental organizations, federal agencies, and Congress — knows precisely the true extent of de facto wilderness in the lower 48 states. Nor is there sufficient information about the resources in these roadless areas to decide their fate.

What is known is this: under the Wilderness Act, approximately 22 million acres of federal lands in the lower 48 states were scheduled for study for possible wilderness designation. Today the status of many of these areas is still pending.

The act ignored almost four times as many roadless acres as it designated for formal study — 35 million acres of Forest Service land and 50 million acres of BLM roadless land.

This omission didn't mean that the 85 million acres could never be considered for wilderness. However, its significance grew as it became clear that both the BLM and the Forest Service oppose adequate wilderness consideration, according to WRI. One fundamental reason for this opposition, according to WRI, is that the two agencies want to exercise their maximum administrative prerogatives. The Forest Service strenuously opposed the Wilderness Act, saying it could protect wilderness administratively and that it needed maximum flexibility in land management.

Timber is the second major reason why the Forest Service opposes wilderness consideration for its roadless areas, according to WRI. However, WRI questions this argument, saying most of the land in the roadless areas is not classified as commercial forest land by the Forest Service. It says that there is neither adequate timber productivity nor mineral resource information on which to base decisions for the roadless areas. WRI says the potential for commercial development is low, based on information that is available.

## FOREST SERVICE INVENTORY

Seven years after the Wilderness Act, the Forest Service responded to pressure from the administration and inventoried its 35 million roadless acres in several western states. This controversial inventory in 1971-72 revealed for the first time what kinds of lands exist within these national forests.

Although it was a start, the two year inventory was too short, according to WRI. "There simply wasn't enough time to do a comprehensive and fair job," Jerry Mallett, WRI director, says. He says that basic criteria, such as the definition of a "road," varied widely from one forest to another. Large acreages were left out of the inventory, usually from poorly drawn boundaries, he says.

Jim Nelson, spokesman for the Forest Service Region II, denies the charge against the Forest Service. "The time was adequate," he says. "It was a high priority program



The Corral Creek area, in the Bridger-Teton National Forest in Wyoming, was included in the Forest Service inventory in 1971-72. Of the 35 million acres inventoried in the two year period, the Forest Service decided that 25 million should not be studied for wilderness. The 25 million included Corral Creek.

Photo by Bart Koehler.

receiving much attention. If an inadequate job was done, it was due to individual rangers," not Forest Service policy.

After the study, the Forest Service decided that 25 million acres of the 35 million studied were not worthy of wilderness study. Only 7.7 million were recommended for study. An additional two million acres were mandated for study by Congress. Nelson concedes that since the inventory, some of the areas not recommended for further study have been developed.

## HIGH UINTAS STUDY

The inventory did offer some basic new information for the public and the Forest Service to use when making wilderness decisions. In 1966, for example, the Forest Service proposed a 320,000 acres wilderness unit in the High Uintas Primitive Areas of Utah, which had been mandated for study by the Wilderness Act.

Conservationists proposed a slightly larger area. After the 1971-72 Forest Service inventory, conservationists studied the area further and revealed a de facto wilderness unit of at least 700,000 acres, almost twice as big as they had originally proposed. The Forest Service is now looking at a small fraction of that for possible wilderness recommendation.

The remaining 50 million acres of roadless areas are under the BLM's jurisdiction. The BLM is making land use decisions for undeveloped areas in a piecemeal fashion, according to WRI, through its Management Framework Planning process.

The BLM is about three fourths done with its land use planning process. To date, the BLM has administratively

designated nine primitive areas totalling around 230,000 acres. These token plots represent approximately 0.1% of all BLM lands in the lower states. National BLM Director Curt Berklund recently said that the agency's first priority is energy and second is grazing.

BLM primitive areas are roughly the same as wilderness areas. However, they are under administrative protection, not Congressional. Just as the BLM has the power to administratively preserve them, it has the power to change that status, WRI points out. A new Organic Act (the Public Land Policy and Management Act) for the BLM is currently pending in Congress. This act contains a wilderness review section, which would direct the BLM to inventory roadless areas for possible consideration for wilderness protection.

## TIME IS NOW

WRI says, "While wilderness use by an increasingly appreciative public soars, wilderness land vanishes daily by an encroaching civilization. While rare and endangered species search and scratch for wildlife habitat, officials prepare logging, mining, roading, damming, and other development plans for the minute fraction of U.S. land which remains in a primitive condition."

"The expected result of present trends is that an inadequate amount of wilderness will be protected and much of that which exists today will be needlessly developed. Within a few years, any wilderness consideration for roadless areas will become very difficult, because formal decisions against wilderness will have been previously made," WRI believes.

The public is not aware that the two agencies are suddenly making these permanent decisions, according to WRI. With this in mind, WRI plans to embark on a program of research and education largely aimed at preserving roadless areas. The effort will include fund-raising programs to benefit other conservation organizations, financial support of field representatives, and research into ways to increase public awareness of wilderness values.

For further information, contact: Wilderness Resources Institute, 9422 E. Girard, Denver, Colo. 80231 or phone (303) 750-9718.

"While wilderness use by an increasingly appreciative public soars, wilderness land vanishes daily by an encroaching civilization. While rare and endangered species search and scratch for wildlife habitat, officials prepare logging, mining, roading, damming, and other development plans for the minute fraction of U.S. land which remains in a primitive condition."

## Leaving Sierra Club post

# Pam Rich to lead fight for Alaska

When the 1975 Wyoming legislature closed, and other conservation lobbyists headed for the mountains for a few days to unwind, Pam Rich headed for Alaska for a dog sled trip. As a Sierra Club staffer, she has been dedicated to preserving the quality of life in the Northern Plains, but part of her allegiance will always be tied to the Far North.

Fond memories of the Far North have been gnawing at Rich ever since she left the log cabin she'd built in the Alaska wilds to work as an assistant to Laney Hicks in the Northern Plains regional office of the Sierra Club in Dubois, Wyo. In her year and a half in the Northern Plains, she has become one of the most dedicated, well-informed, likable advocates for environmental protection in the region.

But sometime before Christmas, Rich will be leaving her job here to work to save Alaska. Ironically, she won't be returning north to the solitude of her Alaskan cabin. Instead she'll be headed east to Washington, D.C., to lead the lobby to preserve the Alaskan wilderness.

Her new job will be to tackle Alaskan issues on Capitol Hill for Friends of the Earth (FOE). Rich's prime responsibility will be to lobby for the preservation of about 80 million acres of wilderness in the Far North by setting up new national parks, wild and scenic rivers, wildlife refuges, and national forests. She'll also be lobbying on the arctic gas line, opening up the "Pet 4" petroleum reserve on the North Slope, and other key Alaska conservation issues.

### GET BALL ROLLING

Rich says her new FOE position was set up "in response to conservationists in Alaska recognizing the need for this type of effort in Washington. The ball is not rolling in Washington on Alaska, partly because Congress doesn't feel any urgency on this issue. . . . There is not sufficient pressure coming from the constituents."

She says members of the Senate Interior Committee were supposed to tour Alaska and hold hearings on preservation legislation this fall, "but out of nine only one went north." The legislation has not even been brought up.

She says part of the problem is the preoccupation with Presidential campaigning. Sen. Henry "Scoop" Jackson (D-Wash.) is chairman of the Senate Interior Committee, but he "hasn't even thought about Alaska since he announced his candidacy," says Rich.

"Unless we can make Alaska a campaign issue, it's going to be real hard to bring Alaska issues to the forefront," she says. "Alaska is certainly a national issue; it's just that there are energy crises and other hot issues preoccupying everybody's minds."

### 80 MILLION ACRES

Rich's work will focus on the "D-2" land legislation. Under the 1971 Native Claims Act (section 17, D-2), 80 million acres of public domain lands in Alaska could be set aside in one of four systems: national parks, national wildlife refuges, national wild and scenic rivers, or national forests. The area involved is larger than all of New England plus New York and New Jersey combined.

"Never before has such an opportunity been offered to this nation. Nor will it ever be again. For this is the only vast untouched area left in the United States," wrote Robert Cahn, a former member of the President's Council on Environmental Quality, in *Audubon* magazine. "Less than one per cent of Alaska's 375 million acres is now developed, and most of the land is still wilderness. It is a place where one can still hike or float or fly for hundreds of miles without a real sign of civilization, where thousands of caribou still migrate in mass movements that have been going on over the centuries, where hundreds of species of birds nest before soaring off to many parts of the world. And it is the last part of America where man maintains a subsistence way of life as part of the ecosystem," he wrote.

"Time is not on our side," warns Rich. The Native Claims Act said decisions on these wild lands had to be made by December 1978. What we don't act to save before that date may be lost forever."

Commercial interests in Alaska fear that pending national legislation will "lock up" too much land from resource development. They favor minimal-sized national parks and retention of most of the lands as national



Pam Rich

forests or public lands administered by the Bureau of Land Management where timbering, road building, water development, and mining would be allowed.

The Interior Department in 1973 came up with a modest proposal for dividing up the lands among the four systems. But some conservationists saw too many pristine areas left open to exploitation under Interior's plan, and set up the Emergency Wildlife and Wilderness Coalition for Alaska to push for maximum preservation.

The battle lines were drawn, but the battle never ensued. Instead, the Alaska wild lands issue languished in the backwaters of Congress. Now Rich is being brought in to get the ball moving again before it's too late.

### INNOVATIVE PLANS

"The most exciting thing in this for me is the innovative management ideas being included in many of these proposals," says Rich.

She says some areas have provisions for subsistence hunting by native people, and some establish wilderness parks with no visitor facilities or any development.

At one time, the Alaska Department of Highways had proposed a system of roads through nearly every proposed national park and wildlife refuge. But Rich says the attitude towards roads is changing in Alaska.

"I've heard very little talk recently saying that if you set up these preserves, you have to provide road access," says Rich. "This is mostly because roads haven't been the traditional means of travel in these areas. The terrain, permafrost, and weather conditions aren't well-suited for roads."

Rich says now there is much more talk of "alternatives to roads such as beefing up the air service." She says people are looking into a state-operated air system or some other way to reduce the cost. "Air travel is an existing industry and probably has the least impact," she says.

Mineral exploration and development in the preserves will be the "main sticky point," Rich predicts. Industry is

pushing for leaving all the areas open to mineral entry, she says. The government is conducting mineral surveys on the D-2 lands now. "There are two trillion tons of coal up there that no one has even started to talk about," says Rich.

### OCCUPIED CITY

When Rich returned to Alaska for a visit in March 1975, she was dismayed at the way development of the trans-Alaska pipeline had disrupted the state and its people.

She reports that Fairbanks was "bracing itself" for an expected additional 20,000 people coming to look for work by summer. "The BLM (Bureau of Land Management), which manages most of the land around the city, was looking for sites for tent cities and ways to accommodate the people. Everywhere I turned it seemed that there was another patch of spruce and birch being torn down to put up a Pay-and-Save Drug Store or a Howard Johnson's Restaurant, or an expansion of the pipeline route. It seemed that so much of the open space around Fairbanks was being filled up with little thought for planning."

"It almost felt like the city was being occupied," Rich recalls. "There were little yellow Alyeska the oil company consortium building the pipeline) vans running everywhere. I could really see how public services were declining. Grocery store shelves were empty half the time."

Despite this disruption, Rich says the people she knows in Alaska haven't changed. "There's still a sense of community and belonging and a special feeling about Alaska among the older residents," she says.

Rich thinks development is coming to Alaska, and the state will never be the same as it was, but she adds: "If we get through the conservationists' D-2 proposals then much of Alaska as I've known it will be saved."

As Rich heads for Washington, she leaves behind her in the Northern Plains a legion of dedicated friends and a legacy of hard work for the cause of conservation. In a farewell letter to the Wyoming Sierra Club Chapter members, she wrote about her mixed feelings and her hope for the future:

"I won't forget Wyoming and the special people and times I have known here. I have faith that that specialness will prevail, thanks to the hard work of each of you."  
—BH

## Report from Alaska

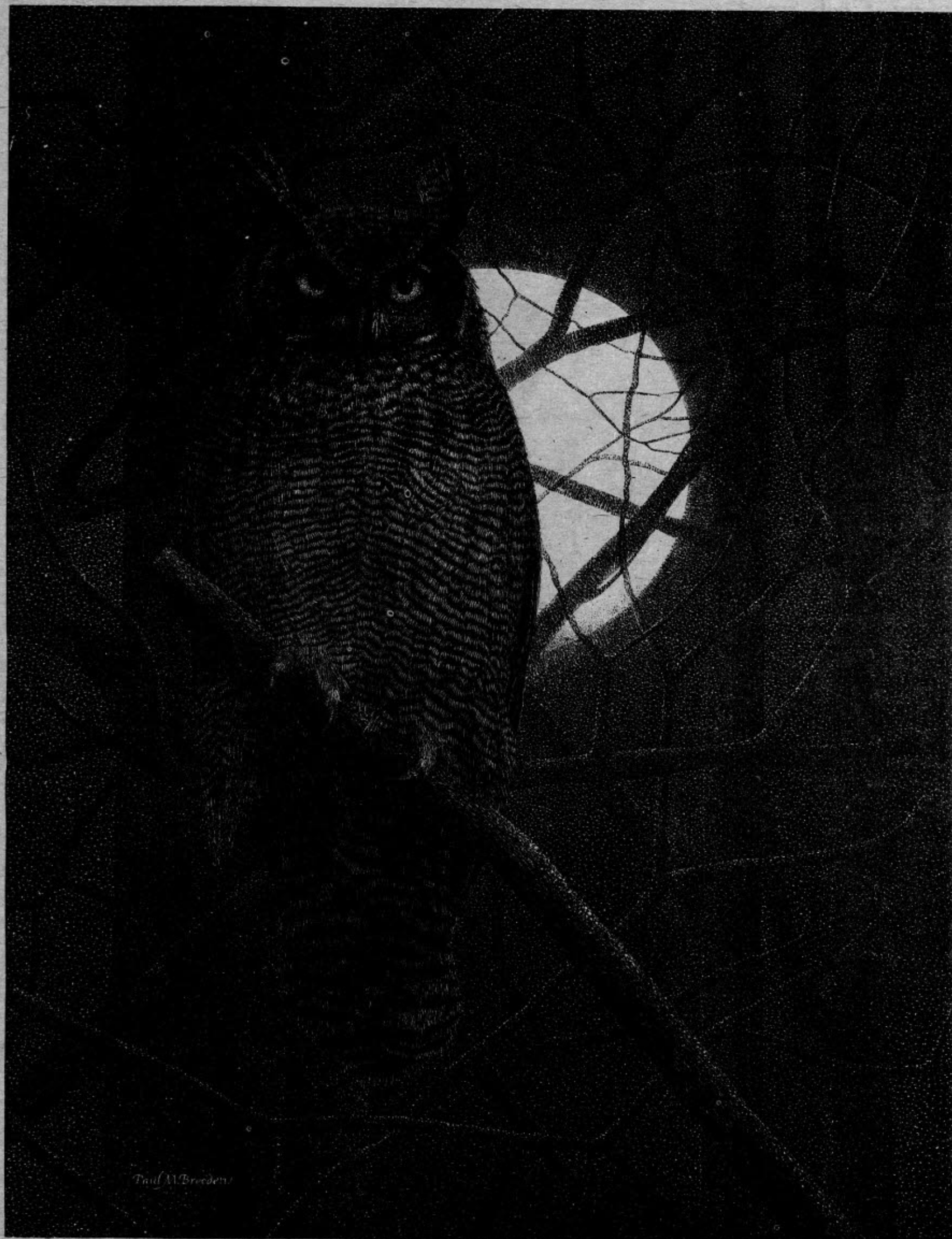
by Greg Capito



The U.S. Army Corps of Engineers has released a draft environmental impact statement on hydroelectric power development in southcentral Alaska. The plan calls for construction of a series of dams and power plants as well as transmission facilities on the upper Susitna River south and east of Mt. McKinley National Park. A total of 6.1 billion kilowatt hours of energy annually could be produced. Most of the electrical power would be utilized in the Fairbanks-Tanana valley area as well as the growing Anchorage-Kenai Peninsula region. The total cost of the proposed hydroelectric project is estimated at \$1.5 billion.

Environmental problems include the displacement of both fish and wildlife, the threat of seismic activity in the project area, and the lingering question of whether "cheap" power will encourage industrial development and growth in southcentral Alaska.

The proposal is now in the legislative action phase of development and Congress must authorize the project. Environmental groups throughout the state including the Alaska Conservation Society have voiced strong opposition to the project as proposed.



Paul M. Breeden

"After a good hard days work, my wife, children and I took a walk down our rural road here and came upon a trio of crows chasing a great horned owl. He retreated to a pine grove and gave a few hoots which were followed by those of his mate somewhere off in the dark corners of the pines. We quietly crept into the grove and discovered him perched, rather angrily, high in a tree. As common as he may be, we'll still always remember the excitement of seeing and hearing this grand and mysterious bird just down the road from home."

Paul M. Breeden

**Great Horned Owl by Paul M. Breeden**  
Black and white — 19 x 24½ inch print.  
Limited edition of 500, signed and numbered.  
\$30.

**Young Prairie Falcon by Paul M. Breeden**  
Black and white — 14 x 20 inch print.  
Limited edition of 500, signed and numbered.  
\$30.

## Paul Breeden

The artist is Paul Breeden, noted calligrapher and illustrator. He has contributed to over a dozen **National Geographic** books, and his continuing series of drawings appear in nearly every issue of the magazine. His paintings and drawings have graced the pages of **Audubon** and presently each issue of **Defenders of Wildlife** magazine. His calligraphic works include unique, specially designed alphabets, logos and one of a kind illuminated masterpieces for presidents, statesmen, and celebrities in the arts and sciences.

Breeden is a self-taught artist, and says of himself, "My desire is to broadly communicate and share my fascination with and love for all life."

The Singing Sparrow, an environmentally orientated gallery, has generously made available for a **High Country News** benefit the two prints featured in our centerspread.

One of the goals of The Singing Sparrow is to make fine, limited edition prints available to wildlife, ecology, public service and conservation groups to be used for fund raising activities. The two prints in this centerspread, "Great Horned Owl" and "Young Prairie Falcon," are fulfilling part of that goal. Forty percent of the proceeds will go to **High Country News**.



"We have attempted to offer really fine art through a medium that people can afford, retaining the full quality of the original and the exclusivity of the limited edition," explains The Singing Sparrow owner, Marty Grisham. In addition to Breeden's work, there are several other fine artists whose work The Sparrow has to offer. Among them are Jim Bama, Frank McCarthy, Guy Colleach, Peter Parnall, and Carolyn Blish.

Brochures should be off the press soon. Write The Singing Sparrow at P.O. Box 4156, Boulder, Colo., 80302; or call Grisham at 303-442-7160.

To order your print: please fill out the order form on page 15 and send it to **High Country News** so that we may receive credit for it.

## Breeden prints

ed calligrapher  
d to over a dozen  
d his continuing  
ly every issue of  
drawings have  
presently each  
agazine. His cal-  
pecially designed  
ind illuminated  
smen, and celeb-

and says of him-  
mmunicate and  
ve for all life."

environmentally  
made available  
at the two prints

g Sparrow is to  
nts available to  
nd conservation  
g activities. The  
"Great Horned  
," are fulfilling  
he proceeds will

really fine art  
n afford, retain-  
and the exclusiv-  
ins The Singing  
. In addition to  
other fine artists  
fer. Among them  
, Guy Colleach,  
t.  
ress soon. Write  
x 4156, Boulder,  
303-442-7160.  
ut the order form  
ountry News so

M. Breeden  
print.  
d numbered.

Nov. 7, 1975 — High Country News-9

Prairie falcons are a rare sight, indeed. The birds are truly majestic in flight. Their shrill warning cries and fast dives and swoops provide an exciting and memorable aerial acrobatic show.

Prairie falcons usually nest in pockets on sheer walls of cliffs. The young hatch in the late spring or early summer, and after five weeks they are fully feathered and ready for flight. This young prairie falcon is resting on a dead cactus branch.

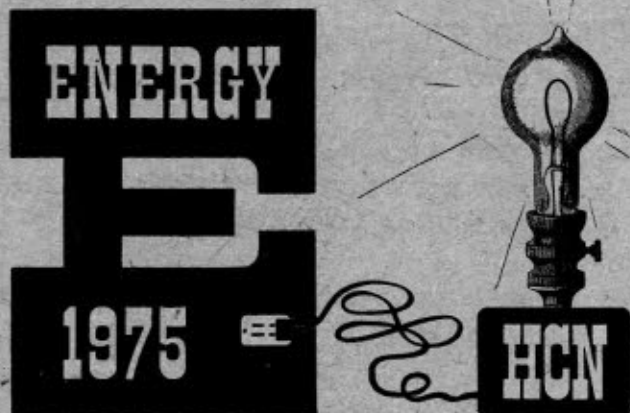
As he grows older, the plumage on the breast will become lighter, and the beak will become noticeably more hooked.



*Young Prairie Falcon*

*Paul M. Breeden*

10-High Country News — Nov. 7, 1975



energy news of the Rockies and Great Plains

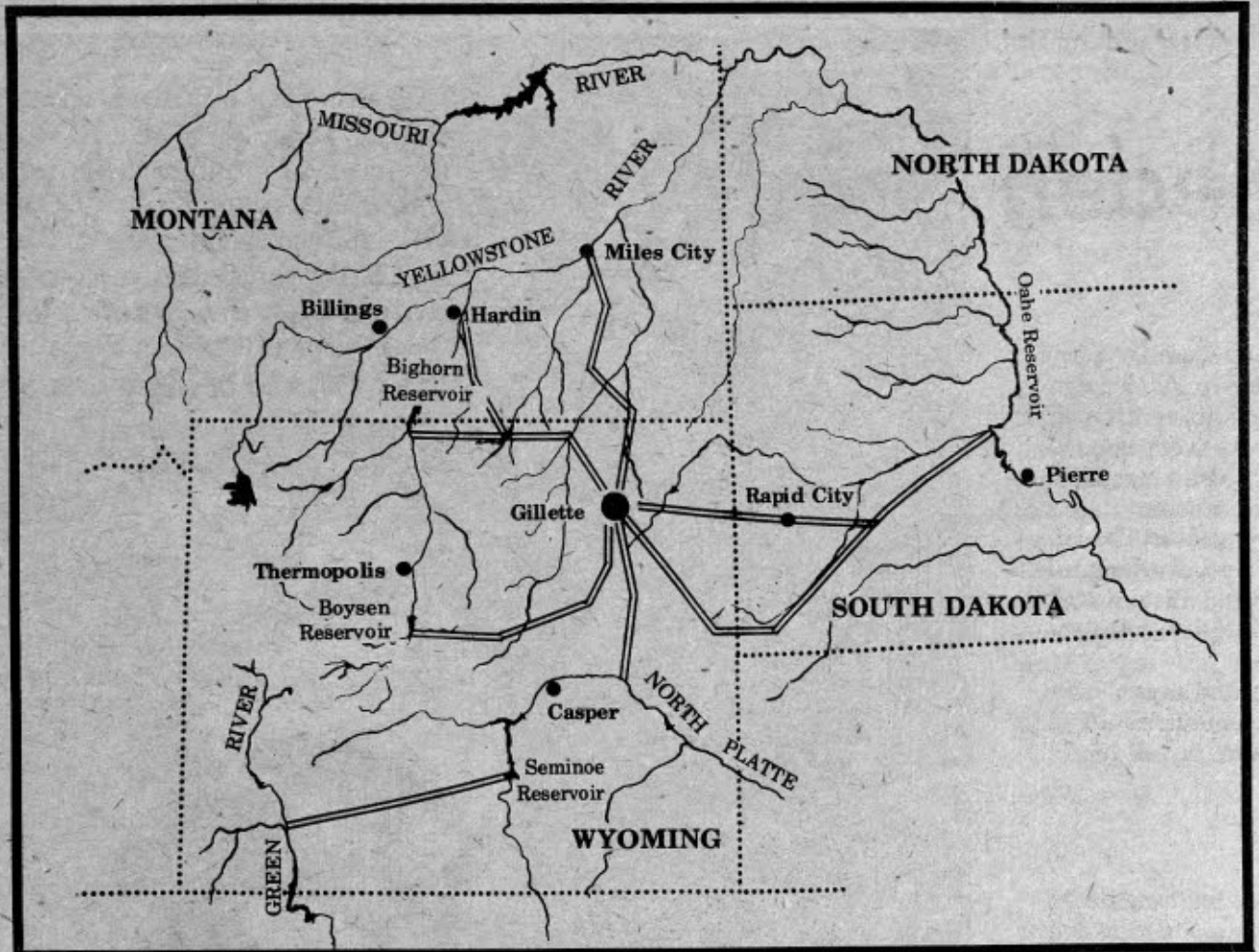
**MISSOURI WIND.** Sen. James Abourezk (D-S.D.) is pushing for a formal study of wind energy potential in the Upper Missouri River Basin. South Dakota School of Mines and Technology and the engineering firm of R. W. Beck and Associates have written a formal proposal for the project. They will seek funding from the U.S. Energy Research and Development Administration. Abourezk says the region has both plenty of wind and a federal transmission line system with 140 substations where wind power could be added.

**BIG BRIDGER BILLS.** Unexpected high costs of building the Jim Bridger Power Plant near Rock Springs, Wyo., may mean a 26% rate increase for Idaho Power Co. consumers. Building the coal-fired power plant has cost 47% more than was expected by the project partners: Idaho Power Co. and Pacific Power and Light Co. At hearings before the Idaho Public Utilities Commission, a spokesman for the utilities' construction firm said that about two-thirds of the cost overrun was due to additions to original building plans. Other important factors were unanticipated low labor productivity and bad weather, he said. The project required hiring 13,000 laborers to maintain a work force of 1,100. On the basis of 14 days of hearings which concluded Oct. 28, the commission will make a decision before mid-January about the proposed rate increase.

**GOODBYE TO COAL — NOT WYOMING.** In general, Wyoming conservationists seem to favor a coal export policy — that is, shipping coal rather than electricity to the country's centers of power demand. One of the state's major newspapers and Asst. Secretary of Interior Jack Horton apparently have similar ideas. Horton recently told the Wyoming Water Development Association, "There has been too much focus on burning (the coal) in the state." In its Oct. 31 editorial, the *Casper Star-Tribune* said that a few energy plants "to meet state or regional economic needs would be advantageous, but certainly not wholesale siting of such plants which surely industrially and socially impact an arid area little prepared to handle too great an influx of new population. We should ship much of the coal out of the state as raw coal, to be consumed or converted to other energy forms in areas where the industrial base, the labor force and the whole web of community services already exist."

**ON THE DOLE.** "Free enterprise" energy companies should pay their own way without help from the government, says Montana rancher Wally McRae. In a press release from the Northern Plains Resource Council McRae said "While calling themselves investor-owned and constantly espousing free enterprise, energy companies are persistently using public money to subsidize energy development." McRae listed a number of federal subsidies to industry in the Colstrip area, including federal grants for recreation and sewage facilities in the town of Colstrip, which is owned by Western Energy Co., and low interest loans for pollution control equipment and a shopping center. The problem is magnified at the national level, McRae said.

**WYOMING LOOKS EAST.** National energy policy-makers are placing too much emphasis on Western coal, Wyoming Gov. Ed Herschler told a House subcommittee in October. He said that the country should focus on both Eastern and Western coal to insure a long term supply of energy and balanced economic growth. "In the absence of a balanced development strategy, we will simply rape the Western states at a rate that will destroy their socio-economic and physical environment, dry up precious water supplies, and leave states like Wyoming with a 'busted' economy and ghost towns when Western coal is gone or no longer needed," he said.



#### HOW TO GET WATER TO GILLETTE

Gillette, Wyo., the hub of energy development in the Powder River Basin, needs more water to sustain 16 coal processing plants proposed for the basin. A variety of ways to move water to Gillette have been proposed, as shown on the map above, based on information from the state water planner. Assistant Secretary of Interior Jack Horton is backing a 240-mile aqueduct from the Oahe Dam in South Dakota. He says the plan would resolve all the conflicts between agriculture and industry in the state and it would keep Wyoming's streams free-flowing, pleasing both conservationists and fishermen. At a Wyoming Water Development convention in Cody, Frank Trelease, state water planner, said he preferred pumping the water from Miles City, Mont. His alternative involves a 120-mile aqueduct and lifting the water 2,000 feet, rather than the 4,500 feet required by Horton's proposal. But the Miles City route also involves revising the Yellowstone Compact. Changing this agreement between Wyoming, Montana, and North Dakota might take years in the courts, Horton believes. Another alternative shown on the map is piping water from Boysen or Bighorn reservoirs in Wyoming. The most controversial of all the plans would involve two transbasin diversions. The water would be piped from the Green River in the southwest corner of the state to the North Platte River above Seminoe Reservoir. The water would be put back in a pipe at Douglas, Wyo., and shipped north to Gillette.

## Sealing holes around your home

(Fifth in a series on home insulation)

Approximately 91 cents worth of energy passes through each square foot of single window glass every year in a home in Casper, Wyo., according to Pacific Power and Light Company. If storm windows are used, the cost is cut practically in half to 46 cents per square foot, says PP&L.

PP&L recommends buying ready-made storm windows since the retail cost of materials approaches the cost of ready-made ones.

For some, new storm windows may be too expensive. The Office of Economic Opportunity in their publication *Save Energy: Save Money!* by Eugene and Sandra Fulton Eccli recommends, "If you can, buy some old storm windows at a garage sale. You can get enough for the whole house for about \$10, but be sure to measure the windows first."

"If you can't get old frame storm windows," says OEO, "plastic storm windows work fine and are cheap. You can buy kits at the hardware store or supermarket." Look for six mil plastic, says OEO. It will last longer than three mil plastic.

"The storm window must fit tightly. For frame storm windows, add some folded paper or weatherstripping to the frame. Then screw the storm windows in place to make them very tight, says OEO."

To seal plastic storm windows tight, OEO recommends rolling up the edges of the plastic and stapling or tacking through the bunching. The bunching gives a good airtight seal.

#### WEATHERSTRIPPING

Can you feel air coming in through the seams around your doors and windows? Can you see light through the crack above or below the door? If your answer is "yes" in

either case, you need weatherstripping.

A small gap of only one-fourth inch at the bottom of a 36-inch wide door is equal to a three-inch by three-inch hole in the side of your house.

"On windows, most of the air will come through the cracks at the top, bottom, and center where the window meets the casing. You can place folded cloth or newspaper in these areas and close the window to make a tight seal," says OEO. You can also use "felt hair" weatherstripping which is sold by most hardware stores.

For doors, add a molding at the top and sides and tack some felt hair to the molding. Keep a throw rug by the base of the door to block cold air there, says OEO.

The Federal Housing Authority requires storm windows and multiple glazed glass on all buildings receiving federal financing in the Rockies and Northern Great Plains. The Stanford Research Institute, in a study for Pacific Power and Light Company, reported that storm windows pay for themselves in added savings from reduced fuel costs.

To obtain a copy of the OEO's report, *Save Energy: Save Money!*, write to the National Center for Community Action, Network Services: Energy, 1711 Connecticut Ave. N.W., Washington, D.C. 20009. The report is OEO pamphlet 6143-5. Other sections included in the report cover: keeping warm, getting heat where you need it, using the sun, stoves, furnaces, and fireplaces.



## Out-of-court compromise proposed

# Governor Herschler enters Sierra -Interior coal battle

Wyoming Gov. Ed Herschler has proposed a compromise which could end a legal fight between the Sierra Club and the federal government over coal development. The lawsuit has inspired intense debate in Wyoming.

Energy companies say it is preventing profits, jobs, and orderly mining.

The state treasurer says it means the loss of millions of dollars in severance taxes.

Coal communities say it is busting the boom now, only to make the boom worse later.

The battle began quietly in June 1973 when the Sierra Club and others filed suit against the Interior Department, claiming the department had neglected to prepare an environmental impact statement on coal leasing in the Northern Great Plains. The club said that federal leasing in the region was a major action which could have a significant impact on the environment. Therefore, they said, a formal regional statement was required.

The Sierra Club lost the first round in District Court in Washington, D.C. The judge ruled that coal leasing in the Northern Plains was a series of separate actions that did not require overall review.

While the Sierra Club was appealing the decision, the court issued an injunction. The action halted Interior's plans to go ahead with coal development at four proposed mines in the Powder River Basin until the suit was settled.

The injunction made news. Mining chiefs in the state, worried about meeting contracts to deliver coal, woke up to the suit's serious implications instantly.

This June, the appeals court's final ruling in favor of the Sierra Club drew even greater attention. Although it did not award a clear victory to the club, the court suggested that federal coal leasing actions should be viewed on a regional basis. The ruling also indicated that a regional impact statement could be required, if the district court felt that federal coal leasing was to begin soon throughout the region.

The Interior Department is trying to appeal the decision to the Supreme Court.

Herschler stepped into the foray at the end of October

with a proposal for an out-of-court settlement. He suggested a compromise which would give the Sierra Club a regional plan, while allowing coal development to begin in limited areas.

"The judicial process may move forward at a snail's pace to a non-conclusion — namely further litigation," Herschler told a gathering of western governors in Albuquerque, N.M. "The resolution that I propose to you is



Wyoming Gov. Ed Herschler has proposed a compromise for the Powder River Basin — an effort to bring together Sierra Club and the Interior Department ideas about coal development.

designed to encourage the Sierra Club and the Interior Department to enter into a good out-of-court settlement in place of what is developing into a bad lawsuit."

The governors, who have banded together to form the Western Governors Regional Energy Policy Office, unanimously adopted Herschler's resolution. (The complete text of the resolution appears in the box on this page.)

Representatives of the Sierra Club at the meeting reacted favorably, with some restraint. Laney Hicks, Northern Plains representative of the club, said that she would be willing to talk about an out-of-court settlement.

"We are very glad the governors have taken this initiative to facilitate settlement discussions," said club attorney H. Anthony Ruckel.

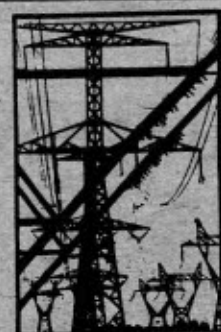
Hicks objected to Herschler's claim that a regional plan might be preferable to an environmental impact statement drafted under National Environmental Policy Act (NEPA) guidelines. NEPA dictates consideration of broad, cumulative impacts, Hicks said. Herschler had argued that the administrative guidelines developed for impact statements "were not designed to focus attention on the larger issues of development. Rather, the impact statement process as it now stands is designed to deal with micro, or site-specific effects."

Herschler and Hicks also varied in their visions of the future, if Sierra Club and Interior left settlement of the dispute to the courts.

"The net effect of extended litigation could well be that the development of our resources, when it does occur, would proceed at such a furious rate that our local communities would be totally overwhelmed," Herschler told the governors.

Hicks said that she thought there were constraints other than her club's lawsuit holding the coal boom back: "availability of capital, diminishing power projections, and, in the long run, alternative sources of new power."

by Joan Nice



## The HCN Hot Line

### energy news from across the country

**COAL LEASING IN COURT.** The Natural Resources Defense Council is seeking an injunction to bar the Interior Department from offering federal coal leases until an "adequate" environmental impact statement on the action is issued. Federal coal leasing, now at a standstill, was expected to resume soon after the release of the department's programmatic environmental statement on coal leasing. NRDC says the statement, which was released for public comment in mid-September, does not prove a need for more leasing. The group has filed suit in U.S. District Court in Washington, D.C.

**EPA SLAMS MINING CLEANUP REGS.** The Environmental Protection Agency says mining and reclamation standards proposed by the Interior Department aren't good enough. EPA is particularly critical of a passage in the rules which calls for reclamation "to the maximum extent practicable." EPA says more specific language is needed. EPA also wants to do the final approving of all mining and reclamation plans — and power to veto development which doesn't meet its standards, according to Coal Week. EPA administrator Russell Train says he intends to make "substantial public comment" on the proposed rules.

**MEAD FIGHTS PLUTONIUM.** Dr. Margaret Mead has stepped into the nuclear power debate. As a result of a study she did for the National Council of Churches, she's begun a fight against plutonium. Plutonium is a byproduct of today's nuclear power plants, and hailed by some as the most important nuclear fuel of the future. In a report entitled "The Plutonium Economy: A Statement of Concern," Mead noted that "plutonium is at least 20,000 times more toxic than cobra venom or potassium cyanide and 1,000 times more toxic than modern nerve gases." Less than 20 pounds is needed to make a nuclear bomb, she said, and a few hundred-millionths of an ounce can cause lung cancer.

**U.S. LOW ON CONSERVATION.** The U.S. is near the bottom of the list when it comes to energy conservation, a recent international survey indicates. The survey was taken by a group composed of representative of 18 oil-consuming nations, the International Energy Agency. The U.S. was ranked 15th out of 18 for its conservation program. "The American program must overcome an extremely high per capita historical energy consumption pattern and as such must be comprehensive and strong to be effective," says the IEA. "At the present time, it is neither."

**FPC SLOW RESEARCHER.** The natural gas shortage predicted for this winter is partially due to the "scandalous" ineptitude of the Federal Power Commission, according to Rep. John D. Dingell (D-Mich.) Despite five years of investigation, the FPC does not know how much gas is under contract, how much is being delivered, or how much can be delivered, Dingell says. The representative is a member of the House Commerce Subcommittee on Energy and Power.

**MONITORING THE PIPELINE.** Can Alaska have authority over oil spills or solid waste disposal along the pipeline, if it's on federal land? The state's attorney general's office is currently trying to decide after the State Department of Environmental Conservation (DEC) filed suit. DEC is also fighting to get funding from Alyeska for additional staff members to monitor pipeline work. A deputy commissioner in DEC is charging that the State Pipeline Coordinator's Office and the federal Alaska Pipeline Office are siding with Alyeska in "performing a hatchet job on DEC efforts to obtain additional pipeline positions," according to "Alaska Environmental Notes." Alyeska is the consortium of oil companies building the pipeline.

#### WESTERN GOVERNORS' REGIONAL ENERGY POLICY OFFICE RESOLUTION

WHEREAS, the Western Governors' Regional Energy Policy Office favors the orderly development of the region's energy resources as being in the best interests of the nation and our states; and

WHEREAS, such orderly development requires a comprehensive regional plan developed by the federal and state governments working as full and equal partners; and

WHEREAS, the potential judicial review of Sierra Club v. Morton will entail unnecessary procedural delays that may well never produce a coherent comprehensive regional plan; and

WHEREAS, limited development of our coal resources, in conjunction with the development of a comprehensive regional plan, will permit the nation's need for coal to be met while adequately protecting the environment, economy, and quality of life of our region and its citizens.

NOW, THEREFORE, BE IT RESOLVED that the Western Governors' Regional Energy Policy Office strongly urges all the parties of record to the lawsuit resolve it by negotiation, provided that any negotiated settlement include the following provisions:

1. The Department of Interior will initiate a comprehensive regional plan for energy development in the Northern Great Plains, including the states as equal partners in the development of such plan;

2. The parties agree to a continuation of the present injunction and the Department of Interior's policy of restraint until the comprehensive regional plan is completed except in limited areas to be designated by the parties to the lawsuit, subject to approval by the governor of the state in which the area is located, or, if the governor of a state so requires, subject to compliance with state plant siting and reclamation laws by all energy developers within the designated areas;

3. Within the designated areas, energy development may proceed without regard to the injunction provided that it is done in compliance with federal and state laws, including any required site-specific environmental impact statements.

12-High Country News — Nov. 7, 1975

## Rocky Mountain

### Ski Report



Once upon a time, ski area promoters received, with little difficulty, the permits and approvals they needed to boost the local economies by building new areas. But ski areas grew from rope tow, one hill operations to include condominium communities. As a result, the public became concerned about the associated impacts rather than just the snow depths. This HCN "ski report" reflects that new concern for wildlife (Ski Yellowstone), geologic hazards (Marble), and roadless areas (Beaver Creek). In the fourth story, the Intermountain Region Forest Service, reacting to this new caution, made the landmark decision to declare a moratorium on new areas in that region until it can assess the need.

## Marble Ski Area nixed by Forest Service

The Marble Ski Area in Gunnison County, Colo., will not be expanded onto 600 acres of national forest land if the U.S. Forest Service's final environmental impact statement is adopted. The application submitted by Marble Ski Area, Inc. was recommended against for both environmental and social reasons. White River National Forest Supervisor Tom Evans says that "expansion of the ski area at this time would prematurely trigger accelerated development of private land in geologically hazardous areas."

"Furthermore, it is important to note that his action would not be irreversible. It provides an opportunity for the county government, if they desire, to find solutions for the potential social and environmental problems which would be created by the proposed expansion."

## Beaver Creek roadless area spared

The chief of the U.S. Forest Service has ruled in favor of the Sierra Club in part of an administrative appeal seeking protection of wilderness-quality lands near Vail, Colo.

Chief John R. McGuire ruled on an appeal arising from Regional Forester William Lucas' decision to classify substantial roadless forest lands for a ski area development called Beaver Creek to be managed by Vail Associates (see HCN Jan. 31, 1975, page 1).

"The Regional Forester classified for ski area purposes more land than needed for Vail's Beaver Creek ski area,"

## Moratorium imposed on Intermountain area

by Mike Weber

October of 1978 is the next date that proposals for the development of new ski areas in the Intermountain Region of the National Forests will be accepted. In announcing the three year moratorium, Regional Forester Vern Hamre emphasized that the action does not prohibit construction of additional lifts at existing areas. Studies for development proposals currently underway will be allowed to proceed at four areas within the region. The Intermountain Region includes Utah, southern Idaho, western Wyoming, and Nevada.

The purpose of the moratorium is to allow time for the Forest Service, with the aid of specialists from colleges, universities and the ski industry, to study the supply and demand situation while updating information on potential new skiing sites in the Intermountain Region.

So far, other regions of the Forest Service have not followed suit. "We do not believe a similar moratorium for the Northern Region would serve any purpose," said Director of Recreation and Lands for the Northern Region, William A. Worf.

The Northern Region includes parts of Idaho and Montana.

A spokesman for the Rocky Mountain Region of the Forest Service, R. Hauff, says he did not expect the Intermountain Region moratorium to have any effect on the ski industry in his region. Hauff told HCN: "Over the past

20 years, the use of ski areas in Colorado has maintained a 19-20% per year growth rate. . . Skiing continues to have great appeal . . . in spite of a troubled economy and energy concerns. . . Accommodating a projected growth rate of 15% per year for the next five years in Colorado would require doubling our 1974 lift capacity. This would involve full expansion of existing areas plus the development of several new ones."

He says that on the whole, he believes ski area development has been done responsibly. He admits that secondary or offsite effects on local and county governments have, in some cases, developed at a rate which burdened local entity resources. However he says that in the Rocky Mountain Region, local, state, and federal governments are working with the ski industry to develop joint planning and review procedures to help this problem. Consequently, Hauff says that a moratorium is not necessary in his region.

Beaver Creek near Vail, Colo., is the only new ski area actively being considered for special use permit in the Rocky Mountain Region, but several other areas are in the initial investigation stages. He says the Forest Service estimates that National Forest lands in his region have the physical capacity to provide for two to three times the present capacity.

The Rocky Mountain Region includes Colorado, part of Wyoming, South Dakota, and Nebraska.

## County grants Ski Yellowstone building plat

by Bill Brewster

Approval by the Gallatin County Commissioners of the first building plats for Ski Yellowstone is the latest action in a move to build a year-round recreational area just west of Yellowstone National Park. (See HCN, May 23, 1975, page 1)

The commissioners voted in Bozeman, Mont., on Oct. 16 to approve a preliminary plat for 960 acres of resort buildings in an area which has been tagged as key habitat for the threatened grizzly bear.

Action by the three commissioners came two weeks after a public hearing at West Yellowstone, Mont., where proponents of the resort filibustered for 4½ hours before giving environmentalists a chance to testify.

In a "Findings of Fact," the commissioners said testimony and written comments received "demonstrated that the development of the subdivision would be in the best public interest."

Commissioners used data from project consultants as the basis for their decision. The Montana officials noted that the environmental study by Ski Yellowstone consultants "indicates that indeed a certain amount of displacement of big game animals may occur if the proposed subdivision is allowed to proceed."

"The big game animal which apparently would be most affected would be the elk since it appears that there is a

herd of approximately 20 elk in the area. The applicant has proposed measures to minimize any such displacement which appear to be workable.

"The testimony and evidence offered insofar as the alleged grizzly bear problem, which has been stated as a concern of those opposing the development, has not shown the development area to be critical," the commissioners noted.

The development project has been opposed by Montana Wilderness Association and other environmental groups because it may be used extensively by grizzly bears and because of its impact on other wildlife species and the wild back country areas to the north of the resort.

Noting that the Ski Yellowstone issue had national significance, a spokesman for the Montana Wilderness Association and the Federation of Western Outdoor Clubs said the area contains "potentially critical habitat" for grizzlies.

"That animal, a strange old codger who used to roam even the plains of Montana, probably doesn't care that he has been placed on the threatened species list; but it is about time that those of us who are concerned with the protection of quality wildlife habitat begin to insure that the activities of man do not duly interfere with the bear's habitat," said the spokesman, Rick Applegate.

"The minimum impact projections of Ski Yellowstone are groundlessly optimistic," he said. Grizzlies have been seen on the Ski Yellowstone site. Even more than the actual land area to be subdivided or laced with ski lifts must be considered, Applegate said.

Applegate recommended that the commissioners consider the Montana Wilderness Association proposal for a cross-country ski area as an alternative which would not destroy the area.

Fletcher Newby, deputy director of the Montana Fish and Game Department, wrote to the county about the proposed subdivision. In his letter he made three points:

- "1. The area of the proposed subdivision and associated ski area lies within grizzly bear habitat.
- "2. This proposed development and associated ski area, if constructed, will cause adverse and irreparable damage to grizzly bear habitat and will certainly increase conflicts and lead to recurrent problems between grizzly bears and people.
- "3. There is no way that the potential conflict between grizzly bears and people in this subdivision and associated ski area would be beneficial to the grizzly bear."

Biologists working on an interagency grizzly study in the Yellowstone ecosystem currently have five bears tagged with radio transmitter collars so they can study their habits. Several of the biologists have said they would like to see a year's moratorium before any governmental decision on the resort, so more bears can be trapped and released with collars to obtain additional data. No official delay has been requested, however.

The U.S. Forest Service has not reached a decision on whether a permit will be issued for Ski Yellowstone to build ski lifts on federal property. An environmental impact statement from the Forest Service is due this month.



# Western Roundup



Nov. 7, 1975 — 13

## Colorado land bill called 'nightmare'

The new director of the Colorado Land Use Commission says his entry into the state "was like turning the clock back seven years." In an interview with Richard Schneider of the **Rocky Mountain News**, Director Phil Savage said he was surprised to find a state that seemed to be so interested in environmental protection so far behind in land use planning. For the past seven years, Savage has been working to build a system of land controls in Maine. He called Colorado's major land use law an "administrative nightmare." The law allows counties to designate critical areas of state concern. The state has no regulatory powers, but provides experts, advice, and money to local governments. If the Land Use Commission wants to force a county to take action, it must file a lawsuit against the county commissioners. "The state isn't equipped to handle the problems," Savage says. He would like to see the creation of a strong state land use agency authorized to issue development permits for major projects. Strengthening state controls wouldn't take authority away from local governments, he says, because the state would just be doing what counties "will never be able to do" — look at the statewide or regional impacts of a project. On the other hand, the state should keep out of local zoning decisions, Savage says.

## Allenspur site could be hazardous

The site chosen for the proposed Allenspur Dam south of Livingston, Mont., could be hazardous, a Montana Bureau of Mines and Geology spokesman has warned. "I don't want to say it's a good site or a bad site," said the bureau's associate director of information, Ralph King. "It deserves more study before they do anything, though." The dam site is just north of a 30-mile-long fault. King said that there was no way to predict if an earthquake could occur along the fault.

## Anaconda closes Butte copper mine

The Anaconda Company is closing its underground copper mine in Butte, Mont., after 100 years of underground mining in the area. About 320 underground miners and workers will lose their jobs. No changes were announced for the Anaconda open pit mine in Butte. A spokesman for the company said new underground mining methods proved insufficient to offset heavy losses involved in the operation. Anaconda lost \$29.4 million in the first nine months of 1975.

## Desert subdividers indicted for fraud

Amrep Corporation, a land development firm, was indicted last month on charges of defrauding consumers of more than \$200 million in the sale of desert land near Albuquerque for home sites. Amrep attempted to sell 91,000 acres of semi-arid grazing land called "Rio Rancho Estates." Lots ranging up to \$11,800 an acre were sold to 45,000 purchasers, primarily as investments. Lot purchasers were led to believe through high-pressure sales campaigns that Rio Rancho Estates was a master-planned community, where plenty of water was available and resale of land for a profit was easy. All these claims were fraudulent, according to the New York federal court grand jury indictment.

## Idaho prepares suit for state waters

The state of Idaho is prepared to go to court with the federal government to settle the issue of who controls water in the state. The State Land Board has ordered Atty. Gen. Wayne Kidwell to draft a lawsuit against the Corps of Engineers. Under regulations which go into effect in 1977 the Corps could regulate "practically all water in the state," says Gov. Cecil D. Andrus. Kidwell told the **Idaho Statesman** he expects 20 or 30 other states might join Idaho in the suit.

## Desert tortoise faces uncertain future

The desert tortoise is "really in trouble in Utah," according to Dale Arhart, a wildlife biologist with the Bureau of Land Management. The Beaver Dam Slope area of southwestern Utah, which once held 1,000 to 2,000 tortoises now holds 200 to 300. It's at "an all-time low," Arhart told the **Deseret News**. Dr. Andrew Barnam, a biologist at Dixie College in St. George, Utah, blames overgrazing, recreational vehicle use in the area, and people who have carried the animals off for pets or sale for the rapid decline. Under a 1971 Utah law the tortoises are protected, but the law is not well publicized and poorly enforced. Arhart has proposed that the Beaver Dam Slope be set aside as an official tortoise preserve — but so far no money is available for the proposal.

## Exxon leasing within Grand Canyon

Exxon has applied to the National Park Service for permission to build an access road and do core drilling on three leases it holds within the rim of the Grand Canyon, according to the Sierra Club's **National News Report**. "The leases are located in Parashout and Whitmore Canyons, just outside the boundary of the enlarged Grand Canyon National Park and in a detached portion of Lake Mead National Recreation Area," states the **Report**. John A. McComb, Sierra Club Southwest regional representative, says the leases were improperly granted and should be revoked because: 1) they are within a wilderness area proposal under consideration, 2) no environmental review preceded granting the leases, 3) the Conference Report on the Grand Canyon National Park Enlargement Act directs the Secretary of Interior to study the area for addition to the park, and 4) mineral leasing in the Lake Mead NRA is clearly discretionary with the Secretary of Interior.



END OF BIG FEDERAL DAMS?

The Interior Department has published a six-year study of Western water problems which forecasts a shift away from construction of huge federal water projects. Future emphasis will be on "total water management, water conservation, and the environment," the report states. The study recommended establishment of a "national entity" to coordinate federal water policies. The report suggests that importation of water by the Southwest from other river basins is impractical. "The conclusion should help lay to rest permanently past talk of diverting water from the Snake or Columbia rivers to the Southwest," said the **IDAHO STATESMAN** in a recent editorial.

Pictured above is Hells Canyon on the Snake River in Idaho.

## Rainbow Bridge hasn't suffered yet

Rainbow Bridge, a world-renowned sandstone arch in southeastern Utah, hasn't suffered because of backing Lake Powell waters beneath it, according to a U.S. Bureau of Reclamation monitor system report. "We cannot relate any reaction of Rainbow Bridge to the water," David L. Crandall, BuRec Upper Colorado Region director, told the Utah Board of Water Resources. Crandall said the bridge reacts to temperature changes, but water hasn't affected the national monument yet. Reservoir water has backed up 400 feet past the bridge and is 25 feet deep at the boundary of Rainbow Bridge National Monument.

## Water project threatens elk habitat

Last month, the Wyoming Game and Fish Department and local landowners argued before Sen. Gale McGee (D-Wyo.) on the need for wildlife mitigation areas associated with the proposed Savery-Pothook reclamation project along the southwestern Wyoming — northwestern Colorado border. The Department has asked for 38,000 acres to make up for elk habitat and other wildlife areas that would be inundated by the proposed agricultural reservoirs to be built by the Bureau of Reclamation. Local landowners want the project, but don't want private land condemned for wildlife and worry that the wildlife mitigation costs may jeopardize the water project. The Department has pared its request down to 16,000 acres of elk winter range, but the landowners are still balking. Wyoming Gov. Ed Herschler is trying to work out another compromise that would involve project purchase of state and federal mitigating lands, but little or no private land. The dams and canals are planned for the Little Snake River and Savery Creek.

## Non-radioactive water supply sought

Rep. Tim Wirth (D-Colo.) says he will begin immediately working to find a new water supply for Broomfield, Colo. Wirth claims the existing supply is contaminated by the nearby Rocky Flats nuclear plant. Wirth said he will also ask the Government Accounting Office to probe the adequacy of safeguards and security in storage and handling of plutonium and other radioactive materials at the facility. Wirth is asking the White House and the Joint Committee on Atomic Energy to consider phasing out nuclear weapons production at the facility and replacing it with other less hazardous activities.

## Kellogg children may have to move

One hundred thirty young children and their families may be moved from their homes in Kellogg, Idaho, according to the Idaho Department of Health and Welfare. Tests have shown that the children, who live within a mile of the Bunker Hill Lead Co. smelter, have abnormally high blood lead levels. Dr. John Ashley, director of the department's health division, says, "There's a question as to whether pre-school age children ought to be living there. The data's not clear, but there are some suggestive trends." The recommendation to move the children is still under consideration by the department.

## Thoughts from the Distant Corner

by Marge Higley

I happened across a most interesting book the other day. Called **Victorian Inventions** (by Leonard de Vries), it's a collection of articles that appeared between 1865 and 1900 in **Scientific American**, the French journal *La Nature*, and the Dutch magazine *De Natuur*.

I found the book both amusing and thought-provoking. Amusing because the forerunners to so many things we use every day seem to have been so awkward and cumbersome. Thought-provoking, because so many of those ridiculous-sounding ideas had merit, and needed only to be refined.

Today's children take roller skates for granted, because about 100 years ago someone invented the "Pedespeed," a 14 or 15 inch wheel strapped onto the ankle of each foot! And bicycles, before 1885, were mostly either three-wheeled velocipedes (nicknamed "boneshakers") or a type of unicycle in which the rider was completely encircled by the one wheel. In 1889, **Scientific American** described a "stairclimber" which, according to the sketch, was not too unlike today's escalators.

Photography, too, went through some clumsy stages before the achievement of motion pictures and television. A photographic rifle was invented in 1882 to enable the inventor to take pictures of birds; five years later came the photographic hat — which produced the first "candid" pictures.

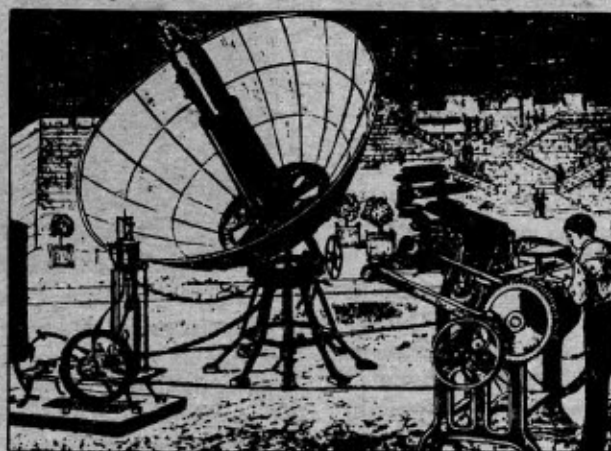
The first useful typewriter was constructed in 1865 by an American named Sholes, and 12 years later Remington introduced a typewriter with a keyboard much like that which is used today. An English lady demonstrated this machine in Paris and achieved a writing speed of more than 90 letters per minute!

Would you believe an automatic dishwasher in 1885? It was used in a large Paris restaurant, and was a far cry

from today's sleek modern appliances. **Scientific American** described it as a circular tank of two compartments, one for hot and one for cold running water. The dishes to be washed were held in eight artificial hands revolving around a central shaft with an undulating movement, then brushed with two stiff brushes. The article concludes with this statement: "The use of this machine constitutes no danger whatsoever either to man or dish!" The descriptions of the first vacuum cleaners and washing machines also make one laugh.

Not all of those Victorian inventions were successful, though. The Theatrophone, for instance, was designed not long after the telephone had become popular, and was intended to bring a concert into the home from a distant place, to be listened to by telephone. No one followed through on that one, possibly because Edison's phonograph was invented in 1877.

Another invention which, fortunately, was never put to



**SOLAR POWER, A CENTURY AGO.** Although the sky was frequently overcast, this solar-powered printing press operated continuously every afternoon in Paris during the 1880s. The inventor was a French engineer named Abel Pifre. Driven by steam made from the sun's heat, the press put out 500 newspapers per hour.

the test was a "natural flying-machine," suggested by a Baltimore man in 1865. In a letter to the editor he says, in part: "In recent months you have published several articles on flying-machines. . . I have long nourished an idea, which is . . . to make use of the powers of inferior animals given to man to be his servants to effect his purpose. There are many birds, for example, noted for strength of wing and endurance in flight, such as the brown eagle. Proceeding from the assumption that such birds can carry up to 20 pounds each . . . one would require 10 such eagles to convey an adult person through the air. . . " and he goes on to describe how he would attach these birds to a circular framework which would carry aloft a metal basket large enough to carry a man. By an arrangement of cords the occupant would be able to compress or release the creatures' wings to control altitude, with a similar system of cords to turn the bird's heads to regulate the direction of flight!

Well, it's easy enough to understand why nothing came of that invention! But, tucked away toward the back of the book is a short paragraph which was printed in *De Natuur* in 1882, under the heading, "Printing Press Driven by the Heat of the Sun's Rays." It says: "Recently, on 6th August, 1882, Monsieur Abel Pifre, a French engineer, demonstrated the solar engine invented by him at a meeting of the Union Francaise de la Jeunesse held at the Jardin des Tuileries in Paris. It consists of a concave mirror 3½ meters in diameter, in the focus of which there is placed a cylindrical steam-boiler equipped with a safety valve. The steam generated by the reflected sun-rays actuates a small vertical engine of 2/5 horse power driving a Marioni type printing-press.

"Although the sun lacked power and the sky was frequently overcast, the press operated continuously from 1 p.m. to 5:30 p.m., turning out an average of five hundred copies per hour of a journal which was especially made up for the occasion and appropriately called *Soliel-Journal*. . . " The paragraph concluded with the editorial comment that "there is little doubt that such a solar engine will be a boon to the population of hot areas, which so often suffer from a shortage of fuel."

That was 93 years ago!

## HCN Bulletin Board

### LOONEY LIMERICKS

by Zane E. Cology

At Burlington's fertilizer plant,  
Circle's ranchers are starting to rant.  
Their land's all groanin',  
Giving coal for ammonium,  
Making Nature do something it can't.

A simple farmer named Hiser,  
Tried inventing a new fertilizer.  
She inserted some coal,  
With each seed in each hole,  
And when nothing grew, it surprised her.

### WATER LAW MEETING

"Are Wyoming Water Laws Working for your Best Interest?" is the title of a discussion at a public meeting to be held Nov. 10 in the Cody Club Room of the Convention Center in Cody, Wyo. It will begin at 7:30 p.m. Sponsors are the Clarks Fork Steering Committee, Cody Sportsmen, Cody Country Outfitters, Powell League of Women Voters, North Absaroka Group Sierra Club, American Association of University Women and the Cody legislative group.

### RAPTOR CONFERENCE

The Raptor Research Foundation, a nonprofit organization dedicated to the conservation of and scientific research on birds of prey, is holding its annual meeting at Boise State University, Boise, Idaho, November 21-25, 1975. Topics to be discussed include hawk migration, threatened and endangered species, captive breeding, management techniques, field study methods, and ongoing research. Field trips to the Snake River Birds of Prey Natural Area have also been scheduled, as well as an art show consisting entirely of artwork on birds of prey. For further information, contact Dr. T.C. Dunstan, 3500 Main Hill Road, Boise, Idaho 83704.

### YELLOWSTONE WATER MEETS

Researchers from Montana State University have been holding a series of public forums to discuss the future of water use in the Yellowstone River drainage in Montana and Wyoming. The meetings are intended to seek public reaction to water use issues, especially those relating to the allocation of water for coal development. Future meeting dates are as follows: Nov. 10, Sheridan Inn, Sheridan, Wyo., 7:30 p.m.; Nov. 11, Sands Motor Lodge, Gillette, Wyo., 7:30 p.m.; Nov. 12, Riverton High School Lecture Room, Riverton, Wyo., 7:30 p.m. Meetings are also planned for Cheyenne, Wyo., and Helena, Mont., but no dates have been set.

### INVESTIGATE A CORPORATION

One good way to understand a corporation, **Straight Creek Journal** points out in a recent issue, is to read its annual report. Companies generally give them away to anyone who asks. Just send a letter to the secretary of the company at the headquarters address asking for the report.

To learn more, you may want to look over a company's "10-K" statement, a form filed annually with the Securities and Exchange Commission. "Regulations require more complete and accurate reporting in the 10-K than is required in the annual report to shareholders," **Straight Creek** says. "The 10-K statements are especially good for their discussions of problems affecting the company and for more detailed financial breakdowns."

Write the treasurer of the company to obtain a 10-K statement. Technically, they are available only to shareholders, but the company has no practical way of determining who is a shareholder and who is not because so many people leave their stock registered in a broker's name.

Annual reports and 10-K statements are also available at public reading rooms maintained by the Securities and Exchange Commission. One such room is at the SEC's office in the Park Central Building in downtown Denver.

### LEGISLATIVE ANALYSES

Conservation lobbyists in Colorado, Montana, and Wyoming have prepared voting analyses of state legislators for the 1975 sessions. The Colorado analysis, prepared by the Colorado Open Space Council, has a rundown of all environmental legislation, a matrix of how every legislator voted on the environmental bills, a percentage of "correct" votes for each lawmaker, and a subjective review on every member of the House and Senate. Copies of the Colorado report are \$3 each from the Colorado Open Space Council, 1325 Delaware St., Denver, Colo. 80204.

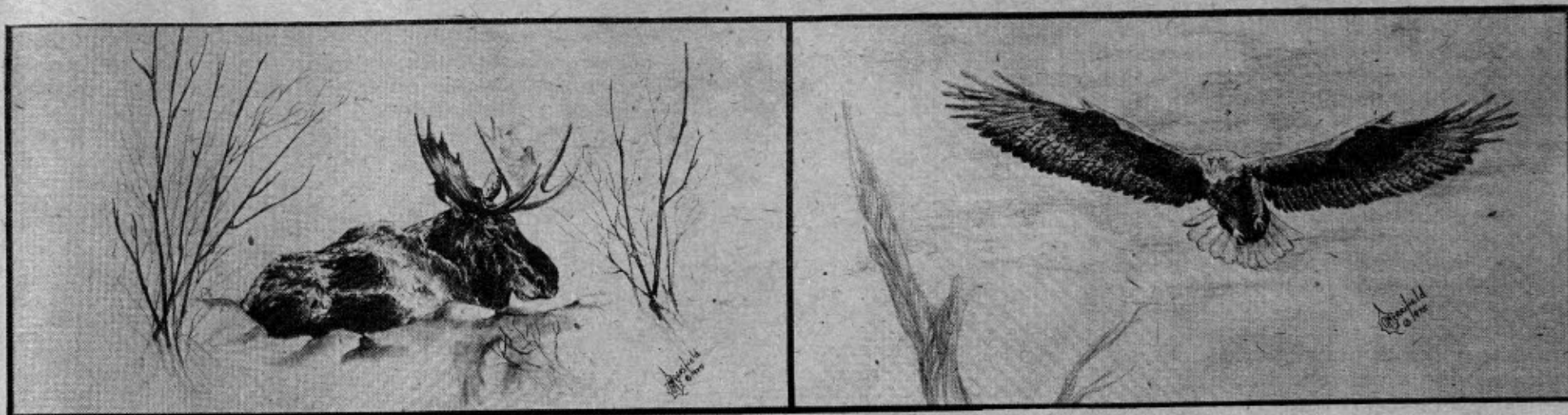
The Montana analysis, prepared by the Montana League of Conservation Voters, is less detailed than its Colorado counterpart. The Montana document gives a one sentence review of each environmental bill used in the analysis, and then gives a percentage figure for each legislator in six categories: land use, energy, water, air, public accessibility, and general conservation. The Montana League of Conservation Voters' analysis is available from the League, 1823 Highland, Helena, Mont. 59601 for \$.50 each.

The Wyoming Outdoor Council's 1975 Legislative Analysis is available for \$1. The booklet contains a tally of votes on eight key environmental issues, an explanation of the issues, and charts which rate legislators. Almost one-third of the representatives scored 100% this year. One-fifth of the senators earned the top score. To buy a copy write, Wyoming Outdoor Council, c/o Pauline Utter, 922 S. Center, Casper, Wyo. 82601.

### NPRC ANNUAL MEETING

The Northern Plains Resource Council will hold its annual meeting in the Northern Hotel in Billings, Mont., on Nov. 12. Bill Christiansen, Lieutenant Governor of Montana, will be the featured speaker at 7:30 p.m. The business meeting starts at 5:30 p.m., followed by a reservation-only dinner. For more information or dinner tickets contact: NPRC, 419 Stapleton Building, Billings, Mont. 59101, telephone 248-1154.

# Alternative Gift Shop

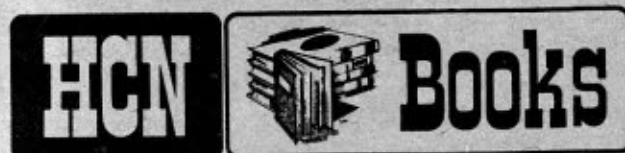


## Note Cards

designed for High Country News  
by Holly Merrifield,  
wildlife artist and friend.

Write your own message.  
Ivory cards, gold envelopes.  
Designs are in wheatfield gold ink.

Ten cards and envelopes per package, \$2.  
3 1/4 by 7 in. standard size.  
HCN to share in proceeds.



## Rocky Mountains

Photography by David Muench. Text by David Sumner. Published by Charles H. Belding, Graphic Arts Center Publishing Company, 2000 N.W. Wilson, Portland, Ore. 97209. Price \$25 until January 1, 1976, \$30 thereafter.

Review by C. H. Nations

David Muench, a native Californian, has traveled the length of the Rockies and has captured on film the immensity, beauty, and serenity of the great mountain range.

The 175-page book that resulted includes comments and explanatory text by David Sumner, a frequent contributor to *High Country News*.

While David Sumner was born in New Hampshire, he is no stranger to the Rocky Mountains, having moved west

almost a decade ago. He has since taught at the University of Denver, served as executive editor of the *Colorado* magazine, and written many articles on environmental subjects as well as a book on ski touring.

Their efforts to produce *Rocky Mountains* led them to places many of us will probably never see except in this powerful, wonderful work. It is evident from the photographic excellence that Muench has spent many lonely hours waiting for just that right amount of early morning or late evening light to accentuate his subject in places far beyond most photographers' limits. His equipment, film, and lenses are mentioned only briefly on the last page of the book, keeping the technical aspects to himself regarding exposure times, f stops, and other details.

The text is entirely adequate, furnishing important historical and interesting information about the areas without the flowery oratory or the sickly, sweet language so often encountered in similar publications. It is a refreshing change from the usual "travel folder" type descriptions of the beauty of the mountains.

If the book has a fault, it may be that like the mountains it portrays, it is just too big to be appreciated in one

sitting. It is a book, also like the mountains, that one will come back to, time after time.

Is the book worth the money? Yes, if you are one of two kinds of people: 1) if you love the Rockies as most of us do, or 2) you are a photographer, either professional or casual, who would like to see how it's supposed to be done.

The publisher of *Rocky Mountains*, Mr. Charles H. Belding, has graciously agreed to share the proceeds from the sale of this book with *High Country News*.

Give a fine gift and help the cause at the same time. To order, please use the combined order form located on the bottom of this page.

It is not an easy task putting a mountain range into a book; this is a brilliant attempt.

*Rocky Mountains*—Actual size, 10 1/8" by 13 1/2", 14,000 words of text, 162 illustrations in full color.

This book has scope large enough to match the mountains. Contrasts are forever present in the high country; massive ranges to singular peaks, masses of wildflowers to the single blossom . . .

### Combined Order Form

Be sure to mark your selections.

- |                                    |         |                          |
|------------------------------------|---------|--------------------------|
| Paul Breeden prints                | \$30.   | <input type="checkbox"/> |
| Great Horned Owl                   |         | <input type="checkbox"/> |
| Young Prairie Falcon               |         | <input type="checkbox"/> |
| Rocky Mountains                    | \$25.   | <input type="checkbox"/> |
| Holly Merrifield Cards             | \$2.    | <input type="checkbox"/> |
| Best of High Country News Magazine | \$1.50  | <input type="checkbox"/> |
| Subscriptions to High Country News |         |                          |
| 25 Issues                          | \$10.00 | <input type="checkbox"/> |

Send the above marked items to:

Name .....

City .....

State .....

Zip .....

HCN, Box K, Lander, WY 82520

(Thank you. Your purchase is helping HCN.)



### Get one before they're gone!

A special edition of Tom Bell's *High Country News*. Forty-eight pages rounding up the best articles appearing in HCN from 1969 to 1975. Glossy cover outside, newsprint inside. Alternate energy, fossil fuels, wildlife, land use. Plus a never-before-published history of the *High Country News*.

To order your copy send \$1.50 to HCN, Box K, Lander, Wyo. 82520.

one family's business  
in Lander, Wyo.

This year send cheese, natural foods and cottage crafts as gifts from

**Focht's "Back Home" Store**  
featuring

Focht's Table Mountain Dairy Cheese

Cheddar 5 lb. \$9.75  
or Colby 10 lb. \$17.95

Sent post paid to anywhere  
in the continental U.S.

Order from "Back Home," 2nd and Main,  
Lander, WY. 82520 (307) 332-9491 or 332-3123

16-High Country News — Nov. 7, 1975

Kerr decision overturned

## Court says EPA can ban coyote poison

The interstate shipment of predator poisons may again be halted by the U.S. Environmental Protection Agency. A three-judge panel of the U.S. 10th Circuit Court of Appeals ruled last month that the EPA acted lawfully when it banned the shipment of sodium cyanide, strychnine, and 1080 for use in controlling predators in March, 1972.

The two-to-one Appeals Court decision reversed a decision by U.S. District Court Judge Ewing Kerr. Kerr had ruled on June 12 that the EPA needed to file an environmental impact statement before it could ban the poisons. Kerr issued a temporary injunction against EPA's poison ban which allowed renewed shipment. Kerr's action enabled the states to stockpile significant quantities of the three poisons.

### PRESUMED EXPERTISE

"An organization like EPA, whose regulatory activities are necessarily concerned with environmental consequences, need not stop in the middle of its proceedings in order to issue a separate and distinct impact statement just to be issuing it," the majority decision read. "To so require would decrease environmental protection activity rather than increase it."

Impact statements are required under the National Environmental Policy Act (NEPA) for major federal actions significantly affecting the quality of the human environment. The majority decision held that EPA had "substantially complied with the NEPA requirement" for an impact statement.

The court said that EPA had relied heavily on the "Cain Report" — a report on predator control by the Advisory Committee on Predator Control chaired by University of Michigan's Dr. Stanley A. Cain. According to the court, the Cain Report "was similar to an environmental impact statement." The court found that EPA had satisfied itself that "a hazard existed which demanded immediate suspension of the registration of the pesticides." The Cain Report concluded that the three poisons were "non-specific" and therefore posed a hazard to non-target animals, including several threatened and endangered species.

In a dissenting opinion, Circuit Court Judge Oliver Seth said that federal statutes require that "all agencies must consider all the directions in which the impact of their major federal action may be felt." He said this includes EPA and the courts "should not create an exception for any reason and not on the basis of presumed expertise."

Responding to news of the decision, Sen. Cliff Hansen (R-Wyo.) told the *Casper Star-Tribune*, "I certainly find it hard to understand why two of the three-member panel could conclude that the law applied to every other agency of the federal government and not to the Environmental Protection Agency."

### MORE ACTION EXPECTED

The Appeals Court sent the case back to Judge Kerr for further proceedings on other claims made in the suit.

The suit was originally filed by the state of Wyoming, the Wyoming Woolgrowers' Association, and several predator control districts and ranchers. In August, Utah and Idaho filed "friend of the court" briefs on the side of Wyoming. The National Woolgrowers' Association, National Cattlemen's Association, and the state of New Mexico are also planning on joining the suit against EPA.

Wyoming Commissioner of Agriculture Larry Bourret told the *Star-Tribune* the state may appeal to the U.S. Supreme Court, and said that the rest of case would be prepared for trial by Judge Kerr.

by Bruce Hamilton



## Dear Friends,

Work at the High Country News office is always full of surprises. One of the nicest surprises we ever experienced was the day August Leo Dailer III came through our door last winter.

August was an unemployed Vietnam veteran with a B.S. in advertising from Marshall University in Huntington, W.Va. He'd seen how strip miners had ruined his native state of West Virginia and was anxious to

help preserve the environment of the Northern Rockies from similar abuses. He'd heard HCN was starting to accept advertising, and he wanted to work for us.

At that time we didn't have any extra money to hire a new staff member. August had a family to help support — wife Pat, who is a nurse, and daughter Aimee — but the lack of "financial aid" from HCN didn't deter his desire to work for the paper. We offered him what we could, the title "advertising manager" and a commission on the ads he was able to hustle up.

August took over the "ad department" (a desk in the corner of Marjane's office) and began making up ads, arranging exchange ads with other publications, sending out rate cards, and doing all the other tasks we'd ignored for too long. He would put in a full day of work, mind his daughter (who would be playing with Lincoln logs under his desk), and still have time and energy to hold down several outside part-time jobs to help support the family.

It was a fun time, a productive time for the paper, but a time that would wear down any man's energy and pocketbook. Finally, in June, August took a full-time job with the *Wyoming State Journal* in Lander as advertising salesman. He continued to spend some of his off hours on HCN ad campaigns and promotion.

Then in September, HCN decided to scrape together a little reserve money and hire a promotion-ad manager on an experimental, short-term basis. It was a timid first step for the paper. But despite the precariousness of the position, August was first in line, ready to plunge neck deep into the insecurity.

In his first week of work, he got on the phone and talked distributors in New Mexico, North and South Dakota, Wyoming, and Colorado into taking our newspaper and magazine to their newsstands to put before the public. He quickly increased our newsstand coverage by several fold, making it much more likely that more readers will find out about HCN and subscribe.

Each day he teaches us something about "selling ourselves." His approach would be considered a "soft sell" in any other operation, but here we need to be reminded not to apologize everytime we try to make a dollar to keep the paper going. He says he's interested in more ideas from readers on how to better promote the paper.

His motto: "Make no small plans. Small plans have no magic to stir men's blood." (Daniel Burnham)

—the editors



August Dailer and his daughter Aimee pasting up the HIGH COUNTRY NEWS.

## In The News

### Furor over fertilizer

BN has big plans for Circle.

1

### Ignored Wilderness

new group fights for roadless area.

6

### Pam Rich

leading the fight to save Alaska.

7

### Paul Breeden

art sale benefit for HCN.

8

### Sierra suit

compromise offered.

11

### Ski report

a new look at impact.

12