

XXXXXXXXXXXXX
 XXXXXXXXXXXXX
 XXXXXXXXXXXXX
 XXXXXXXXXXXXX
 XXXXXXXXXXXXX 56001

11-77

MINNESOTA 560-566

Red Desert uranium venture Too much water stymies desert mine

by Philip White

In the year of the drought, in the middle of Wyoming's Red Desert, Union 76's Minerals Exploration Co. (MEC) faces an ironic problem: what to do with a pesky 11,000 acre-feet per year of good quality ground water that will seep into its proposed open pit uranium mine. Its answer so far is to evaporate it.

MEC has applied to the Wyoming Department of Environmental Quality (DEQ) for a permit to strip mine and mill uranium oxide ore at the remote Chain-of-Lakes

area in the Great Divide Basin, 40 miles northwest of Rawlins.

Although plans are not set, the company is now proposing to flood the water onto Battle Springs Flat, a large playa (undrained basin), which normally dries up in summer and remains dry until spring. The mine water would flood up to 3,500 acres most of the year and drown the greasewood-dominated (*Sarcobatus vermiculatus*) vegetative cover for the life of the mine, presently estimated at 15 years.

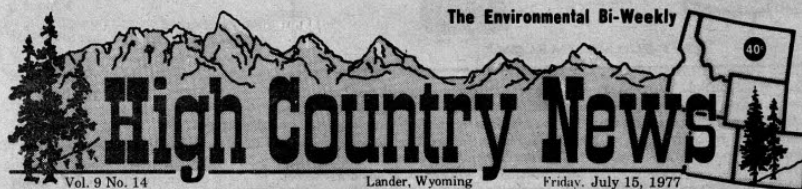
Before being pumped to the flat, the

water must be treated with barium-chloride, a salt, to remove the radioactive radium isotopes, under terms of a DEQ water discharge permit.

RECLAMATION PROBLEMS

According to an engineering study done for MEC, the mine de-watering "would result in 3,720 tons of salt delivered to Battle Springs Flat per year." That amounts to three-fourths of a pound of salt per square

(continued on page 8)



Environmental constituency building

Building political power — future of a movement

by Dan Whipple

Power. Wielding influence in the political arena. Achieving the goals of environmental protection ultimately depends upon the elusive commodity known as "clout."

Clout, in the political process, is ordinarily exercised in one of two ways — through lots of money or lots of votes. Since large sums of money are an impossible dream for most citizen action groups, their strength is usually based on people. A safe maxim would be: "The more people you represent, the greater your power." And, environmentalists, long accustomed to a

minority role in the political world, are embarking on ever more intense efforts to increase their power base.

The term used in the Northern Rockies for this organizing approach is "constituency building." Fundamentally, it involves bringing people into a group by appealing to their self-interest, usually an economic one, in a specific, local issue. The issue will attract support and, perhaps, more members for the organization. The increased popular support is designed to increase the group's clout with legislators, councilmen, or commissioners.

ISSUE ORGANIZING

It can be said that all environmental groups, with a few exceptions, have a "constituency." They have managed to attract members and interest by developing an approach to an issue that appeals to a number of people. Very few environmental groups, however, have ever spent much time trying to enlarge their constituency. Most have simply let their stands on the issues attract attention for them.

The current advocates of vigorous environmental constituency building are playing the game differently. They include among a group's key concerns those with "organizing potential," which are usually clearly defined "pocketbook" issues. For example, the Wyoming Outdoor Council is considering, among other issues, an organizing drive around utility rate reform, hoping that the issue will appeal to those who pay utility rates and, at the same time, encourage energy conservation in that sector.

The Idaho Conservation League is concentrating on rate reform after seeing the success of an affiliate group's campaign against the Pioneer power plant, which was based upon the anticipated



JOE LAMSON, staff member of the Northern Rockies Action Group in Helena, Mont., is a proponent of aggressive constituency building tactics. Lamson says that to have impact environmentalists must alter the political climate in which decisions are made.

250%-300% increase in electricity rates if the plant were built. Pollution and impact became secondary issues in the campaign, and its success was proven by citizens in three counties voting against the plant in referendum votes. ICL is quick to point out, however, that rate reform can also encourage energy conservation.

Wyoming's Powder River Basin Resource Council has organized landowners near Wheatland, Wyo., over the issue of transmission line right-of-way. The farmers and ranchers want to get the best



AVOCETS and other species of water-loving birds are common in the Chain-of-Lakes area. Photo by Tom Baugh.

possible financial deal from the power company on the routings, but at the same time, are concerned about the very existence of the lines.

PRBRC calls their Wheatland effort their most successful ever. PRBRC staff director Tom France says, "We now have 200 members in Platte and Goshen counties."

The purpose of increasing memberships is to change the political climate in the area. Joe Lamson of the Northern Rockies Action Group (NRAG) says, "Most decisions affecting the environment are basically political decisions. If you can create a certain political atmosphere that makes it easier for the politicians to agree with you, you will win more battles."

Lamson says that this political pressure is what keeps the politicians from constantly undermining previous victories. "The main thing about constituency building is building a political climate that keeps the laws working. If you're just winning lawsuits, they can be overturned. We're seeing now where a lot of good decisions are being overturned by Nixon's Supreme Court."

Constituency building, he says, "is trying to bring together a group of people who have a direct interest in an issue. You're not only aiming at your target; at the same time, you're bringing new people in."

ECONOMIC INTERESTS

More often than not, the "direct interest" that builds membership is an economic one. Lamson cites the case of a number of landowners near Helena, Mont., who organized to oppose a hard rock mine near them. "There, the group grew from 2 to 15

(continued on page 4)



TOM FRANCE: "Any group that wants an organizing drive is going to need people who will talk for a hour to some rancher in Rifle, Colo., instead of the governor."



HCN Letters

CAMAS CONTROVERSY

Dear Editors, HCN:

I was initially pleased to note that you had an article on the Nez Perce and their relation to the blue camas in your June 3 issue. Unfortunately, it promised more than it provided. It seems that either Carl Brown or your editors suffer from delusions of noble savages in a pre-Columbian paradise.

Mr. Brown writes that the life-view of the Nez Perce was that "young men shall never work." Later he comments that the Nez Perce "hated work because they had inherited a boundless wealth from the land. They viewed the work of the white man as a senseless toil that desecrated the land."

Considering myself a white man, I immediately responded "What a wonderful society! Alas, that it is too late for me to join." But I was too hasty, for soon I discovered my error.

Mr. Brown continues, "because the women refused to allow the men to help in such a crucial task, the men were free to do as they pleased." I suspect that gathering enough of the tiny camas roots to feed a family would be a great deal of work, as would preparing them for a meal. In fact, this sounds less like Eden than the life of most present day farmers' wives (to assume a modern division of labor by sex).

My error was to assume that I was a man (which my dictionary defines first as a human being) rather than only a member of that lesser race, the beast of burden, woman.

In short, Mr. Brown has attempted to interpret the economy of the Nez Perce without considering the amount of work that the women performed. The result is a naive and worthless analysis of anthropological and historical sources. It is also insulting to Indian women in particular, and to all women by extension.

This lack of understanding makes me suspect that the entire article is a useless piece of fluff unworthy of your generally high quality publication.

Julia Fellows
Washington, D.C.

MORE GRAZING CONTROVERSY

Dear Editors:

I'd like to make a few comments concerning Bridger-Teton National Forest's Supervisor Reid Jackson's remarks about my April 8th editorial on grazing in wilderness areas.

1. I was pleased to see Reid react so



quickly (in the April 22 issue) to my comments. This showed his concern as an interested land manager and his desire to alleviate many ranchers' fears of losing grazing rights in wilderness areas.

2. I suppose the term "revoked" was too strong. The Forest Service can stand on its record and say, "We've never revoked a grazing permit in wilderness areas," but other curtailing actions have occurred. Reductions in animal numbers can and have caused operations to fold, and some permits have been subject to relocation (not necessarily voluntary) from one area to a more distant area, which has caused economic hardship.

3. Reid took exception to my use of "predominant use" in describing cattle grazing in wilderness. I used it to mean historical use, or common, or widespread. Regardless of semantics, the Wilderness Act does recognize grazing as a legitimate use, by stating that the Wilderness Act is compatible with the Multiple Use Sustained Yield Act, and the uses designated therein... including grazing.

4. Range management is a complex subject, especially when wilderness is concerned. I strongly feel that wilderness should not be used as a scapegoat when livestock numbers are reduced because a permittee has abused the range, or when

increased recreational use results in conflicts with range use. Don't heap the blame on wilderness.

5. I hope the next time that the Bridger-Teton National Forest staff holds a public meeting on wilderness (or any other forest for that matter) that the staff members make it clear to ranchers that, as Reid pointed out, "no grazing permits have been revoked by the U.S. Forest Service where protected by the Wilderness Act."

Ranchers should not fear wilderness designation as long as the provision of the Wilderness Act, which contains the mandatory language that "existing grazing

rights shall continue," remains a part of the law.

I'm happy to have the High Country News as a forum for raising questions, gathering answers, and clearing the air of ill-founded fears.

Bart Koehler
Regional Representative
The Wilderness Society
Cheyenne, Wyo.

BURROS AND LIONS

Letter to The Editor:

In your 5-20-77 issue, one of the letters which you received pertaining to the burro problem in Grand Canyon suggested that lion predation be permitted to control the over-populations of the burros. I doubt that the process will work because I have seen five or six burros run a mature female lion off a foal kill in the canyon.

Another bit of evidence was observed in Bass Canyon near the Tonto level when we ran across the badly flattened carcass of a lion cub. There was hardly enough left for the vultures and coyotes.

Corry McDonald
Albuquerque, N.M.

POWERFUL LEGENDS

Dear HCN,

Carl Brown's Blue Camas story (HCN 6-3-77) is exceptional. Nothing like being educated to concern by powerful legends.

Stories like that reaffirm HCN's touch, its latitude, beyond day-to-day journalism. It would have made sense one hundred years ago and will mean as much if not more in the future. Thanks for printing a good 'un.

Gary Nabhan
Tucson, Ariz.



HCN models: Aimee Dailer, Kim and Kris Nations.

**HCN
T-shirts
\$5.00**

Silk-screened by hand to give a quality impression. T-shirts are 100% cotton. Order your exact size; shirts are a little large to allow for shrinkage. (Eagle motif is from an original drawing by Carol Snow.) When you buy a HCN t-shirt, you help out the paper financially and you'll help spread the word around, too. Shirts are white with black print. Frontal image.

Now in blazing colors.

HCN t-shirts are now available in colors: pure white, light blue and hot orange, all with black images.

Quantity	Size	Adult	Shirt colors (select white, blue or orange).
Youth		Small (34-36)	My first choice is _____
Small (24-26)		Medium (38-40)	My second choice is _____
Medium (28-30)		Large (42-44)	please check one of the following:
Large (32-34)		X-Large (46-48)	_____ If the above colors are not available, hold my order until more shirts are in stock.

Please send me some HCN T-shirts.
Enclosed is \$5.00 per shirt (postage included).
name _____
address _____
city _____ state _____ zip _____

Send order to HCN, Box K, Lander, Wyoming 82520

(Wyoming residents add 3% sales tax.)

HCN Research Fund:

it works!

Two stories in this issue of HCN, yarned by Carl Brown and Red Desert uranium mine by Phil White, were paid for with research fund monies.

To help HCN with its coverage of the West, send a tax-deductible donation to the High Country News Research Fund. Thank you.

Enclosed is a donation to the fund.

name _____
address _____
city _____ state _____ zip _____

Please make out checks to Wyoming Environmental Institute—HCN Research Fund, and send to: WEI, P.O. Box 2597, Jackson, Wyo. 83001. Thank you.

High Country News

Published biweekly at 331 Main, Lander, Wyo. 82520. Telephone 307-332-4877. Second class postage paid at Lander.

Publisher Thomas A. Bell
Managing Editor Joan Nice
Associate Editor Marjane Ambler
Office Manager Mary Margaret Davis
Advertising Manager August Dailer
Contributing Editor Dan Whipple
Circulation Manager Georgia Nations
Editorial Assistant Sarah Doll

Subscription rate \$12.00
Single copy rate 40 cents

Material published in High Country News may be reprinted without permission unless it is copyrighted. Proper credit should be given to High Country News, Box K, Lander, Wyo. 82520. 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



Editorial

HCN

Search for power plant site should be state's responsibility

The Idaho Legislature has started the state on a good path toward energy planning that other states in the West should scrutinize. Both Idaho Public Utilities Commission (PUC) and, apparently, Idaho Power President James Bruce hope the new system for choosing power plant sites will lead to the most environmentally, economically, and socially acceptable sites. Idaho Power no doubt hopes this will quiet the opposition.

After a period of bitter dissension in the state over the proposed Pioneer power plant, the 1977 legislature directed the Public Utilities Commission to set minimum environmental criteria on potential sites for energy generating facilities. The commission was also told to rank the 21 sites in at least five priority groupings.

Now the commission has narrowed the acceptable sites to three, and Idaho Power has said it is "willing to work with anyone" to pick the final site. "We learned our lesson with Pioneer. We really got burned. We thought it was the best site and still do, but this time we intend to work with all groups and collectively find an acceptable site," Bruce said.

Of course Bruce's attitude is more conciliatory than we can imagine utility executives' attitudes being in any other Western states where the "free enterprise" banner still attracts unquestioning allegiance when such a topic arises. Who ever heard of a power company being told where to put its plant?

In Idaho, it's different. Idaho Power "really got burned" by the people who voted overwhelmingly against siting the Pioneer plant near Boise and by the PUC, which said more power is needed but agreed the site would not be acceptable. Idaho Power had reason to be surprised by this treatment — we can think of no other instance in the region when a power plant's proposal has been flatly turned down.

Idaho has taken a good first step, but to

do it right, the PUC needs money. As the *Idaho Statesman* points out, with proper funding, the commission could hire consultants to study the interdependence of need, site, ownership, size etc. — not only for this Idaho Power plant, but for any future plants.

The commission could decide whether a particular valley was out of the question because of temperature inversions that would trap smog. Or it could say Idaho Power should consider building a plant outside of the state in connection with

another utility. It could suggest sites that were close to load centers, that didn't use up prime agricultural land, that had enough water, that would have the least social impact.

Every state that has tried to rule on whether or not a power plant should be built and how big it should be knows the frustration of the present situation. Before the state is ever involved, the company has already invested thousands of dollars in site selection studies and consulting fees. The state is merely reacting — and basing

its reaction only upon information supplied by the proponents and the opponents of the plant.

We think it's urgent that other Western states recognize that just because power development offers an attractive tax base and jobs doesn't mean the utilities should direct the whole show. The companies aren't likely to abandon our coal resources and market area just to avoid a little state control over siting. It's a step they must take.

—MJA



Guest Editorial

HCN

Last chapter of violent assault

by Mike Leon
Reprinted from the SHERIDAN PRESS

I feel it in my bones. I think you do, too. Within 20 years the Wyoming we once knew will have become unrecognizable. In less than a generation it will have been degraded from a leading example of environmental quality to one of the worst.

I'd bet on it. And I'll tell you why. First, there is the obvious fact that the rest of the country has begun to value Wyoming primarily for its energy resources. It is plainly not willing to make the necessary adjustments in lifestyle for the sake of preserving intangible environmental qualities anywhere, never mind Wyoming. It is hardly cognizant of those qualities anyway.

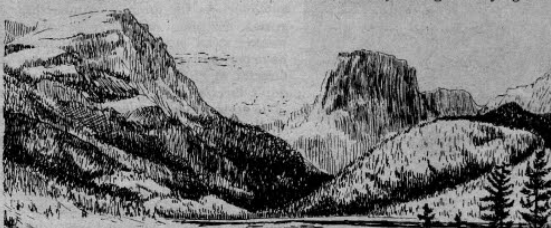
The Carter Administration is stressing energy conservation but it is also discovering that most Americans are obdurately determined to continue energy waste at any cost including eventual social, economic, and environmental chaos.

Nonetheless, we could cope with the rest

of the country if we wanted to. We could insist that if the Rocky Mountain West had once been, in DeVoto's words, a "plundered province," Wyoming will be so no longer. We would support the strongest sort of strip mining legislation at the federal level

combined effort is. And that is Wyoming's tragedy.

The environmental movement proliferates. But in terms of regiments and divisions it does not grow. It has made its alliances, the easy and ego-satisfying ones,



and bolster such a law with firm administration and legislation of our own.

That beneficial synthesis is not about to happen. Wyoming's governor, under the banner of state's rights, long used in the South to perpetuate racial discrimination, has just stated we do not want or need a federal strip mine law.

This question of state's rights leads to

another of the anomalies which bedevil Wyoming's future. The coal companies are fighting the strip mine bill, knowing full well that the state legislatures can be more easily bent to their will. Leave it to the states, is the coal company cry.

But when necessary, energy companies will take the opposite tack, appealing to the federal power. The Yellowstone River Compact between Wyoming, Montana, and North Dakota is about to be challenged by a company that wants Yellowstone River water for its energy projects and knows it cannot have it so long as two of the three signatories to the pact refuse to be accommodating. The company will challenge that compact on lofty grounds, namely, that it is unconstitutional for states to enter into such an agreement. The result is that Wyoming finds itself driven in the direction the energy companies want it to go by both state's rights and federal dominance arguments.

But even these burdens on Wyoming's future are not fatal ones. Ultimately, Wyoming's decimation will occur because the coalition of Wyoming people who could prevent it can never come into effective being. That coalition would require, as a basic, a united front between Wyoming labor and Wyoming agriculture. I hardly need to remark on how unlikely such a

but they are not the effective alliances, the ones that will work in the future.

The only thing that wins year in and year out, decade after decade, is a coalition with a broad base. In Wyoming's case no such coalition exists or can.

Divided, confused, suffused by the smell of big, big money, badly led by the political exegesis of both parties, Wyoming will almost certainly become the last chapter of this country's violent assault on its resource base. We are the last bonanza. We are the ultimate Eureka! I've found it!

We are the farewell party. The country will live off us for a while as we are turned upside down, literally and figuratively. And if you look around a bit you will notice that a lot of people are rubbing their hands over the prospect.

HCN could not get by without a little help from its friends.

If you like what HCN is doing, maybe you would like doing something for HCN. Here's a list of a few of the things that you can do to help HCN.

Display the poster insert in a prominent place.

Send HCN some names of people whom you would like to receive a sample copy.

Ask a newsstand or a bookstore to carry HCN or send its address. Send names of possible advertisers: people you purchase from.

Tell your friends about HCN.

Wear an HCN T-Shirt.

HCN condenses two stories it publishes into two 500-word columns every month. If you feel a local paper would be interested, send an address.

If you would like to lend a hand, write HCN at Box K, Lander, Wyoming or call (307) 332-4877. Thank you.



© Carol Snow

Offer to type names on mailing labels for HCN (HCN will send the names and money for the labels).

Tell the library about HCN.

Distribute copies of HCN at a club meeting. (HCN provides free copies of the paper for this.)

Tell your congressman about HCN.

HCN long-shot: Do you have office equipment lying about? HCN needs file cabinets, desks, typewriters, and other office equipment.

SUN SIGN SUBSCRIBER NOTICE



Attention all Leo subscribers (by our definition, subscribers who have a 8-77 on their address labels) — it's almost time to renew.

Your subscription doesn't actually run out until the end of August. But we know what good organizers you are. What a flair you have for life. And how generous you are to High Country News.

So save us the cost of reminding you individually and keep that biweekly environmental news coming. Send your \$12 now.

4-High Country News — July 15, 1977

Building power. . .

(continued from page 1)

people by drawing in those people who have an economic stake. Since the town of Helena gets its water supply from near the site of the mine, the entire town of Helena was a potential constituency. By recognizing this, the group was able to bring more people in."

The concept of combining economic self-interest and environmental protection goals is not new to the West. Both the Northern Plains Resource Council and the Powder River Basin Resource Council were founded to protect the rights of an interest group. PRBRC's France says, "Our constituency is ranchers and landowners, and that's pretty well-defined. Other groups also have constituencies, but they are often rather ill-defined. They are constituencies that conceptualize about conservation issues."

But, many of the groups with more "concept-oriented" constituencies, espe-

cially those that are active in legislative lobbying, are thinking of turning more attention to issues that will appeal to the direct economic interests of a well-defined group, like utility rate payers, or ranchers faced with transmission lines.

But, this approach to constituency building is not without critics. Some conservationists argue that, under this approach, the organization becomes more important than the issues.

The Colorado Open Space Council Mining Workshop monitors oil shale, coal, and uranium development to assure that federal and state agencies enforce their regulations. Its work depends largely upon staff efforts in researching and testifying and not upon a large membership base. However, it is funded mostly by donations from the public. Workshop director Carolyn Johnson says, "Constituency building is a real possibility for us. But, you have to consider why you are growing. You do reach a point where you have to ask, 'is everybody fully aware of where they want to go?' If you're going for size, you're going to end up like the Democratic and Republican parties. Your platform will be a bunch of ideas that contradict each other."

NRAG's Lamson says this fear isn't warranted. "Groups are formed around issues. How you cut those issues is important."

WEAKER ISSUE STANDS

There is an important danger to a large, successful constituency-building effort, however. As the group's membership grows, the group may have to take a weaker stand on an issue than it would have previously. Lynn Dickey, former staff director at PRBRC, says of groups that don't emphasize constituency building, "The organization is not required to make compromises to dilute the philosophical purity of the stands it takes."

An example of this "softening of positions" can be found in the dissension following the nomination of Stanley Hathaway for Secretary of Interior a few years ago. The Wyoming Outdoor Council had recently completed a very successful state legislative lobbying session by building a coalition of interest groups. When Hathaway's nomination was announced, there was internal struggle in the group between those who wanted to vigorously oppose his appointment and those who felt that doing so would alienate the coalition members that had been so carefully courted, many of whom supported the



LYNN DICKEY, former Powder River Basin Resource Council staff director, says, "In a constituency-built group, you've got an identifiable group whose members have a real stake in their way of making a living and their way of life. The constituency has a stake that Legislator X can understand when it is explained to him."

popular former governor. Although a weak resolution of opposition was eventually adopted, the testimony of the group's executive director against Hathaway during his U.S. Senate confirmation hearings did cause some of the coalition members to protest.

And, at the June 1977 WOC annual meeting, when the possibility of a strong constituency-building drive was discussed, the membership refused to authorize a strong WOC wilderness position, for fear that such a committee would alienate potential supporters on other issues.

Another problem with a large membership was demonstrated in Montana by the Gallatin Sportsmen's Association when their membership doubled between winter and spring of 1976. The new members voted to reverse GSA's position in support of U.S. Senator Lee Metcalf's (D-Mont.) Montana Wilderness Study bill.

On a more subtle level, a group that plunges heavily into constituency building must weigh carefully what issues are approached and those that are avoided. Dickey says that at PRBRC, "we have to be

sure that the stands we take are okay with the great majority of our members. That stance requires re-evaluation of former positions, not in the light of theoretical attitudes, but in terms of political climate."

Current PRBRC staff director France echoes this sentiment. In a group that hasn't gone out to build a big constituency, "the staff is given a pretty free hand. They are able to do some things our constituency wouldn't let us. For example, a stand either for or against land use would deeply divide our board of directors." France also says that a more "concept-oriented" membership has more opportunity to address the general issues of environmental protection. If every group had a well-defined constituency, he says, "some of the broader issues wouldn't be addressed."

POLICY IMPACT

But, says Dickey, "If your goal is to affect policy, the philosophically-pure approach is a distinct drawback. It's too easy to divorce yourself from the real world. In a constituency-built group, you've got an identifiable group whose members have a real stake in their way of making a living and their way of life. The constituency has a stake that Legislator X can understand when it is explained to him."

Legislatively-oriented groups are now taking a hard look at the possibilities offered by constituency building. An example of the difficulties involved in the switch is the Wyoming Outdoor Council. WOC was formed to coordinate statewide conservation efforts and act as the statewide political arm of a coalition of Wyoming environmental groups. Over the years, the interest of many of the original coalition member groups has waned, and WOC has become more dependent on individual members, who number over 300. To enlarge that membership base, WOC is now considering a full-fledged constituency-building effort.

WOC's executive director, Colleen Kelly, says that the group wants to develop "grass-roots support for the organization and the issues we deal with, with the specific purpose of building political clout. There are two ways to do this. First, we could choose an issue (to organize around) with broad political appeal and go organize — for instance, on mineral severance taxes or utility rate reform.

"Secondly, we could go with the

(continued on page 5)



COLLEEN KELLY, executive director of the Wyoming Outdoor Council, says of constituency building, "You have to tread a careful line remembering what you believe and what you plan to accomplish — not just building your organization."

Public asked to help reform U.S. water policy

President Jimmy Carter is not backing down on his resolve to reform the nation's water policy, despite Western states' Congressmen's strenuous objections to his efforts to cut off funds for water projects.

Operating under the intense time-table directed by the President, task forces are — in two weeks — putting together "option papers" on topics as encompassing as Indian water rights, cost-sharing of federal projects, water conservation, and appraisals of water laws, rights, and practices.

The option papers will be used as a basis for discussion at public hearings to be held across the country in July and August. They will be published in the *Federal Register* July 15. Carter will announce his final policy statement Nov. 1.

Carter has said that through this process he is seeking a "comprehensive reform" of water policy with "water conservation as its cornerstone." Many of the ideas for water reform directly affect the West, where Carter has said development should

be limited, specifically because of the shortage of water.

Brent Blackwelder of the Environmental Policy Center says it is important that the government receive a lot of input. He suggests that environmentalists might want to stress several points, including: the need for water conservation, improved water pricing, and recycling; designation of scenic rivers and river conservation; flood control projects that don't require dams; review of old projects to be sure they pass current standards; and a smaller burden for the federal government in cost-sharing of irrigation projects.

Interior Secretary Cecil Andrus made many of the same points in an address to the National Water Conference this spring. Water projects funding was a major topic, and Andrus emphasized that if local cost-sharing had been required in the past, many projects would not have been built, implying local governments would have been more sensitive to poor cost-benefit ratios.

The major points that he made will be

dealt with in the policy review and offer a clear indication of the Administration's preliminary leanings. Some of Andrus's ideas, as summarized by *Water Information News Service*, follow:

INDIAN WATER RIGHTS. Andrus called for a quantification of "reserved rights" for Indian reservations and other federal lands. He said the country faces a conflict between the "legitimate right of Indians to develop their resources and the impairment of enormous capital investments already made by non-Indians in the same water supply."

WATER CONSERVATION. He said one way to encourage conservation might be to require individual water meters for homes receiving water from federal systems and to set water efficiency standards for irrigation and for other projects where federal money is involved.

WATER QUALITY AND QUANTITY. "Waste water reuse, artificial groundwater recharge, minimum streamflows, and safe drinking water are primary-objectives —

not just afterthoughts or appendages," Andrus said.

Public hearings on these options will be held throughout the country. The hearing in this region is scheduled for Denver on July 28-29 at the auditorium in the Main Post Office Building, 1823 Stout St., from 9 a.m. to 1 p.m. and 5 p.m. to 10 p.m. on the first day and from 9 a.m. to 5 p.m. the second day.

Written statements will be accepted until August 9 if sent directly to the Policy Committee, Water Resources Council, 2120 L St., NW, Washington, D.C. 20037. Letter writers should send copies to their Congressional representatives, too.

Anyone wishing to speak should write to John Neuberger, chairman, Missouri River Basin Commission, 10050 Regency Circle, Suite 403, Omaha, Neb. 68114 at least two days before the hearing.

Other hearings will be held in Minneapolis, Boston, Atlanta, and Los Angeles on July 28-29, and Seattle, Dallas, and Cincinnati on August 1-2.

USFS slates wilderness meetings

The U.S. Forest Service has tentatively set dates for the first round of public meetings on roadless areas.

The agency is redoing its old Roadless Area Review, a document that identified lands suitable for wilderness designation and study. As a result of the new review, more lands with wilderness potential are expected to be located.

At the summer meetings the agency will invite the public to check agency maps for accuracy and to make general comments on wilderness. Questions to be raised include: How much wilderness is enough? Should wilderness be close to cities? What activities should be allowed in wilderness?

At a second round of meetings in late fall or early winter the Forest Service will ask the public to comment on the desirability of wilderness designation for local roadless areas.

Beware: the dates, times, and places below are subject to change. Check with your local Forest Service office later this month for confirmation.

(See HCN July 1, 1977, page 5, for further information about these meetings.)

COLORADO

Fort Collins
Aug. 4, 7 p.m.
REA Building
Denver
Aug. 4, 7 p.m.
Regency Inn
Boulder
Aug. 4, 7 p.m.
Fairview High School
Pueblo
Aug. 4, 7 p.m.
Sangre de Cristo Arts and Conference Bldg.
Colorado Springs
Aug. 6, 1 p.m.
East Junior High School
Denver
Aug. 6, 1 p.m.
Marriott Inn
Craig
Aug. 8, 7 p.m.
Craig Jr. High School
Ouray
Aug. 8, 7 p.m.
Ouray City Hall
Glenwood Springs
Aug. 9, 7 p.m.
Holiday Inn
Aspen
Aug. 9, 7 p.m.
The Grant
Grand Junction
Aug. 9, 7 p.m.
Two Rivers Plaza
Steamboat Springs
Aug. 9, 7 p.m.
Yampa Valley Electric Assoc.
Eagle
Aug. 10, 7 p.m.
New School Admin. Bldg.
Montrose
Aug. 10, 7 p.m.
Montrose Elks Lodge
Gunnison
Aug. 11, 7 p.m.
Gunnison High School
Frisco
Aug. 11, 7 p.m.
Holiday Inn
Del Norte
Aug. 12, 7 p.m.
Mesa Elementary School
Buena Vista
Aug. 12, 7 p.m.
Mt. Princeton Hot Springs
Pagosa Springs
Aug. 15, 7 p.m.
Elementary School

Durango

Aug. 16, 7 p.m.
Fine Arts Bldg.
Ft. Lewis College
Cortez
Aug. 17, 7 p.m.
Municipal Building

IDAHO

Boise
Aug. 10, 2 and 7 p.m.
New State Office Building
Twin Falls
Aug. 11, 7 p.m.
College of Southern Idaho
Coeur d'Alene
Aug. 4, 7 p.m.
Idaho Panhandle NF
Orofino
Aug. 7, 7 p.m.
Orofino High School
Grangeville
Aug. 1, 7:30 p.m.
Grangeville High School
Moscow
Aug. 3, 7 p.m.
Student Union Building
University of Idaho
St. Maries
Aug. 9, 7 p.m.
Masonic Hall
Sandpoint
Aug. 11, 7 p.m.
Federal Bldg. Conference Room
McCall
Aug. 9, 7 p.m.
Shore Lodge (Mill Room)
Challis
Aug. 12, 7 p.m.
American Legion Hall
Idaho Falls
Aug. 11, 7 p.m.
Westbank Motel
Pocatello
Aug. 8, 2 and 7 p.m.
Holiday Inn
Salmon
Aug. 12, 7 p.m.
Pioneer School

MONTANA

Hamilton
Aug. 11, 7 p.m.
Elks Lodge
Great Falls
Aug. 3, 7 p.m.
Rainbow Hotel
Helena
Aug. 2, 7 p.m.
Helena Senior High School
Butte
Aug. 4, 7 p.m.
Ramada Inn

Dillon

Aug. 8, 7 p.m.
Catholic Family Center
Billings
Aug. 11, 7:30 p.m.
Student Union Building
Eastern Montana College
Bozeman
Aug. 10, 7 p.m.
Ballroom, Student Union
Montana State University
Libby
Aug. 4, 7 p.m.
Memorial Gymnasium
Kalispell
Aug. 3, 7 p.m.
Outlaw Inn
Missoula
Aug. 2, 7 p.m.
Eagles Hall

UTAH

Cedar City
Aug. 9, 7 p.m.
Music Recital Hall
So. Utah State College
Provo
Aug. 11, 7 p.m.
Provo High School
Logan
Aug. 16, 7 p.m.
Logan High School
Ogden
Aug. 17, 7 p.m.
Weber St. College
Student Union Building
Price
Aug. 10, 7 p.m.
Carbon County Courthouse
Moab
Aug. 11, 7 p.m.
Grand County Courthouse
Vernal
Aug. 8, 7 p.m.
Uintah County Courthouse
Richfield
Aug. 16, 7 p.m.
Richfield High School
Tonopah
Aug. 15, 7 p.m.
Tonopah Convention Center
Salt Lake City
Aug. 18, 2 and 7 p.m.
Skyline High School
SOUTH DAKOTA
Rapid City
July 26, 7 p.m.
Howard Johnson Motor Lodge
WYOMING
Lander
Aug. 8, 7 p.m.
American Legion Hall

July 15, 1977 — High Country News-5



Photo courtesy of the Idaho Department of Commerce.

Rock Springs
Aug. 9, 7 p.m.
Mountain Fuel Bldg.
Cheyenne
Aug. 9, 7 p.m.
First Methodist Church
Jackson
Aug. 10, 2 and 7 p.m.
Virginian Motel
Casper
Aug. 10, 7 p.m.
Ramada Inn
Cody
Aug. 10, 7 p.m.
Cody Auditorium
Sheridan
Aug. 11, 7 p.m.
Central Jr. High School
Sundance
Aug. 11, 7 p.m.
Crook County Courthouse
Greybull
Aug. 16, 7 p.m.
Elks Lodge

Building power. . .

(continued from page 4)

philosophical approach and organize on what the organization has traditionally believed (encompassing values such as 'quality of life' or 'slow growth'). We'll probably have a smaller constituency with the second tactic."

Kelly admits, however, that if her group took the first approach, WOC would change: "A large constituency would dilute the strength of some stands. You'd have to take a more popular approach to issues."

At WOC's annual June meeting, prioritizing issues that would "get members" was discussed. One participant in the meeting said, "There was discussion of what was good for WOC, but not what was needed for the state." Kelly agrees that the group has to be careful not to turn too self-interested: "It's somewhat dangerous to go to a completely constituent-based organi-

zation. You have to tread a pretty careful line remembering what you believe and what you plan to accomplish — not just building your organization."

EXAMINING GOALS

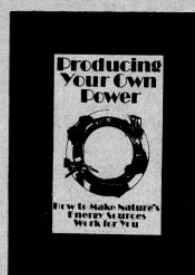
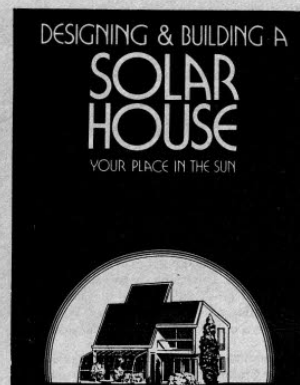
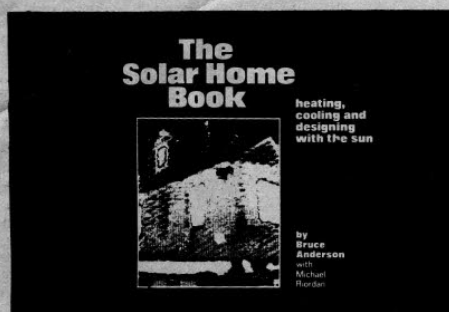
Moving heavily into grass-roots organizing requires a constant reassessment of a group's goals, however. Lynn Dickey says, "I see no way around any group redirecting its goals, unless it was prescient enough to land exactly on those issues that already have a large potential constituency."

PRBRC's Tom France says, "It would be tough to switch and maintain the same identity. They've got to identify the issues that will keep their old members and bring in new ones. They've also got to get people who are willing to get out and knock on doors and talk to people and organize. They would need to develop a staff with different

expectations. Any group that wants an organizing drive is going to need people who will talk for an hour to some rancher in Rifle, Colo., instead of the governor." "Obviously," France says, "such a group will undergo some changes. It's not a quick process."

Constituency building is more than just a way to "get members." Coalescing a large group of people to fight for a common goal requires reassessing that goal and, perhaps, redefining it, to appeal to a broad and, necessarily, diverse base of people. Many of those involved recognize that this can be taken to an extreme.

One long-time conservationist says, "You can tell when you're diluting your core issues and beliefs to the point where your best people are mad and you're attracting more and more non-committed people. Then you realize that perhaps you're too diversified for your own good. If you want a lot of members, then form a garden club."



Reviews by Joan Nice

It used to be difficult to find information on solar energy. Now, there are so many sources, it's hard to avoid inundation.

The varied offerings of five good books in the field are examined below.

Solar home building books abound



Heating, Cooling and Designing with the Sun

The Solar Home Book

by Bruce Anderson, with Michael Riordan, Cheshire Books, Church Hill, Harrisville, N.H. 03450, 1976. 297 pages, \$7.50 paperback.

The *Solar Home Book* has replaced the need for bibliographies citing the dozens of sources you need to consult if you wish to buy or build a solar home. Now you need go only one place — for a start anyway — to *The Solar Home Book*.

The book is comprehensive, attractive, and clear; it is also persuasive. Author Bruce Anderson offers a common sense approach to a broad range of technical material, emphasizing simple, cost-effective designs.

This is no instant, slap-it-together, do-it-yourself book, however. Anderson makes the reader well aware of the complexities of designing a solar system. Do-it-yourself systems are not easy, he counsels.

Despite a mountain of technical material, the text reads smoothly. Calculations and details are placed outside the main body of the text where they can be absorbed at leisure or skipped.

The book is full of the answers to questions that keep solar tinkers awake at night. How many layers of glazing should you put on a collector? Is a selective surface worth the money? What kind of insulation is best on a collector? Anderson also explains how to calculate collector performance within 20% of the actual efficiency.

The book has a detailed history of the early solar experiments in this country, as examples of the possibilities and pitfalls the reader is facing. The reader who studies the second chapter, which describes 13 solar homes completed before 1960, won't be likely to reinvent the wheel himself, but will be amazed at how many others have recently done so.

Anderson, founder and president of Total Environmental Action, Inc., a research, education, and design firm in Harrisville, N.H., says he thinks the use of solar energy is at a crossroads. "It can be used in ways that perpetuate the status quo and hasten the demise of an over-exploited environment, or it can be used in ways which enrich our lives and bring us closer to our natural surroundings. I hope my book will help us to walk this latter path."

Your Place in the Sun

Designing and Building a Solar House

by Donald Watson, Garden Way Publishing, Charlotte, Vt. 05445, 1977, 281 pages, \$8.95 paperback.

Designing and Building a Solar House competently covers much of the same important territory as *The Solar Home Book*. Both are well worth their price and speak to a broad audience; the differences between them are subtle ones, related to the authors' attitudes.

Watson says that placing solar collectors on a house is a "more advanced" form of technology than passive techniques. He also recommends always using a combination of passive (non-mechanized) and active (mechanized) systems. Anderson clearly prefers the passive path wherever it is feasible.

Information on choosing and coordinating architects and builders is emphasized in Watson's book. Information on building materials is more complete in Anderson's.

Watson seems to be speaking to people interested in shopping for and understanding sophisticated solar homes. Anderson, with his emphasis on low cost and simplicity, would rather inspire people to build their own.

If you can't afford to hire an architect, Anderson may be a slightly better choice for you than Watson. If you are after a stylish, elegant solar home, choose Watson.

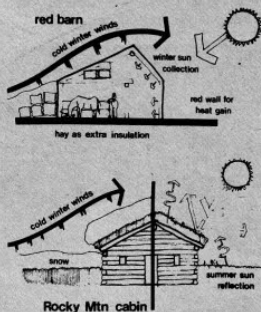
But either book will offer you a good basic solar energy education. Both are well written and well illustrated.



HARNESSING THE SUN. This is away at the winter solstice by THE SOLAR HOME BOOK.

Sun Earth

If Crowther is a snob, he is a painstaking, ingenious, humble-before-nature snob whose work is worthy of study.

[illegible]

How to Make Nature's Energy Sources Work for You

Producing Your Own Power

Editor Carol Huppig Stoner chose some of the most experienced small-scale alternate energy technologists in the country to write the various chapters: Henry Clews and James B. DeKorne on wind; Ken Kern on wood; the New Alchemy Institute on methane; Don Marier on combined alternate energy systems; and Eugene Eccle on energy conservation. The result of this guest-expert approach is more lively, but less comprehensive and consistent reading.

Solar Heated Buildings

Is solar technology saving homeowners money? No, says Shurcliff in his introduction, unless it is replacing electrical heating. Cost is such a problem with today's systems that technical elegance and collector efficiency may be less important to de-



Other well known tinkerers featured in this book offer similarly useful tidbits. **Producing Your Own Power** in combination with one of the more comprehensive books listed here, **The Solar Home Book, Designing and Building a Solar Home**, or **Sun Earth** would make a solid, basic alternate energy library.

Solar energy growth has been and will continue to be very rapid — "almost explosive," Shurcliff says.

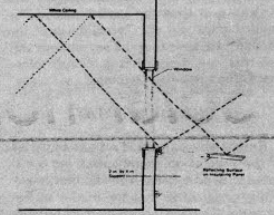


FIGURE 52. Light reflected to the ceiling of a room from the reflective rear surface of a one-sided insulation panel.

SOLAR LIGHT FROM PLAIN, OLD WINDOWS. Robert F. Girvan figures that the sun coming in his south-facing window in Iowa is worth 17 cents a day measured by the cost of electric light. To collect more light and distribute it better, Girvan has built insulated reflectors on his windows like those shown in the diagram above. Closed at night, they help the home retain its heat. Girvan is author of the chapter called "Space Heating With Solar Energy" in **PRODUCING YOUR OWN POWER.**



FIT FOR THE GODS. An Aztec god warms himself against a stone wall at the Inca citadel. Drawing from **THE SOLAR HOME BOOK.**

8-High Country News — July 15, 1977

Desert mine. . .

(continued from page 1)

foot that would be deposited by 15 years of evaporation.

The MEC study plays down the problem of reclaiming the flooded lands: "Greasewood should be able to re-establish itself naturally in any denuded areas because of its tolerance to high salinities and requirement for considerable water."

Gary Beach, soil scientist at DEQ, is not convinced. In a June 17, 1977, memorandum, Beach wrote: "the potential for reclamation of the greasewood plays has not been established. A reclamation plan which demonstrates that the plays can be reclaimed to an equivalent condition within the (legal time limit) has not been developed." Beach recommended that an "intense study" of soil degradation be conducted prior to issuance of the permit.

Dennis Knight of the University of Wyoming botany department has been studying the Chain-of-Lakes area for more than a year under grants from the National Park Service to identify and assess potential Natural Landmarks in the Wyoming Basin. Chain-of-Lakes and Battle Springs Flat are prime candidates for such designation.

At DEQ's request, Knight commented upon the engineering reports submitted by MEC. In a June 2, 1977, letter to DEQ, Knight said that the reports tended "to minimize the potential problems of reclamation." He says they did not confront the essential question: what is the salt tolerance of greasewood seedlings?

UNIQUE HABITAT

Knight also expressed concern that loss of the vegetation would open those 3,500 acres to wind erosion when flooding stops. Knight indicated that the mining operations could have a large impact on the wildlife of the area, especially if the removal of large amounts of water from the ground

water table results in the shrinkage of Circle Bar Lake and the Chain-of-Lakes.

"It appears to us that the Chain-of-Lakes area is unique. Aquatic, marshy habitats in the Red Desert are rare and we suspect that there is nothing comparable within a distance of 40-50 miles," Knight said.

The Wyoming Game and Fish Department has purchased 62,000 acres in the area for antelope winter range. According to W. Donald Dexter, assistant Game and Fish director, "the project will adversely affect the winter range of 800 antelope." (See HCN, June 17, 1977, pg. 8) In addition, the area is an important habitat for waterfowl, sage grouse, prairie dogs, and wild horses.

Game and Fish has recommended that the mill tailings pond be fenced and covered. "Water in the tailings pond will be acidic enough (pH 1.5 to 2.0) to cause injury or death to small mammals and waterfowl," the report states. Frank Knackstedt, administrative manager for MEC, says the company is considering fencing the pond but has no plans to cover it.

Knackstedt emphasizes that plans for disposal of the water are not definite yet. In addition to the evaporation proposal, the company has also considered pumping the estimated 7,200 to 10,000 gallons per minute into Circle Bar Lake, which would more than double its size. It has also considered creating artificial lakes.

The impacts of MEC's Sweetwater Uranium Project could equal those of the Black Butte coal strip mine proposal, which involves a permit area of 56 square miles southeast of Point of Rocks, Wyo., east of Rock Springs. Both projects are in the initial stages of study by DEQ personnel.

The impacts of the uranium project are large because the area has previously been a vast, unknown, inaccessible sagebrush steppe, home for free-ranging antelope. MEC now plans to build a 30-mile paved road from Bairol to the mine site. In addition, Pacific Power and Light (PP&L) has received permission from the Wyoming Public Service Commission to build a \$1.2 million power line and substation.

The power line would bring 115 kilovolt

(kv) from Bairol west 18 miles to the proposed Great Divide Substation. A 34.5 (kv) line would then be built 11 miles south to the MEC site. Other lines would go north to supply other energy projects, such as

Lucky Mc and Western Nuclear uranium developments. PP&L is awaiting right-of-way approval from the Bureau of Land Management for the line.



SANDS AND SILT. Now salt crystal sands amid silt dunes are held by the greasewood, preventing wind erosion at Chain-of-Lakes. However, if Minerals Exploration Co. is allowed to flood the area around its proposed uranium open pit mine with salty water, the greasewood might not be able to survive after the water is gone, according to one expert.

Photo by Philip White

Where will the Great Seal go?

by Philip White

"This isn't so bad," we thought as we came to the lip of Chain-of-Lakes rim

after traversing 25 miles of treeless landscape by dirt road. From the topographic map, we had expected that the road would plunge over a precipitous

ridge down into a basin of numerous intermittent lakes and two or three permanent ones.

Instead, the ridge descended gently off a "rim" of relatively little relief. Accustomed to the green maps of mountain forests, with many blue streams wiggling in brown contour-line canyons, we were perplexed by the seeming failure of this desert topography to match the dramatic lines on the desert map.

A couple of hours later, we stumbled upon the answer to our topographic quandary: maps of the Red Desert have 10-foot contour lines! They are thus four times more detailed in their treatment of elevation differences as are the 40-foot contour maps of the mountains.

We surmised the reason the U.S. Geological Survey (USGS) uses 10-foot contours for the desert is that if it used normal intervals and omitted township lines, the maps would be nearly all white and blank.

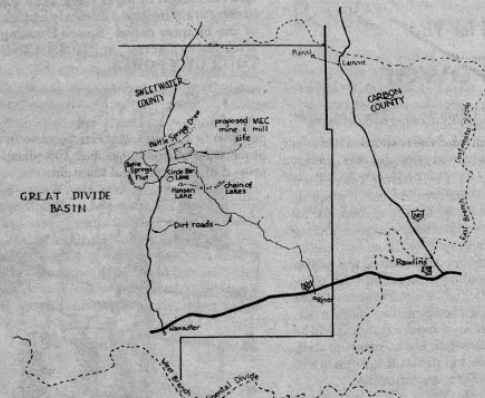
Soon, though, with paved roads, uranium mines and mills, oil well development, power lines, and employ housing projects advancing on the Red Desert, USGS will have plenty of man-made features to fill in those open spaces.

We were there during the second week of May. The wind blew a steady gale, raising huge whirlwinds of white alkaline dust from the shores of Circle Bar Lake. We walked through the strange marsh and over the small hummocks called silt dunes. I thought the country was alien and hostile until we saw a flower stalk with red buds rising from a basal rosette of bright green leaves. It looked somehow familiar. We continued along the fringe of the marsh looking for one in full flower. Finally, we found the nodding red-and-yellow fountain of the shooting star (*Dodecatheon pulchellum*), the same flower which brightens lush mountain streambeds in late June.

The next morning, we found 16 species of water birds on the lakes and 10 others amidst or above the greasewood. Among the water birds were the white-faced ibis, black-necked stilts, willets, and many American avocets.

"All these roads, mines and other developments out here mean trouble for those guys who design the state highway map," my friend, Bill Romme, said. "Why's that," I asked.

"Pretty soon they won't have any place on the map to put the Great Seal of the State of Wyoming," he said.



PROPOSED MINE SITE. Minerals Exploration Co. proposes its open pit uranium mine at this site in the Great Divide Basin in the Red Desert of Wyoming. Now only dirt roads reach the site, but MEC proposes a 30-mile paved road from Bairol to the mine.



Western Roundup

HCN



WILDLIFE HABITAT in Wyoming may be significantly imperiled by strip mining. The Bureau of Land Management estimates that 67,000 acres of land will be affected in southwest Wyoming, only three to five percent of which can be restored to wildlife use.

Wildlife habitat imperiled by mining

The Game and Fish Department is conducting a study to determine how wildlife species and plants would be affected by federal coal leasing in southwest and south-central Wyoming. The information gathered will be part of environmental impact statements on the regions being prepared by the U.S. Bureau of Land Management.

In the southwest Wyoming area BLM estimates that that proposed local leases could destroy nearly 67,000 acres of wildlife habitat. Only three to five percent of the land strip mined in that area could be revegetated and restored for wildlife use, BLM says.

Hansen opposes park mass transit bill

A bill that would encourage people to use public transportation rather than private cars in national parks "calls for too much too soon," according to Wyoming Sen. Cliff Hansen. Within a year of its enactment, the bill would require establishment of public transportation systems at nine national parks, including Yellowstone in Wyoming and Glacier in Montana. It

would authorize the spending of \$1 million in fiscal year 1977, \$2 million in fiscal year 1978, and \$3 million in fiscal year 1979. The Parks and Recreation Subcommittee of the Senate Energy and Natural Resources Committee hearing record on the bill is still open. Comments should be sent to Hansen at 3229 Dirksen Senate Office Building, Washington, D.C. 20510.

BLM director Berklund moves up?

Curt Berklund, head of the Bureau of Land Management and long-time political foe of Interior Secretary Cecil Andrus, has been named to the new position of Assistant to the Secretary and Land Utilization Adviser. The "promotion" is seen by many observers as a reassignment to an ineffective position.

The Energy Daily says that Andrus has

been trying to get Berklund to resign ever since he took office, but that Berklund has refused, claiming protection under Civil Service rules. The newsletter reports that Berklund's advice has been "pointedly ignored" by the secretary. Asking a few months ago why this was the case, Andrus' press secretary replied, "Maybe he (Andrus) doesn't value that person's advice."

Oregon kills Columbia River fish treaty

A bill to create a three-state Columbia River fish compact has died in the Oregon legislature. The bill would have admitted Idaho to the 60-year-old pact between Oregon and Washington.

Royce Williams of the Idaho Department of Fish and Game says that the bill was killed because of unfounded fears on the part of coastal fishermen, a fuss over an appointment to the Oregon Fish and Wildlife Commission, and what one Oregon legislator called a "dirty, lousy political game."

Williams says that, "Idaho, a major producer of salmon and steelhead in the Columbia River, deserves membership in the commission," but that the membership has been too slow in coming. The bill was killed in a four to four tie. One legislator voted against the bill because the governor of Oregon, who supported it, ordered a pet coyote returned to an Oregon family. State Rep. Denny Jones wanted the coyote turned over to a zoo, on the principle that coyotes kill livestock and shouldn't be kept as pets.

Colo.: plutonium shipping unnecessary

The Colorado Department of Health says that the only acceptable reason for shipping plutonium by air is an emergency situation involving the threat of war. The department's executive director, Anthony Robbins, says that this is his agency's interpretation of Congress' intent in regulating the air shipment of the material.

Robbins told the U.S. Energy Research and Development Administration (ERDA) that he is unconvinced that air shipments are necessary and urged that proposed regulations covering such shipments be reworded to prevent them unless the

emergency is immediate. "Other circumstances in which plutonium air shipments might occur are simply matters of convenience to the agency and its contractors," he says.

Plutonium air shipments have been a particular concern in Colorado. The radioactive material was being sent from the Rocky Flats nuclear plant via the Jefferson County airport, a facility not equipped to handle a plutonium accident, should one occur. ERDA is in the process of drawing up regulations to deal with the problem.

Hunter-Fryingpan wilderness proposed

The U.S. House subcommittee on Indian affairs and public lands has approved the inclusion of the 67,000-acre Hunter-Fryingpan wilderness area in the Endangered American Wilderness Act. The area, east of Aspen, Colo., would become "instant wilderness" if Congress approves the act.

Inclusion of the area was proposed by Rep. Jim Johnson (R-Colo.). The Forest Service was proposing wilderness study for the area, but not until the 1980s. Johnson's

boundary excluded a part of the Forest Service proposal that would have prevented timbering in the Spruce Creek area.

The proposed area includes some water diversion facilities that will bring water from the west slope of the Rockies to the east slope. Opponents of this diversion had favored an 80,000-acre area, hoping to halt construction on the project. Johnson says that his version will allow the project to be completed.

Wyoming environmentalists 'reformist'

Wyoming environmentalists hold a fluctuating reformist attitude toward the state's ecological problems and upcoming growth, according to a survey by James S. Bowman.

Bowman, assistant professor of political science at the University of Wyoming, drew this profile in his paper "The Politics of Ecology: Political Orientations of Environmentally-Concerned Citizens."

He first divided the respondents into four categories of varying degrees, ranging from anti-litter campaigners to activists aiming at a change of the system, which they believe perpetuates industrial development, population growth, and resource depletion.

Most fell into either Bowman's reformist or his radical definition. The reformist engages in civic activities to improve the existing political system, and while viewing inadequate government regulation and incomplete technology utilization as causes of pollution, he believes the change will come without major alternations in the present system. The radical bypasses immediate problems, believing that ecological problems are symptoms of inherent defects in the system.

The survey respondents generally understood the complexities of environmental problems. Most felt that responsibility for environmental protection lies with in-

dustry, government, and the private citizen.

Bowman then explored solution approaches, which brought more division between radicals and reformists. About one-half blamed the public's concern for convenience and comfort, nearly 20% blamed the society's economic preoccupation, while 2.5% blamed the capitalistic system.

Many of the reformists were willing to pay \$50 to \$100 in additional taxes to improve their surroundings, but 10% disapproved of environmental taxation.

Bowman characterized the Wyoming environmentalist as a person with interest in reform but with little faith in the system. One survey comment stated, "It (environmental destruction) is treated as a regular fact of life. Officials are willing to exploit the state on the grounds that 'Wyoming should be ruined like the rest.' It makes me sick."



GRASSLAND RESOURCES, INC.

Wholesale & Retail

Best Prices

Largest Inventory



SEEDS

For Hay, Pasture and Range

(505) 983-2601

P.O. Box 1596
Santa Fe, N.M. 87501

In The Old Railway Yard

10-High Country News — July 15, 1977

Proposed power plants plentiful in the Rockies

Every state in the Northern Rockies is considering coal-fired power plant proposals. And every state has its official or unofficial hurdles for power plant proponents.

Here's the status of projects most recently making headlines in the region:

COLSTRIP

Montana Power Company has begun construction of Colstrip units 3 & 4 under protest from a Montana agency that insists another permit is required.

The Montana Board of Health claims that the utility must apply to them for a construction permit under the Montana Clean Air Act. Montana Power counters that the state's facility siting act superseded the state clean air act. Since Montana Power has a permit under the siting act, it says that a health department construction permit is not required.

The health department says it will take action against Montana Power if the company doesn't apply for the permit by July 15.

Other threats to the power project are an appeal pending in state court filed by the Northern Plains Resource Council and the Northern Cheyenne tribe related to the granting of the siting permit and an appeal filed by the U.S. Environmental Protection Agency in federal court involving air quality standards.

The two coal-fired units are designed to produce 1,400 megawatts of electrical power — enough for a city of about one million people.

IDAHO POWER

American Falls, Idaho, is a likely site for a 500 megawatt plant proposed by Idaho Power Company, according to the Idaho Statesman.

The site was among 21 studied by the Idaho Public Utilities Commission (PUC) after it rejected the power company's proposed "Pioneer" power plant near Boise. American Falls, Sid's Crossing, and Bliss were the three sites to emerge from the PUC study with highest marks.

Local government and chamber of commerce officials in American Falls have begun wooing the plant, but the state senator who lives there, Joe F. Allen (R), predicts that citizens opposed to the site will begin organizing soon.

WYOMING — POWER ON PRAIRIE DOG CREEK

Pacific Power and Light Company is studying the possibility of a 1,000 megawatt plant on Prairie Dog Creek near Sheridan, Wyo.

The Powder River Basin Resource Council, a rancher-environmentalist coalition based in Sheridan, has not opposed the plant yet, but it has asked Pacific Power officials to provide the public with more information about the generating facility's possible impacts.

UTAHNS CAUTIOUS ABOUT IPP

After having lost the Kaiparowits plant, some Utah officials seeking more power plants for their state are proceeding cautiously.

Early in July the State Energy Resources and Conservation Council postponed a vote on whether to endorse the Intermountain Power Project, IPP, at 3,000 megawatts, would be the largest coal-fired plant in the country. The council decided to wait until the end of July, when a Bureau of Land Management study on

air quality problems on alternative sites is expected to be complete. The present site is expected to degrade air quality in Capitol Reef National Park.

At least one Utahn on the council is skeptical about waiting for advice from the federal government, however. "If IPP goes the way of Kaiparowits, Utah will be the loser," said Sen. Ivan Matheson (R-Cedar

City) in a *Deseret News* story. "It's a cinch that if we sit here and do nothing, it won't be approved."

The National Park Service has just announced plans to study the possibility of requiring the highest air quality (Class I) for Capitol Reef and Canyonlands National Parks. In amendments to the Clean Air Act, Congress is considering whether all

parks should have Class I air.

COLORADO'S RAWHIDE

The Rawhide power plant, a relatively small project proposed by the Platte River Power Authority, has aroused concern among people who live near its site 18 miles north of Fort Collins. Part of the controversy stems from PRPA's tax-free status as a joint venture of the cities of Fort Collins, Loveland, Longmont, and Estes Park.

Four public hearings have been held. A team of citizens established by the Larimer-Weld Regional Council of Governments is reviewing testimony from the hearings. The team will soon make a recommendation on the project to the Larimer County Commissioners.

The commissioners have been asked by PRPA for a conceptual O.K. of the Rawhide project by Sept. 22.

Crow chairman ousted, coal deal okayed



CROW TRIBAL CHAIRMAN Patrick Stands Over Bull has been impeached by the tribe by a vote of 622 to 454. Photo by Michael Crummett.

The Crow Indian tribe has impeached its tribal chairman, Patrick Stands Over Bull, and approved a coal mining venture with Amax Coal, according to the *Billings Gazette*. Stands Over Bull, who is a strong proponent of coal development, says that he does not accept the impeachment proceedings as valid and indicated that he would file suit in the U.S. District Court in Billings.

The removal from office is only the latest in a series of clashes between the tribe and its chairman. Stands Over Bull had been removed, then reinstated, once before. The vote on the latest removal motion was 622 to 454, a larger majority than in the past, indicating that the impeachment may stand up to further challenges.

The coal mining offer approved by the tribe has been rejected once before by Amax, because the company said that they were not certain who spoke officially for the tribe. Now that Stands Over Bull has been removed, the tribe's offer will be resubmitted. The proposal involves a joint venture to open at least one, and perhaps as many as three, coal mines on 4,000 acres of the Crow Ceded Strip.

Two-year leasing delay ahead

A U.S. District Court Judge in Washington, D.C., appears to be favoring the Natural Resources Defense Council in the case of NRDC v. Hughes, filed over the adequacy of the Interior Department's coal programmatic impact statement. Judge John Pratt has ordered Interior and NRDC to submit plans next week on how to accomplish NRDC's requests.

A finding for NRDC in the case could result in at least a two-year delay in the resumption of federal coal leasing. The group is asking Interior to conduct extensive reviews of all coal leases on which no production has begun, or which were issued prior to Jan. 1, 1970. An environmental review would accompany that evaluation and areas found to be environmentally unacceptable would be exchanged for acreage where mining was acceptable.

NRDC is also suggesting a "system of

tiered impact statements." These would analyze the local, regional, and national ramifications of coal leasing, according to *Coal Week*. In an elaboration of their position submitted to Interior, NRDC says the agency should conduct economic, as well as environmental studies, to determine the demand for Western coal.

The judge's order has apparently caused some turmoil in the Interior Department. One long-time bureaucrat says, "Nobody knows what to do about it. There isn't any direction."

If the agency doesn't submit some kind of a plan, the judge has indicated that he will issue an order, containing an injunction, prohibiting the government from taking any steps to resume coal leasing, including taking coal lease nominations, a process that has already been completed.

Wind harnessed at Laramie dairy

Ranchers and farmers interested in wind generated electricity may be able to look for information from the Old West Regional Commission.

The commission is providing \$224,500 to install a wind generator at the University of Wyoming's dairy farm southwest of Laramie. The 25-foot in diameter, 20 kilowatt generator is the largest ever manufactured by Grumman Aerospace Corp.

In a two-year study, a university team will "demonstrate the feasibility" of using wind power to generate electricity in agricultural and rural areas. While wind-generated electricity was common in rural areas early in the century, "the power demand levels were so small (500 watts or so) that they can't be compared to contempor-

ary needs," says study director Donald Smith of the University of Wyoming's mechanical engineering department.

To keep costs to a minimum, the Laramie wind experiment will not store power in batteries in the way that farmers used to do. Instead, power generated will be used immediately or put into the utility power grid.

Researchers will monitor the power output of the turbine and the problems involved in linking it to the grid. They will also try to answer two basic economic questions: 1) under what conditions would it make sense financially for a farmer or rancher to invest in a wind generating device, and 2) how much cheaper would the wind generators be if they were mass produced?



energy news of the Rockies and Great Plains

WGREGO'S DYING WISH. What was supposed to be a strong line of defense against excesses in the federal government's push for energy development, the Western Governors' Regional Energy Policy Office (WGREGO), closed up shop at the end of June. As it expired, it made a last-ditch stand for state's rights, recommending that higher severance taxes be placed on minerals to help states meet the impact of energy development. A WGREGO study shows that per-ton coal taxes in the region — from highest to lowest — are \$1.04 in Montana, 65 cents in North Dakota, 60 cents in Colorado, 39 cents in Wyoming, and 38 cents in New Mexico. Utah has no tax on coal. WGREGO was a coalition of 10 Western Democratic governors. It will be replaced by a 16-governor group with a broader political base and interests, the Western Governors' Policy Office.

SOLID BOOM? A one million dollar coal company office is being hailed by local officials as a sign of future stability for the Wyoming boomtown of Gillette. A county commissioner called the new headquarters for Carter Mining Co. a "vote of confidence" for the entire area. Gillette Mayor Michael Enzi said that the building "signifies to the nation that coal is here to stay." "It's beautiful. I like the permanency it represents," said state Sen. John Ostlund (R). The comments were made at dedication ceremonies July 9. Carter Mining is a subsidiary of Exxon Corp. Its building will increase the community's tax base by six per cent, according to the mayor.

UTAH GEOTHERMAL FIZZLES. Utah Power & Light says that their geothermal power production plans are being scaled down because two of three sites have proven commercially unfeasible, according to the Associated Press. The company's director of research and development says that the two sites explored showed steam of only 300 degrees, while at least 500 degrees is needed for power production. Exploration of the third area — the Roosevelt Hot Springs — is being delayed by an environmental impact statement.



The HCN Hot Line

energy news from across the country

BOOST FOR EASTERN COAL. One provision in the Clean Air Act now under consideration by a House-Senate conference committee forces use of "locally or regionally available coal" where such use is necessary "to prevent or minimize significant local or regional economic disruption or unemployment." The provision is aimed at boosting Eastern mining and preventing utilities from buying low-sulfur Western coal to meet air requirements. Instead, the bill requires non-complying Eastern utilities to install sulfur scrubbers. The bill wouldn't affect utilities already importing Western coal, however.

INDIANS STUDY OPEC. An Indian group is working with members of the Organization of Petroleum Exporting Countries (OPEC) to try to strengthen U.S. tribes' bargaining power over energy reserves. The Indian group, the Council of Energy Resource Tribes (CERT), is made up of 24 Western tribes that control about 55% of U.S. uranium reserves and 30% of U.S. coal reserves. What did OPEC have to offer CERT? "We wanted to see if they could give us some technical assistance we can't get from the United States government," said Navajo Chairman Peter MacDonald in a *Denver Post* story. "We've found how energy companies have dealt with them in the past — bad leases and one-sided operations."



ERDA FAVORS BIG BUSINESS. Large energy companies such as General Electric, Boeing, and Westinghouse received solar grants from the U.S. Energy Research and Development Administration (ERDA) that were worth five times the amount awarded to small businesses, according to a report by the Center for Science in the Public Interest. The study says many of the large energy companies receiving the grants have interlocking directorates with such other energy companies as Standard Oil of California and Atlantic Richfield. The study concludes ERDA is biased toward complicated, high-technology, centralized applications of solar energy rather than decentralized applications, which many experts agree offer the most hope. Copies of the four-page study are available for 40 cents from the Energy Project, CSPI, 1757 S St., N.W., Washington, D.C. 20009.

NUCLEAR PROPAGANDA IN SCHOOLS. The National Audubon Society has revealed that an "educational game" being distributed to schools since 1974 is actually a propaganda package for nuclear energy. To play the game, students assume roles in making a decision on a proposed nuclear plant, according to Marvin Zeldin, who describes it in the July issue of *Audubon*. The overall message to students, he says, is that "reasonable, responsible people are for more power plants, especially nuclear plants, while unreasonable, irresponsible people — conservationists and other 'oddballs' — are against all new power plants." The game is sponsored by the Edison Electric Institute in New York.

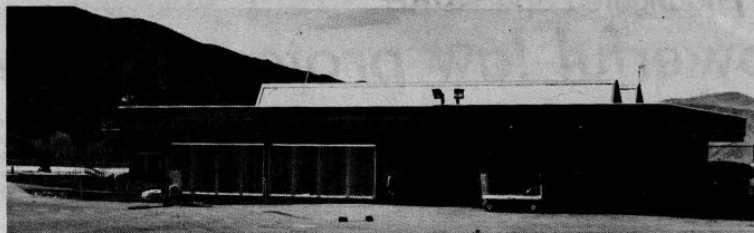


Photo by Lee Salmon, courtesy of The Sunshine Company

SOLAR AIRPORT. The Aspen, Colo., airport terminal uses "skylids" and "beadwalls" to gather heat from the sun. Both devices are the patented inventions of Zome-works, Inc. (Box 712, Albuquerque, N.M.). Both allow sunlight to enter the 16,800 square foot building, where it is stored in massive concrete walls and floors. When the sun goes down the devices automatically insulate the light-gathering space.

THE BEADWALL. The south wall, shown in the photo, has vertical windows made of two sheets of clear fiberg-

lass spaced three inches apart. When the sun shines, light passes through the fiberglass and is absorbed inside the building. At night or on a cloudy day, a small blower fills the space between the fiberglass sheets with styrofoam beads to keep heat from escaping.

THE SKYLIDS. The two triangular devices on the airport roof are skylights. Inside them are insulated louvers powered by heat-sensitive freon. When the skylights are cool, the louvers close automatically. When it warms up, they open.

Reckoning from Washington

FINAL STRIP MINING BILL

by Lee Catterall

Whether from frustration, fatigue or both, few huzzahs are being shouted as the federal strip mining bill is about to become law.

A joint conference of senators and congressmen recently agreed to compromises in versions of the bill that passed each chamber, and the bill is expected to reach the White House late this month.

Just about everything that can happen to a bill in Congress has beset the strip mining bill — committee skirmishes, fights over congressional rules, two vetoes, even a petition among some congressmen trying to skirt congressional procedure.

Environmentalists say six years of that has taken its toll on the bill. Others say it has smoothed out some of the bill's rough spots.

Rep. Teno Roncalio (D-Wyo.) speaks proudly of the bill he has called the most important piece of federal legislation in Wyoming's history. "A lot of fine-tuning" by congressional committees this year, he says, has made it "a little more business-oriented, less environment-oriented" than past versions, but the final bill is no drastic departure from the way the bill was written previously.

Roncalio says it will permit "some strip mining here and there along the Tongue River" in the Powder River Basin, but he expects it will forbid it along Clear Creek and in the foothills of the Big Horn Mountains. It will allow what Sen. Howard M. Metzenbaum (D-Ohio) complained is "the largest gaping hole I've ever seen," near Kemmerer, to gape even wider because its coal seams run in strange ways, making it not a strip mine but an open pit mine unsuitable for land reclamation.

A White House environmental advisor said the bill is weaker than some Carter environmentalists would like because, in the joint conference, "the House gave in on every substantive issue" to what was regarded as the weaker Senate language.

Still, the Carter advisor said, "The bill is acceptable and he is happy to see it coming out of conference."

What some environmentalists, including the White House advisor, found most

vexing in the closing stages of the conference was a new interpretation of the bill's restriction on strip mining valley floors of the West. The bill says strip mining can't be allowed to interrupt farming operations in those alluvial valleys.

However, Rep. John Seiberling (D-Ohio), a favorite of the environmentalists, remarked during the conference that he assumed that did not mean farming couldn't be stopped for the actual mining operation. His assumption, which ran counter to that of the environmentalists, quickly found its way into the conference report explaining the bill, eroding what environmentalists had regarded as one of the bill's tougher features.

Landowners will be able to forbid coal companies from stripping their land to get at federally-owned coal underneath, or will be able to get rich allowing those companies to strip away.

The "landowner consent" issue threatened to torpedo the bill several times in past years, and came close again recently. In a five-to-four vote, Senate conferees, including Sen. Clifford Hansen (R-Wyo.), agreed to the provision. Sen. Dewey Bartlett (R-Okla.) was hospitalized with lung cancer, missing the vote and failing to allow another senator to cast his vote in his absence. Sen. Dale Bumpers (D-Ark.) said Bartlett's staff refused to give him their boss's telephone number at the crucial time. Bumpers, with Bartlett's belated proxy in hand at the last meeting of the conference, tried to resurrect the issue; Sen. Lee Metcalf (D-Mont.), chairman of the Senate conferees, turned him down.

Years from now, when some Powder River Basin rancher cashes a large coal

company check, he can know that a good portion of it is due to the fact that an Oklahoma senator was in the hospital in the summer of '77.



Editors' note: The committee report, published after Catterall's column was written, confirmed what he had predicted. It said, "The conferees recognize that farming on the mine site must be interrupted during the mining and reclamation program; therefore, the language quoted above is not intended to apply to such temporary on-site interruptions, but is limited solely to such interruptions of off-site farm activities."

Lynn Dickey, who was lobbying for the valley protection for the Powder River Basin Resource Council, says this interpretation's impact is "quite serious." "We will have to count on the Interior Department to write some rules and regulations to better protect the valleys," she says. Since the law itself and the committee report seem to be in direct conflict, she says it will be difficult for the court to determine what the intent was.

However, she says, it would have been much worse to have the language in the law itself, as Sen. Clifford Hansen (R-Wyo.) wanted to do.

The bill now will be voted on by both houses, which can either approve it, disapprove it, or send it back to the conference committee.

native plants



PLANT MATERIALS FOR:

- Reclamation, Revegetation, Reforestation
- Soil and Water Conservation
- Low Maintenance Landscaping
- Wildlife Habitat Improvement
- Highway Beautification

P.O. BOX 15526 • SALT LAKE CITY, UTAH 84115 • (801)-466-5332

12-High Country News — July 15, 1977

The Endangered Species Act Powerful law protects plant species

by Mark Peterson

The plight of the grizzly bear, bald eagle, and other endangered creatures is well known. But have you heard about the paramint daisy or the bird's-eye primrose? These are just two of some 1,800 threatened and endangered plants that the U.S. Fish and Wildlife Service (FWS) may soon place on the endangered species list. Ironically, the list may also include a plant commonly known as the live-forever.

No plants are yet protected under the Endangered Species Act, despite a study by the Smithsonian Institution which suggests that 10% of the 20,000 plants native to the U.S. are in danger of extinction. Now, after years of careful study, the FWS will soon approve the first 14 plants to be listed. As more data is analyzed, other plants will be adopted in the months ahead.

When a plant is approved for listing, no federal agency can authorize, fund, or carry out any action that would jeopardize the existence of any listed species. The 1973 law also prohibits the interstate transportation and sale of these plants, although intrastate commerce and removal or possession of listed plants would be legal.

The plant listing is sure to touch off controversy. Critics of the proposal fear the list may be used by environmental groups as a vehicle to stop major federal projects that would destroy endangered plants. Already construction has slowed on the \$600 million Dickey-Lincoln dam in Maine because the project would drown 30 furbish louseworts, a snapdragon once thought to be extinct.

FWS is well aware of the repercussions their designations may have. They fear that if the act is used by groups to stop major projects, severe pressure could be put

on Congress to weaken the act. Bruce MacBryde, a botanist in the Endangered Species Office points out: "The Endangered Species Act is potentially so powerful. We're already getting vibrations from state and federal agencies. 'Do you know what you could do with this law? With this list of plants?'"

But many scientists believe that protecting plants from extinction is important because of the benefits they may one day provide mankind. For example, they point out the great loss that would have occurred had the wild ancestors of our present-day corn, wheat and rice hybrids been wiped out long ago. Other plants help to indicate mineral deposits. The locoweed, for example, aids prospectors in locating uranium deposits.

Also, there are many insects, snails, and birds which have dependent relationships with plants. "If the plant goes, so does the animal, and the ultimate effect on the ecosystem could be severe," says Keith Schreiner, FWS associate director.

The 1,800 plants now under study range from delicate 9-inch orchids and insect-eating pitcher plants to 120-foot trees and includes cacti, wildflowers, shrubs, grasses, ferns and trees in 46 states. More than half the plants under consideration are native to Hawaii where much of the flora is found nowhere else in the world, having evolved in an isolated environment.

Many plants, such as the giant sequoia, may be listed because of their narrow range and restricted habitat. They are rare due to natural causes. But habitat destruction is primarily blamed for the demise of many other plants. The paths of urban developments, dams, and highways have led many to near-extinction.

Another major cause has been plant collectors. Commercial plant dealers and over-zealous nature lovers are uprooting

wild stocks of cacti in the desert areas of the southwestern states. Populations of unusual or exceptionally beautiful plants like the carnivorous Venus flytrap and several orchid species have also been seriously depleted in many regions.

The Smithsonian Institution lists 77 commercially-exploited rare plants. Consumers should check with the store manager before buying a plant to make sure the plant was commercially propagated. Cacti taken from the wild will have a line around

example, has helped the Desert Botanical Garden in Phoenix propagate from seed many threatened plant species.

One of the newest plant groups formed last October in Denver. With over 200 people at its founders' meeting, the Colorado Native Plant Society hopes to "promote awareness of native flora and influence public opinion to protect and preserve areas of special interest." Membership is open to anyone and includes field trips, publications, and regular meetings.

With FWS about to begin listing plants,

"Like winds and sunsets, wild things were taken for granted until progress began to do away with them. Now we face the question whether a still higher 'standard of living' is worth its cost in things natural, wild, and free. For us of the minority, the opportunity to see geese is more important than television, and the chance to find a pasque-flower is a right as inalienable as free speech."

—Aldo Leopold

their base, indicating where the natural soil level was.

Most states do not have stringent laws to protect plants from unscrupulous plant collectors and eager developers. Coverage usually protects only the official state flower and tree. Where laws do exist, they are often unworkable and do not result in convictions. Some state agencies give plants such minor emphasis that one state designated its weed control supervisor as an endangered plant liaison.

Plant clubs around the country are trying to help. The Tucson Garden Club, for

and groups like the Colorado Native Plant Society working to preserve endangered plants, there is new hope that these species will not be buried under cement or drowned by a reservoir. And it's a safe bet that, in the near future, we'll be hearing a lot more about plants like the paramint daisy and the bird's-eye primrose.

(Editor's note: Individuals interested in membership in the Colorado Native Plant Society should write to: Dr. Dieter Wilken, Department of Botany and Plant Pathology, Colorado State University, Fort Collins, Colo. 80523.)

Dear Friends,

We have a journalist friend, Justus Bavarskis, who understands us well enough to parody us. To prove it, he did so in the second section of this issue.

His relationship to the paper has traditionally been avuncular. He's never around when the press breaks down, or when someone threatens to sue, or when we are inserting 5,000 copies of section "b" in section "a," or when a staff member collapses. But he does take a genuine professional interest in us. By avoiding the nerve-racking, deadening aspects of newspaper production, he seems able to maintain clear vision. We profit by our talks with him.

One evening we ran into Bavarskis at the Union Bar in Hudson, Wyo. He was particularly glad to see us, because he had had an idea brewing for some time. He wanted to "lampoon" us.

It sounded fun that evening. It sounded dangerous and potentially painful the next day, but we didn't say no. For one thing, like most of us,

Bavarskis doesn't complete every project he takes on over a beer. We weren't too sure the dreaded lampoon would ever materialize. For another, Bavarskis said he would take care of everything, just like a good uncle. Nothing can be too painful if someone you trust offers to take care of everything.

So we ignored our apprehensions and decided to wait and see what he would come up with — if anything. We took comfort in knowing that Bavarskis is wise. It would be one thing to be mocked by a sage — another to be mocked by a crackpot.

Bavarskis has been in Wyoming for four years, doing oil rig work, logging, free lance writing, reading and admiring John McPhee and Gabriel Garcia Marquez. Before he came to Wyoming he put in seven years as an editor and reporter for United Press International wire service in New York City and Detroit. He grew up in London and in Chicago. His parents are both Lithuanian.

The idea of lampooning High Country News must have captivated him. Considering the circumstances of the offer, we were surprised when manuscripts for the lampoon edition began to arrive immediately. Bavarskis coordinated his efforts with those of other writers. He personally clipped

an advertising book to gather "art work" for the special edition. He came to us thrilled with his selections, which included sketches of patio furniture with the caption "enter the great outdoors" and sketches of steaks, hot dogs, and Cadillacs, which didn't need any captions.

That's all the explanation we can offer about the bizarre four pages tucked away in the second section of this issue. Thanks to Bavarskis's skill and perspective, we learned something about ourselves from it. We know it won't help you win any environmental battles, but we hope that it will give you a laugh.

Other folks who helped out on the lampoon edition include: Mike McClure, Dan Whipple, Bob Vollmerhausen, Ed McCahill, Heather McGregor, Mike Jakubcin, Hannah Hinchman, and Johnny Mac and Jane.

We've had several callers inquiring about the address of the New Mexico Solar Energy Association, the group that was featured in our last issue. You can reach them by writing P.O. Box 2004, Santa Fe, N.M. 87501 or by telephoning (505) 983-2861.

Another address — for those of you who are interested in helping the

Dunn County, N.D., citizens fight for the clean air designation we mentioned last issue, write Randolph Nodland, Dunn Center, N.D. 58626.

In The News

Growing groups
what's the price? 1

Uranium mine
with ironic desert dilemma. 1

Building solar
a review of the literature. 6

Power proposals
one per state. 10

Endangered plants
West has its share. 12

HCN Lampoon
laughing — with us. Special Issue

The 4 Environmental B-Wash

Section B

High Country News

YARROW:

The band-aid plant served Greek, Indian soldiers

by Carl Brown

For some strange reason, great ideas tend to strike the earth in different places at the same time. It happens in agriculture. After countless millennia of foraging, the Chinese and Mesopotamians began farming almost concurrently. It happens in science. It is possible that, before 1858, everyone who ever lived believed in spontaneous generation. Poof, here's a bunny-rabbit. Kazaam, a man-eating tiger. But that year it all changed. Alfred Wallace and Charles Darwin, working on opposite sides of the globe, both debunked the theory of spontaneous generation.

It even happens in medicine. Greek physicians and American Indian shamans had no idea that each other existed. Yet both patched up their clients with the same medicinal plant.

The plant they used is called yarrow. Approximately 75 closely related species grow around the world, but all belong to the genus *Achillea*. The genus is named for the Greek hero, Achilles, who used the plant to treat the maladies of his soldiers.

Traditional uses of yarrow range from the treatment of melancholy to injuries from being trampled by a chariot. This is because yarrow has three basic actions upon the body. It sedates the nervous system, soothes mucous membranes, and slows the flow of blood. In short, yarrow is a "downer." When discussing the use of yarrow with ethnobotanists, shamans emphasized that extended use was discouraged for fear of damage to mucous membranes.

Yarrow was a valuable and respected medicine. Old journals mention that it was prized by such widely separated tribes as the Pueblos, Utes, Salish, Flatheads, and Illinois. Its use varied from tribe to tribe.

Some tribes mashed yarrow and used it as a poultice to relieve the pain of broken

bones, sprains, bruises, rheumatism, snake and insect bites, cuts, and burns. The Flathead Indians of Montana called it the "band-aid" plant.

The fresh plant was crushed and rubbed on as a salve for rashes, blisters, sore lips, and chapped hands.

An infusion of leaves and flowers was used to soothe sore eyes, earache, muscle cramps, hemorrhoids, and the body aches of invalids.

The same concoction was drunk to relieve sore throat, colds, hay fever, headache, diarrhea, kidney ailments, and gas. It was also used to prevent conception and as a general tonic.

The Ute translation for yarrow was "wound medicine." To American Indian, Confederate, and Greek soldiers alike, yarrow gave life. It was used to stop profuse bleeding, to cleanse infection from wounds, and to soothe excruciating pain.

During the 1800s, even the American medical fraternity gave its stamp of approval to yarrow. They used it to expel intestinal worms.

Common sense guides the dosage of yarrow. External poultices are made by simply crushing leaves and flowers and applying them directly to the injury. The poultice is replaced as its effectiveness wears off. A yarrow poultice gives almost instant relief.

To make tea, a small handful of leaves and flowers is steeped in a cup of hot water for five or more minutes to create a strong brew. Tea is taken throughout the day, as frequently as an hour apart. Unlike commercial drugs, yarrow tea may take an hour or so to take effect. Its lingering, medicinal taste is easily masked by honey or sugar.

In addition to being effective, yarrow is abundant. It is a weed. It grows from valley floor to above timberline throughout the cooler portions of the northern hemisphere. It is one of the first plants to emerge in the



Drawing by Carl Brown

YARROW'S scientific name, *ACHILLEA*, comes from the Greek hero, Achilles, who used the plant to cure his soldiers. Yarrow is common in the Rocky Mountains.

July 15, 1977 — High Country News-13

Yarrow



Photo by August Dailer

spring and one of the last to fade in the winter. The only places it avoids are deep woods and swamps.

Yarrow is easily recognized. It is a perennial herb growing from a few inches to three feet tall. Like other members of the sunflower family, each flower is, in reality, many tiny flowers. Flowers are usually white and held in small, flat clusters. Its most striking characteristic is finely divided, fern-like leaves that have given it

the nickname of "chipmunk-tail." Yarrow has a pleasantly medicinal smell that sets it apart from all other plants.

For one simple reason, anyone spending time in the outdoors would do well to recognize yarrow. It works.

This article paid for in part by the HCN Research Fund through tax deductible donations by our readers and friends.

Eavesdropper

environmental news from around the world



INDIANS SEEK U.N.'S HELP. Indian water rights, land claims, and coal leases will be among the topics investigated by a special United Nations subcommittee on human rights at a conference in September

1977. Some of the Indians who sought the U.N. audience explain, "We want the United Nations to take official actions against the U.S. for colonization and treaty breaking... We will bring documentation about our lives and the U.S. activities against us." The Indians seek resolutions from the conference and later hope for financial and political support. Indian leaders from the U.S., Canada, Bolivia, Nicaragua, Peru, Guatemala, and other countries will speak at the conference, according to the International Indian Treaty Council News.

AIR POLLUTION TIME BOMB. The Canadian Minister of Fisheries and Environment, Romeo LeBlanc, said both Canada and the U.S. should step up air pollution controls before there is an "emergency" situation. LeBlanc compared the potential North American situation with the current European problem while addressing the Air Pollution Control Association. At a press conference, LeBlanc estimated the U.S. has the potential to dump five times more pollution into Canada than vice versa. He also aimed an attack at the "tall stacks" as substitutes for flue gas scrubbers. "The use of high stacks has been successful in limiting local pollution. Unfortunately, that approach is probably one of the major causes of the long-range transport of pollution," he said.



Lane de Moll, Ed., Schocken Books, New York, 1977. \$7.95 paperback, \$15.00 hardcover, 251 pages.

Review by Heather McGregor

Reading *Rainbook: Resources for Appropriate Technology* is like reading a delightfully illustrated catalog of wit and wonders, for the editors have drawn from the flow of life itself.

They haven't compiled a dry list of alternative heating plans. Instead, the scope of appropriate technology combines low-impact industry, alternative lifestyles, and folklore. The machine is not shunned, but, as proposed by the editor's examples, should be a tool modified to fit available resources and human energies.

The resources, including books, bibliographies, pamphlets, and organizations, are outlined in concise, bibliographic fashion.

RAINBOOK—Resources for Appropriate Technology

A short paragraph accompanies each reference noting who it would be relevant to. Most of these descriptions are positive and informative; *Rainbook* never hesitates to hand out praise.

Under "Economics," a rural real estate guide is touted: "Guides like this make the real estate profession and their substantial commissions on real estate sales obsolete."

Resources are listed under topic headings of: appropriate technology, place (weather, geography), economics, community building, communications, transportation, shelter, agriculture, health, waste recycling, and energy. Each features a myriad of introductory explanations, wittily written by the staff of *RAIN*, a monthly journal of appropriate technology.

What makes *Rainbook* captivating reading is not its resourceful listings, but the side articles that range from the potato

poetry of an orphaned Oregon girl in a turn-of-the-century logging camp, to the vivid philosophical explorations of a modern-day nuclear opponent.

These sidebars are relaxed, often reminiscent of bygone days of clean air, and humorous. One bold headline splashed across a page top reads: "The second law of thermodynamics says cutting butter with a nuclear-electric chainsaw doesn't make sense and has got to stop."

Rainbook offers a personal, social, and technological alternative: one available without the advice or consent of your congressman. It isn't aimed at IBM or the Pentagon, but at you, the reader: the basic source of appropriate technology.

If *Rainbook* is not available in your town, it can be ordered from "RAIN Magazine," 2270 N.W. Irving, Portland, Oregon 97210.

14-High Country News
July 15, 1977



HCN Bulletin Board



LOONEY LIMERICKS

by Zane E. Coley

A candid old friend one night crooned:
"I'm sick of your self-righteous tune.
Hoping nature to save,
You all rant and you rave.
What you need is a little lampoon."

SOLAR ECONOMICS

Two short studies on the economics of solar energy systems and on federal programs that could help overcome barriers to solar commercialization have been released by the Center for Science in the Public Interest. "Solar Economics Revisited" provides an introduction to economic analyses for the homeowner considering installing a solar hot water heater. "Solar Commercialization" is a series of specific program recommendations for the Energy Research and Development Administration (ERDA). The first costs 40 cents and the second costs a stamped, self-addressed envelope. Write: CSPI Energy Project, 1757 S St., NW, Washington, D.C. 20009.

DRAFT EVALUATION

The 21st regular meeting of the Missouri River Basin Commission will be August 1 and 2 in Jackson Hole, Wyo. The draft "Missouri River Basin Water Resources Plan," which is currently undergoing review by state and federal agencies, will be presented at the meeting.

PUBLIC TRUSTS AND ENVIRONMENTAL QUALITY

Rick Applegate's Public Trusts for Environmental Protection examines the history, application, and methods of establishing public trusts as an approach to environmental quality. Applegate is the founder of the Center for Public Interest, Inc., in Bozeman, Mont. It is available from: Exploratory Project for Economic Alternatives, 1519 Connecticut Ave., N.W., Washington, D.C. 20036.

ROADLESS AREAS UNDER STUDY
The Vernal, Utah, District of the Bureau of Land Management is beginning a 15-year study of roadless areas exceeding 5,000 acres for possible wilderness designation. Two people are being hired for the summer to tackle the 1.7 million acres in the district, which will include both natural and primitive areas.

AVOID INVESTING IN POLLUTERS
The Council on Economic Priorities has published *The Pollution Audit: A Guide to 50 Industrials for Responsible Investors*. The 48-page guide focuses on performance and controls within petroleum refining, iron and steel, pulp and paper, and electric utilities industries. The guide is available from the Council on Economic Priorities, 84 Fifth Avenue, New York, N.Y. 10011, for \$25.

DIVE INTO THE ACTION

A direct approach to citizen involvement in wild and scenic river designation has been outlined by the River Conservation Fund in *Flowing Free: A Citizen's Guide for Protecting Wild and Scenic Rivers*. The 76-page guide explains legislative action, past and future programs, alternatives for river protection through citizen action, and three specific case studies. It can be ordered from The River Conservation Fund, 317 Pennsylvania Ave. S.E., Washington, D.C. 20003, for \$3.25.

SOLAR ENERGY IN DURANGO

The San Juan Solar Energy Association is meeting monthly, publishing a monthly newsletter, and keeping up with many local solar developments. Dues are \$6 a year. More information is available from Dr. Harold Mansfield, Box 435, Durango, Colorado 81301.



Black-footed ferrets are found in prairie dog towns.

WANTED: BLACK-FOOTED FERRET

The National Geographic Society is offering a \$50 reward for the first person providing a photograph or information leading to the verification of the existence of the black-footed ferret in Wyoming. Unique features are its distinct black-face mask, black feet, and a black-tipped tail. The rest of its short-furred body is a pale yellow buff, lighter on the undersides, and nearly white on the forehead, muzzle, and throat. The top of the head and the middle of the back are brown. The society stresses that it only wants photos or information: penalties for killing a ferret or destroying its habitat range up to \$10,000. Reports may be sent to Ferret Search, Box 2705, Jackson, Wyoming 83001.

ENDANGERED AND THREATENED SPECIES LISTED

The National Wildlife Federation and the U.S. Fish and Wildlife Service have prepared a state-by-state listing of endangered and threatened species in the U.S. To obtain a single free copy, write the National Wildlife Federation, 1412 16th St. N.W., Washington, D.C. 20036. Additional copies are five cents each.

Classifieds

HELP HCN get the word out. One way HCN keeps going is by introducing itself to new people. HCN needs volunteers to write or type names onto mailing labels. If interested, write HCN, Box K, Lander, Wyoming 82520. Thank you.

"CANYON COUNTRY HIKING AND NATURAL HISTORY," Barnes, 176 pages, illustrated, \$3.95ppd. Hiking trails and routes in southeastern Utah. F. A. Barnes, Box 963, Moab, Utah 84052.

THE SALT CEDAR, a Western journal of environmentalist writing, is accepting submissions and subscriptions. Poetry, fiction, articles, reviews, and B&W graphics receive prompt personal attention. Subscription rates: \$2-issue; \$3.50-year. Contact: Don Snow, Route 3 Box 652, Fort Collins, Colorado, 80521.

EASTERN TIMBER WOLF RECLASSIFIED

The eastern timber wolf of Minnesota, a subspecies of the gray wolf, is being proposed for a switch from an endangered species to a threatened species. The proposal is a result of an increase of the animal's range in northern Minnesota, indicating that it is no longer in danger of extinction in that area. Public comment on the proposal is invited through Aug. 8, 1977. Comments should be addressed to Director, U.S. Fish and Wildlife Service, Washington, D.C. 20240.

MISSION WILDERNESS PLAN

Flathead National Forest officials have released for public comment the draft of the Mission Mountain Wilderness Management Plan. The wilderness area, about halfway between Kalispell and Missoula, Mont., was established by Congress in 1975 and includes nearly 7,400 acres. Public comments should be submitted to the Forest Service by Oct. 31.

Service Directory

LARSEN'S BICYCLES

233 EAST 2nd ~ PHONE 754-5481

POWELL, WYOMING 82435

RALEIGH



Clivus Multrum

ORGANIC WASTE TREATMENT SYSTEM

Composts kitchen and bathroom wastes, uses no energy, no water, odorless, produces rich humus fertilizer. Contact Clivus Multrum Northern Rockies, Rt. 2, Whitefish, Mt. 59937.

Shaw's Fireplace

Efficient—burns fuel at 70-80% (wood, coal)
Safe—withstands temps. to 3200 F.
Durable—stainless steel firebox
Easy to install—wood framing



For information write to:
Cole's
Fuel Economy
Store
218 Main Dept. C
Lander, Wyo. 82520
(307-332-2670)
"Efficient Heating"

COOK STOVES

BURN WOOD & COAL

FREEDOM From Gas Shortages!
From Oil Price Hikes!
From Black & Brownouts!



MODEL (SD4) THRIFTMASTER

TIROLIA

Superb Craftsmanship Since 1919
SOLID CAST IRON, STEEL, FIREBRICK
5 Different Models
COAST TO COAST WAREHOUSES

For FREE Information Write

OLD COUNTRY APPLIANCES
Box 330-HC 1 Vacaville, Ca. 95688
707-448-8460
DEALER INQUIRIES INVITED

Name _____
Address _____
City _____
St. _____ Zip _____



Louis Lake Resort

Under new management
Now taking reservations

Box 265, Lander, Wyo. 82520
(307) 332-5047



BACK TO THE LAND LISTING SERVICE

Receive mailings from dozens of back-to-the-land publications and businesses. From solar and wind energy to dehydrators and drip irrigation. Keep informed; save time and postage. Receive mailings for six months, just \$2.00.

G & J Distributors, Dept. MM, 4523 Labath, Santa Rosa, CA 95401

The Environmental Bi-Weekly

High Country News

Special Issue

Friday, July 15, 1977

Lander, Wyoming

Carter to Wyoming: burn, baby, burn

by Ed McCahill

WASHINGTON — President Jimmy Carter announced this week that the state of Wyoming will be converted into fuel to "light the nation's spirits as well as its lamps." Conversion of the state into low sulfur fossil fuel was expected to begin immediately, he said.

Asked whether he was acting on a special presidential edict, the President responded that he was backed by the unanimous advice and consent of both houses of Congress. "The executive and legislative branches have long recognized the need to burn Wyoming, but the two previous administrations were foot-dragging," he said. He added that the Justice Department had already polled neighboring states and found that none would attempt to stop the move through the courts.

Carter had been under pressure throughout his campaign for the presidency to clarify whether he was "soft" on land use planning and the activities of the Bureau of Land Management. But there was no mistaking his position now as he took a line from another presidential aspirant, former Gov. Ronald Reagan of California: "With regard to Wyoming," Carter said, "We paid for it, we own it, and we're going to burn it." At that point the President patted his daughter Amy on the head and left.

Under the Carter plan, Wyoming residents will be given 60 days to relocate. The Army will assist the elderly. The entire operation is expected to take less than 24 months although Sen. Lott O. Laffs (R-Wyo.) speculated that it might take longer. The resulting hole will be water

filled and named Big Square Lake after former President Gerald R. Ford.

Laffs said he had been aware of the plan for some time and had supported it. He said Wyoming had always stood ready to serve its nation.

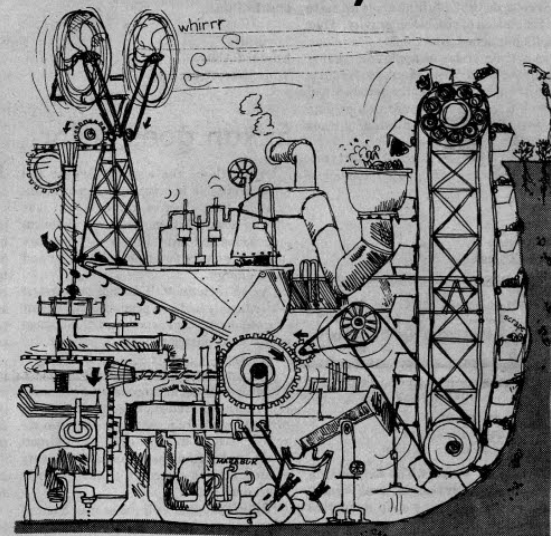
Sen. Quiet Grone (R-Wyo.) said he had been against the bill from the very beginning. Capitol Hill insiders noted that Grone has been against every bill introduced in the Senate since being elected to office. He later told insiders that he was tired of going back to Wyoming every six years anyway.

Rep. Back T. Caves (R-Wyo.), leader of the Wyoming House delegation, was reached in Paris for comment. He said he had read the bill carefully, and was satisfied that there were no provisions for "Communist land use planning, pinko social reform, or fellow-travelling social security." He said he was, therefore, in favor of the measure.

Wyoming Gov. Ed Herschler could not be reached for comment because he was reported to be beaver trapping, and other officials said the matter was not in their areas of responsibility. A secretary in the governor's office, however, asked if there were good movies in the states where Wyoming was being sent.

Gov. Dick Lamm of Colorado said he hoped Wyoming would enjoy the trip.

The bill actually was the brainchild of Pat (Sheep-Lover) Murphy, a prominent Wyoming gas station owner, who claimed to own 252 gas pumps. Asked why he had initiated the movement to burn the state, Murphy said: "I used to own 354 gasoline pumps. Then Parks and Recreation came along and said they needed 53 pumps for a



THE BUREAU OF RECLAMATION'S wind-powered state dismantler.

national gasoline pump forest. Then the Bureau of Reclamation came along and said the Snake would overflow if I didn't give them 25 pumps. Then the Energy Office came along and said they had to have 24 pumps to supply the Canadians with gas in exchange for wheat. I ask you, who the hell wants to be known as the owner of a

stinking little 252-pump gas station? Where's my freedom gone to? Let the Bureau of Land Management worry about the whole state, I figure."

Asked if he had thought of the impact this move would have on his neighbors, Murphy responded, "Neighbors?"

Cattle Kate died for buffaloes' rights to the range

by Irving Scrubb

Ella Mae Watson passed the half-empty bottle of Ole Sagebrush across the bar to Jim Averill and said, "Jim, we gotta do something about all them cows that's trampling our land and polluting our water and eating the buffalo right off the plains. Hey, don't hog that."

Averill reluctantly handed back the three-quarters empty bottle, wiped his lips with the back of a bony hand, aimed a stream of tobacco juice in the general direction of a brass spittoon, and looked out the saloon window.

"You betcha," he said.

"Look," said Ella Mae. "I know you ain't much for talk. But I seen you in action. Remember when them prairie schooners came through town and threw empty cough medicine bottles all along the trail and you went out with a branding iron and made them come back and pick it all up? Well, we gotta do something like that about them

cows. Why, before you know it, they'll be whittling down that mountain." She pointed to Casper Mountain, rising out of the Wyoming sagebrush in the north.

"You betcha," said Averill.

"Listen, Jim, I got us a plan," said Ella Mae. Shyly, she peered at Averill and pushed back the yellow ringlets of hair that cascaded like corn cobs over her shoulders. But before she could lay out her plan, she was interrupted by a violent neighing and trampling of hooves outside the screen door.

Partly obscured by a cloud of still settling dust, five cowboys had ridden their horses onto the porch of Averill's Break-neck Saloon, and were dismounting.

"It's the Cattle Barons," Ella Mae whispered, her pale blue eyes wide in fear. "Don't you do nothin' rash now, Jim."

In a body, and lustily bawling out the "Bow, bow, ye lower middle classes" chorus from Gilbert and Sullivan's *Iolanthe*, the Cattle Barons burst through the screen

door. They wore chaps and high heeled boots with spurs that raked the floor as they walked. Each wore a fringed buckskin vest, with the words "Cattle Barons" stitched in purple-dyed buffalo hide across the back. Each carried a whip and a lariat.

"Dance, little lady," bellowed Luke Cross as he lashed a bullwhip on the sawdust floor three inches from Ella Mae's toes. Shorty, the pimply, four-foot-seven, youngest member of the gang, lassoed a bottle of Locoweed Squeezins from the bar. He was applying it to his lips when Walt Headshorn, a former Indian fighter, snatched it.

"Gimme that," Headshorn yelled. "You too young fer drink, Shorty." "Don't call me Shorty," the youngster said quietly, and dangled his right hand just above his holster. "To you, mah name's Mister Shorty."

"Aw, shucks, Shorty," said Headshorn. Those were his last words. Quick as a rattler, Shorty's gun leaped from its holster and Headshorn thudded to the floor, six

bullet holes forming a tight, one-inch circle over his heart.

"Boys will be boys," sighed Big Tim Carver, leader of the band. "Well, Mister Shorty, you made the mess. Guess you clean it up. Now, boys, we got us a vacancy on the crew. How 'bout if we ask the little lady if she's a mind to join us?"

Ella Mae recoiled. Then she smiled and winked at Averill. "Why boys," she drawled. "I guess that'd be just dandy. Always did have a yen to run a few cattle."

The history books do not call her Ella Mae Watson. When they grudgingly refer to her at all, the history books call her Cattle Kate. That is the most complimentary term they use. More often, they call her a rustler, a thief, a prostitute, a trouble-maker. In actuality, she was a conservationist, a feminist, and, more than an environmental pioneer, a martyr for the

(continued on page 3)



HCN Letters

Dear Sirs:

After reading and re-reading Edward Abbey's *The Monkey Wrench Gang*, I have been forced to conclude that it is the greatest piece of literature to appear in the Western world since the Bible. It was Abbey's book that provided me with the inspiration to write *Hamlet*, *King Lear*, and *The Tempest*.

Sincerely,
William Shakespeare
Stratford-on-Avon, England

Dear Sirs:

It is not true that a falling apple led me to the formulation of the law of gravity. What actually happened was this:

I was sitting under an apple tree reading Edward Abbey's *The Monkey Wrench Gang* when I inadvertently dozed off and the book fell from my hands into my lap. This event led me to speculate that what goes up must come down.

So it is to Edward Abbey, and not to me, that the world is indebted for the law of gravity.

Sincerely,
Isaac Newton
London, England

Eavesdropper

An environmentalist lady from Utah Passed a strip mine on her motor scooter

She said with a grin
As she tossed a bomb in
"Take that, you dirty polluter."

STRIP BILL PASSES. The strip mining bill was attached to the National Pornography Bill, thus making strip mining an obscene act.

CARTER ADDRESSES PARK SERVICE. At a getting-to-know-you luncheon in Washington, D.C., President Carter recently told the National Park Service "to park cars without leaving rubber." An aide later told the President that the National Park Service was not a union of parking lot attendants.

BIG DAM. The House passed a \$13.4 billion appropriations bill for a dam stretching from South Carolina to Bermuda. Environmentalists opposed the measure on safety grounds, claiming the dam would bisect the Bermuda Triangle.

OILY EAGLE. A House subcommittee, held hostage by oil industry lobbyists, voted to make an oil-drenched bald eagle the national bird. Following the vote, the hostages were released and given a \$2,000 campaign donation, as well as 18 major oil company credit cards. The House Ethics Committee slapped the wrists of those Congressmen involved.

IRRIGATION CANAL GUIDE. The Irrigation Canal Association (ICA) has published a guide to navigable irrigation canals in the U.S., Mexico, and Canada. Proceeds from the sale of the guide will go towards promoting the ICA goal of building more irrigation projects so that "one day we'll be able to canoe from Vancouver to Mexico via Wyoming's Red Desert."

ICA points out that irrigation canals are safer than unpredictable wild streams and have more KOAs and restaurants on their banks.

Dear Sirs:

All published photographs of my conquest of Mount Everest show that we planted an English flag at the peak. We did that, true enough. But what no photograph has shown is that, at the foot of the English flag, I left a copy of Edward Abbey's *The Monkey Wrench Gang*.

I did this to show that Abbey's mental achievement was at least as significant as my physical achievement. Besides, I'd forgotten to take it out of my day pack when I set off for the top, and I was damned if I was going to haul it all the way back down the mountain.

Sincerely,
Edmund Hillary
London, England

Dear Sirs:

If Hillary and his gang don't stop strewing their blasted litter all over my mountains I'll take my M-16 out of mothballs and kill them.

Cordially,
Edward Abbey
Wolf Hole, Ariz.

Exxan goes solar

Exxan Corp., the world's largest and most profitable industrial enterprise, announces that, effective immediately, it is closing down all its mineral and chemical operations and instead focusing its entire capability on the development of solar and wind energy.

Cyril E. Arbutnot III, Exxan's chairman of the board, said in a prepared statement printed on recycled paper that the change was due to a change of heart by the board of directors.

"We were sitting around the boardroom one day smoking anthracite and cracking jokes about the latest price increase when my son suddenly piped up, 'Hey! Do we really need all this money?' " Arbutnot explained. "And the thought suddenly struck all the directors that, by gosh, maybe we didn't."

"I don't suppose we'll make much out of solar and wind energy," Arbutnot said, "but what the hell, we've been saying for years that solar and wind energy weren't technologically feasible for the foreseeable future. That was a lie."

"Actually, with all Exxan's resources, I'd be very surprised if the nation's entire energy needs aren't met by solar and wind energy by 1978. When we said we couldn't do it, we really meant we couldn't make as much money out of it."



CIA seeks spies in one-horse town

The High Country News has learned that the Central Intelligence Agency has been spying for 10 years on residents of Muddy Gap, Wyo., in the belief that the town is the capital of a foreign country. The covert activity was uncovered when an HCN reporter saw a blonde woman in a trench coat display her passport before attempting to purchase a beer.

The reporter was seated at the only table in the Muddy Gap station, sipping a beer next to the yellow and black fanbelt display. The woman approached the table and said, in carefully modulated tones, "Excuse me, (pause) do you (pause) speak English?" The reporter was so astonished at this inquiry that he merely stared slack-jawed at the woman.

She hesitated for a moment and then repeated, slightly louder, "Do you speak English?"

The increased volume of the question merely flustered the reporter further. He recognized the peculiarly American habit of addressing foreigners repeatedly in the same words, though more and more loudly, in the hope that repetition would accomplish what language lessons had not. The woman took the reporter's consternation for stupidity and nearly shouted, "DO YOU SPEAK ENGLISH?"

"Mother of Pearl, lady," he finally said, "of course I speak English."

The woman sat down next to him and at this point flashed her passport, saying, "Oh, thank goodness you're American. The only people I've run into lately speak some sort of unintelligible foreign tongue. All they can say is 10-4, good buddy, smoke the bear's gonna catch you on the flip side, do you copy, and other such folderol. I have a very important dispatch to get to Washington, but if I try, I'm certain that I'll be assaulted by people carrying 'hand-les.'"

"I think I need another beer," said the HCN reporter. "What the hell are you talking about?"

"I'm with the CIA," she said earnestly. She went on to explain that her superiors in Washington believe that Wyoming is a foreign country and that its center of activity is near Muddy Gap. There is reason to believe, she said, that crazed environmentalists are about to launch an assault on lignite coal fields in North Dakota. The environmentalists would seize the fields

and call on the government to name the lignite an 'endangered plant' thereby preventing mining of it.

It seems that the environmentalists had been fleeing from the U.S. mainstream back to Wyoming after clandestine, subversive forays and gathering at suspicious hours of the day and night in Muddy Gap's service station. Since the national government believes that it lacks jurisdiction in Wyoming, they had sent the CIA to reconnoiter the area.

The surveillance has been underway for 10 years, the woman said, but the only noticeable impact of the agency's activities has been the assassination of two antelope believed to be acting as couriers for the environmentalists.

Sierra Club demands

The Sierra Club has filed suit against the Pentagon, asking that the agency be forced to file an environmental impact statement on any potential nuclear action taken by the military.

According to Maxwell Silverhammer, Sierra Club lawyer, "We believe that a nuclear war is a major federal action under the definition of the National Environmental Policy Act. Consequently, we believe that an EIS is necessary before any action of this type can be taken."

Silverhammer said his group fears the military may be carried away if nuclear reaction ever became necessary. "You know how these things work," he said. "Some fly-by-night nuclear power launches a few missiles at Miami, or wherever. The military then goes off half-cocked and launches a barrage of bombs. This inspires an ally of the first country to launch a few more missiles and pretty soon the whole thing escalates into something serious. The government always seems to overreact in these cases. Look at how they handled the energy crisis."

The Sierra Club is asking for a temporary injunction that would prohibit the military from launching any missiles until an adequate EIS has been prepared. "This process would only take a year or so," says the club's attorney. "However, the first EIS could obviously only deal with the effects of warfare in general and a site-specific EIS would have to be prepared for any particu-

Cattle Kate v. Cattle Barons. . .

(continued from page 1)

environment she died to preserve.

And she was the first environmental spy. Ella Mae Watson was born in St. Louis, Mo., in 1863, the second daughter of a Scotch Presbyterian rag merchant and a Hindu water buffalo herder. The blend of unbending conservatism beaten into her by the father, on the one hand, and mystical communion with animals and nature instilled into her by the mother, on the other hand, formed the foundation of her conservation work.

She was a lonely child. At first, she had been invited to play with her neighbors' children. But when, at the age of five, she began to blow out the candles on the cakes at her friends' birthday parties "to save energy," her wastrel playmates soon abandoned her.

She grew up talking mainly to her pet turtle and the pigeons in the park. When she was 17, and St. Louis was sweating through the hottest summer on record, she found and turned off the entire city's water supply, "to conserve our valuable natural resources," she told the judge.

At the request of their neighbors and the police, Ella Mae's parents provided her with a Bible, a bedroll, and a sack of nuts and raisins, and packed her onto the first wagon train going West.

She found no companionship on the trail. Her insistence that the pioneers replace every rock, every blade of grass, every sagebrush flattened by the wagon wheels, slowed progress so much that, after six weeks, the wagon train was still within sight of St. Louis.

One day, the trail boss found her scattering over the prairie the alfalfa seeds intended for planting in Oregon. "What you doin'?" he yelled. "Returning to the wild animals what our domestic animals have taken from them," she replied. Ella Mae spent the rest of the journey bound hand and foot with rawhide, lying among the flour and sugar sacks of the rear wagon.

By the time the wagon train had reached the banks of the North Platte, Ella Mae

had gnawed through her bonds. For the last two days, the pioneers had found no water. Now, lips parched and tongues blackened, the men, women, children, and horses plunged into the North Platte and sucked greedily at the water.

They raised their heads when a thin, clear voice, vibrating with rage, shouted, "Hold it." They saw Ella Mae standing on the bank, a double-barreled 10-gauge shotgun in her hands and an open case of ammunition by her side.

"Now," she said. "Let's have some decency. The men and women and children can drink one cup of water each. The horses, they can have a pint. Me, I don't need none. We gotta preserve this water. Future generations are gonna need it just as much as we do."

Shakily, the pioneers climbed out of the river. Ella Mae had to shoot only one, a young widow who furtively tried to scoop an extra handful of water into her dying infant's mouth.

The wagon train lumbered along up the North Platte until it creaked into the little settlement of Poison Hole and Averill's saloon. "Looks like a good place to settle a spell," said the trail boss, waving at the sagebrush that straggled to the horizon and winking at the others.

"Sure does," said Ella Mae. "Lotsa land to reclaim."

That night, while Ella Mae and Averill, the first kindred spirit she had ever met, were exchanging conservation strategies, the pioneers wrapped rags around their horses' hooves, greased the wagon wheels, and stole out of town. They did not even leave Ella Mae her bedroll.

In due course, Ella Mae and Averill became lovers. He planted a garden. He built a log cabin. Together, they watched in dismay as the Cattle Barons gobbled up more and more land and the cows pushed the buffalo further and further toward the inhospitable mountains.

"We gotta do something about them durn cows, Jim," Ella Mae kept saying. "We gotta do something."

"You betcha," Averill would say.

It was dark and wispy clouds scudded across the crescent moon when the four surviving Cattle Barons bade goodbye to Ella Mae, vaulted onto their horses, and cantered off across the range, leaving behind the remains of Averill's saloon and promises to come back as soon as he'd rebuilt it.

"Now then, Jim," said Ella Mae, piecing together the fragments of a chair. "Here's my plan."

"You remember how when we got together we signed that contract sayin' you'd run the business and do the building and gardening and the cooking and the washing and ironing and darning and sewing, and I'd do the talkin'?"

"You betcha," said Averill.

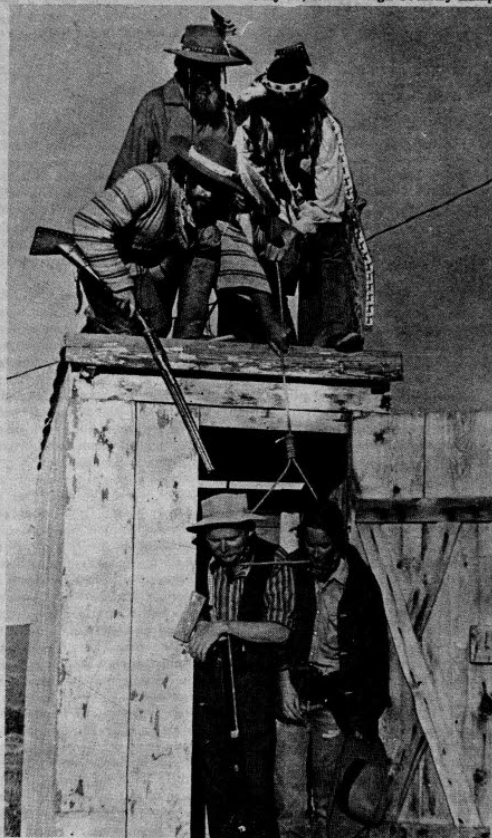
"Well, I figure that was a pretty good deal for you," said Ella Mae. "And we said so long as you kept up your end and I kept up my end, you'd be my man and I'd be your woman?"

"You betcha."

"Well, you sure have kept up your end. And I've kept up mine. But I figure if we make a little change, we can take care of them cattle. See, it's like this. I got a hunch them Cattle Barons take a hankerin' to me. Why, they as good as told me they wouldn't swap me for a choice Hereford. Well, that's how we can get all them damn Herefords and Anguses and whatnot that's ruinin' the plains."

"See, them Cattle Barons don't have no

July 15, 1977 — High Country Lampoon-3



CATTLE KATE refused to read the Cattle Barons' environmental impact statement on the effects of livestock grazing.

mands EIS of military

lar war. Obviously, the impacts of a nuclear assault on Cuba would vary greatly from a similar action in Lithuania."

Silverhammer said part of the suit would demand sufficient time for public comment and input. "If, for instance, someone dropped nukes on Miami, we think that there should be a public comment period of 30 days before the Pentagon makes any retaliatory strikes, to give those affected by the action a chance to state their views. Except those in Miami, of course."

"We think that this action is an important step in protecting the environment that has been long overlooked. Nuclear bombs make a ponderous racket. Whooping crane mating habits are deeply affected by excessive noise. Should a bomb go off in the vicinity of whooping crane habitat, I think you can imagine the devastating impact on the birds' population."

Finally, said Silverhammer, "People should understand this suit in its proper context. The Sierra Club isn't against war, we just want to see it carried out in an environmentally sound manner."

Two campers in Yellowstone National Park mauled a sleeping grizzly in an apparently unprovoked attack. The bear sustained injuries around the head and shoulders and was taken to Cody Memorial. A forest ranger tracked two campers for several hours after the attack and finally succeeded in shooting them.

female company. An' I figure if I — well, if I do them a good turn every once in a while, then they'll give me a Hereford, or an Angus. And purty soon, we're gonna have all the cows. And then we just ship 'em all back East where they came from and turn the prairie back over to the buffalo, who it rightfully belongs to anyway."

"You betcha," said Averill.

Nine years later, Ella Mae and Averill lounged one autumn day against the wooden fence of the corral Averill had built and surveyed their domain.

The fence stretched from the bank of the river, disappeared over the distant horizon, then reappeared a mile to the south. Inside it, a hundred thousand Angus and Hereford and Charollais stood, exposed rib to exposed rib, lowing for food and water. Outside the fence, buffalo roamed, and deer and antelope played.

"Just one more," said Ella Mae, standing on tip-toe to lean her head on Averill's shoulder, "and we got 'em all. Big Tim Carver, boss of the Cattle Barons, is ridin' in tonight and he's bringin' in the last Hereford calf with him. Tomorrow, we ship the cows East and the day after, we hit the trail for California. Lots of good work waitin' to be done there."

Big Tim Carver did ride in that misty night of October 12, 1899. But instead of bringing his calf, he brought his three partners. The Cattle Barons marched in quietly and grimly. This time, the Cattle Barons carried only two lariats between them, and both had nooses tied at the ends.

"Why, Big Tim, honey," said Ella Mae. "Ain't seen you for goin' on eight hours."

Where you been? You boys bring any cows with you?"

"Sure didn't," said Carver. "All we brung was these." He shook the nooses. "We aim to leave 'em here with you folks. An' we're takin' them cows when we go."

Averill reached for his branding iron, but Shorty already held two cocked six-guns.

The Cattle Barons marched Ella Mae Watson and Jim Averill out of the Breakneck Saloon. They tied their hands behind them, mounted them on horses, and led the horses to Rottonwood Creek. They halted at an outhouse and climbed onto its roof. Almost tenderly, they placed the nooses around Ella Mae's and Averill's necks.

"It's like this, Ella Mae," said Carver. "We had your game figured all along. We just played along 'cause I figured the boys needed a little fun. Afore we go, I'll give you one hunk of advice for free. You oughtn't to play fair with the Cattle Barons, 'cause the Cattle Barons ain't gonna play fair with you."

"We got nothin' against you," he said, turning to Averill. "We just think it ain't polite to leave a lady on her lonesome at night." He slapped the horses' rumps.



4-High Country Lampoon — July 15, 1977

Wind power advocate is conservationist of 1976

On Jan. 15, 1976, while the wind howled at 48 knots and the mercury in the thermometer froze hard as a steel rod, Harvey Bentwhacker spent a warm and comfortable night on Colorado's most formidable mountain wrapped only in an aging U.S. Army surplus blanket.

Conditions that would have sent Sir Edmund Hillary shivering back to his Winnebago were, to Bentwhacker, pleasantly cool. For Bentwhacker long ago had

learned to use the resources of his own body to stay warm at any temperature. Now, he is using those same resources to heat his home, power his motorcycle and pickup truck, and run the windmill that generates his electricity.

"Nothin' to it. Anybody can do it," said Bentwhacker, a bearded, barrel-bellied 32-year-old mechanical engineer from MIT who now lives in Vail. "All you gotta do is learn how to properly use your internal wind power (IWP) and hook up a few pipes and storage tanks."

In an exclusive interview with HCN, Bentwhacker explained the workings of his discovery, and what led him to it.

Poking the chewed-up stem of a corn cob pipe through a gap in his whiskers and clamping it firmly between yellowed teeth, Bentwhacker picked his way through a back-yard strewn with rusting oil barrels and twisted lengths of four-inch plastic pipe until he reached a ramshackle wooden shed 25 feet from his house.

He motioned to the interviewer, and flung open the door of the shed. "Thar she is," he beamed proudly. "That's what keeps the old lady and the little uns warm."

"She" consisted of a wooden box with a hole cut in the top, and a hinged lid that fit over the hole. Two feet of plastic pipe led from the bottom of the box to four dented, interconnected, 55-gallon oil drums. Another plastic pipe led from the top of the oil drums to the house. There, the pipe split into eight branches, each branch leading to a separate heating vent in each of the house's eight rooms.

"That's all there is to it," Bentwhacker said. "Cost me two hours and three bucks to whup together."

Bentwhacker fumbled around his whiskers for the bowl of his pipe. "The first thing you gotta realize," he said, extinguishing a small fire in his beard, "is that we all got wind. I got wind. You got wind. Everybody's got wind." He danced a few steps to demonstrate the catchy rhythm, then pulled a wad of crumpled bumper stickers bearing the same proclamation out of a greasy pocket of his overalls and tried to sell them to the interviewer.

"The amazing thing is that, until I came along, nobody could figure out how to harness all this wind power," Bentwhacker said.

He described how, in the fall of 1973, he went on a camping trip in Rocky Mountain National Park and got caught with a summer-weight sleeping bag in winter-



HARVEY BENTWHACKER, conservationist of the year, setting off on a three-week wilderness trip. He holds a patent on the portable plastic wind holder.

weight weather. He heated a can of beans over a candle and crawled into the bag, wearily anticipating a cold, uncomfortable night.

"Damned if, as soon as I settled in, I didn't feel these drafts of warm air wafting around me from about the center of the bag," he said, his bloodshot eyes gleaming. "Didn't take me long to figure out what was what."

"I figured the human body's an internal

combustion engine, and a damned efficient one. You feed it a can of beans, and you swallow air along with the beans. Then your lungs compress the mixture and send it out your exhaust system in the form of hot air."

Since then, Bentwhacker has hiked the Alps, the Andes, the Himalayas, the Canadian Rockies, and Fifth Avenue in Manhattan, never taking anything more for shelter than his trusty old Army blanket.

Dear Friends,

We had HCN laid out and ready to put to bed except for one small but significant omission — Zane E. Cology's Looney Limerick was an hour past deadline and, with a blizzard howling outside, it was not likely to come in the day's mail. We could not delay much longer. But we could not, in good conscience, print the paper without Cology (a pseudonym for Hallmark Cards, Inc.).

As we debated the alternatives — offer our readers a refund, declare literary bankruptcy, suicide — the sudden snarling and yapping of half the dogs in town told us the impossible had happened. Irwin the mailman had done it again.

"Here you pinkos," he cried as he burst through the door, shaking off snow, a Labrador, and a Pekinese. "Your poem's come in. Special delivery. 'Tweren't hardly worth delivering. My hamster could write better."

Irwin handed us Cology's limerick, liberally marked in red crayon with Irwin's changes, deletions, and keen editorial comments.

Few of HCN's friends have been more helpful than Irwin in our nine years of existence. Six days a week, Irwin punctually brings our subscription money — minus 10 per cent for what he calls "agent's fees" — right to our door. He keeps up a constant stream of sharp, practical advice. "Your shoes are on the wrong feet," he might tell managing editor Joan Nice. Or "This woman's got \$50,000 in the bank and a Mercedes. You should double her subscription rate."

His wit brightens up the office every time he walks in. "Why did the environmentally-oriented chicken cross the road," he asked one day to our great delight. Then he walked out

and left us in suspense until, at 3 a.m., he called Marjane Ambler and told her, "To get to the other side where there was less pollution."

We calculate that Irwin has lugged 43 tons over 27 miles of icy, treacherous pavement or hot, melting asphalt to deliver our mail. In the course of performing his duty to us, he has suffered three dislocated arms, one perforated shin, and a broken jaw. Nineteen times, between his van and our door, he has stepped in dog waste. But, each time, he has scraped it off his shoe and brought it in to us as a "sample of pollution."

Innumerable friends have helped us innumerable times. Irwin is one of the staunchest of these. Truly, it can be said of him: Neither rain nor snow nor hail nor sleet nor threats of bodily harm can stay this carrier from his appointed rounds.

This is our last issue. A 16-corporation consortium headed by Exxon, General Motors, Peabody Coal, and Pacific Power and Light last week bought us out. Terms of the sale are none of your business.

We are not sure what they intend to do with HCN. Last we heard, they were considering changing the paper to a poetry magazine for strip mine and oil rig workers with the first feature entitled, "Mining is Beautiful."

The new owners have watched with interest the readers' loyalty to HCN through the years, even when we began accepting advertising. They are confident you will continue your support after this latest transition, which they assure us will mean only minor changes.

So farewell, dear readers, and good luck.

—the editors

Yellowstone — pave it to save it

The National Park Service has drawn up a secret plan to pave another 1.73 million acres of Yellowstone National Park, the High Country News has learned.

This will mean that by July, 1980 — tentative date for completion of the project — all but 183 of the 2.2 million acres that comprise the nation's oldest and largest national park will be under concrete.

"We just don't have the technology yet to pave Old Faithful," explained Park Administrator Howard (Red) E. Mix.

"You might not believe me," Mix said, "but it's really a conservationist measure. The only way we can save Yellowstone," said Mix, a former colonel in the Vietnam War, "is to destroy it."

Between Memorial Day and Labor Day of 1976, Mix said, 9.4 million tourists went through the park. "There's just no way we can handle that many people with our limited parking facilities and few roads," he said. "For those three months every year, the park gets to look more and more like a cross between the worst features of Times Square and Los Angeles on a foggy day."

Originally, Mix said, the plan was drawn up to accommodate the ever-increasing flow of tourists. But, he said, "It suddenly dawned on me that it might do just the opposite. Look at it this way. Who the hell's going to drive clear across country — or even step out their back door — just to look at millions of acres of concrete?"

"I'll tell you who'll do that. Nobody, that's who," said Mix. "And then, if all the other parks and wilderness areas and national seashores and national monuments follow our lead, Americans will stay home where they belong. Hell, we'll probably end up saving the country millions of barrels of oil a year."

Scrubber controversy spurs strike

The International Brotherhood of Stack Gas Scrubbers last week launched its first major job action with a strike against Montana Powerful. The union says the utility company is exploiting workers.

Union President Michael "Shorty" Weber said, "Montana Powerful is claiming that it spends millions of dollars on the development of scrubbers. Everyone in our union is a scrubber at — we happen to know that this is completely untrue."

"We spend all day inside the power plant stacks, scrubbing the flue gas with wire brushes. It's hard, specialized work, but it certainly isn't worth the millions that the company claims it's spending. The highest paid scrubbers get only \$6.60 an hour, plus overtime and a cost of living raise. If the company is spending millions, we want our share."

The strike came as a surprise to the Environmental Protection Agency. A red-faced EPA spokesman said, "To be honest about it, no one at the agency has actually

ever seen a scrubber. We just took the company's word for it when they said it was advanced technology requiring large capital outlays."

An officer of Montana Powerful said, "The reason that most people haven't heard of the union is because it is a relatively small portion of the labor force. The job requirements are stringent — a scrubber has to be strong, agile and capable of performing repetitious work. At the same time, he has to be small enough to fit inside the stacks. 'Shorty' Weber is the tallest scrubber we have, and he's only four foot two."

Some observers were nevertheless a bit nonplussed by the utilities' claim that it spent "millions in research and development on scrubbers." Replied the Montana Powerful spokesman, "We did spend millions. But, in the final analysis, we discovered that midgets in the stacks were more efficient and cheaper than complex hardware."



Straw spread on the ground attracts turkeys so they can be captured and transplanted.

Photo by Don Domenick and courtesy of the Colorado Division of Wildlife.

15

STATE OF WYOMING PUBLIC NOTICE

PURPOSE OF PUBLIC NOTICE

THE PURPOSE OF THIS PUBLIC NOTICE IS TO STATE THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS UNDER THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972 (FWPCA), P.L. 92-500 AND THE WYOMING ENVIRONMENTAL QUALITY ACT (35-502 et. seq., Wyoming Statutes 1967, CUMULATIVE SUPPLEMENT 1973).

IT IS THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS TO (8) EIGHT OIL TREATER DISCHARGERS, (2) TWO DOMESTIC DISCHARGERS AND (1) ONE WATER TREATMENT PLANT DISCHARGER; TO MODIFY (2) TWO OIL TREATER AND (1) ONE COMMERCIAL DISCHARGE PERMIT; AND TO RENEW (2) TWO OIL TREATER PERMITS WITHIN THE STATE OF WYOMING.

APPLICANT INFORMATION

- | | |
|---------------------|----------------------------------|
| (1) APPLICANT NAME: | BUTTES RESOURCES |
| MAILING ADDRESS: | P.O. BOX 121 |
| FACILITY LOCATION: | OSAGE, WYOMING 82723 |
| | RANGER GOVERNMENT, |
| | NE¼, SECTION 13, T37N, R63W, |
| | NIobrara County, WYOMING |
| APPLICATION NUMBER: | Wy-0026972 |
| (2) APPLICANT NAME: | DIAMOND SHAMROCK COMPANY |
| MAILING ADDRESS: | 5730 WEST YELLOWSTONE |
| | CASPER, WYOMING 82601 |
| FACILITY LOCATION: | MARTIN SPRING STATE NO. 31-16, |
| | NE¼, SECTION 16, T36N, R74W, |
| | CONVERSE COUNTY, WYOMING |
| APPLICATION NUMBER: | Wy-0027014 |
| FACILITY LOCATION: | HORNBECK STATE NO. 3-16, |
| | NW¼, SECTION 16, T36N, R74W, |
| | CONVERSE COUNTY, WYOMING |
| APPLICATION NUMBER: | Wy-0027022 |
| FACILITY LOCATION: | HORNBECK STATE NO. 1-16, |
| | SW¼, SECTION 16, T36N, R74W, |
| | CONVERSE COUNTY, WYOMING |
| APPLICATION NUMBER: | Wy-0027031 |
| FACILITY LOCATION: | MARTIN SPRING WERNER NO. 11-9, |
| | NW¼, SECTION 9, T36N, R74W, |
| | CONVERSE COUNTY, WYOMING |
| APPLICATION NUMBER: | Wy-0027049 |
| FACILITY LOCATION: | MARTIN SPRING FEDERAL NO. 11-21, |
| | NW¼, SECTION 21, T36N, R74W, |
| | CONVERSE COUNTY, WYOMING |
| APPLICATION NUMBER: | Wy-0027057 |
| FACILITY LOCATION: | MARTIN SPRING FEDERAL NO. 1-9, |
| | SW¼, SECTION 9, T36N, R74W, |
| | CONVERSE COUNTY, WYOMING |
| APPLICATION NUMBER: | Wy-0027065 |
| (3) APPLICANT NAME: | L & R DRILLING COMPANY |
| MAILING ADDRESS: | P.O. BOX 936 |
| | PIERRE, SOUTH DAKOTA 57501 |
| FACILITY LOCATION: | BLOCK LEASE, |
| | NE¼, SECTION 7, T44N, R62W, |
| | WESTON COUNTY, WYOMING |
| APPLICATION NUMBER: | Wy-0027090 |

All facilities are oil production units located in Converse, Weston and Niobrara Counties, Wyoming. The produced water is brought to the surface and separated from the petroleum product through the use of heater treaters and skim ponds. All discharges are to unnamed drainages which eventually reach Class III streams, with the exception of L & R Drilling, which discharges to an unnamed drainage of Beaver Creek (Class I warm water stream).

All facilities must meet Wyoming's Produced Water Criteria effective immediately. Semi-annual self-monitoring is required for all parameters except oil and grease which must be monitored quarterly. Expiration dates correspond to the expiration dates of other oil treater facilities in the same area.

- | | |
|---------------------|-----------------------------|
| (4) APPLICANT NAME: | BALD MOUNTAIN TRAILER COURT |
| MAILING ADDRESS: | ROUTE 1, BOX 103A |
| | BUFFALO, WYOMING 82834 |
| APPLICATION NUMBER: | Wy-0022985 |

The Bald Mountain Trailer Court is located west of the Town of Buffalo, Wyoming, on U.S. Highway 16. Wastewater treatment consists of an extended aeration package plant followed by a small polishing pond which presently discharges into a natural drainage and onto the property of United Campground. It is now the intention of the Bald Mountain ownership to install a new outfall line which would carry the wastewater directly to Clear Creek (Class I stream) and thus end the discharge onto United Campground property.

The proposed permit requires any discharge to Clear Creek to be in compliance with National Secondary Treatment Standards effective immediately. Quarterly self-monitoring of the effluent will be required and the permit will expire July 31, 1982.

- | | |
|---------------------|-------------------------|
| (5) APPLICANT NAME: | PACKERVILLE SEWER USERS |
| MAILING ADDRESS: | ROUTE 1, BOX 8 |
| | WORLAND, WYOMING 82401 |
| APPLICATION NUMBER: | Wy-0027073 |

The Packerville area is a residential area located approximately ¼ mile north of the City of Worland. There are approximately 42 homes in the area, all of which have septic tanks. Forty of the homes' septic tanks discharge to a single interceptor line which in turn discharges to an unnamed drain, a tributary of the Big Horn River (Class I stream). Two of the homes' septic tanks discharge directly to the drain. The homeowners in the Packerville area have formed the Packerville Sewer Users with the purpose of connecting their sewer system to the City of Worland's sewage collection system. The City of Worland has agreed in principle with this proposal.

The proposed permit contains no effluent limitations or self-monitoring requirements, however, the Packerville Sewer Users must provide this Department, within thirty (30) days of permit issuance, a schedule of compliance for hook-up to the Worland system. If the schedule is determined to be reasonable by the Department, it will become an enforceable part of the permit itself.

- | | |
|---------------------|-----------------------------|
| (6) APPLICANT NAME: | TOWN OF BUFFALO, WYOMING |
| MAILING ADDRESS: | P.O. BOX 430 |
| | BUFFALO, WYOMING 82834 |
| FACILITY NAME: | WATER SUPPLY SCREENING UNIT |
| APPLICATION NUMBER: | Wy-0027103 |

The Town of Buffalo operates a coarse screening unit on its raw water supply. At present, when the screen is backwashed, the material trapped on the screen is discharged into Clear Creek (Class I stream). The Town now has developed plans to construct a 3,600 gallon settling pond to hold this backwash water and allow time for the waste material to settle before discharging the supernatant water to Clear Creek. The Town expects the settling pond to be constructed by October 1, 1977, thus the permit will require compliance with best practicable treatment standards for total suspended solids by October 1, 1977. Since in this process no chemicals of any kind are added to the water, the permit requires only the monitoring of flow volume and total suspended solids on a quarterly basis. The permit is scheduled to expire June 30, 1982.

- | | |
|--------------------|-----------------------------|
| (7) PERMIT NAME: | SUPERIOR OIL COMPANY |
| MAILING ADDRESS: | P.O. BOX 71 |
| | CONROE, TEXAS 77301 |
| FACILITY LOCATION: | LITTLE LARAMIE FIELD, |
| | NE¼, SECTION 5, T16N, R75W, |
| | ALBANY COUNTY, WYOMING |
| PERMIT NUMBER: | Wy-0025593 |

Facility is a typical oil production unit in which the produced water is brought to the surface and separated from the petroleum product with the use of heater treaters, skim tanks and skim ponds. A permit for this facility was issued January 23, 1976.

Proposed modification simply changes the permit to include 2 separate discharge points, and semi-annual self-monitoring for all parameters (except oil and grease quarterly) at both points of discharge. The permit will expire June 30, 1980.

- | | |
|--------------------|------------------------------------|
| (8) PERMIT NAME: | TENNECO OIL COMPANY |
| MAILING ADDRESS: | 1200 LINCOLN TOWER BUILDING |
| | 1860 LINCOLN STREET |
| | DENVER, COLORADO 80203 |
| FACILITY LOCATION: | TURNER SAND UNIT, TRACT 1 BATTERY, |
| | NW¼, SECTION 25, T48N, R66W, |
| | WESTON COUNTY, WYOMING |
| PERMIT NUMBER: | Wy-0026239 |

Facility is a typical oil production unit located in Weston County, Wyoming, in which produced water is separated from the petroleum product through the use of heater treaters and skim ponds. Discharge is to Raven Creek (Class III stream) via an unnamed drainage.

A letter of beneficial use has been received by an area rancher, therefore, the proposed modification is to delete limitations on all chemical parameters except oil and grease and pH. All parameters must be monitored semi-annually, however, with the exception of oil and grease which must be monitored quarterly. The permit will expire September 30, 1980.

- | | |
|------------------|----------------------------------|
| (9) PERMIT NAME: | KOA CAMPGROUND, BUFFALO, WYOMING |
| MAILING ADDRESS: | P.O. BOX 865 |
| | BUFFALO, WYOMING 82834 |
| PERMIT NUMBER: | Wy-0025941 |

Facility is a campground located approximately one mile west of Buffalo, Wyoming, on U.S. Highway 16. Wastewater treatment consists of a sanilogical package plant followed by chlorination. Discharge is to an unnamed drainage which will eventually flow to Clear Creek (Class I stream). A wastewater discharge permit for this facility was issued March 12, 1976.

The proposed modification is to increase the total residual chlorine limit of the discharge to 3.0 mg/l and decrease the fecal coliform limit to 200-400 organisms per 100 ml. The discharge flows approximately ¼ mile before entering Clear Creek, therefore, the chlorine residual will have a chance to lose most of its toxicity before entering the creek. It is also felt that the bacteria level must remain quite low year around due to the location of the discharge.

- | | |
|--------------------|------------------------------|
| (10) PERMIT NAME: | TOCOO OIL CORPORATION |
| MAILING ADDRESS: | 26 SOUTH SENECA AVENUE |
| | NEWCASTLE, WYOMING 82701 |
| FACILITY LOCATION: | WRIGHT GOVERNMENT UNIT, |
| | SW¼, SECTION 24, T44N, R64W, |
| | WESTON COUNTY, WYOMING |
| PERMIT NUMBER: | Wy-0023167 |
| FACILITY LOCATION: | SS U UNIT, |
| | SW¼, SECTION 23, T44N, R64W, |
| | WESTON COUNTY, WYOMING |
| PERMIT NUMBER: | Wy-0023175 |

Facilities are all oil production units located in Weston County, Wyoming. The produced water is brought to the surface and separated from the petroleum product through the use of heater treaters and skim ponds. Both discharges are to unnamed drainages of South Beaver Creek (Class III stream). Two (Wy-0023167) must meet Wyoming's Produced Water Criteria effective immediately. The Toco (Wy-0023175) facility was given a higher total dissolved solids (6,000 mg/l) and chloride (2,500 mg/l) limit due to the aridness of the area.

All parameters for both facilities must be self-monitored semi-annually, with the exception of oil and grease which must be monitored quarterly. The permits will expire December 31, 1981.

STATE-EPA TENTATIVE DETERMINATIONS
Tentative determinations have been made by the State of Wyoming in cooperation with the EPA staff relative to effluent limitations and conditions to be imposed on the permits. These limitations and conditions will assure that State water quality standards and applicable provisions of the FWPCA will be protected.

PUBLIC COMMENTS

Public comments are invited any time prior to August 15, 1977. Comments may be directed to the Wyoming Department of Environmental Quality, Water Quality Division, Permit Section, Hathaway Building, Cheyenne, Wyoming 82002, or the U.S. Environmental Protection Agency, Region VIII, Enforcement Division, Permit Administration and Compliance Branch, 1860 Lincoln Street, Denver, Colorado 80203. All comments received prior to August 15, 1977 will be considered in the formulation of final determinations to be imposed on the permits.

ADDITIONAL INFORMATION

Additional information may be obtained upon request by calling the State of Wyoming, (307) 777-7781, or EPA, (303) 327-5874, or by writing to the aforementioned addresses.

The complete applications, draft permits, and related documents are available for review and reproduction at the aforementioned addresses.

Public Notice No. Wy-77-09

DEPARTMENT OF INSURANCE STATE OF WYOMING 380 Summers St., San Francisco, Calif. 94106 BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1976 Gross Premiums Received 1976 \$21,346 Gross Premiums Returned 1976 2,134 Gross Premiums Retained 1976 19,212 Losses Incurred 1976 15,620,425 Losses Returned 1976 1,789,571 Losses Retained 1976 13,830,854 Capital Stock Paid Up 1,000,000 Surplus 1,272,044 Income during year ending 10,077,489 Expenses for year ending 10,427,148 December 31, 1976 10,427,148 Credited to the best of my knowledge and belief, the insurer above named is in compliance with the law of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming. Dated May 26, 1977 Insurance Commissioner	DEPARTMENT OF INSURANCE STATE OF WYOMING 400 North Meridian Street, Indianapolis, Ind. 46207 BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1976 Gross Premiums Received 1976 \$45,104 Insurance Written 1,149 Direct Benefits and Losses Paid 1,149 Gross Premiums Returned 1,149 Losses Incurred 1,149 Losses Returned 1,149 Capital Stock Paid Up 62,166,272 Surplus 1,342,353 Income during year ending 22,432,397 Expenses for year ending 22,432,397 December 31, 1976 22,432,397 Credited to the best of my knowledge and belief, the insurer above named is in compliance with the law of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming. Dated May 26, 1977 Insurance Commissioner	DEPARTMENT OF INSURANCE STATE OF WYOMING American Title & Insurance Co., P.O. Box 0-2007, Miami, Fla. 33101 BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1976 Gross Premiums Received 1976 \$13,820 Losses Paid () Losses Returned () Losses Retained () Capital Stock Paid Up 20,126,813 Surplus 1,353,415 Income during year ending 16,082,475 Expenses for year ending 14,921,385 December 31, 1976 14,921,385 Credited to the best of my knowledge and belief, the insurer above named is in compliance with the law of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming. Dated May 26, 1977 Insurance Commissioner	DEPARTMENT OF INSURANCE STATE OF WYOMING American State Insurance Co., 400 North Meridian St., Indianapolis, Ind. 46207 BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1976 Gross Premiums Received 1976 \$104,233 Gross Premiums Returned 1976 13,850 Losses Paid Predicting Salvage 13,850 Losses Incurred 13,850 Losses Returned 13,850 Capital Stock Paid Up 286,045,222 Surplus 112,050,011 Income during year ending 210,705,313 Expenses for year ending 203,097,005 December 31, 1976 203,097,005 Credited to the best of my knowledge and belief, the insurer above named is in compliance with the law of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming. Dated May 26, 1977 Insurance Commissioner	DEPARTMENT OF INSURANCE STATE OF WYOMING American Title & Insurance Co., 250 Middlefield Road, Menlo Park, Calif. 94025 BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1976 Gross Premiums Received 1976 \$10,471 Gross Premiums Returned 1976 15,000 Losses Paid Predicting Salvage 15,000 Losses Incurred 15,000 Losses Returned 15,000 Capital Stock Paid Up 686,134,840 Surplus 32,852,581 Income during year ending 112,303,213 Expenses for year ending 124,779,736 December 31, 1976 124,779,736 Credited to the best of my knowledge and belief, the insurer above named is in compliance with the law of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming. Dated May 26, 1977 Insurance Commissioner	DEPARTMENT OF INSURANCE STATE OF WYOMING Allstate Insurance Co., 212 E. Thomas Road, Phoenix, Ariz. 85016 BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1976 Insurance Written \$ 0 Gross Premiums Received 1976 \$ 0 Direct Benefits and Losses Paid 1976 0 Gross Premiums Returned 1976 0 Losses Incurred 1976 0 Losses Returned 1976 0 Capital Stock Paid Up 402,200 Surplus 30,292,457 Income during year ending 39,472 Expenses for year ending 664,713 December 31, 1976 664,713 Credited to the best of my knowledge and belief, the insurer above named is in compliance with the law of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming. Dated May 26, 1977 Insurance Commissioner	DEPARTMENT OF INSURANCE STATE OF WYOMING Allstate Insurance Co., 44 West Main Street, Meriden, Conn. 06450 BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1976 Gross Premiums Received 1976 \$44,133,671 Losses Paid Predicting Salvage 64,000,109 Losses Incurred 64,000,109 Losses Returned 64,000,109 Capital Stock Paid Up 285,285,437 Surplus 102,203,301 Income during year ending 102,203,301 Expenses for year ending 102,203,301 December 31, 1976 102,203,301 Credited to the best of my knowledge and belief, the insurer above named is in compliance with the law of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming. Dated May 26, 1977 Insurance Commissioner	DEPARTMENT OF INSURANCE STATE OF WYOMING Allstate Insurance Co., 59 John St., New York, N.Y. 10005 BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1976 Gross Premiums Received 1976 \$ 0 Losses Paid Predicting Salvage 0 Losses Incurred 0 Losses Returned 0 Capital Stock Paid Up 17,823,133 Surplus 7,205,543 Income during year ending 7,205,543 Expenses for year ending 7,205,543 December 31, 1976 7,205,543 Credited to the best of my knowledge and belief, the insurer above named is in compliance with the law of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming. Dated May 26, 1977 Insurance Commissioner	DEPARTMENT OF INSURANCE STATE OF WYOMING Allstate Insurance Co., 144 West Main Street, Meriden, Conn. 06450 BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1976 Gross Premiums Received 1976 \$4,402 Losses Paid Predicting Salvage 4,402 Losses Incurred 4,402 Losses Returned 4,402 Capital Stock Paid Up 2,000,000 Surplus 9,694,994 Income during year ending 17,220,265 Expenses for year ending 16,091,026 December 31, 1976 16,091,026 Credited to the best of my knowledge and belief, the insurer above named is in compliance with the law of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming. Dated May 26, 1977 Insurance Commissioner	DEPARTMENT OF INSURANCE STATE OF WYOMING Allstate Insurance Co., P.O. Box 2120, Salt Lake City, Utah 84110 BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1976 Insurance Written \$4,704 Gross Premiums Received 1976 50,700 Direct Benefits and Losses Paid 1,047 Gross Premiums Returned 1,047 Losses Incurred 49,753,485 Losses Returned 49,753,485 Capital Stock Paid Up 5,727,289 Surplus 4,857,289 Income during year ending 3,664,464 Expenses for year ending 3,700,435 December 31, 1976 3,700,435 Credited to the best of my knowledge and belief, the insurer above named is in compliance with the law of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming. Dated May 26, 1977 Insurance Commissioner
--	--	--	--	--	---	---	---	---	---