

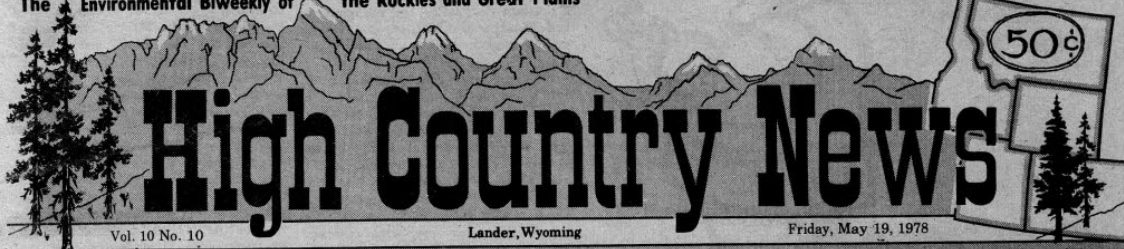
PLEASE CHECK YOUR ADDRESS LABEL: The numbers after your name stand for the month and year your subscription expires. If it's nearly due, how about sending in \$12 today?

XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX

NUM. 2008 11-78

7203

The Environmental Biweekly of the Rockies and Great Plains



Vol. 10 No. 10

Lander, Wyoming

Friday, May 19, 1978

Three of four seats up for grabs

Montanans face turmoil next election

by Dale Burk

Photos courtesy of the Missoulian

Montana's congressional delegation may be going through major changes this year after almost two decades of stability under the combined leadership of Sens. Mike Mansfield (D) and Lee Metcalf (D). Three of the state's four congressional seats — one in the Senate and two in the House — are at stake in 1978. Observers expect that two of them will be filled by new faces.

Environmentalists can be certain of at least two things. One is that Sen. John Melcher (D) — the only officeholder whose seat is not up for election — has presented a mixed and sometimes puzzling record on environmental matters. The other is that

the untimely death on Jan. 12 of Sen. Lee Metcalf is making it harder than they had expected for their preferred candidate, Max Baucus (D), to replace him. (Metcalf had planned to retire at the end of the current term.)

Metcalf endeared himself to environmentalists during a long and distinguished career in Congress. He was a leading proponent nationally of wilderness, wildlife refuges, strip mining legislation, and sustained-yield management of the national forests.

Until Metcalf's death, it was generally assumed that Baucus, now a Congressional representative from the western district, would easily win the election to replace

him. However, Metcalf's death left the remainder of his term to be filled, and Gov. Tom Judge appointed Paul Hatfield (D), chief justice of the state Supreme Court, to fill the seat. Hatfield, by virtue of his incumbency, may give Baucus a run for his money, and two other candidates have now entered the field.

Both the Senate race and that for the Western Congressional District post Baucus is vacating are crowded. Four Democrats and three Republicans are seeking their party's nomination for the Senate seat, and each party has six candidates seeking the right to run for the House seat.

The other race has incumbent Republi-



REP. MAX BAUCUS may have a tight race for Senate against incumbent appointee Paul Hatfield.

can Rep. Ron Marlenee running unopposed in the primary. Two Democrats are vying for the opportunity to oppose him in November for the Eastern Congressional District seat.

Of these races, the most attention is being focused on the Senate battle where Baucus is expected to triumph in both the primary and the general election, and on the Western Congressional District race with its 12 candidates.

BAUCUS, THE FRONT-RUNNER

Baucus is unquestionably the front-runner in the Senate race and enjoys good support from environmentalists. He had an 80 percent approval rating from the League of Conservation Voters in 1975, his first year in Congress, and was rated at 75 percent in 1976. He was instrumental in passage of the Montana Wilderness Study Act and legislation placing the three forks of the Flathead River in northwestern Montana in the National Wild and Scenic Rivers System.

"Baucus may be slow to warm up, but he is real savvy," Bill Cunningham ham, Montana

(continued on page 6)

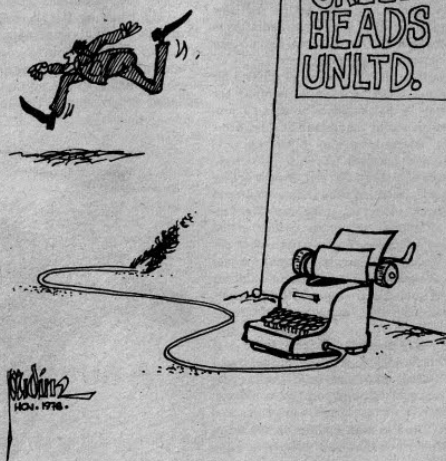
God bless America. Let's save some of it.

©1978 by Edward Abbey

I see my role in the environmentalist movement as that of a cheerleader on the sidelines — call me the pom-pom girl of American environmentalism — and a troublemaker after dark. For I am only a writer, a journalistic scrivener, and what I write is mostly fiction. I am not an expert at anything, except maybe at the fine art of constructive vandalism. (More on this later.)

The people I admire most in the environmentalist movement are the people of wide and scientific knowledge — Barry Commoner, Paul Ehrlich, Garrett Hardin, Lewis Mumford (my own private Nobel Prize nominee), Amory Lovins, to name but a few. And the organizational leaders — Dave Brower (another Nobel nominee), Mike McCloskey, Pete Seeger, Stewart Udall. And a few grand old men like Sigurd

(continued on page 4)





"AS SOMEONE WHO LOVES YOU, I'M DOING THIS FOR YOUR OWN GOOD."

HIGH COUNTRY

By Jane Bell

The farther we get from the beginnings of this great country the less we seem to appreciate the vast natural resources we had. No other continent was blessed with such a variety of riches in combination with geography and climate.

We began as a wilderness continent with only a few native Indians as inhabitants. Their culture and their numbers rested lightly upon the land. When Europeans came upon the scene, their culture depended upon the exploitation and use of a wide array of natural resources. Thus began a saga of depletion and destruction. The forces are still at work.

Still, there have been some counterforces. The conservation philosophy had its beginnings in the late 1800s in the aftermath of the vast bison herds and the near depletion of the white pine forests of the Lake States. There were a few who saw the need to wisely husband our resources. And there were even a few who had the courage to propose some preservation. So the national parks system was conceived.

As our human population grows, so, too, the pressures upon our resources. The opportunities to conserve and preserve some semblance of our former riches will grow ever more difficult. The dedication of an additional 40,000 acres of redwoods to Redwood National Park is a good example.

Recently, the Worthington (Minn.) Daily Globe carried an editorial on the native grasses. It pointed out that the grasslands of the central North American

continent were one of the most wondrous natural resources ever found on earth. Yet the rich diversity of grass species and all the plant and animal communities associated with them have been virtually destroyed.

Now, there is growing appreciation of what native grasses represent to us. A movement is under way to try to restore them to many areas. The Soil Conservation Service has a Plant Materials Center at Manhattan, Kan., where numerous species of native grasses have been planted and tested.

SCS interest in the original prairie grasses goes back to the 1930s. It was then the mid-continent was scourged by severe drought. The dead soil with its grass cover removed was vulnerable to the wind. When it raged, millions of tons of some of the richest soil on earth blew away. When clouds of dust so thick they obscured vision hit Washington, D. C., Congress created the Soil Conservation Service.

Then as now the greatest healer of the stricken lands were the native grasses. They were perennial, had adapted to climatic changes over eons of time, and were highly resistant to erosion. But the crisis of the drought passed, World War II came, and the need for foodstuffs increased. The importance of grass cover was never fully realized.

Now, there may be renewed interest in establishing more grass cover along roadways, in waterways, and wherever soil is exposed to erosion. There is even considerable interest in establishing a Tallgrass Prairie National Park. If that dream is ever realized, the turkey track grasses along with hundreds of other species will once again wave in a "Sea of Grass."



HCN Letters

BRANCHING OUT

Dear Editor,

In a letter to HCN (April 21) a reader takes Myra Connell to task for her series of discussions on weather modification.

Unfortunately there are innuendoes in the letter that appear to suggest that the discussions should never have been printed, because the reader claims, they lack facts.

I would like to point out that the opinion expressed is not Myra's alone. She has drawn from many people, who are far more knowledgeable in weather modification than Myra is, or claims to be.

And since facts are mentioned, where are the facts that prove that tampering with the weather will not, in the long run, have an adverse and detrimental effect upon our environment?

As I understand it, one of the reasons for Myra's column, "Branching Out" is to present a different slant to various topics, and perhaps jar people out of their usual paths of thinking. If through her "emotional" discussions a few weather modifiers stop and question before they act, one of her purposes will have been achieved.

Thomas Connell
Lander, Wyo.

STONE, HEADLINES MISLEADING

Dear Editor,

I was glad to see your bringing to light some of Jay McGrew's findings regarding

insulation. For the most part I agree with McGrew although I think the tone of your article and particularly the headlines are misleading in terms of how I read what he is saying.

The point is not that insulation is a waste of money; rather that there are often other heat losers in a house much more significant to heat loss than heavy insulation — such as holes in the roof in the form of chimneys, stove vents and bathroom vents, or number of time exterior doors are opened (i.e. number of household occupants and their habits), or furnace inefficiencies. It would be foolish to ignore these heat losers, concentrating solely on insulation.

Nevertheless, it would be equally foolhardy to believe that because these factors are of first importance, that insulation can be ignored. In your article McGrew states that 6 inches of ceiling insulation is warranted in the Denver area; this is more than most existing homes have.

Regarding the discussion of criteria for insulation, cost-effectiveness is really the only way for an individual to make a decision about adding insulation or solar to his home. Determining cost-effectiveness is not simple, however (refer to *Alternate Sources of Energy* No. 30). In your article there is a statement that with a tripling of gas prices, adding an additional three inches of insulation to your ceiling would only save four cents per square foot per year. It happens that with annualized real costs, the additional insulation would cost less than one cent per square foot per year. To me that insulation sounds cost-effective.

Too many people have incorrectly used cost-benefit analysis to show that solar and conservation options are hopelessly expensive in comparison with conventional fuels. It is true that insulation companies and others stand to make some money off of insulation, but that is really beside the point.

There has been quite extensive coverage of these insulation questions (including ar-

ticles by McGrew and Bickle and Van der Meer) in issues of the New Mexico Solar Energy Association Bulletin (Box 2004, Santa Fe) during the past year. Interested people may wish to browse through back copies of the Bulletin to get a better feel for some of the issues involved.

Charles D. Kolstad
Stanford, Calif.

OPPOSES FOOTHILLS

Dear HCN,

I am writing to you about the proposed Foothills Water Project located in Waterton Canyon, southwest of Denver, Colo. I am greatly opposed to the Foothills project. Some of the reasons are listed below.

— By building the Strontia Springs Dam, the Foothills project would destroy the best fishing grounds on Colorado's Eastern Slope. A herd of over 60 bighorn sheep, Colorado's state animal, would be reduced by half or even lost. Deer, moun-

tain lions, black bears, raccoons, coyotes, bobcats, and many other animals would be driven from their homes by the construction activities. Endangered peregrine falcons would be driven from their existing nesting sites. All of these animals are only 15 miles from Denver.

— Some other consequences are that the increased water supply will promote new housing developments resulting in urban sprawl, thus adding to Denver's already growing air pollution problem. The water board denies this. However, there is an infallible law of nature that states that increased supply results in increased demand.

— The Denver area does not need Foothills, either now or in the foreseeable future. The current treatment capacity is more

It's not the comics

Why would libraries and research centers throughout the nation wish to subscribe to High Country News? Perhaps articles like the uranium stories of the March issues keep them interested. Or the coverage of the St. Vrain nuclear facility in Colo.

Whatever the reason, it's not the comics. Because HCN has none. But it does contain well-researched articles and sharply honed editorials.

Subscribe to HCN today, won't you? Each issue contains several good reasons why you should subscribe. But don't do it for the comics. Subscriptions are \$12 for twenty-five issues.

Enclosed is \$12. Send HCN to:

name _____
address _____
city _____
state _____ zip _____

Send to: HCN, Box K, Lander, Wyo. 82520
Still not convinced? Ask for a sample copy.



Guest editorial

May 19, 1978 — High Country News

Wyoming energy boom like a 'two-legged stool'

by Mike Leon
Reprinted from the SHERIDAN PRESS

It would be more to the point, I think, if we dropped the phrase "quality growth" from our rhetoric and began to think in terms of the amount of damage that will be inflicted on Wyoming in the coming years.

Bear in mind that to talk about damage has been considered by many Wyoming people to be outright subversion, dangerous talk originating in environmentalist cells, elitist prattle with lofty disdain for the need for common folk to sustain themselves with jobs. To talk of damage has been to talk up the wind, so to speak, one's own words blown back in one's face. Politicians have been the most wary of us all about bringing up the subject of damage. It is simply too touchy an issue.

So, instead, we have talked about "quality growth" as if such a thing were possible, as if it were actually taking place. True, the economies of many Wyoming communities have improved. True, job opportunities have expanded. But it is also true that the agricultural sector of Wyoming, continuing a long decline, grows sicker as each year brings larger ranches and fewer ranchers.

It is also true that the current economic boom is like all Wyoming booms before it, a two-legged stool with intense concentration of activity in a few areas of resource development and no healthy expansion into such stabilizing forces as manufacturing and research. There has always been a tendency in Wyoming education to follow such economic concentration with a curricular narrowness of its own, and the process is accelerating. Wherever one looks one sees Wyoming focusing down on energy and energy production. Neither a healthy economy nor a healthy state of

mind can be delivered out of such monomania.

So I think it is high time to admit the concept of "damage" to respectability in our discourse about Wyoming's future. For it is damage not quality growth with which we shall be dealing from now on: damage to human beings, particularly children, damage to those unique qualities we express when we say the word "Wyoming"; damage to human health and perhaps to world climate as we increase the combustion of coal to unimaginable numbers of terms; damage to what America could and should be like; and damage to unborn Americans who will have to make their way in a land we have stripped equally of amenities and necessities.

Make no mistake about it: whatever transitory well-being we achieve through frantic development and waste of fossil fuels will be at the expense of those not yet here. We are living off our children's grandchildren's resources.

There is another way of saying "damage." It is called "suboptimization" which is a polite way of admitting that the future for Wyoming will be dismal. It is a way of agreeing that much of value will be lost. And it is a way of pledging ourselves to limiting the loss to no more than is absolutely necessary.

Suboptimization, it need not be said, is a different way of approaching the future than chanting incantations about quality growth. But at least it is an honest approach. And honesty about the future is quite possibly the one thing that has been lacking in our dialogue.

Now, to bring some realism and honesty into the dialogue is bound to give us some powers over our situation in which we have been deficient heretofore. We begin to develop insights. We recognize for the first time that when a school board insists that

behavior on a school bus shall meet certain standards it is also illuminating the need for standards and is thus making it possible for us to meet the future with a code of behavior which will have authority behind it.

That is a way of limiting damage, for without such a code and without such authority the growth in our school population could induce chaos.

The point is, if we are going to meet the future in Wyoming with some success it will be because we are willing now to develop standards and are willing to make them stick. At this point we have too few of them and those few we have are constantly under attack.



Guest editorials do not necessarily represent the opinions of HCN.

The cost-benefit of staying alive

Several years ago, we heard that the chemicals and other materials comprising the human body were worth a total of 96 cents. Doubtless, with inflation, that figure has increased somewhat, perhaps as high as \$2.50. Even at this price, however, one is not apt to have delusions of grandeur about one's "worth" in terms of dollars and cents. And few of us would sell out, even for the inflated \$2.50.

The question of the value of a life is becoming more complex in our cost-benefit world. Increasingly, politicians and corporations are arguing that environmental controls are too costly and that they are hampering business, employment, and growth of the gross national product.

Granted, environmental protection costs something. Everything costs something. As Barry Commoner puts it, "There is no such thing as a free lunch."

The issue, more properly put, is "are the costs worth it?" Take air pollution, for in-

stance. It is reasonably well documented that air pollution has "health effects." That is, it sickens and kills people. A recent scientific study indicates that some air pollution control costs are "worth it," while others are not.

The report, prepared by two Carnegie-Mellon University researchers, concludes that the cost of removing pollutants for industrial and power plant emissions is cost-effective because the saving achieved in health care costs was greater than the investment in the pollution control equipment.

On the other hand, the report says, cleaning up auto emissions is not cost effective because the health savings are about half of the costs of such controls.

The assumption seems to be that human health is worth what it costs for medical treatment. Both auto and industrial pollution injure and kill people, but one is worth cleaning up and one is not.

The politicians and corporate manager who complain about such costs to save lives are, at bottom, arguing a particularly grisly case. There are costs associated with cleaning up the environment. There are also costs associated with not cleaning it up. One of these latter costs may be your health or your life. How much is it worth? Is it \$2.50 for chemicals? The cost of medical care? Or maybe a little more than that?

—DSV



been enough to serve Denver's demand.

— The cost of Foothills is outrageous. The total cost will be approximately \$2 billion, according to water board estimates. This cost will be taken care of through the Denverites' water bills.

— The water board has neglected to mention the fact that there are people living in Waterton Canyon. By building the Strontia Springs Dam and the Two Forks Dam, two entire towns would be flooded. There are many people who have lived there all their lives and now would have to move.

Greg Gordon
Littleton, Colo.

DISAPPOINTED

Dear Friends,

I have no wish to convey the flavor of sour grapes, but I was genuinely disappointed that you did not see fit to report on our recent regional conference on citizen involvement in energy resource issues.

The United Church of Christ's Board for Homeland Ministries did not sponsor the conference for the purpose of attracting media attention, but we did make an effort by mail and telephone to invite your coverage and to provide you with releases both

before and after the event.

The churches of this nation can be, and in some instances are being, a vital force in the environmental movement. I think your readers would appreciate knowing that, and learning more of the ways in which churches are involved. In addition, the faith resources of Judaism and Christianity can do much to undergird, clarify, and give momentum to persons' instinctive ecological consciousness.

Apparently you don't agree, and you are in a better position to know what your readers want. Or it may be that you fear the church is simply using its environmental involvement as a lever for evangelistic activity. That is a risk, to be sure, that you might be running.

What happened at our conference was not earth-shaking, but bringing together as it did people and issues meant if nothing else that lines of communication within the movement were expanded and strengthened. I wish you had helped to keep those important lines up.

(The Rev.) Michael Moore
Absarokee, Mont.

UNEVEN BATTLE

Dear HCN,

Please support Senate Bill 270 — The Public Participation in Federal Proceedings Act.

My feeling is that this legislation would do a little more to equalize the uneven battle between corporate America and the environmentalist organizations. Business

corporations can write off all expenses of testimony before federal agencies, Congress, or federal courts as legitimate business expenses while environmental organizations that lobby can gain tax exemptions for only a part of their contributions.

Although I do not always agree with environmentalists I often do and in any case I think they are a desirable — even a necessary — counterbalancing force to business corporations.

I also am not particularly in favor of growth of federal funding in additional areas but I think this is an area where the expenditure is justified.

Edward N. Strader
Cheyenne, Wyo.

WYOMING ELITIST

Dear HCN,

How dare Wyoming elitist Phil White say that the ultimate insult (HCN letters April 21) is to die in an L.A. hospital as did John Muir!

As a temporary Angeleno I take offense at his statement. Has he I wonder ever spent time in an L.A. hospital?

Or has he ever considered what it would be like to die in an L.A. street or downtown skyscraper? Now THAT would be the true ultimate insult — as they already are to the environment.

Thanks for the chance to set the record straight.

By the way happy birthday John.

Ira Rifkin
Los Angeles Calif.

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 Nise
Associate Editor	Margaret Ambler
Office Manager	Mary Margaret Davis
Advertising	August Dailer
Contributing Editors	Dan Whipple
	Peter Wild
Correspondent	Philip White
Staff Artist	Hannah Hinckman
Circulation Manager	Georgia Nations
Editorial Assistant	Sarah Dell

Subscription rate \$12.00
Single copy rate 50 cents

Copyright High Country News 1978. Call for permission to reprint any articles or illustrations. 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 get a sample copy sent to a friend, send us his or her address.

Write Box K, Lander, Wyoming 82520.

God bless America. . .

(continued from page 1)

Olson and William O. Douglas. And essayists like Wendell Berry, John McPhee, Edward Hoagland, and Annie Dillard. A few politicians like Morris Udall (despite his many compromises), and the late Lee Metcalf, to name but two. And even Jimmy Carter (?). We'll see. But most of all I admire, respect and try to help support (with a little money, about a tithe of my income), the hundreds and thousands of dedicated men and women on the local and regional level who do the hardest work, the organizing, the fund-raising, the propagandizing; those who go to hearings, make statements, write letters, get out votes, form clearinghouses for action and information, pressure politicians, harass industrialists, hire the lawyers, put out the publications, do the paperwork, and sometimes, when necessary, go out at night with chainsaw and sugar and sand to do what sometimes must be done, as a last resort, when all other means of resistance fail. These organizers and activists are the backbone of our cause and I salute them, cheering them on from the safety and comfort of my own position on the sidelines, behind the barricade of my typewriter.

I am not even a dues-paying member of any conservation organization (except for Environmentalists for Full Employment), believing as I do that I can be more effective as an outside observer. Not above the battle but somewhere on the fringes of it, my own irresponsibility lending respectability to conservation by making its leadership and program appear, in comparison with my proposals, sane, reasonable, level-headed, conservative. I call myself, therefore, not a conservationist or environmentalist, but a wild preservative. My motto is not simply, "keep it like it is," but "like it was." I am a reactionary, really, one who thinks that the human race, when it invented agriculture, and then industrialism, took a giant step — not forward — not backward — but off in a wrong direction. We'll see.

What then do I have to offer that can be of much use to practical conservationists, to

requires and thrives upon contradiction, paradox, human difficulty. An ideal society, if ever realized, would put people like me out of business. As perhaps we should be. There are no writers in heaven. (I assume.)

I hesitate also to present you with any sort of eco-utopian scheme because I am, temperamentally, uncomfortable with the notion of any kind of planned society. All utopias, especially those worked out in detail, with blueprints, strike me as autocratic, arrogant, essentially authoritarian, anti-human. I really am an anarchist and libertarian, a true believer in personal liberty, spontaneity, diversity, power in all forms decentralized, pure democracy.

My ideas on "something different" therefore are offered only because it seems to me that our society is already much too authoritarian, and because certain trends, supported by a blind and misapplied technology, are leading toward an ever more authoritarian, centralized, potentially totalitarian state. Let us begin.

First of all, if we hope to continue to enjoy our freedoms, and perhaps realize more, it seems to me absolutely essential that we stabilize the human population of the United States. I want my children to enjoy a green, wild and spacious America. If we allow our population to continue to grow, all freedom will be suppressed, out of necessity, to the needs of brute survival, complex organization, hierarchical functions, a technocratic state of masters and slaves. In such a society the computerized factories of food production will be, more than likely, our masters: the technocratic elite a priesthood tending the machine gods; and all the rest of us dependent worshippers.

I say therefore that we must stabilize the population and then begin to reduce it. Through natural attrition, of course, not through war or any form of internal genocide. The only fair and democratic method through which this can be done, in our society, is by economic incentives. We must restructure the tax system, penal-

Nothing could be more useful for a writer than a society like ours, so rich in complexity, trouble, anguish, hope, misery, hatred, ecstasy, and love.

serious and realistic environmentalists? I'm not sure. Maybe nothing. But of course, like everyone else, I have lots of ideas. All borrowed from many sources, but mine nonetheless, by virtue of a synthesis in my own head.

In the book *Journey Home* I mention somewhere that what we need in this country is not socialism, nor capitalism either (an obvious failure), but "something entirely different." Since I have been challenged, several times, to explain what I meant, I will sketch for you what I would conceive as a close-to-ideal form of human society for our nation and possibly for the world.

An enormous presumption, of course. Furthermore as a writer, primarily a novelist, a writer of stories, I am actually well-satisfied with the world as it is. Nothing could be more useful for the writer than a society and existence like ours, so rich in complexity, trouble, anguish, hope, misery, conflict, agony, hatred, ecstasy, love, etc., etc. Art, especially literary art,

ing large families, rewarding small ones, paying bonuses to those below the poverty line in return for their practice of birth control, voluntary abortions, even voluntary sterilization in some cases.

I've fathered three children myself — superior children of course (superior to their father) — and now that they're here I'm not going to send them back. But it is high time to start changing our reckless breeding practices. We must recognize now that any parents who have more than two children — more than one! — are imposing an unfair burden on their neighbors, and on society at large; even the children of the rich (especially them!) demand services, goods, pleasures, and playgrounds from all the rest of us.

Not only must we cut back on our reproduction rate, we must also clamp down hard on immigration, whether legal or illegal. I do not think we can help Mexico, for instance, by letting their surplus, unwanted, hungry peasants swarm across our



border; and we are certainly not helping ourselves. I think we should stop this illegal immigration by imposing severe penalties on employers — even jail sentences if necessary — who knowingly employ wetbacks; when jobs are no longer available, the wetbacks will stop coming. As for those already here, I suggest giving each an automatic rifle and a case of ammunition and hustling them back across the border. What Mexico needs is not more handouts from the North but another and better revolution from within.

What about political refugees from dictatorial regimes? — Chile, or Russia, or Vietnam? A painful and difficult question. I would hate to see America cease to be a sanctuary for the desperate; our tradition as a place of refuge is one of the most glorious things in our history. But even here it may be necessary, sooner or later, to draw the line. I hope not, but I am willing to suggest the possibility.

All of the above sounds harsh, even cruel, not at all libertarian. Many of you will recognize here the lifeboat ethic of Garrett Hardin. So it is; and I subscribe to it. Not with my whole heart — but from necessity, with what's left of my sick and disordered mind.

As for further impositions on personal freedom, it seems to me that we must all accept a curtailment of our freedom to breed in return for more personal living space, for a decent quality of life, for greater freedom in the future.

I realize there are those who believe that both our nation and our planet can support even a bigger population than we have now — through technology, fusion power, computerized central control — but some of us are more interested in freedom, adventure,

play, useful work, than in submitting to the techno-utopia of Herman Khan, Bucky Fuller, and all of their many clones and counterparts in the industrialized nations. Maybe I would even have to include Stewart Brand in that list; he certainly seems, lately, to have abandoned whole earth in favor of space colonies, holistic systems, the synergistic blueprint. But I think the technocrats are wrong. Our basic problems are biological, cultural, political. They require biological, cultural and political solutions. They cannot be solved through technology alone.

Be as I am — a reluctant enthusiast, a part-time crusader, a half-hearted fanatic.

Having said the most unpleasant things first, I am happy now to go on to happier subjects. I am not against technology. I am not against industrialism, least of all I am against science, which I would define as the leading edge of humankind's ageless search for knowledge, for deeper understanding of ourselves and the world around us. But — I say that we must keep industrialism and technology firmly under control, serving human interests and not the other way around. All too often our business and political managers — I refuse to call them leaders — ask not what is good for human beings but what is good for the economy — and that economy narrowly identified with an ever-growing ever-greater Gross National Product. Civilization is not dependent on a growing



Tim O'Brien — Eclectic fiddle

Guess Who's in Town

This album's query: "Guess Who's in Town?" is answered with such a variety of musical styles and songs that one knows Tim O'Brien and friends must be in town.

O'Brien is a fine singer and a triple-treat instrumentalist. He plays fiddle, mandolin, and guitar. His voice is a haunting tenor.

There are 15 selections on this album. Side one is fiddle-filled, with eight tunes from the country. Side two vocals include some sweet, vibrant, swing numbers like "Guess Who's in Town" and "Cadillac-in" (with the Ophelia Swing Band).

To order: send \$5 to Tim O'Brien, 1251-A, Verbena Street, Denver, Colo. 80220. (Biscuit City Records — BC 1317) HCN is sharing the profits on sales of this album.

(continued from page 4)

economy. Au contraire, on a steady economy. As many have pointed out, we seem more concerned with the health of the auto industry, for instance, than with the health or needs of the human beings whose lives are so chained to the auto factories.

We have erected in this country an industrial state so huge, so complicated, so rapacious, and so unpredictable in its workings that no one even pretends to un-

derstand it anymore, or knows how to operate it for the common good, or how to fairly share the fruits — usually rotten anyway — of its production.

I wish some of our Western politicians, always ranting and raving about Big Government would do something about big families; Big Government is the result of too big a society. Simplify. Decentralize. Scale down. Small is easier to handle, understand, control, humanize, make workable.

Now you see the libertarian, anarchist, and utopian side of my thought (better to call it feeling than thought, for I am not a systematic thinker; hardly a thinker at all but a feeler and I hope, in some dim way, a seer-er). I envision an American society growing beyond industrialism, beyond our slavish dependence on technology, toward a barefoot and green anarchism of largely independent states, independent towns and cities, independent men and women, economies localized and so far as possible, self-sufficient. Ridiculous that people in Montana should have to buy and eat food grown in Florida, processed in Chicago, packaged in Des Moines.

Let us develop a truly sophisticated technology, one so sophisticated that we're scarcely aware of its presence. The same for the so-called economy. We need a small-scale, industrial-agrarian, steady-state economy that functions so smoothly, like a healthy body, that we need seldom give it direct attention or concern. It's absurd that so many have to devote so much laborious effort to a study of the economy. Unworthy of grown men and women. There are far better things for sane and healthy humans to do: climb mountains, cobble boots, follow a mountain lion for 50 miles, teach children, extract rare metal from the heart of a mountain (but with care, with reverence),

raise tasty tomatoes, write a book, launch another rocket ship to the stars. For yes, I am in favor of continuing the scientific and technological adventure, for as far as it may lead us. I too want to know what lies beyond Saturn — though I doubt if it's better than here. But let us confine this activity to one corner of the country — New Jersey, perhaps, or southern California. No need to burden the whole nation, the whole planet, with this one peculiar form of human activity. Keep it in its place — if we can.

Every advance in technology has en-

tailed corresponding losses in human freedom and perhaps joy as well; I suspect that the freest, most joyful culture that ever existed was the buffalo-hunting culture of the Plains Indians. But we cannot go back to that sort of life — at least not without incomprehensible pain and suffering on the way (via nuclear war, famine, plague). Nor can we stay exactly where we are (sometimes I wish we could); we are compelled by a multitude of different pressures to go forward.

But not necessarily along the same old lines. If we had the will we could strike out in a new direction — better as well as different (if not entirely different) — from the one we've let ourselves be chained to for the last 400 years.

Well, enough of all this futurology. I distrust futurologists myself, and furthermore I am an ignorant man: all that I can offer are hints on what seems to me a desirable future; let those more competent point out the ways and means by which true progress can be made. I am ready and willing to follow the leader; if we can ever find one; if he — or she — is truly a leader —, and not merely another power-intoxicated, political macho-mystic. I doubt, however, that we'll ever find such a leader; I think rather that if we want a free and decent life for our children and their children we are all going to have to be our own leaders. Here. And now. Now. Or never.

So what about now? Enough of the future. What about now? here? How can we best defend the Rocky Mountain West, the Intermountain West, and the desert Southwest from the tidal wave of industrialism now sweeping toward us from the East? From California, Oregon, and Washington — that ecotopia up that way?

Well I'm afraid I have no simple answers to the problem. Or any new answers. I fear it will require of us all more of the same answers: time, effort, money, legal action, political action, organization. Us nature mystics got to stick together. Us anarchists got to get organized. If you can't give time to the effort, give money: "hire a slave," as David Brower says. If you can't give money, give some of your time: help mail things, pass out paper, make phone calls, badger the politicians, try to get better ones elected. And if you have special talents or skills give them to the cause, as generously as you can.

And if you haven't got any job at all, get one. Infiltrate the unions. We've got to get the unions on our side. We can't save the West from urbanization and industrialization unless we manage somehow to gain support from the working people (and that should include most of us) who already live here.

We've got to combat the idea that environmentalism is the enemy of jobs. We all need jobs. My brother-in-law's been out

of work for six months. I haven't had a steady job since I got thrown out of the U.S. Army 30 years ago. And speaking of jobs, it's high time to start sharing the work, as well as the wealth. It's time for a reduction in the basic work week; we've been on the 40 hour week for over 40 years. I say it's time to advance to the 30-hour week, the 20-hour week, for all employees in all occupations, private or public sector; for a total ban on overtime; for a minimum of one month's paid vacation — preferably two months — for everybody, from the beginning of your service in any job.

What else can we do? Well... there's night work. Since writing a certain slapstick comedy called *Monkey Wrench Gang* I've been challenged a thousand times to say — publicly — whether or not I'm in favor of illegal behavior — industrial sabotage. Of machine wrecking, billboard leveling, powerline outages, road construction-destruction projects. And so I suppose I am morally obligated to attempt an answer to a question some accuse me of raising. I'll try.

First of all, does sabotage do any good? Well, I'm not sure. But I can tell you this: it sure makes you feel good. When your soul's been stifled by too much anger, and frustration, ugliness and stupidity, there's no better catharsis than a little direct action. When directed, of course, at institutions or machines — never at other human beings.

Am I willing to come right out and declare myself in favor of sabotage? A fair question, which I resent. And my answer is of course not. I want to make trouble; but I don't want to get into trouble. Let me say, for the record, that I am absolutely opposed to all forms of illegality — except maybe at night. And even then only when accompanied by your parents — or a couple of good friends. Keep your team small, no more than three at most: one at each end of a well-sharpened crosscut saw (we are ecologists) and the third standing lookout.

Do I practice what I preach? Another fair question, which I also resent. First, I deny that I am a preacher; the MWG is a novel, a fantasy, an entertainment, not a tract or a training manual. If you need a good handbook, buy the *Complete Blaster* by E. I. DuPont. I do not advocate anything; and I refuse to accept responsibility for anything done in my name or inspired by a book. If you feel you want to act at night, consult your own conscience, not mine. And if any-

I want to make trouble; but I don't want to get into trouble.

body gets hurt I hope you get caught. I will concede only this much: I would never suggest to anyone that they do anything that I am unwilling to do, or have not already done, or tried to do, myself. Think about that.

But can sabotage do any good anyway? Besides soothing your jangling nerves. Or would not sabotage do more harm than good, turn the public against conservationists, stimulate more and more repressive measures by the law, bring on the all-out police state much sooner than we want it? Those are the important questions and the difficult questions, and I must confess that I've not thought them out as thoroughly as I should have. Again I must say, I don't know. Not for certain. All I know is this:

We have a beautiful land here in the American West and we are not only morally entitled but morally obliged to defend it against its enemies by all means within our power. If sabotage is too dangerous, too

May 19, 1978 — High Country News-5

self-defeating, then we must continue with every possible legal, political and economic weapon to hold back those alien invaders from Houston and Tulsa, from L.A. and New York City and Chicago, from Tacoma and Seattle, from Japan and Saudi Arabia — all those big, powerful, rich institutions, governmental and corporate, national and international, which are bent on destroying our way of life. If legal means to stop them fail us then, and only then, will we be morally justified in resorting to the last resort: violence. Direct action. Sabotage. By that time we would have or should have what we'd need the most: general and popular support from our neighbors, from



most of the people fortunate enough to live in the American West.

Enough of the apocalyptic tone. One final paragraph of advice: Do not burn yourselves out. Be as I am — a reluctant enthusiast, . . . a part-time crusader, a half-hearted fanatic. Save the other half of your selves and your lives for pleasure and adventure. It is not enough to fight for the West; it is even more important to enjoy it. While you can. While it's still here. So get out there and hunt and fish and mess around with your friends, ramble out yonder and explore the forests, encounter the GRIZZ, climb the mountains, bag the peaks, run the rivers, breathe deep of that yet sweet and lucid air, sit quietly for a while and contemplate the precious stillness, that lovely, mysterious and awesome space.

Enjoy yourselves, keep your brain in your head and your head firmly attached to the body, the body active and alive, and I promise you this much: I promise you this one sweet victory over our enemies, over those deskbound men with their hearts in a safe deposit box and their eyes hypnotized by desk calculators. I promise you this: you will outlive the bastards!

We dwell on a sweet green-and-blue, mossy, vaporous, mysterious little planet — not simply a spacecraft, not a machine, but a living breathing organism, of which humankind is the mind and environmentalism the lately-arrived conscience. Our little planet is the ship of life circling the life-giving but lifeless nuclear inferno of the sun, in the depths of a universe that contains we know not what. We humans are companions, fellow voyagers on this strange and holy vessel that we call the earth.

In the words of Walt Whitman: Joy, shipmates, joy. God bless America. Let's save some of it. LONG LIVE THE WILDERNESS.

Montana turmoil. . .

(continued from page 1)

representative of the Wilderness Society, says. "He knows the political business and went to work on some key wilderness issues."

Cunningham also says that Baucus, as one of the so-called "Young Turks" in the 1975 session, was instrumental in bringing about organizational and ethical reforms in the House of Representatives.

Environmentalists across the state give Baucus high ratings, though some are puzzled at his hesitance to support the Welcome Creek Wilderness area near Missoula as part of the Endangered American Wilderness Bill.

Sen. Paul Hatfield is generally considered an unknown quantity among state environmentalists. He was elevated from his position on the Montana Supreme Court to the Senate post by Montana Gov. Thomas L. Judge in what some political observers saw as a "hardball game play" aimed at untracking Baucus' drive for the Senate post.

Unknown as he is, Hatfield has won some admirers among Montana environmentalists on what they consider a key issue — establishment of the Absaroka-Beartooth Wilderness.

Another point in his favor was that he

"working out the negatives" in the bill. He is expected to introduce legislation on the Great Bear after the primary election.

One veteran Montana political observer, editorial page editor Sam Reynolds of the *Missoulian*, says that neither Hatfield nor the other major primary opponent to Baucus (former House Majority Leader John Driscoll) have a real chance in the primary — but that fact has little to do with the stands of any of them on environmental issues.

"I think Baucus is going to clobber the hell out of him (Hatfield), but it has almost nothing to do with the environment," Reynolds says. "Baucus had a long head start in the campaign. He got a big jump in lining up Democrats around the state to help him. And he's been a pretty good party regular."

Reynolds believes that Hatfield lacks significant backing among party regulars in spite of appearances that Judge has thrown the weight of his faction in the party behind Hatfield. He also sees, as do most observers, that the other major candidate out to beat Baucus — former Montana House Majority Leader John Driscoll — as too weak generally to be taken as serious threat. "However, one of the nice things about politics is that it is unpredictable," Reynolds says.

ISSUES: WILDERNESS AND ENERGY

Reynolds says that there is credence to the theory that most Republicans are "running against the environment," par-



REP. RON MARLENEE has vigorously opposed wilderness within his district, but supported studying areas outside of it.

the western district race. One says he is "nervous" about being quoted because most of the people on the Democratic side are his friends.

Another, Pat Sweeney of the Northern Plains Resource Council also notes that the approaching elections will cost the legislature another pro-environment representative in that House Majority Leader John Driscoll is battling for the Democratic Senate nomination, instead of returning to the legislature.

Some observers fear that the "fratricidal" battle for the congressional post will decimate environmental leadership in the legislature, but both Sweeney and Phil Tawney, a former lobbyist for the Montana Environmental Information Center, suggest that this may not be the case.

Tawney notes that, statewide, there are people in both parties registered who support strong environmental positions. "There have been a lot of people shocked by the badness of our most recent legislation session," he says. "There are good candidates, good people, running throughout the state." He flatly predicts that no negative impact will occur in the legislature as a result of the congressional race.

Most environmentalists have little comment to make about the Republican candidates, mainly because they've had little contact with them.

An exception is State Sen. Bob Brown of Whitefish, who is also running for the western district seat. Environmentalists say he is so badly misrepresenting the wilderness and roadless area issues that they feel compelled to challenge him.

"Brown is coming off as the most reactionary anti-wilderness candidate we've seen," Cunningham says. "I've asked him repeatedly to sit down and discuss the

siting and utility legislation affecting the Northwest.

THE EASTERN DISTRICT

Energy-related issues also dominate political talk in eastern Montana where Marlenee drew bad marks for his efforts to split up the Absaroka-Beartooth area, but praise for his work on strip mining legislation and efforts to control pollution from Canadian power plants on Poplar River.

However, one observer notes that "everybody's good on Poplar River" and suggests that Marlenee's position on the final energy bill will give a better indication of his basic attitude toward such issues.

Pat Sweeney of the Northern Plains Resource Council, a coalition of ranchers, farmers and conservationists, notes that Marlenee voted against the wishes of his organization on a crucial issue of protection of alluvial valley floors during the strip mine bill battle. He says, however, that Marlenee did vote for the entire bill in both committee and on the floor.

Most environmentalists praise Marlenee for his willingness to at least talk with them about resource issues. For example, he strongly supported inclusion of the Welcome Creek Wilderness area in the Endangered American Wilderness Bill.

Some think this might be because Welcome Creek isn't in his district. Marlenee vigorously opposed inclusion of the Big Snowies and Judith areas in the Montana Wilderness Study Act, but supported studying other areas outside his district.

"We may disagree at times, but he has an open mind and we can talk with him," Cunningham says.

MELCHER

The one constant environmentalists see is that they'll have to continue working with Sen. John Melcher, whose environmental rating by the League of Conservation Voters went from 75 percent in 1975 to 49 percent in 1976.

For example, he voted against cutting back funds for breeder reactor development and the Kennedy amendment to cut back the Barnwell nuclear reprocessing facility.

This was offset, however, by his work on the strip mining legislation. Environmentalists rate Melcher good on basic energy issues and better on national resource issues than he is on local issues.

In national forest management, motorized use of public land, and oil pipeline construction he generally has taken the industry or development side of an issue.

Cunningham of the Wilderness Society worked closely with Melcher during during a two-year stint in Washington and says that, in spite of the LCV ratings, he believes Melcher is improving on resource issues. "I see an encouraging trend with

The untimely death of Sen. Lee Metcalf altered both the structure and style of the campaign to replace him.



DOROTHY BRADLEY is a state legislator with a good environmental record, who is trying to win the Congressional seat being vacated by Max Baucus.

quickly established his independence from Melcher by refusing to go along with Melcher on an amendment to the Endangered American Wilderness Bill that would have reduced the size of the Welcome Creek Wilderness.

"Hatfield has proven to be interesting, but he's still unproven in the field of conservation," Cunningham says. He and several other persons suggest that the real test of Hatfield will be his actions regarding Metcalf's pet project, establishment of the Great Bear Wilderness along the Continental Divide in northwestern Montana.

Hatfield has, according to his staff, been

ticularly on the wilderness and energy issues.

"Wilderness is the main issue," he says. "People are scared. They think there's enough wilderness, that it cuts into jobs. The political talk is that we've got all that wilderness and it just sits out there being wild all the time."

Wilderness and energy are two of the main issues of the hotly-contested western district campaign. One state capital political writer observes that most Democrats are dealing with the issues, while most Republicans he interviews see the wilderness issue in black and white terms because they don't know the intricacies of it.

Some environmentalists are worried that the western district race has weakened their influence in state legislative matters because three key Democratic candidates there had outstanding environmental records in the legislature. They are Dorothy Bradley, who was majority whip in 1977, Gary Kimble of Missoula, and J. D. Lynch of Butte.

Two other candidates — Public Service Commissioner George Turman and John Bartlett — enjoy solid backing from environmentalists and the sixth, Pat Williams, has generally been noncommittal or couched his campaign in such general terms as to engender little reaction from environmentalists.

Assessments statewide seem to point, however, to a showdown among Bradley, Williams, and Turman. Turman, a former Missoula mayor and state legislator with an excellent environmental voting record, started out as a front-runner. In recent weeks, however, he has slipped because he waited until May 1 to take a leave of absence from the Public Service Commission and begin his campaign.

Most environmentalists don't want to make either a prediction or comment on

Missoulian editorial page editor Sam Reynolds says, "The political talk is that we've got all that wilderness and it just sits out there being wild all the time."

economics of cutting timber in marginal areas, but he won't talk with us," Cunningham says he'd have to rate Brown "on the bottom of the pile" in regard to his sensitivity to wilderness resource issues.

One other western district Republican primary candidate, Missoula County Commissioner Jim Waltermire, draws favorable comments for his work on energy issues — particularly powerline

John" Cunningham says. "He is coming along and gaining more sensitivity. His ultimate support of a unified Absaroka-Beartooth Wilderness is an example, and we understand that he's looking favorably at the Great Bear Wilderness Bill."

At the same time, Melcher is one of only five senators who voted against the En-

(see next page)

Montana turmoil. . .

(continued from page 6)

dangered American Wilderness Bill, which passed on an 84-5 vote.

Sweeney of the Northern Plains Resource Council says Melcher "deserves high marks" for his work on the strip mining bill. He says his organization sees Melcher as having a key role in determining the future of the Bonneville Power Administration and they are watching him carefully on this issue.

Some environmentalists say they are puzzled at Melcher's combative attitude on many issues, though *Missoulian* editor Reynolds sees this as a plus. He says the



SEN. JOHN MELCHER is showing "an encouraging trend" on environmental votes, according to one activist.

fact that Melcher responds vigorously and openly to criticism on any issue is good.

"It's very hard to pin John Melcher down on environmental issues," Reynolds says. "Environmentalists have found they have to keep their eye on him every minute of the day." Reynolds describes Melcher as a follower and not a leader.

Asked to compare Melcher to Metcalf, Reynolds says, "Comparisons are difficult to make. Metcalf was on the side of the angels and had serious personal flaws. Melcher is free of the personal flaws, but seems to ride around the circle with one foot on the devil's charger."

Many environmentalists say they be-

May 19, 1978 — High Country News-7

lieve Melcher is "in tune" with a substantial portion of Montana citizens and they expect him to be around awhile. Montana does not have a tradition of one-term senators. Metcalf was elected to three terms and Mike Mansfield to four.

Dale Burk is a former reporter and columnist for the *Missoulian*. He is now a free lance writer and ranch manager near Stevensville, Mont.

"John Melcher seems to ride around the circle with one foot on the devil's charger," Reynolds says.

Flathead River at the watershed

by Richard Eggert

Every decade, like some kind of predictable celestial phenomenon, the U.S. Army Corps of Engineers or some other federal agency initiates another study of Montana's lower Flathead River for potential hydroelectric dam sites. Now, in the 1970s study, the Corps has recommended two primary sites and four alternative sites on one of the few long stretches of free-flowing and pristine river left in the Columbia River drainage.

The Bureau of Indian Affairs began the cycle of studies 65 years ago. The BIA looked at dam sites on the Flathead Indian Reservation, through which much of the river flows. They were followed in the 1930s by the Federal Power Commission, which approved Kerr Dam — completed in 1939 — and leased it to Montana Power Company. Kerr Dam is located at Buffalo Rapids, just downstream from Flathead Lake at Polson, Mont.

In the 1940s, the Army Corps of Engineers studied three sites downstream from Kerr Dam. They returned for another look in the 1950s and again in the 1960s when they proposed the mammoth Knowles Dam, which would have flooded a 70-mile band over two towns and a large portion of the reservation. Congress turned down Knowles then, but the Corps proposed it again in 1977, along with a number of other sites.

Many of the sites are proposed on the Flathead Reservation, home of the Confederated Salish and Kootenai Tribes. A number of reservation residents apparently oppose the dam proposals. Tribal Chairman Tom "Bearhead" Swaney says that most of the people of the tribes are against the dams in spite of promises of

fairly lucrative leases on hydroelectric facilities that may evolve from the Corps' current study. Swaney admits, however, that the tribal council, which will have a strong say in whether the dams are built or not, has not yet made up its collective mind.

The river has become increasingly popular during the past few years for family floating excursions. The 24-mile section from Buffalo Bridge to Sloan Bridge west of Ronan flows through practically untouched geologic formations. Between Sloan Bridge and Dixon, there are an additional 20 miles through rolling hills with a few scattered farms. Below Dixon to the river's junction with the Clark Fork at Paradise, there is a highway along the bank, but floaters can still get lost in a maze of channels and islands that dot the river.

Biologists are concerned about the effect the dams may have on wildlife and fish in

The Corps of Engineers has recommended two primary and four secondary dam sites.

the Flathead River ecosystem. Trout inhabit several creek tributaries. There are also white-tailed deer and black bear along the banks.

Since February, when the American bald eagle was declared an endangered species, several biologists have been studying the river as possible critical habitat for

the birds. Bald eagles are fairly common in the remote sections of the river during the winter and there is new evidence that some remain there year-round.

In order to bring together as much information as possible on the proposed dams, the Flathead Reservation tribal council has joined with the Institute of the Rockies and other organizations to sponsor a day-long forum on the future of the Flathead. The forum, "Flathead River at the Watershed," will be at the Dixon Tribal Agency, north of Dixon, on May 27.

About 40 water resource experts will conduct three panels and seven workshops about the river. Participants will include representatives of the Corps of Engineers, the Bonneville Power Administration, and other federal agencies, as well as faculty from the University of Montana, and resource personnel from the Confederated Tribes and the Bureau of Indian Affairs.

Mel Tonasket, chairman of the Colville Tribes in Washington, will discuss his tribe's experiences with the Corps on the Chief Joseph Dam on the Columbia River.

In addition, former Corps geologist Art Gelden, who studied the Flathead dam



sites in 1977, will discuss the projects' geological problems. Gelden broke with the Corps in the fall of 1977 and has since been highly critical of the proposed dams for both geological and economic reasons.

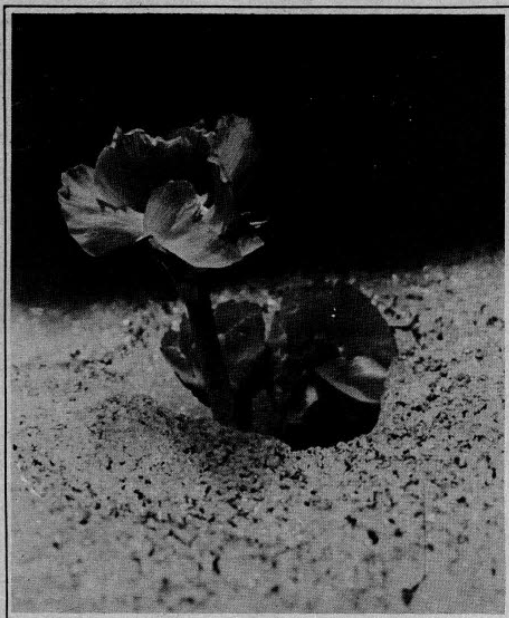
The forum will be followed by a two-day float of the river from Buffalo Bridge to Dixon. During the float, Corps representatives will be on hand at the two primary dam sites and two alternative sites.

Don Baty, coordinator for the Committee for the Flathead Forum, says, "Although the energy of the forum will be specifically focused on the Flathead River, much of the information will ripple to other areas of the Northwest. We will be talking not only about rivers and hydropower, but also about power demands in general and alternative ways of meeting them. I think the forum should provide something for everybody."



Small Gallery Inviting Exceptional Art Work

Warm Things, Box 80, Atlantic City,
Wyo. 82520. (307) 332-3709, 332-4511



THE SNOW BUTTERCUP, *Ranunculus adonis*, thrives where winds have left snow drifts. The flower can force its way up through the snow.

Wind — the tough, unpredictable

by Kent & Donna Dannen
copyright 1978
by The East Woods Press

Wind is an ever present factor in the tundra environment. Even in summer, you cannot walk far above tree line without commenting — at least mentally — about the wind.

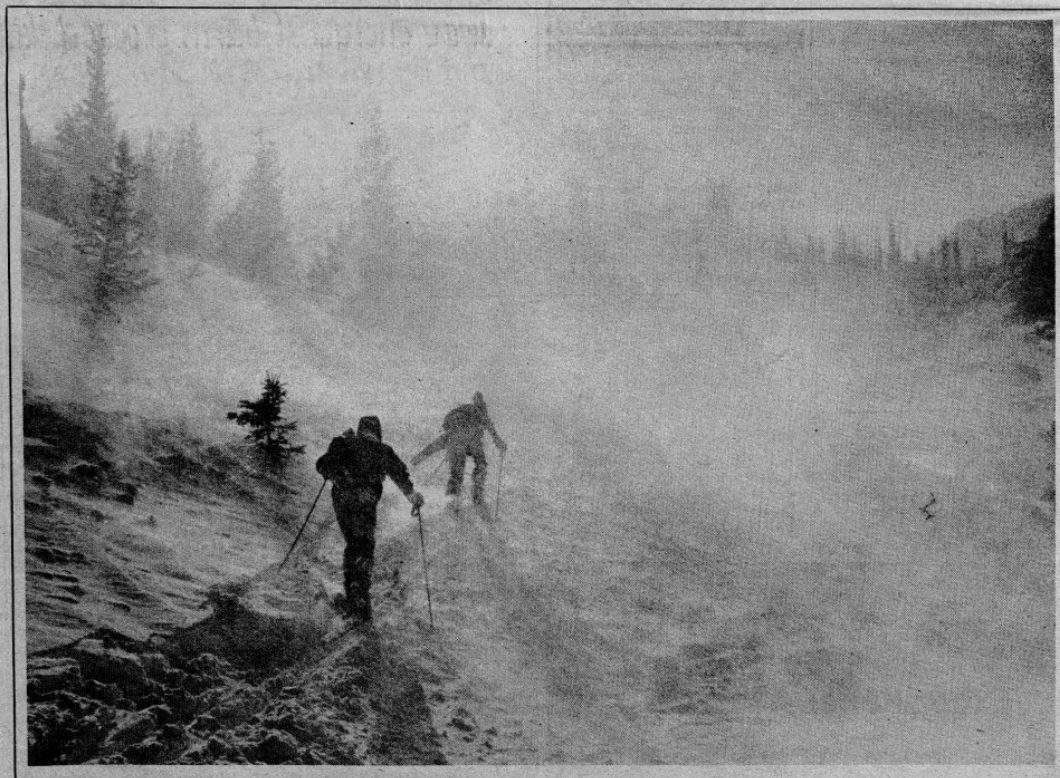
The higher you climb on the mountains, the faster the wind blows. When you begin to feel the chill and pressure of the wind, try lying down for a graphic, not-to-be-completely-understood-until-you-try-it lesson in how alpine plants survive by being small.

Plants are tiny on the tundra not only because their growing season is short and food for growth often in short supply. An even more important benefit of ground-hugging is protection from winter wind, which kills anything that dares to stand upright against it. Wind drastically in-

creases the chilling effect of tundra temperatures, which are already quite cold. Wind also sucks moisture out of plant tissues in winter when it cannot be replaced because ground water is locked up in ice. Winter winds that frequently surpass 100 miles per hour and sometimes 200 mph carry bits of gravel and ice, sandblasting anything that gets in the way.

But tundra wind also can be beneficial. It scatters pollen and seeds of willows, sedges and many other plants. It piles up snow in some places while sweeping other areas bare of cover. This action creates variety in tundra plant life, where some plants have adapted to heavy snow cover while others live without protection of the snow.

Hikers often feel ambivalent about the wind. It is exciting, adding a touch of adventure and romance to mountaintop experiences. As John Muir said, "the wind will blow its own freshness into you and the storms their energy."



WILDERNESS TRAVELERS face high winds as they approach tree line in Rocky Mountain National Park.

Photos by

ctable spirit of

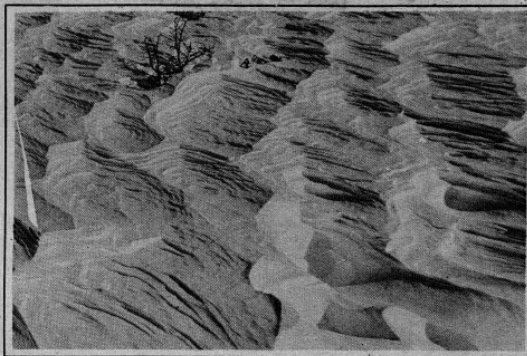
the mountains

Perhaps. But the wind also saps your energy if you have to walk into it. It chills and dries out your body, necessitating the carrying of extra clothing and water. It burns exposed skin and brings tears to your eyes.

Experienced mountaineers can predict in a general way what the wind will do. But local variations caused by the shape of nearby terrain sometimes destroy the usefulness of such predictions.

With its unpredictability, with its power to both benefit and harm, wind seems more human than any other inanimate aspect of nature. It is not surprising that people throughout history have tended to think of wind as a living force. In fact, the Greek version of the original New Testament uses the same word for both wind and spirit. In many ways, the wind embodies the spirit of the mountains above tree line.

— adapted from Rocky Mountain National Park Hiking Trails



WIND CARVINGS in Rocky Mountain National Park.

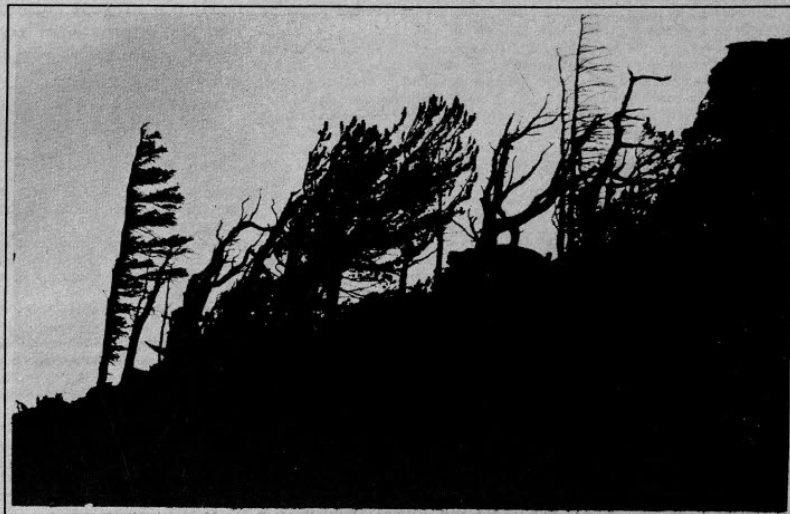


MOSS CAMPION has a ground-hugging, streamlined profile.

As John Muir said, the wind "will blow its own freshness into you." But it also dries, chills, and saps away energy. It burns exposed skin and brings tears to your eyes.



A BANNER TREE at war with the wind. Its shape is formed by winds carrying ice and sand, which kill all the twigs on the windward side of the trunk.



y Kent and Donna Dannen

10-High Country News — May 19, 1978

Solar power lures strange bedfellows in N.M.

by Dede Feldman

Many people think of New Mexico as the land of solar energy. But New Mexico is also the home of two of the nation's largest defense research facilities, its largest missile testing range, and a growing nuclear power industry.

With the increased availability of federal and state grant money for solar experimentation, the defense and nuclear industries in the state are beginning to cash in on New Mexico's solar boom.

Just east of the town of Cebolleta, deep in the heart of the Grants uranium belt, lies a new uranium mill. The mill, which is owned by Standard Oil of Ohio (SOHIO), is used to recover uranium from raw ore by a hot water leaching process. To preheat that water, SOHIO is planning to use solar energy.

In 1975, under a contract with the federally-funded Lawrence Livermore Lab in California, SOHIO embarked on a project to construct 36 shallow solar ponds 12 feet wide by 200 feet long. The ponds, which are enclosed under clear polyester fiberglass, are exposed to the sun during the day and drained into a hot water holding tank in the evening.

"The alternative was to construct a boiler, using natural gas," says Lynn Jacobsen, manager of SOHIO's uranium operations. "But that's getting too expensive, so our idea was to construct something very simple, avoid all the high technology, and do it on a cost efficient basis."

Although Jacobsen is reluctant to cite the exact cost of the passive solar project,

Mike Ross, Public Information Officer at Lawrence Livermore Lab, says that the project was operated on a "no funds exchanged basis." Lawrence Livermore (at taxpayers' expense) provided the engineering and monitoring expertise, while SOHIO did the installation and bought the necessary materials.

According to Ross, the time and skill "donated" to SOHIO cost Lawrence Livermore approximately \$100,000.

"It's an ideal use for solar energy," Ross says. "We try to perfect methods that may be desirable for energy conservation but not yet economically feasible."

In spite of the money and expertise poured into the project, Jacobsen says that only three of the planned 36 ponds have been built. The rest of the project has been abandoned until it becomes more economically feasible, he says.

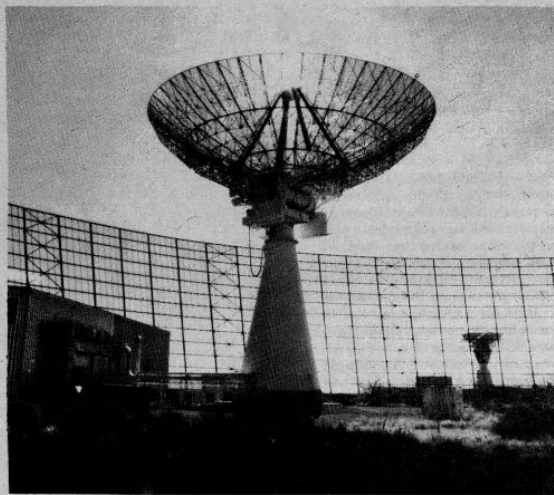
But far from viewing the experiment as a failure, Jacobsen is happy to have gotten the system all set up and ready to go.

"It will be worthwhile soon," Jacobsen says.

SOLAR FURNACE AT WHITE SANDS

In the southern part of New Mexico, at the famous White Sands Missile Range, another solar experiment is taking place — this one funded by the Department of the Army to the tune of \$225,000 for preliminary design studies alone.

Last fall a contract was awarded to New Mexico State University at Las Cruces to convert a large unused radar facility at the



A SOLAR FURNACE in southern New Mexico that will be used in tests to see if U.S. missiles could withstand the heat from an atomic bomb. The furnace will subject the weapons to temperatures exceeding 5,000 degrees.

missile range into a solar furnace that could be used to test the effect of heat from nuclear blasts on weapons systems.

The proposed solar furnace will have a 400 kilowatt capacity and produce temperatures exceeding 5,000 degrees. It will be the third largest solar furnace in the world.

Using mirrors, the project will focus and concentrate the sun's rays onto various missile components to see if they can withstand the effects of what Jim Lovelady,

public information officer at the missile range, calls an "atomic burst."

According to Lovelady, this will help the Army improve the materials used in nuclear weapons, so that they could strike back even after a nuclear holocaust had devastated New Mexico.



The **HCN**
Hot Line

energy news from across the country

EXPLOITING THE SEAS. The Department of Energy has awarded contracts to Westinghouse Electric Corp. and Lockheed Missiles & Space Co. to design systems for generating electricity using the temperature difference between warm surface and colder, deeper water in the oceans. Such systems would pump warm surface water through heat exchangers where the water's heat would evaporate ammonia. The ammonia vapor would turn a turbine-generator to make electricity before being condensed by cooler water pumped from the depths. An ocean thermal energy conversion power system could link several individual modules, each generating as much as 50,000 kilowatts.

SOLAR ENERGY BILLS. A coalition of solar energy advocates in the U.S. House and Senate has introduced a broad package of legislation designed to promote solar technologies and energy conservation. The coalition has support from a variety of consumer, business, environmental, and labor organizations. The package includes bills to expand the research, development, and demonstration programs for wind, biomass, passive heating and cooling of buildings, and solar electric technology. For more information, contact Consumer Action Now at (202) 547-1100 or write 317 Pennsylvania Ave. SE, Washington, D.C. 20003.

N-WASTE BURIAL WARNING. U.S. Geological Survey scientists have warned that it is now impossible — and may never be possible — to guarantee fully the permanent, safe burial of nuclear wastes. The USGS report says that scientists don't know everything they should about the safety of storage caverns in salt or rock and cannot predict with certainty what will happen to those caverns over the thousands or millions of years required for the wastes to lose their radioactivity. USGS also said, however, that "acceptable" burial facilities can be built and that their report was not intended to discredit the idea.

ZONING OUT THE SUN. An Albany, N.Y., Supreme Court judge has ruled that a local zoning ordinance could stop a New York couple from placing a solar heating unit in their front yard. The couple argued that they had a right to try to save energy and that they had the right to choose their own method of doing so. The judge ruled against them, however, saying, in effect, "suppose they wanted to build a nuclear power plant on their front lawn."

CITIZEN-LABOR COALITION LAUNCHED. Sixty citizen and labor groups have formed the Citizen-Labor Energy Coalition. The organization's policy statement says, "Energy policy must be regarded as an avenue to broader national goals," and policies adopted to resolve energy issues must be directed toward "economic, social and environmental goals which are fair, progressive, equitable and productive." The group's basic principles include: energy prices must be just and affordable for consumers; energy policies must create jobs; concentrated economic power of the energy companies must be broken up; and energy must be safe.

New Mexico is not only the home of solar power development — but also of a growing nuclear power industry, the nation's largest missile testing range, and two large defense research facilities.

Classroom rates

Educators, order High Country News for classroom use in bulk for the September school term.

HCN centerspreads often cover the flora and fauna of the West. Natural history classes have found them an exciting resource.

Journalism classes use HCN as a research tool and as an example of alternative reporting. Environmental design classes read HCN for ideas on alternative energy use. Business and law schools subscribe to HCN for news of natural resource conflicts.

For bulk rates for your school or students, contact HCN at Box K, Lander, Wyo. 82520 or call (307) 332-4877. (Individual issues of HCN may be purchased in bulk, too.)

Mothering
a quarterly publication

ON
NATURAL
MOTHERING

Home births midwifery nutrition
natural child care alternative education

Single Issue: \$2.25

One Year: \$8.00

Box 184, Ridgway, Colo.
81432



Tundra Wind

The High Country News Research Fund pays for all or part of the expenses for many stories printed in HCN.

Fund supported stories in this issue of HCN are Western Watch on Washington — Montana Legislators (part five of a series), and Wind on the Tundra.

Donations to the fund are tax-deductible. Contribute to the fund today, won't you?

Make out a check to Wyoming Environmental Institute — HCN Research Fund and send it to: WEI, P.O. Box 2497, Jackson, Wyo. 83001. Thank you.

Enclosed is a donation to the HCN Research Fund from:
name _____
address _____
city _____
state _____ zip _____



Whoopers may delay Grayrocks yet

URANIUM MINE PROTEST. The Wyoming Outdoor Council has protested the issuance of a uranium mine permit in Wyoming's arid Red Desert. The environmental group claims that the company, Minerals Exploration, a subsidiary of Union Oil of California, has "an inadequate reclamation plan." WOC President Leslie Petersen says, "The plan, as submitted, presents a good possibility that the mine's operation would drain the Chain of Lakes. Yet, the lakes are not even addressed in the reclamation plan. The plan is deficient under our laws, as all affected lands must be covered (in the mine plan)." The Chain of Lakes serves as important desert wildlife habitat. A hearing was held on the protest on May 19 before the state Department of Environmental Quality. DEQ has 30 days to rule on the protest.

MONTANA TAX PROTEST BROADENS. Peabody Coal Co. has become the fourth company to pay its first quarter 1978 Montana coal severance tax under protest. The protested payment makes a total of \$5.5 million that the state may be required to keep unspent in an escrow account until the companies' legal challenge to the tax is settled. Decker Coal, Westmoreland Resources, and Western Energy have also paid the tax under protest. However, Montana Gov. Tom Judge says that the state will continue to spend the coal tax receipts despite the challenge. He says that should the companies' legal challenge prove successful, the state could dip into two coal tax trust funds to repay the protested taxes. The companies are charging that the 30 percent Montana coal severance tax is exorbitant.

ENERGY IMPACT ASSISTANCE. President Jimmy Carter has proposed a five-year energy impact assistance program totaling \$675 million in grants to states and \$1.5 billion in loan guarantees. If the package is approved, it would provide states with \$15 million each year for planning grants and \$120 million to establish a revolving fund to provide grants, loans, and loan guarantees, according to **Land Use Planning Reports**. Another \$15 million a year would be used to guarantee loans to states at the average borrowing rate of interest. Eligibility for the money will be based on the number and severity of impacted areas within a state.

IDAHO POWER PLANS MAY CHANGE. The Idaho Statesman reports that Idaho Power Co. plans for a 500 megawatt power plant in Idaho may be delayed for at least 10 years if the utility is able to fulfill its current plans for new hydroelectric plants and able to obtain power from a Nevada power plant. Utility President James Bruce told a panel of newsmen on a television program that if the company can purchase 375 megawatts from a Valmy, Nev., power plant proposed by Sierra Pacific Power Co. and complete its current hydroelectric plans, additional power capacity from a coal plant in Idaho would not be needed until the late 1980s. Idaho power also is considering purchasing a half interest in the Nevada plant.

Although construction of the Grayrocks Dam near Wheatland, Wyo., is still under way, a U.S. District Court judge has told the Missouri Basin Power Project (MBPP) that it is continuing at the company's own risk. The court will soon be considering a request for a permanent injunction requested by the state of Nebraska, the National Wildlife Federation, the Nebraska Audubon Society, and the National Audubon Society. The dam is to provide water for MBPP's Laramie River Power Plant, which is also under construction.

The plaintiffs charge that the Corps of Engineers should not have granted a 404 dredge and fill permit to MBPP because of several violations of federal law. The Big Bend area along the Platte River has just been designated as critical habitat for the whooping crane, and under the En-

dangered Species Act no federal agency is allowed to take actions that would damage critical habitat. Grayrocks Dam will take water from the Laramie River, which flows into the Platte. The judge will consider their arguments July 24.

The plaintiffs had asked for an immediate, temporary injunction to stop construction, but according to NWF staff attorney Pat Parenteau, they could not prove that irreparable harm would occur before the dam was completed. The dam is expected to be complete in October 1979.

Parenteau will argue that the Corps should withdraw its permit until after a U.S. Fish and Wildlife Service study of the critical habitat and the needs of the cranes is complete. Although the study isn't scheduled to be complete for three years, Parenteau says the Corps could expedite it

with funding assistance. He says another alternative would be for the Corps to require MBPP to use dry cooling towers instead of water from the Laramie River for cooling. Construction has not proceeded so far that this would not be possible, although MBPP argues that it would be "prohibitively expensive."

Although the critical habitat wasn't designated until after the Corps' permit and another federal permit from the Rural Electrification Administration had been granted, Parenteau says the two agencies will not be able to use this in their defense because the Endangered Species Act has no "grandfather" clause and because both agencies were aware the designation was possible.

The plaintiffs have also filed suit against REA, and the judge may consider the two suits together when court convenes in July.

TVA MOVES FOR WYOMING URANIUM. The board of directors of the Tennessee Valley Authority has authorized the expenditure of \$101 million during the next six years for the production of uranium from properties the agency holds in central Wyoming. The production will take place in the Gas Hills area of the state. TVA expects more than 12 million pounds of uranium concentrates by 1993. The funds will be used to develop one underground mine and eight open pit mines.

STRIP RULES SENT BACK. A federal judge in Washington, D.C., has ruled that the Interior Department has exceeded its authority in issuing certain interim regulations required by the federal strip mine bill. A U.S. District Court judge agreed with the coal industry, which had brought a number of lawsuits over the interim rules, that Interior had too stringently interpreted the law in those portions of the regulations dealing with non-conforming structures and facilities, waste impoundments, sedimentation ponds, effluent limitations, and prime farmlands exemptions. A number of other industry objections were denied by the court, and the National Coal Association and the American Mining Congress are appealing that part of the decision.



ENERGY IMPACT ASSISTANCE will be available from the federal government for towns like Gillette, Wyo., if a Carter administration proposal is approved.

TRIBE BARS OIL PIPELINE. The Confederated Salish and Kootenai Tribal Council has voted not to allow the proposed Northern Tier Pipeline to cross the Flathead Reservation. The Missoulian reports that Tom "Bearhead" Swaney told a representative of the Northern Tier Pipeline Co. that the council action is "absolutely final... We won't even consider allowing the pipeline to be routed through

the reservation." However, a company attorney later said that he still believed that the pipeline would go through the reservation. Attorney Ward Shanahan told the Missoulian that the tribes' decision may have been a bid to get a higher price for the pipeline right-of-way. The tribes say, however, that they won't give in because the route would cross an area that is culturally important to them.

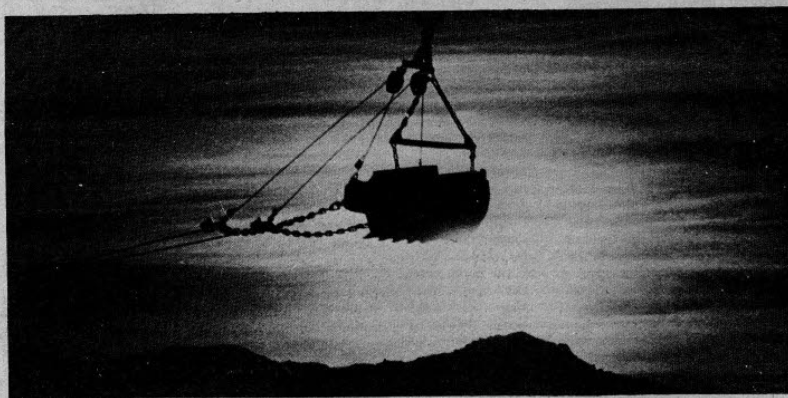


Photo by Sheldon Green

STRIP MINE RULEMAKERS have gone too far in interpreting some parts of the federal strip mine bill for the

recently-issued interim regulations, according to a federal district court judge.

12-High Country News — May 19, 1978

Energy impacts reach to distant recreation areas

by Lee Nellis

Everyone knows what's happening on the east side of Wyoming's Big Horn Mountains. The east side is the Powder River Basin — where the coal draglines and antelope play. But the other side?

The other side is the Big Horn Basin — Big Horn and Washakie Counties. There the economy still depends on beef, beets and barley. Local landowners spend their afternoons counting license plates: from Sheridan, from Gillette, from Rapid City. These license plates are attached to Blazers or Broncos that are sitting in the hunting camp a local sportsman has used undisturbed for 17 years, or at someone else's favorite fishing hole (the one no one else knew how to find) or in someone's bull pasture (just past the gate that was left open).

Big Horn County's Planning Commission has projected that recreational visits

to the county from energy impacted areas in Wyoming alone could grow as rapidly as 15 percent per year through 1985. This would add 1,747,000 visits to the 700,000 total visits recorded in 1976. The county's most conservative projection anticipates an additional 477,000 visits by 1985.

The increased recreation pressure upsets local people, according to a mail survey made in 1975, just a few years after the boom began. The survey was used in preparing a recreation plan for Big Horn, Hot Springs, and Washakie counties. It sampled the recreational preferences, needs and problems of area residents. The problem most commonly identified was overcrowding.

In addition to overcrowding, Big Horn County's report on recreational growth lists several other potential impacts, including resource damage, conflict between

recreationists and landowners and the domination of local rural values by the more urban values of the recreating public.

Big Horn County is attractive to recreationists because most of it is public land. Eighty percent of Big Horn County is administered by federal agencies, predominantly the Bureau of Land Management. Recreational access to public lands is a hotly debated issue.

The focus of debate is the BLM's draft management plan for Paint Rock Canyon. Located east of Hyattville, Paint Rock Canyon has important fisheries, wildlife and archeological values. It is also an important stock trail. Access at the mouth of the canyon is blocked by private lands, although the landowners allow foot and horse access from May through September. Game trails provide public access over the canyon rim.

But the BLM has taken the position that safe, legal access into the canyon does not exist. The draft management plan proposes

alternatives for access, including the condemnation of easements over private land.

At a tense public hearing in Worland, local landowners and sportsmen testified that access was adequate, especially in light of the limited carrying capacity of the canyon. Even the local Chamber of Commerce opposed additional access. Big Horn County provided testimony based on its land use plan, which contains a policy stating that further recreational access in the Paint Rock area is undesirable and would destroy 74 local values.

The Paint Rock Canyon controversy is not yet resolved. Local planners see it as an example of what the future holds for mountain and foothill areas close to coal fields, uranium mines and similar centers of development. The rapid growth of recreational demand in such areas is a sure bet. The ability of local people, in the Big Horn Basin and other recreationally impacted areas, to chart their own course into the future is not so certain.

Agencies offer river information

Compiled by John McCarthy

The Cooperative Instream Flow Service Group (IFG) is an interagency organization formed to develop and distribute information on river protection. It is part of the Western Energy Land Use Team sponsored by the U.S. Fish and Wildlife Service and funded by the Environmental Protection Agency.

The IFG has compiled a series of current papers written by specialists on water law and strategies for preserving minimum flows. The language may be somewhat legalistic and technical but is readily understandable.

The information IFG has printed is free in limited quantities to organizations and individuals. The IFG has placed information at many area university libraries and at the regional headquarters for the Fish and Wildlife Service, National Park Service, and Bureau of Land Management.

The IFG has run a series of water law short courses in different locations all over the country in the last two years. Cost has been \$75 for a three day course. Future courses will depend on demand. Topics include: the concept of riparian doctrine and the significance for instream flows, the appropriation doctrine, federal reserved rights, and Indian rights. Some tape cassettes from the courses are available. Direct inquiries to Berton L. Lamb.

The IFG puts out a free newsletter "Instream Flow Briefs," covering its work, related projects, and new publications.

Send requests for information to: Technical Information Specialist, Western Energy Land Use Team, U.S. Fish and Wildlife Service, Room 206 Federal Building, Fort Collins, Colo. 80521. If the requested report is out of print, the team will direct you to the closest library where there is a copy.

Some of the reports available include: **State Laws and Instream Flows.** This document identifies strategies possible under state laws for reserving flows for fish and wildlife. A matrix at the back identifies the statute (if any) through which the strategy can be applied in each state.

Promising Strategies for Reserving Instream Flows. This report is a list of the most promising strategies

under both state and federal laws.

Protecting Instream Flows under Western Water Law: Selected Papers includes papers presented at a July 1977 meeting of the Western Association of State Game and Fish Commissioners. Prepared primarily by attorneys in Wyoming, Idaho, and Colorado, the papers cover opportunities under current water law and potentially under future water law for protecting instream flows. There is a matrix of all strategies for protecting instream flows that have been identified by the Western Energy and Land Use Team.

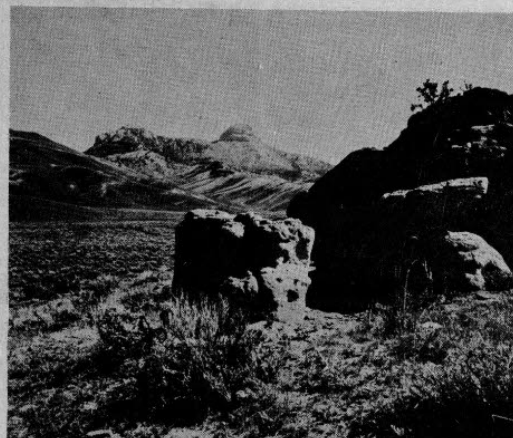
Preserving Instream Flows Under the Appropriation Doctrine — Problems and Possibilities by George A. Gould offers history and the basics of the appropriation doctrine, a basic tenet of Western water law.

Should Rivers Have Running? Toward Extension of the Reserved Rights Doctrine to Include Minimum Stream Flows by Scott W. Reed is a discussion of the rights (or lack of rights) of free-flowing streams. It was first presented in the Idaho Law Review.

WILD AND SCENIC

The wild and scenic river system is another method for preserving rivers. **Flowing Free** is a 76-page book outlining the process for designating wild and scenic rivers. It covers the federal system, state systems, and options for local and private protection. There is a question and answer guide for landowners, a list of state contacts, three case studies, and a reprint of the federal Wild and Scenic Rivers Act. It is available from the Rivers Conservation Fund, 317 Pennsylvania Ave. S.E., Washington, D.C., for \$3.25.

The Forest Service and the Department of Interior have put out a pamphlet, "Guidelines for Evaluating Wild, Scenic and Recreational River Areas Proposed for Inclusion in the National Wild and Scenic Rivers System under Sec. 2, Public Law 90-542." It gives the criteria used for placing rivers in the three categories. For more information, contact local offices of either the Forest Service or Interior Department agencies.



Wyoming Travel Commission photo
HEART MOUNTAIN in the Big Horn Basin is typical of some of the areas that attract recreationists from the boom towns on the other side of the mountains.



Environmental/educational notecards, posters & prints.

Proceeds from sales will be shared with HCN.

* Write for free catalog *

WILDERNESS ADVENTURE ...AS YOU WANT IT.

Outings for all who would seek the refreshment of the natural world... in the style they prefer. 250 of them. Trips for scramblers and strollers, for old and young, for those who want to get started and those who never stop. Lots of trips for the whole family, some for special skills. Trips to high places, dry places, and wet ones. Down rivers by raft, kayak and canoe, up mountains by raft, kayak and foot. Cover lots of by horseback and foot. Trips to every country or stay put. Trips to every continent, to Alaska and Hawaii, Canada and Mexico, islands near and far away. So many ways to experience the joys of nature, so many of them offered by no one else at such a reasonable cost.

THESE OPPORTUNITIES ARE AVAILABLE TO SIERRA CLUB MEMBERS.

WON'T YOU JOIN US?

For a closer look at membership and outings opportunities, write or call:

Marne Schiffman
Sierra Club Outing Dept.
530 Bush Street
San Francisco, CA 94108
Phone: (415) 981-8634



Western Roundup



North Dakota holds wetlands hostage

Still frustrated by the Carter Administration's refusal to approve the full Garrison Diversion irrigation project in his state, North Dakota Gov. Arthur Link is now holding federal wetlands purchases hostage, according to the Associated Press. Link has refused to approve a dozen federal wetlands purchases involving about 3,000 acres. Under federal law, a governor must approve the purchases of wetlands needed for waterfowl habitat before the federal government can acquire the lands.

Link explains that the Interior Department, which wants the wetlands, is the same department that is responsible for the delays and objections to the Garrison

Diversion. Interior Secretary Cecil Andrus has proposed a 96,000 acre plan as a compromise, following a National Audubon Society suit against the project. Link wants a 250,000 acre project.

Assistant Interior Secretary Robert Herbst has been to the state to talk with Link about the wetlands, and Link hopes Herbst will carry North Dakota's message back to Andrus. The two men also discussed a 1977 state law on wetlands, which the Interior Department might sue the state over. The legislature stipulated that when the department purchased easements for wetlands, the easements would last only until the landowner died. Herbst says the department can't accept this provision.

Can foresters claim water for wildlife?

The National Wildlife Federation is attempting to help the federal government overturn a New Mexico Supreme Court decision forbidding the use of a wildlife watering station on the Gila National Forest.

The outcome of this suit could affect the right of the U.S. Forest Service to claim priority water rights to protect fish, wildlife, and recreation within its boundaries, says Pat Parenteau, attorney for the federation. "It will directly affect litigation regarding the federal reserved water rights doctrine, which is currently pending in at least four Western states — Colorado, Idaho, Nevada, and New Mexico," he says.

The federal government and the conservation group are arguing that the Forest

Service should be allowed to consume some 30,000 gallons of water per year at the watering station. Legal precedents dictate that land reserved for the public — "federal reservations" — should have priority rights for the water they need to accomplish the purposes for which the land was set aside. The federation is arguing that the purposes of a national forest include not only timbering and watershed protection, but also protection of wildlife.

The federation is a "friend of the court" in the case, *United States of America v. the State of New Mexico*. The case was filed in the U.S. Supreme Court last fall. A decision is expected before June.

Lamm says ski area doesn't fit priorities

Colorado Gov. Dick Lamm has decided not to support further study of the Adam's Rib ski area, which would be in Eagle County east of Vail. Lamm said he cannot support continued study of the proposal because it doesn't fit any of the state and

Forest Service criteria for priority new winter sports sites, according to the *Eagle Valley Enterprise*. The state prefers areas that are close to Front Range urban centers and to existing resorts.

The state developed the priorities following a controversy over another ski area in the same vicinity as Adam's Rib. That area was opposed because of its effects on wildlife, traffic, and growth patterns in the area, and many of the same impacts could be anticipated with Adam's Rib.

Eagle County Commissioners have asked Lamm to reconsider. Although they say they don't necessarily support the area, they would like to see further studies. The commissioners say the governor has "overstepped his bounds in Eagle County."

However, residents of the town of Eagle recently elected three candidates who oppose Adam's Rib to the town board, and the town is generally believed to be opposed to the development.



MARDY MURIE of Jackson, Wyo., was made an honorary park ranger and presented with a National Park Service gold badge recently in appreciation for her support of the Park Service and its mission. Murie has devoted her life to the field of conservation and resource protection.

State makes first ruling on Yellowstone

The Montana Department of Natural Resources is recommending approval of only a fraction of the water in the Yellowstone River requested by state agencies for instream uses. The Montana Fish and Game Department had requested an 8.2 million acre-feet instream reservation. The state Health Department had requested 6.6 million acre-feet to preserve water quality.

After extensive hearings held last year, the Department of Natural Resources has recommended that only 4.3 million acre-

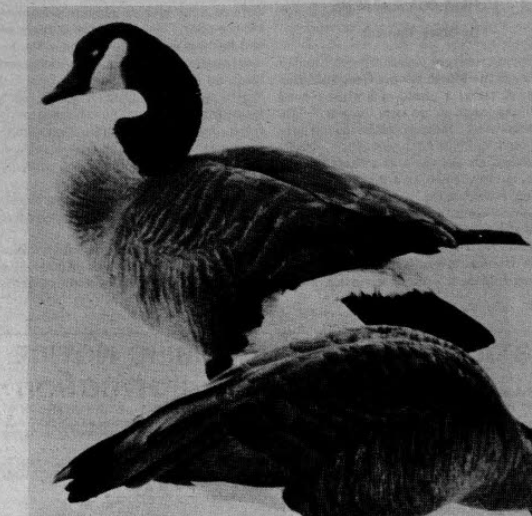


Photo by Tom Raugh
CANADA GEESE and other waterfowl depend upon wetlands.

Ranchers accused of poisoning ferret

A group of ranchers allegedly tried to kill a black-footed ferret in southeastern Montana, but the state Fish and Game Department says it cannot press charges.

The ferret was sighted by a Fish and Game Department biologist last September in Carter County. When a representative of the department visited the prairie dog town again in November, he discovered grain that had been laced with strychnine. The ranchers had already made it known that they didn't want the government meddling in their affairs, apparently afraid that protection of the black-footed ferret, an endangered species, would require changes in their management of their ranches. This was the first ferret that had been seen in the state for 25 years.

According to information presented at a Fish and Game Commission meeting re-

cently, no one knows whether the ferret was killed. However, ferrets feed on prairie dogs, which would eat the poisoned oats. Fish and Game biologist Dennis Flath said he checked the prairie dog town after the poisoning and didn't find any dead ferrets. However, he understands the ranchers plan additional poisonings. Presently, he is working with the ranchers trying to prepare a management plan.

However, another Fish and Game representative, Joe Egan, says, "Whatever we do we have to go to them (the landowners) with hat in hand and ask them if they think it's reasonable. . . . We're not in the business of trying to put undue pressure on any private interests."

Hank Fischer of the Defenders of Wildlife says the poisoning is a clear violation of the law. He says, "The law should be followed."

Monuments' air subject of controversy

Potential conflicts between pristine air quality and oil shale development were predicted by several people testifying at public hearings held recently in Utah on

Class I air protection for national monuments. Class I designation allows almost no degradation of air quality.

Dinosaur National Monument, which straddles the Utah-Colorado border, is near proposed oil shale development areas in Utah. A representative of the Utah Energy Office said neither Dinosaur nor Cedar Breaks National Monument, which is near Cedar City, should be designated Class I. He feared the Cedar Breaks redesignation would limit the town's growth.

However, some others supported the designations. One person said Cedar Breaks sometimes offers views of 100 miles. Dick Carter, Utah-Nevada representative of the Wilderness Society, said he feels "clean air is one of the most significant resources, including economic resources . . . in the southwestern United States."

feet be divided among agencies and cities for purposes that include irrigation and municipal consumption as well as instream uses. The estimated flow of the river is 8.8 million acre-feet per year.

The department ruled in favor of allocations for three water storage projects and denied requests for seven others, saying they are unnecessary.

The department's recommendation will be acted upon by the Board of Natural Resources this summer.

14-High Country News — May 19, 1978



UNWELCOME ALIENS

by Myra Connell

During a recent visit in Oregon I leapt through the March issue of *Oregon Wildlife*. A life-size photo of a glassy-eyed bullfrog leapt at me from the page. The caption read "Missouri and Louisiana contributed the bullfrog to Oregon. . . Their introduction has not been entirely beneficial as they eat native frog species and young pond turtles."

I found some inconsistency in the article in which the photo appeared. While deploring introduction of the bullfrog, the author, Cliff Hamilton, implies approval of other foreign species, such as mountain goats,

pheasants, Hungarian partridge, chukar, valley quail, wild turkeys, eastern cotton-tails, eastern gray squirrels and fox squirrels.

Hamilton says that some introduced species "fill a niche" in Oregon's wildlife populations. At the same time he believes that importation of migratory birds is unnecessary since most species "would . . . displace some species already present or become pests." He cites English sparrows and starlings as notable examples. He also mentions the Norway rat, house mouse and black rat as unwanted imports from Old World countries. Fish fanciers, both trained and untrained, have planted exotic fish in Oregon. Yet he implies that wildlife managers of Oregon are fully capable of predetermining desirability of potential imported species.

There are many instances of problems caused by human meddling with wildlife and their habitat.

Friends who recently visited New Zealand noted the large numbers of non-native deer in that country, so numerous that the

government hires hunters to keep their numbers down. They are a fertile hybrid derived from interbreeding of European red deer and American wapiti. Rabbits were also introduced into New Zealand as well as into Australia, where they became a classic example of a prolific exotic pest. New Zealand has no native predators.

In our own country the spread of the starling is perhaps the worst example. In large cities of the east and south they present a serious problem. They have adapted to traffic and fumes; using large structures as roosting places they deposit guano up to 18 inches thick that can cause a disease similar to tuberculosis. Flocks near airports have caused plane crashes. Bizarre remedies — noisemakers, chemicals and electrical devices have proven ineffective. One almost has to admire house (En-

glish) sparrows' adaptability, which has enabled the aggressive and prolific little nuisances to inhabit the country since 1850.

A pair of squirrels, thought to be fox squirrels, were set free in Lander some years ago. (Two different persons have been blamed for this act.) The squirrels thrived on hand-outs. Now there are numerous complaints about their offspring molesting birds, consuming the expensive sunflower seed put out for songbirds, and even chewing the clothes hanging on the line.

Transplanting of a species from its own natural habitat into another seems to me an argument with nature. Re-establishment of a native species in its former habitat is a different matter; likewise cultivation of domestic stock that can be more or less controlled.

I think we must keep in mind that many of us, too, are exotics, and we would do well to be wary of the consequences of our introduction into the regions where we live.



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 (95-11-101 et. seq., WYOMING STATUTES 1957, CUMULATIVE SUPPLEMENT 1973).

IT IS THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS TO (2) TWO OIL TREATER FACILITIES, AND TO RENEW (3) THREE INDUSTRIAL DISCHARGE PERMITS, AND (7) SEVEN OIL TREATER DISCHARGE PERMITS WITHIN THE STATE OF WYOMING.

APPLICANT INFORMATION

- (1) APPLICANT NAME: M & K OIL OPERATIONS
MAILING ADDRESS: P.O. BOX 1487
CASPER, WYOMING 82602
FACILITY LOCATION: HUNT No. 12 LEASE, SW4, NW4, SECTION 26, T50N, R102W, PARK COUNTY, WYOMING
APPLICATION NUMBER: Wy-0027774
- (2) APPLICANT NAME: BUTTES RESOURCES
MAILING ADDRESS: P.O. BOX 121
OSAGE, WYOMING 82723
FACILITY LOCATION: ROTH LEASE, SW4, SECTION 25, T35N, R66W, NIOBRARA COUNTY, WYOMING
APPLICATION NUMBER: Wy-0027768

Facilities are typical oil treaters located in Niobrara and Park Counties, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. Both discharges are to Class III streams.

The discharges must meet Wyoming's Produced Water Criteria effective immediately. Chapter VII of the Wyoming Water Quality Rules and Regulations infers that if the Produced Water Criteria is met, the water is then suitable for beneficial use. Because the discharges are to Class III streams, more stringent limitations than the Produced Water Criteria are not deemed necessary to insure compliance with Wyoming's Water Quality Standards.

Semi-annual self-monitoring is required for all parameters with the exception of oil and grease which must be monitored quarterly. The proposed expiration dates are December 31, 1982, for Buttes and July 31, 1980, for M & K.

- (3) PERMIT NAME: UNITED NUCLEAR CORPORATION
MAILING ADDRESS: P.O. BOX 2606
CASPER, WYOMING 82602
FACILITY LOCATION: NORTH MORTON MINING OPERATIONS, SECTIONS 11, 12, 13 AND 14, T36N, R73W, CONVERSE COUNTY, WYOMING
PERMIT NUMBER: Wy-0024571
- FACILITY LOCATION: SOUTH MORTON MINING OPERATIONS, SECTIONS 11, 14 AND 15, T35N, R72W, CONVERSE COUNTY, WYOMING
PERMIT NUMBER: Wy-0024562
- FACILITY LOCATION: BOX CREEK MINING OPERATIONS, SECTIONS 1 AND 2, T35N, R72W, CONVERSE COUNTY, WYOMING
PERMIT NUMBER: Wy-0020998

The United Nuclear Corporation is the owner and operator of 3 major uranium mining operations located northeast of Glenrock, Wyoming.

The Box Creek Mining operation is an open pit mine which is currently in the preliminary stages of development. Water which enters the mine pit will be treated by 1 or 2 barium chloride treatment plants, followed by settling ponds, with final discharges to the North Fork of Box Creek (Class III stream) via an unnamed drainage or the South Fork of Box Creek (Class III stream) via an unnamed drainage.

The South Morton Mining operation will consist of numerous open pits and is presently under construction. Water encountered in the various pits will be routed to approximately 6 locations for treatment with barium chloride and settling ponds before discharges to the South Fork of Box Creek via various unnamed drainages. The following discharges are also authorized at this operation; the overflow from a domestic water tank, the outfall from a fuel tank catch basin, the outfall from a shop water catch basin, and the overflow from a fresh water holding pond. These discharges will also be routed to the South Fork of Box Creek via unnamed drainages.

The North Morton Mining operation consists of existing underground mine shafts. Water pumped from the shafts or various dewatering wells is routed to approximately 14 locations. Treatment with barium chloride for radium removal may or may not be required, depending on the quality of water pumped. The discharges are to any of 11 separate playas, Cowell Draw via an unnamed drainage or the North Fork of Box Creek via an unnamed drainage (all Class III waters).

The proposed permits require all mine water related discharges to meet effluent standards considered to be best practicable for the uranium mining industry. Since all discharges are to Class III streams, effluent standards more stringent than best practicable are not necessary to meet Wyoming's Water Quality Standards. The fuel spillage

and shop water discharges are required to meet pH and oil and grease limitations based on Wyoming's Water Quality Standards.

Self-monitoring of effluent quality is required on a regular basis with reporting of results quarterly. The permits contain standard wording requiring control of runoff from disturbed areas. All 3 permits are scheduled to expire March 31, 1983.

- (4) PERMIT NAME: AMOCO PRODUCTION COMPANY
MAILING ADDRESS: P.O. BOX 2520
CASPER, WYOMING 82601
FACILITY LOCATION: ROCKY POINT FIELD, NE4, SW4, SECTION 35, T67N, R69W, CAMPBELL COUNTY, WYOMING
PERMIT NUMBER: Wy-0000281
- FACILITY LOCATION: SALT CREEK WATERFLOOD, WEMCO No. 4, NW4, NE4, SECTION 35, T40N, R79W, NATRONA COUNTY, WYOMING
PERMIT NUMBER: Wy-0020460
- (5) PERMIT NAME: FENIX-SCISSON, INC.
MAILING ADDRESS: P.O. BOX 3880
CASPER, WYOMING 82602
FACILITY LOCATION: SECOND WALL CREEK BATTERY, NAVAL PETROLEUM RESERVE No. 3, SECTION 20, T38N, R78W, NATRONA COUNTY, WYOMING
PERMIT NUMBER: Wy-0003454
- FACILITY LOCATION: SHANNON BATTERY No. 2, NAVAL PETROLEUM RESERVE No. 3, SECTION 35, T38N, R78W, NATRONA COUNTY, WYOMING
PERMIT NUMBER: Wy-0003476
- (6) PERMIT NAME: TERRA RESOURCES
MAILING ADDRESS: P.O. BOX 2500
CASPER, WYOMING 82601
FACILITY LOCATION: WHITEHILL STATE No. 1-16 UNIT, SE4, SE8, SECTION 16, T56N, R72W, CAMPBELL COUNTY, WYOMING
PERMIT NUMBER: Wy-0001091
- (7) PERMIT NAME: TENNECO OIL COMPANY
MAILING ADDRESS: 720 SOUTH COLORADO BLVD.
DENVER, COLORADO 80222
FACILITY LOCATION: GLENROCK BLOCK C UNIT, BATTERY No. 18, NE4, SECTION 33, T33N, R76W, CONVERSE COUNTY, WYOMING
PERMIT NUMBER: Wy-0023493
- FACILITY LOCATION: GLENROCK BLOCK C UNIT, BATTERY No. 11, NW4, SECTION 27, T33N, R76W, CONVERSE COUNTY, WYOMING
PERMIT NUMBER: Wy-0023540

Facilities are all oil production units located in Natrona, Campbell and Converse Counties, Wyoming. The water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharges are all to Class III waters of the State, with the exceptions of Amoco Wy-0000281, which is to the North Fork of the Little Missouri River (Class I stream) via an unnamed draw, and the 2 Tennessee discharges which are to Deer Creek (Class I stream) via an unnamed drainage. Due to the high dilution factors in these streams and the fact that there is no detrimental effect to aquatic life, these discharges will be allowed to continue.

All discharges must meet Wyoming's Produced Water Criteria effective immediately. The expiration dates of the permits correspond to the expiration dates of other oil treater permits located in the same areas.

Chapter VII of the Wyoming Water Quality Rules and Regulations infers that every produced water discharge is beneficially used if the total dissolved solids content is 5,000 mg per 1 or less.

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 June 19, 1978. 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 VII, Enforcement Division, Permit Administration and Compliance Branch, 1860 Lincoln Street, Denver, Colorado 80295. All comments received prior to June 19, 1978, 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) 327-3874, 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-78-006



HCN Bulletin Board



May 19, 1978
-15-

LOONEY LIMERICKS by Zane E. Cology

If our Congressmen were perspicacious,
And if they had an eye for the spacious,
They would see we deserve
An Alaska preserve.
But alas, some are very rapacious.

WEMINUCHE WILDERNESS

The U.S. Forest Service is soliciting suggestions on the management of the Weminuche Wilderness in Colorado. For more information contact James M. Thomas, Wilderness Planner, San Juan National Forest, 701 Camino Del Rio, Durango, Colo. 81301 (303) 247-4874.

classifieds

STAFF PERSON. Colorado Open Space Council Mining Workshop is looking for a staff person to coordinate our work on coal, oil shale, and minerals development with that of Western Slope mining activists and to develop a strong Front Range volunteer base. Applicants should be able to work well with people and should be committed to the environmental movement. Organizing experience would be useful but is not essential. Send resume and writing samples by June 1 to Brad Klafehn, COSC Mining Workshop, 2239 E. Colfax Ave., Denver, Colo. 80206. Telephone (303) 321-6588.

FIELD WORK. Volunteers needed to inventory roadless areas in northwest Wyoming. Should be able to read a map, hike, take slides, and prepare a brief written report. Contact Bart Koehler, The Wilderness Society, Box 1184, Cheyenne, Wyo. 82001.

STAFF OPENINGS. The Dakota Resource Council has openings for two full-time field persons. The DRC is a recently organized citizens organization of farmers, ranchers, and other citizens working on energy and coal development issues in North Dakota. Send resume, writing sample, and references to DRC, P.O. Box 254, Dickinson, ND 58601, (701) 227-1851.

CITIZENS' FOOTRACE. High Country News is sponsoring the Second Annual Lander Citizens' Footrace to be held June 3. (The date has been changed.)

To enter, come to the southeast end of City Park between 5 and 5:45 p.m. The fee is \$1. Starting time is 6 p.m. Classes of competition will be based on interest and number of entries. For more information call Sarah Doll at 332-3929 or Joan Nice at 332-4877. (Classes last year ranged from youth to over-40, including a walking class.)

UTAH WRITERS sought by HCN. We are interested in stories from Utah on air pollution, alternative energy innovations, coal development, and people making the news. Pay is two cents to four cents per word for fair, accurate news reporting. One-sided diatribes unacceptable. Contact Joan Nice, Box K, Lander, Wyo. 82520 with story ideas.

CANYON COUNTRY GUIDEBOOKS. For a list of 12 guidebooks and maps describing the canyon country of southeastern Utah, write Wasatch Publishers, P.O. Box 963H, Moab, UT 84532.

NORTH DAKOTA ENVIRONMENTAL DIRECTORY

The University of North Dakota's Institute for Ecological Studies has prepared an environmental directory for the state. It includes a comprehensive listing of North Dakota's environmental organizations, environmental agencies, local government officials, and environmental facilities. It can be obtained for \$3.00 from the Institute, University of North Dakota, Grand Forks, N.D. 58202.

ALASKA PROGRAM

Pam Rich of the Alaska Coalition will present a program on Alaska and the current controversy over land preservation in that state at the Western Wyoming Community College in Rock Springs, Wyo., on June 7, 1978, at 7:30 p.m. in room 203. The program is being sponsored by the Lower Green River Chapter of the Izaak Walton League.

MONTANA WILDERNESS WALKS

The Montana Wilderness Association is sponsoring 21 wilderness walks during the summer and fall of 1978. The walks will be led by experienced guides, and the trips will go into some of the state's most beautiful areas. For further information, contact MWA, Box 84, Bozeman, Mont. 59715.

OUTDOOR SEMINAR INSTRUCTORS SOUGHT

Applications are now being accepted for instructors for the 1979 Summer Seminar Program to be held at Rocky Mountain National Park. The program is designed to encourage the use of the national park as an outdoor classroom. Selection of courses will be made in cooperation with the participating universities, Colorado State University and the University of Northern Colorado, early next fall. Applicants for instructor positions and their course ideas should be sent before Sept. 1 to Seminar Coordinator, Rocky Mountain Nature Association, Inc., Rocky Mountain National Park, Estes Park, Colo. 80517.

COYOTE GETTERS

The Wyoming Bureau of Land Management has issued a warning about "coyote getters" because of a large number of incidents involving these devices, which are used to kill or trap certain kinds of predators, such as coyotes. A "coyote getter" is a spring or .38-caliber cartridge loaded device that emits a burst of sodium cyanide when tripped. Only a small portion of it is visible above ground, and the animal re-

leases the cyanide by pulling up on the bait. BLM warns that the devices are prohibited on public lands and on private lands must be marked with brightly colored warning signs. BLM says that there have been no injuries to humans so far, but that there have been a number of incidents involving both humans and pets tripping the device.



Bureau of Land Management photo
A "COYOTE GETTER" is being pointed out by a federal employee. A warning sign must be placed within ten feet of the trap.

service directory

HCN Survey

The May 5, 1978 issue of High Country News contains the current HCN Survey and Reader Profile. Tell us where to go! Fill out the survey and send it to HCN, Box K, Lander Wyo. 82520.

LARSEN'S BICYCLES

233 EAST 2nd ~ PHONE 754-5481
POWELL, WYOMING 82435



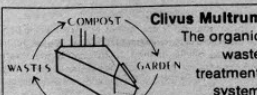
WILDLIFE PHOTOS

ORIGINAL CUSTOM PRINTED WILDLIFE PHOTOGRAPHS HAND PRINTED ON BEAUTIFUL GLOSSY NON-FADING CIBACHROME PHOTOGRAPHIC PAPER. VERY TRUE COLOR, ALL AGAINST BEAUTIFUL NATURAL BACKGROUNDS.

ANTELOPE — Newborn fawn, running doe, buck, big herd. DEER — Buck in velvet, buck leaping fence, fawns in winter. ELK — Bull on snow, bull in velvet, bugling bull. GOLDEN EAGLE — Immature bird in nest (extreme closeup). CANADA GEESE — Feeding.

PRAIRIE DOG, MARMOT, STRUTTING SAGE GROUSE, TRUMPETER SWANS 8x10 print — \$10 — add \$1 for matboard mount. Available on beautiful REDWOOD PLAQUE for \$5 extra 11x14 print — \$20 — add \$2 for matboard (no plaques) Other wildlife scenes — write, probably have them.

ED'S CAMERA ADVENTURES, 242 Main Street, Lander, Wyoming 82520 (307) 332-3800.



For information send SASE to:
Teton Tinklers and Traders
Box 91, Victor, Idaho 83455



BACK TO THE LAND MAILING 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, \$3 or write for information.

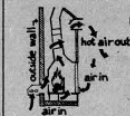
G & J Distributors, Dept. WM, 4523 Labeth, Santa Rosa, CA 95401

KAYAKS & CANOES

Do it yourself and save 50%.
FREE CATALOG, PLASTICRAFTS
2800 N. SPEER BLVD.
DENVER, COLO. 80211

Shaw's Fireplace

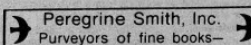
Efficient—burns fuel at 70-80% (wood, coal)
Safe—withstanding temps. to 3200 F.
Durable—stainless steel firebox
Easy to install—wood framing



For information write to:
Cole's
Fuel Economy
Store
218 Main Dept. C
Lander, Wyo. 82520
(307-332-2970)
"Efficient Heating"



Rocky Mtn. National
Park Hiking Trails — plus Indian
Peaks. Complete guide to 440+
miles of trail. Maps, drawings.
Quality guaranteed. Free
Catalog. \$7.50 postpaid
6000 Kingstree, Box 6X, Charlotte, NC 28210



Purveyors of fine books—
including Western history, fiction,
art and architecture.
Write for Catalog
P.O. Box 667 • Layton, Utah 84041

REQUEST FOR PROPOSALS

SEALED PROPOSALS IN DUPLICATE WILL BE RECEIVED BY THE DEPARTMENT OF ADMINISTRATION AND FISCAL CONTROL, PURCHASING AND PROPERTY CONTROL DIVISION, Room 301, Emerson Building, Cheyenne, Wyoming 82002, until 2:00 P.M., June 1, 1978, at which time they will be publicly opened and read for FURNISHING CONSULTING SERVICES FOR STATE BUILDING ENERGY AUDITS FOR THE ENERGY CONSERVATION OFFICE, CHEYENNE, WYOMING.

Proposals will be furnished by contacting Dick Rich, Purchasing and Property Control Division, Room 301, Emerson Building, Cheyenne, Wyoming 82002, telephone (307) 777-7253. Prospective contractors desiring information on this project should contact Ms. Lynn Dickey, Energy Conservation Office Coordinator, Capitol Hill Office Building, 320 West 25th Street, Cheyenne, Wyoming, 82002, telephone (307) 77-7131.

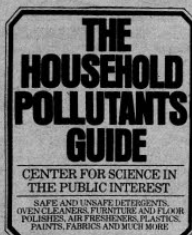
The Contractor shall furnish all materials, equipment and labor necessary to complete the project. The Purchasing and Property Control Division reserves the right to waive informalities or to reject any or all bids.

The attention of prospective contractors is called to the requirements as to conditions of employment to be observed, minimum wages to be paid under the contract, and to all applicable laws affecting the work, particularly to Sections 9-647.2, 9-663, 9-665, 9-666, 9-667, 9-668, 9-669, 9-672 through 9-680, and 27-210.7, Wyoming Compiled Statutes, as revised to date.

No prospective contractor shall withdraw his proposal for a period of thirty (30) days after the actual date of proposal opening.

DATED THIS ELEVENTH DAY OF MAY, 1978.
STATE OF WYOMING
BY: Carla S. Lallain
Purchasing Administrator

16-High Country News — May 19, 1978



by the Center for Science in the Public Interest, Anchor Press-Doubleday, Garden City, New York, 1978. \$3.50, paper, 309 pages.

Review by Peter Wild

A housewife noticed that she came down with a headache every time she used an aerosol spray to clean her portable oven. To get better ventilation, she moved it outdoors for the next scouring. The tactic solved her headache problem all right, but the wind blew the spray into her face, nearly blinding her.

The fact is that the typical American household contains hundreds of chemicals — far more than were found in laboratories a century ago. Many are so dangerous that scientists put on gloves, goggles, and masks before they handle them. Those who think that such government agencies as the Food and Drug Administration protect the consumer by approving chemicals before they are marketed will be disappointed after reading *The Household Pollutants Guide*.

Little is known about the hundreds of new chemicals turned loose each year on the public. Rather than conduct expensive tests, it's cheaper for the manufacturers when "the consumer becomes the test animal in the laboratory of the home to determine the ill effects." With their smaller bodies and curiosity, children are most vulnerable. And what is most insidious, the effects in both children and adults can be cumulative, producing cancer or other diseases after 10 or 20 years of exposure.

Ever since Rachel Carson's *Silent Spring* appeared in 1962, warnings have been sounded by scientists concerned about our chemical abandon. Still, the problem worsens. The innocent-looking deodorant

powders we douse ourselves with may contain carcinogenic asbestos fibers. The filters we eagerly buy to purify our water become "breeding grounds for bacteria." Fifty million Americans are walking around with radioactive false teeth. One out of every ten who wears eyeglasses has a pair that silently administers a dose of radiation "close to eight times higher than permitted by law." Add to that the daily dosage of some television sets, microwave ovens, and smoke alarms.

According to the team of respected scientists who wrote this book, our concerns about such things are not the result of environmental paranoia. Rather, a lot of people are making money by selling dangerous products. To add insult to injury, in many cases the commodities not only are harmful and expensive, but they don't do the job as advertised. They are marketed to fill a need created by industry: witness the grinning television actors pirouetting around the house spraying their families with air fresheners and disinfectants. In the long run, consumers pay a very high health price for many of these supposed "convenience items."

The Household Pollutants Guide goes beyond explaining how to recognize dangers lurking in everything from building materials to shoe polish. Page after page suggests sane, simple, and often less expensive substitutes. The book especially recommends against all aerosol sprays. They can explode like bombs — one reason why being a garbage man is twice as risky as being a policeman. And even though a law going into effect in April 1979 will help with the widely publicized ozone problem, the new propellants will be just as poisonous to breathe. Added to that, aerosols are a ripoff, containing up to 90 percent propellant and only 10 percent usable product.

As the book points out for other categories, the person who swears off aerosols can find cheaper products. Instead of spray starches, for instance, a simple mixture of cornstarch and water will serve us just as well as it did our grandparents.

Fifty million Americans are walking around with radioactive false teeth.

Dear Friends

Most of our staff spent more than a little time helping to organize the local Sun Day celebration. We remained calm when it hailed on Wednesday, May 3, when most of the rest of the country was celebrating. Our celebration was scheduled for Saturday, May 6. We were hopeful it would clear up by then.

However, the rain we had been having for two weeks continued. As the week wore on, the puddle deepened in the empty lot on Main Street where our sun rites were to be held. Only slightly discouraged, we made plans for an indoor celebration. Inside, we would have to forgo a few things like painting a sun mural on a brick building and constructing a 15-foot-high solar heated dome. But we could still have music, food, exhibits, and a tour of the town's solar homes.

By Friday, we had not just May showers but a major snowstorm on our hands. We wandered around the office saying, in essence, "The show must go on." What we probably meant was, we'd

put so much work into the affair that we were going to celebrate the sun, by George, sun or no sun.

It became sort of like the time we planned a birthday party for our landlord. When he didn't show up, we ate the cake ourselves. We forgot the essence of the celebration.

By Saturday morning, nature brought us a snowstorm so fierce that we couldn't remain oblivious. Only someone with a nature-be-damned, buffalo hunter mentality could have said, "The show must go on." So we canceled Sun Day and spent the weekend watching almost three feet of wet snow come down on us.

We must have had lots of wise farmer types laughing at us for a while there — preaching responsiveness to nature while we prepared to celebrate the sun in a snowstorm.

We are trying again, however. We have scheduled another sun celebration for this Saturday. But every farmer



The Deserts of the Southwest

by Peggy Larson, Sierra Club Books, San Francisco, 1977. \$5.95, paper; \$9.95, hard cover. 286 pages. Maps and illustrations.

Review by Peter Wild

Deserts are inhospitable and boring places, blank pages in the richness of the earth. Our society, oriented toward the millpond and the greensward, either has turned its back on them or exploited their grass and minerals, and then moved on as quickly as possible. Yet the fact is that deserts cover one-seventh of the world's land — and, as newspapers keep telling us, those sandy wastes are spreading, due largely to man's abuse.

If that seems like someone else's problem, it isn't. About half of the West's land between the crest of the Rockies and the Pacific Ocean is desert, and much of the rest is semi-arid. To a large extent, then, the Western experience is a desert experience. Peggy Larson's purpose is to sensitize us to this reality.

Further, she wants to get us down from the snowy, pine-covered peaks and out hiking across the expanses where rabbits cope with the heat by radiating it through their long ears and cactuses expand like accordions to store the sparse rainfall. An added advantage to discovering the desert is that the hiker wearied by the glut of others in areas as lush as a Coors ad can blissfully lose himself among the mirages and bare, splitting pinnacles of these unpeopled regions.

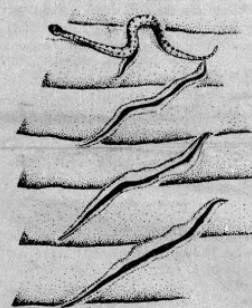
Larson applies the fairly standard technique of defining a desert as an area receiving 10 or less inches of annual precipitation. As she hastens to explain, that isn't the whole story. Bagdad, Calif., which once went two years without a drop of rain, ob-

viously qualifies. But she also rightly includes Tucson, Ariz., with 11.2 inches, since what makes a desert depends on a subtle combination of factors, including temperature, wind, and soil conditions.

What she comes up with for drawing desert boundaries is a rule-of-thumb based on distinctive vegetation. Hence, mentioned in order of size, the Great Basin is dominated by sagebrush; the Chihuahuan by an agave known as lechugilla; the Sonoran by the bizarre saguaro cactus; and the Mohave by the Joshua tree. It should be said that these four major deserts start on the north in Idaho and continue down to Arizona in the south and on into Mexico. A curious inaccuracy in an otherwise factual book is its title.

As the reader eager for exploration might hope, Larson discusses the deserts separately, calling attention to the Gila monsters, bighorn sheep, fringe-toed lizards, boojum trees, and sage sparrows one might see. She devotes fully the last half of the book to hints on how to explore: what to wear, what special items belong in the pack of the desert traveler, what to do if you find yourself lost, bitten by a black widow spider, and with a bone-dry canteen.

Drawn from the author's 20 years of desert camping, it is all good advice. However, it seems a bit superfluous. In order to be prepared, the novice desert hiker with a fair amount of experience elsewhere need bring along only two things in addition to the usual camping equipment and his good sense: a broad-brimmed hat and twice as much water as he thinks he'll need.



THE SIDEWINDER is a small rattlesnake that moves by means of sidewise locomotion. In soft sand its track is a series of roughly parallel marks.

In The News

Abbey nature's pom-pom girl.	1
Montana congressmen rated.	1
Wind shapes the tundra.	8
Solar-powered missile tests.	10
Grayrocks hurdle ahead for dam.	11
Overcrowding in the wide open spaces.	12

—the editors