

The Environmental Biweekly of the Rockies and Great Plains



High Country News

Vol. 11 No. 15

Lander, Wyoming

Friday, July 27, 1979



Colorado, Wyoming offices closed, too Wilderness Society fires key Utah environmentalist

by Ann Schimpf

SALT LAKE CITY — Utah environmentalists are up in arms over the June 29 closing of the Utah office of The Wilderness Society and the firing of field representative Dick Carter.

"A travesty...an unresponsive bureaucracy has axed our main source of direction and motivation," says a spokesman for the Northern Utah-Southern Idaho Wilderness Coalition.

"It's like amputating the heart of wilderness in Utah. Carter has been the center of action here," says the Wasatch Mountain Club.

"The society has jeopardized its credibility with Utah conservationists by the recent chain of events," says the Slickrock Country Council.

According to Bill Turnage, executive director of The Wilderness Society, "Two crucial factors came into play in making the decision. First of all, in eight of the last 10 years The Wilderness Society has operated on a budget deficit. Secondly, there is no question in my mind that Dick has been very effective in Utah, but he is not philosophically committed to the idea that the central organization needs to make decisions. It's very difficult to run an organization of 40-50 staff people if they refuse to cooperate."

The Wilderness Society has designated Roger Scholl as the Utah-Nevada (Great Basin) field representative and located him in Reno, Nev. The closing of the Utah office follows closely on the heels of the closing of the Wyoming office and the termination of field representative Bart Koehler. Early in 1979 the Colorado field office was closed when field representative Perry Moyle moved to Washington, D.C., to assume the duties of field representative coordinator.

In an April 21 interview with the Casper (Wyo.) Star-Tribune Koehler cited incompatibility with the new administration of The Wilderness Society as his reason for resigning his post. "My major grievance is the complete absence of respect for the regional representatives as professionals and as human beings," Koehler said.

Since Turnage assumed duties as executive director November 1978, there has been high turnover among Washington Wilderness Society staff, as well as field personnel. Overall, about one-fourth of the society's staff has quit or been fired within the past few months.

CUTTING BACK

"We're in the process of cutting back financially," says Theodor Swern, president of the governing council of the society.



Photo by Jack McLellan

THE UTAH WILDERNESS' only paid defender, Dick Carter, has been fired from his job with the Wilderness Society. The photo above shows Broken Bow Arch in the Escalante Wilderness.

"When the monetary situation improves, we may return our field representatives to former areas."

"We simply do not have the resources to have a field representative in every state,"

Turnage says. "We're looking more and more to the concept of regional representatives."

Early in 1980 the Colorado field office will be reopened as a combined Wyoming-

Colorado field office. For now, seven Western field offices remain: Alaska (representative Stan Senner recently resigned to take another job); Arizona, New Mexico, West Texas (Dave Foreman); California, Hawaii (Jim Eaton); Idaho (Steve Payne); Montana, North Dakota (Bill Cunningham); Nevada, Utah (Roger Scholl); and Oregon, Washington (Joe Walicki).

"I suggested that they (the society) get a new Utah representative and reopen the Utah field office," Carter says. "They informed me that would not happen and that Roger (Scholl) would handle Utah matters from Nevada. But experience tells me that arrangement won't work even close to adequately."

The specific incident that led to Turnage's firing of Carter was whether or not Carter would return to Washington, D.C., in April to help with lobbying the House on the Alaska National Interest Lands bill.

"The whole thing has been characterized by Turnage as Alaska versus Utah," explained Carter. "That simply isn't true. They asked me to come back and testify at a time when we had a significant number of professional appointments and schedules in Utah that could not be broken without losing considerable ground. I offered my services to come back and work on lobbying on the Senate side of the bill and even to come back at the end of April."

"But they wanted me to come right then and there," he continued. "Never did I feel I was not a team player. I made a profes-

(continued on page 5)

Giant wind-water generating system proposed

Wind prospectors strike it rich in Medicine Bow

Second in a two-part series on wind energy. Part I, on small, domestic systems was published June 15.

by Joan Nice

MEDICINE BOW, Wyo. — "More forlorn than stale bones." That's how Owen Wister described the town of Medicine Bow in his novel, *The Virginian*. It and towns like it seem to have been "strewn there by the wind and be waiting till the wind should come again and blow them away."

A century later Medicine Bow, on a high plain in southeastern Wyoming, hasn't blown away. Its population has grown from 450 in 1970 to 1,000 as a result of the state's coal and uranium boom. And the wind, that

force that Wister thought could obliterate the town, has risen to the stature of a valuable resource. Medicine Bow is slated to become the site of the nation's first large-scale wind farm.

If all goes as planned, by the late 1980s Medicine Bow will be the site of 40 or 50 wind generators larger than any now in operation in the world. They will be capable of producing about 100 megawatts of

"The wind is so bad out here you have to lean into it to stand up straight."

electrical power — enough to serve 50,000 to 60,000 homes.

U.S. Bureau of Reclamation officials hope that the wind farm will add diversity to a system now served by six dams in the Colorado River Storage Project. When the wind is blowing, the system will use that power and hold some water back behind the dams. When the wind stops, the system will serve up hydropower.

Medicine Bow people seem delighted with the prospect of putting their wind to work.

Jack Curry, town mayor, thinks the project could bring hope to the town without bringing a big influx of people. Curry, a ruddy-faced man whose family homes-

(continued on page 4)

2-High Country News — July 27, 1979

Carter orders a drowning West to go for a swim

In concept, President Carter's declaration of war on the energy problem is the answer to our most persistent editorial pleas.

We've demanded a national energy policy. We've begged high officials to use their influence to convince the public of the seriousness of the energy situation.

But the details revealed in Carter's July 15 and 16 speeches make us wish we'd never asked. His earlier energy plan was based on conservation. In an abrupt policy reversal, the plan revealed this month makes production — particularly synthetic fuel production — the cornerstone of our energy future.



"There's just no blood in the turnip."

Carter's about-face, drenched in the rhetoric of war and patriotism, convinces us more of the gravity of his political fears than of his commitment to solve the energy problem. He knows as well as we do that conservation is the cheapest, cleanest and most reliable way to ease our dependence on Arab oil. A host of recent studies also have confirmed that conservation does not mean grueling sacrifice. One, produced by Harvard Business School, indicates that the country could cut its energy consumption by 30 to 40 percent and emerge with a standard of living as high or higher than it now enjoys.

Nevertheless Carter, apparently spooked by popularity polls and political enemies, has decided to abandon the sensible approach. Synthetic fuels for your tank, he implies.

Never mind that synfuels are an expensive and technically risky form of energy. Never mind that no plants of the size Carter wants are now in existence anywhere in the world. Never mind that Carter wants to produce 2.5 million barrels of synthetic oil a day by 1990 — 2½ times the amount that would risk overextension of our country's resources, according to a Rand Corp. study.

Never mind that implementation of the plan would necessitate a federal Energy Mobilization Board with the power to shut the public, as well as state and local governments, out of the energy decision-making process. Never mind that the effort could make Colorado and the Northern Great Plains a dusty ruin. This is war.

At least half of the coal gasification and liquefaction plants and all of the oil shale facilities required to meet Carter's goals would be located in the West. Does the president realize that we are hard-pressed to cope with our present energy boom? He seems as blind and insensitive to our situation as someone who'd ordered a drowning man to go for a swim. We're up to our necks in energy development already, Mr. President.

With many of our streams over-appropriated, water availability is another big question. Perhaps the administration hasn't considered the problem — or, worse, perhaps it thinks it can buy out the agricultural interests in the region. An oil shale

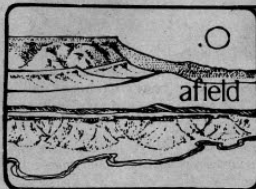
industry producing one million barrels a day would consume nearly 10 percent of the Colorado River water currently consumed by the Western states, according to the *Los Angeles Times*. That's two to three barrels of water for each barrel of shale oil produced.

If the president gets his way, we can wave goodbye to the northwestern corner of Colorado, which contains the country's richest oil shale reserves. A million barrel a day production would require moving about a billion tons of earth each year — about the same amount dug up to build the Panama Canal.

Then there are the coal gasification and liquefaction plants slated for the Northern Plains. To produce a million barrels of synthetic oil a day from coal, the country would have to step up its production of coal by about 160 million tons a year — a 23 percent increase over current production levels. By itself that increase would not be so difficult to achieve. But the Department of Energy has already told us to expect a 3.5 to fivefold increase in coal production in the West, without extensive synfuel production.

In short, the president's synfuel surge seems fraught with potential for environmental, social and financial disaster. Can the man who proposed it really be thinking clearly — or has political warring distorted his vision? Has he forgotten that we're fighting the energy war on home ground? The proposed battlefield, the West, may have some treasures even more priceless than a barrel of Arab oil.

— JN



by Hannah Hinchman

BRIDGER WILDERNESS, Wyo. — We are sitting on a glacier-planned granite outcrop at 10,600 feet in the Wind River Range. We look across a deceptively vast distance to a glacier-battered cirque, whose peaks form the Continental Divide. I try to grasp the volume of space held in this valley and how such complete quiet and stillness could unite all of it. The only sound is from faint ripples at the outlet of the lake far below.

Some kind of tension or active quality, though, lies within the stillness. The force of gravity acting on the steep slopes has pulled down giant hunks of granite. From another point of view, there's no stillness here at all. The mountains are crumbling, sending sediments to the plains. From this perspective, the rise and fall of mountain ranges is like the waxing and waning of small waves on a choppy lake's surface.

Then where does this sense of stillness come from? I think it's just the

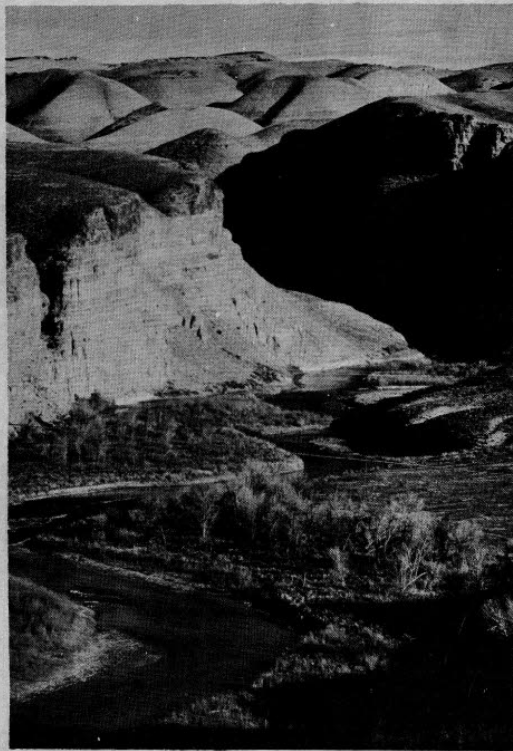


Photo by David Sumner

NATURAL RESOURCE AGENCIES will have to "do good work faster" if wild places are to survive President Carter's proposed attack on the energy problem. The photo above shows some of Utah's richest oil shale country, along the White River near Bonanza. It is among the Western sites likely to be slated for rapid development if Carter can push his plan through Congress.

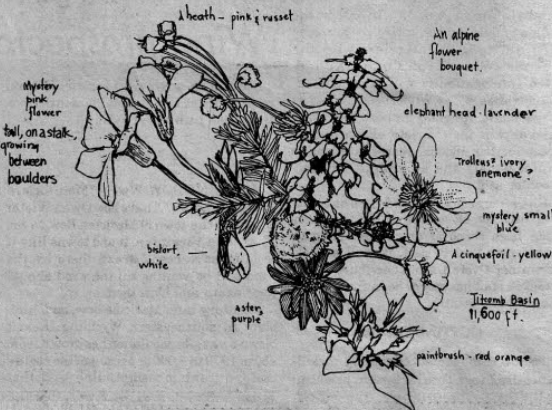
orderly dance of atoms forming rocks, water, air and living beings instead of chaos.

I gather a handful of alpine flowers growing in the turf between boulders. The colors are primary, brilliant, as dazzling as fireworks. At this altitude we have returned to the richness of June; everything is well-watered, in its prime.

Our descent is a cross-country route along a strange, unnamed creek. The

little basin it drains has deep, springy soil with delicate gravel underneath. The snowmelt has burrowed down into it like some sort of hydro-ground-squirrel, sometimes appearing in brimming whorls, other times traveling under the grass, its sound surfacing through little holes.

Back to Lander's sunny dustiness and daily heat. Young sage grouse learning unfortunate lessons about the roads out on the plains. Hollyhocks like big bandannas flung around backyards and alleys.



POPULAR REALITIES

Work weeks

Employers in the Rocky Mountain region are complaining that the government is prohibiting them from conserving energy in daily business operations, according to a **Denver Post** article.

Mountain States Employers Council Vice-President Kermit Darkey says that laws that require overtime pay for more than eight hours of work per day are keeping his group from instituting alternative work schedule — i.e., four-day, 40 hour work weeks — which might reduce pollution from automobiles in larger cities as well as conserve energy.

The overtime proviso of the Walsh-Healy Act, which applies to private companies doing more than \$10,000 worth of business with the feds, hasn't hampered rescheduling government operations, however. Some state and federal agencies in Colorado have switched to the four day, 40 hour week, but officials have so far been unable to determine if any energy savings have resulted.

— WM

Get on and ride

While farmers and truckers have received the most national attention during the gasoline shortage, the highways are

filled with others whose jobs or hobbies require lots of traveling. Cowboys who ride the rodeo circuit put thousands of miles on their trucks, especially during the summer; sometimes they'll compete in four states in two days.

Bill Parker, a calf roper from Montana, says he travels about 80,000 miles a year. "We're going to go whether it's 50 cents a gallon or a buck fifty. We've got to make a living," he says.

Earl Eliassen from Dubois, Wyo., says he hasn't had trouble getting gasoline yet; when he stopped at a station in Colorado with a \$10 limit and told the manager he was rodeoing and had to get to Lander, Wyo., by morning, he got all the gasoline he needed.

Bud Kerby of the Bar T Rodeo Co. in Salt Lake City, figures the number of com-



petitors has dropped by about 10 percent, which he attributes to the gasoline situation. He's also seen a lot more cowboys doubling up in pickups with crew cabs, which accommodate six passengers, and leaving their families at home. "If they double up anymore, they'll have to get buses," he says.

Rick Bradley, a bulldogger from Oklahoma, drives a pickup with a camper and pulls a trailer twice as long as his truck that holds his horses and living quarters. He gets eight miles per gallon. "How many miles do you figure you travel?" he was asked.

"Oh, about 3,000."
"For the whole summer?"
"That's since last Wednesday."
Asked what they would do if the lines got four or five hours long or if they couldn't get gasoline, only one of the cowboys had a quick answer. "I'll just get on my saddle horse and ride."

— MJA



BUD KERBY, who supplies rodeo stock, says, "Cowboys are going to have to change their ways — everyone will."

Photo by Ron Shaw

Fashion during ration

The **Wall Street Journal** reports that President Carter's order to set thermostats in public buildings at no less than 78 degrees is changing the way America looks. For the first time ever, dress codes defining proper business attire are being expanded to include jeans and short-sleeve shirts. In some offices, the **Journal** reports, some tatterdemalion secretaries are even resorting to wearing shorts.

In the halls of Congress, reporters are being given preferential treatment over representatives. House speaker Thomas O'Neill has allowed newsmen to forego

suits and ties while observing house proceedings from the press gallery. But when Rep. Jim Mattox (D-Tex.) appeared on the floor in a short-sleeved shirt, O'Neill was not so lenient. "The gentleman knows he is embarrassing the chair. I don't know if he is embarrassed." Apparently not, for when O'Neill asked Mattox to leave, he refused.

Restaurants are also having fashion problems as a result of the new setting. An assistant manager at Trader Vic's in Atlanta says, "If we set the temperature at 78 degrees, it's tough to enforce our jacket requirement... Soon people will come in with shorts and T-shirts because it's too hot. How do you stop that?"

— WM



MOVING?

Don't forget to take HCN along.

The Post Office will not forward second class mail. So you don't miss an issue of **High Country News**, please notify us at least four weeks in advance of your change of address. Send us a card (you can pick one up at your local P.O.) or fill out the blank below:

Please put your old address label here

Your new address below:

name _____
address _____
city _____
state & zip _____
Date effective: _____
Send to: Will Murphy, HCN, Box K, Lander, WY 82520.

High Country News

Published biweekly at 331 Main, Lander, Wyo. 82520. Telephone 307-332-4877. Second class postage paid at Lander. (USPS NO. 067480) All rights of publication of articles herein are reserved.

Publisher	Thomas A. Bel
Managing Editor	Joan Nice
Associate Editor	Marianne Ambler
Contributing Editors	Dan Whipple
	Peter Wild
Correspondent	Philip White
Business Manager	Jazmyne McDonald
Circulation	Will Murphy
Art and Production	Hannah Hinchman
Editorial Assistant	Sarah Doll

Subscription rate \$12.00
Single copy rate 50 cents.

Call for permission to reprint any articles or illustrations. Contributions (manuscripts, photos, art work) 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, Wyo., 82520.



4-High Country News — July 27, 1979

Medicine Bow...

(continued from page 1)

teaded the Medicine Bow area, says "We're looking at something clean that doesn't have quite the problems that some of these other things do."

David Roberts, the young publisher of the Medicine Bow Post, says the wind project will bring "scientific distinction" to a town already rich in natural resources and history.

David Butt, a high school science teacher, sees it as a way to promote renewable energy in a town surrounded by fossil fuel development. "With coal trains passing by all day, it's hard to explain to the kids that energy is in short supply," he says.

For federal wind prospectors, Medicine Bow is a rich strike. On the map of wind potential in the Rocky Mountain region, which looks vaguely like a target, Medicine Bow is the bull's-eye. Medicine Bow was rated third in the country in a survey of wind potential at 758 weather stations around the U.S. — just behind Guadalupe, Texas, and Livingston, Mont. That means average winds of 12 to 16 mph and gusts of up to 70 mph. The University of Wyoming says it's the highest wind area in the state.

For federal wind prospectors, Medicine Bow is a rich strike.

"The wind is so bad out here you have to lean into it to stand up straight," says Medicine Bow high school student Tim Vonbon. "When it stops blowing, everybody falls over."

The prospect of a wind farm holds promise not only for the people of Medicine Bow but also for the Bureau of Reclamation.

"We're right on the edge of a new era," says Abner W. Watts, supervisor of power for the bureau's Lower Missouri region. Wind power, using big dams as storage batteries, could breathe new life into an agency whose dam-building days are numbered due to a lack of suitable sites. In addition, wind machines offer the agency an impeccable public image that dams, which are getting more and more controversial, have not provided recently.

Watts sees wind energy projects as a "natural extension" of the bureau's hydroelectric projects, which also use renewable energy.

Watts introduced the Medicine Bow wind farm idea several years ago in a paper he coauthored with another bureau en-

gineer, Stanley J. Hightower. In 1977 Congress gave the agency \$200,000 for the first year of a three-year feasibility study. Last year, study funds were increased and an extra \$2.5 million was thrown in to initiate the construction of a giant test machine at the Medicine Bow site. This first machine is scheduled to be operating by August of 1981.

The agency's studies show that the project is not only technically feasible, but that it could provide power that is competitive with conventional oil-fired generation. This is possible, despite the high cost of wind power, because the Medicine Bow machines would be tied in with the bureau's hydropower system serving Wyoming, Arizona, Colorado, New Mexico, Utah, and parts of Nevada. The wind hydro power would be more expensive than hydropower alone or coal-fired electricity however.

Without the partnership with hydropower, utility-sized wind systems have proved discouraging economically. While coal-fired plants normally cost \$1,000 per kilowatt to construct, the experimental 100-kilowatt Plum Brook wind generator near Sandusky, Ohio, cost the National Space and Aeronautics Administration (and the American taxpayer) about \$10,000 per kilowatt of generating capacity. The cost of machines like the 200 kilowatt Clayton, N.M., machine would be considerably lower, about \$8,690 a kilowatt, says John Glasgow of NASA. But the power generated would cost about 42 cents a kilowatt hour (in a site with an average wind speed of 14 mph) — more than 10 times what most Rocky Mountain region residents are paying for power today.

NASA, which is responsible for most of the country's large-scale wind generation program, is already looking at bigger, and hopefully cheaper, machines. Glasgow says, "The 200 kilowatt machines are not cost-effective. We're looking to machines in the two to four megawatt range (2,000 to 4,000 kilowatts)."

While the contract to construct the first test machine at Medicine Bow is open to international bidding, "Boeing will have an inside track," Glasgow says. "They're farther along than anyone else in the U.S. in designing a cost-effective machine."

The federally-funded "Mod 1" project, designed by General Electric, goes into operation near Boone, N.C., this summer. Boeing Construction Co.'s design, which the bureaucrats have dubbed "Mod 2," is scheduled to be up and turning in June of 1980.

G.E.'s rotor is 200 feet in diameter — four feet longer than the wingspan of a Boeing 747 jumbo jet. Boeing's rotor will be even bigger — 300 feet in diameter.

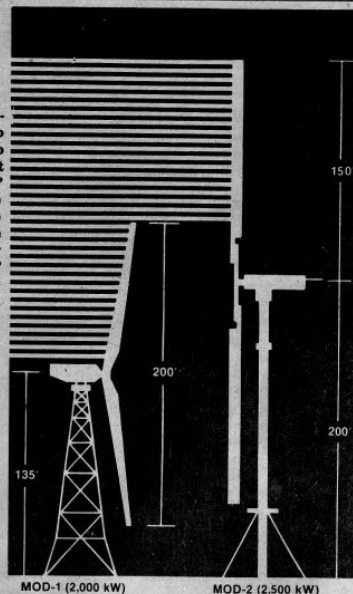
If the bureau's wind farm goes ahead, 40 or 50 such huge, two-bladed turbines would be spread out in the sagebrush-covered ranges where sheep and cattle now graze, just five miles south of the town. The turbines would be spaced about six-tenths of a mile apart so each could gather a maximum of wind. The blades would sweep down within 50 feet of the ground, but they probably would not disturb normal activities there, says Larry Nelson, the bureau's project manager.

To make sure, this spring the bureau funded a three-year Wyoming Game and Fish Department study of the project's potential impact on wildlife in the area, including both game and nongame species.

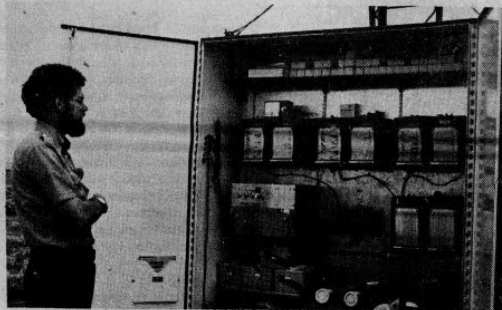
Harry Harju, staff biologist for the department, says he expects the project's impacts on wildlife will be minimal. "I think the animals will accommodate. The big factor is the human activity the project may generate."

It's not clear how the machines could affect the black-footed ferret, an endangered species that lives in prairie dog towns. But

THE BUREAU OF RECLAMATION hopes to build a wind farm of 40 to 50 wind generators at least as big as the "Mod-2" machine pictured on the right in the diagram. The biggest wind machine operating in the country today is the "Mod-1," shown at left.



Photos by
Sara Hunter-Wiles



DAVID BUTT, a Medicine Bow high school science teacher, has been hired to gather wind data for the Bureau of Reclamation's feasibility study.



DAVID ROBERTS, publisher of the MEDICINE BOW POST, says the wind project will bring "scientific distinction" to a town already rich in natural resources and history.



MAYOR JACK CURRY thinks the wind project could bring hope to the town without bringing a big influx of people.

the bureau says it is willing to keep all of its turbines at least half a mile away from all major dog towns, as was recommended by consultant Tim Clark of Western Environmental Research Associates. Clark found a ferret skull in the area but no live ferrets.

The government's attention to these de-

tails, which is required under the National Environmental Policy Act, has amused and frustrated some Medicine Bow people. At a public meeting held by the bureau, a local rancher said, "If you guys don't put up that tower and forget that environmental

(see next page)

Wilderness...

(continued from page 1)

sional decision as the society's Utah representative that I think best served the society in Utah at that time. I thought The Wilderness Society would pay more respect to the knowledge and experience of its professional field people."

There is not unilateral agreement among members of the society's governing council on where field representatives should be located. Western members of the council understandably feel that their states, with massive acreages tied up in the Forest Service and Bureau of Land Management wilderness inventories, should be the focus of the field program work.

"A great many things are happening in Utah and it has always been a very weak state in conservation," said Margaret Murie, council member from Moose, Wyo.



WILLIAM TURNAGE: "A central organization needs to make decisions."

"I feel very, very sorry that this (closing of the Utah office) happened. Dick was doing a great job down there and why he refused to come to Washington to help with the Alaska issue I can't understand. I hope we fill that field office very soon."

"I definitely feel the Utah position should be filled," Utah council member Bernard Shanks said. "We have 8 million acres of Forest Service and BLM lands currently being inventoried and considered for wilderness. Of the Rocky Mountain states, that makes us second only to Idaho. Why, on the Moab BLM district alone there are

By firing Dick Carter and others, The Wilderness Society has jeopardized its credibility with Western conservationists.

more acres being inventoried than in the states of Colorado and Wyoming combined.

"The other very significant point is that unlike Montana, Wyoming, Idaho and Colorado, the only paid environmentalist in Utah was Dick," Shanks says.

Wilderness Society member Dorothy Harvey of Manitowoc, Wisc., who has spent countless hours as a volunteer stumping for wilderness areas in Utah, Nevada, Wyoming and Idaho, says, "Without the direction of people like Dick Carter and Bart Koehler, people like me can't operate. It's absolutely imperative to have paid, full-time leaders of their calibre in the field to keep things organized."

"It's absolutely imperative to have paid, full-time leaders in the field to keep things organized."

studies should be a low priority compared to the other things going on around here."

Mayor Curry is confident the project is feasible, if only the bureaucrats can get moving. He and many of his neighbors have used wind power before. When he was first married, he owned a small wind generator — "quite a luxury — and as reliable as we could wish for."

Large wind turbines, however, do not have the record for reliability that their smaller predecessors in the early part of the century enjoyed. The 200 kilowatt machine at Clayton, N.M., had problems

Praise for the work being done by the Western Wilderness Society field representatives is not limited to environmentalists. A BLM wilderness specialist who preferred to remain anonymous said, "People like Carter and Koehler give us a leg to stand on. They're among the two or three people in each state who consistently exert pressure for wilderness preservation each time the other side starts making inroads."

Steve Harper, deputy supervisor of the Wasatch National Forest and national roadless area review public inventory coordinator, said of Carter, "It has been a real help having such a fair spokesman for wilderness on the environmental side."

In an August 1978 management audit of The Wilderness Society conducted by the Northern Rockies Action Group, Inc. (a non-profit management consulting organization) the field program was listed as a unique and important part of the society's overall program.

There seems to be no disagreement among the society's professional staff, governing council or general membership on that point.

"The field program already gets the biggest part of our total budget," Turnage says, "and it will be getting more funds."

"Our field program is very definitely a priority," Swem says.

But the audit says, "the present field program is not being as effective as it could be...field staff are extremely independent with inadequate attention given to the concept of organizational accountability."

Turnage cites that section of the audit as a justification for Carter's firing. "Dick has such a strong commitment to Utah and being totally independent that he can't fit in this organization. We're not that big; we have to work as a team." Turnage was hired as executive director in November 1978 by the council to implement among other things, recommendations in the audit.

But Wilderness Society members in Utah

with its aluminum blades, which weigh a ton apiece. While a good blade should last for 30 years, Glasgow says, the Clayton machine's had to be taken down to repair stress fractures after 1,000 hours of operation and again after 4,000 hours.

"The original blades were built using aircraft technology," Glasgow says. "Now we're looking for cost-reduction — simpler methods of construction and greater reliability."

Until the Boone, N.C., machine went into operation this summer, the Clayton machine was the largest wind generator in the country. Something 10 times larger — such as those proposed by the bureau for Medicine Bow — could be expected to experience similar problems of scale.

However, Glasgow of NASA says the problems experienced with the big

THE BLACK HILLS of South Dakota need your HELP! Twenty multi-national corporations plan extensive mining operations in our scenic wonderland. For more information and to help us in our effort to save the Hills, send \$1.00 or more to: Black Hills Energy Coalition, Box 8092, Rapid City, S.D. 57701.

POSITION. Immediate opportunity for a professional manager to direct a program to develop and demonstrate the use of renewable energy — solar, wind, biomass, geothermal, and wind. Responsible for the conceptualization, planning, organization, budgeting, supervision, and scheduling of major renewable energy projects. Position requires a B.S. in an engineering or related physical science field plus four years experience in program management and contract administration work. Salary \$18,393 per yr. Submit resume to Personnel Officer, Dept. of Natural Resources and Conservation, 32 So. Ewing, Helena, MT 59601. An equal opportunity-affirmative action employer.

July 27, 1979 — High Country News-5



DICK CARTER, a local calls him the "heart of wilderness in Utah." His former boss says he was too independent.

clearly do not agree with Turnage. At a meeting June 30 and July 1 the Utah Wilderness Coalition decided to keep Carter's office open and pay the phone bills through voluntary contributions for a couple of months. Meanwhile, they are seeking permanent funding through options like an independent state coalition with membership fees or through affiliation with the American Wilderness Alliance, a Denver-based group run by former Wilderness Society staff persons Clif Merriitt and Sally Ranney.

Ann Schimpf is a free-lance journalist based in Logan, Utah. She was formerly a staff writer for The Herald Journal in Logan.

Utah wilderness advocates are accepting donations to keep Dick Carter's Salt Lake City office open. Contributions should be sent to: Utah Wilderness Coalition P.O. Box 1231, Salt Lake City, Utah 84110.

machines are "nothing that we can't handle — given time and money." Medicine Bow people seem to feel the same way. It looks to them like it's definitely worth a try.

"This fits together real well," Curry says. Water power is most plentiful in the summer; wind power in the winter. Peak demand for power is at mid-day — just when it's the windiest in Medicine Bow. Wind power promises to bring dollars without some of the dilemmas that fossil fuel development causes.

Instead of blowing the little town away, the dusty gales that Owen Witter described may put Medicine Bow on the map.

Research for this article was paid for in part by donations to the HCN Research Fund.

CLASSIFIEDS

Classified ads cost 10 cents a word; they must be prepaid.

WANTED. Persuasive people to sell advertising for HCN. 15 percent commission. To apply, send references and letter with your ideas for selling advertising in your area to Hannah Hinchman, HCN, Box K, Lander, Wyo. 82520.

POSITION WANTED. Response Ability equals Reliability. Colorado River boatman with excellent communication skills and project management experience seeking long term employment. ATP qualified pilot with 4,257 hours P.I.C. experience (including 1140 hrs. "Bush Flying" in N.W. Alaska). Successfully served various environmental projects as volunteer pilot, speaker and organizer. 30 yrs. old. Excellent references. Available Aug. 5. M. Stevens (303) 988-5110.

Medicine Bow...

stuff, we're going to be bought out by the Arabs."

High school teacher Butt, who is gathering wind data for the bureau's feasibility study, says, "The coal companies are tearing up more land in one day than this will ever harm. I'm not opposed to environmental studies. It's just that the wind project

An evocative collection of poems by Myra Connell, HCN's own "Brackening Out" columnist. Full of

Myra's
A
N
Y

M
O
O
D
S



wit and rhyme, color and changing moods, this slim volume is a first edition treasure.

26 pages, paperbound with illustrations

\$3.50 plus 50 cents postage. (Wyoming residents add 3% sales tax)

Please send me _____ Myra's Many Moods

Name: _____
Address: _____
City: _____
State: _____
Zip: _____

If you'd like your copy personally signed by the poet please print your name here:

Checks must accompany all orders.

Order through HCN Box K, Lander, Wyo. 82520

6-High Country News — July 27, 1979

Love spins rock tales from huckleberries and oil

by Louisa Willcox

KELLY, Wyo. — First day of summer and, as you might expect, it's sleeting in Jackson Hole. Aspens shimmer silver and green in the chill wind, and dark ribbons of clouds wrap themselves around the Tetons. While most people must be hovering around fireplaces, a group from the Teton Science School is out in the wet, hunting-rocks. Armed with geologic hammers and notebooks, they stand crowded around a pockmarked boulder as big as a house. They seem as thrilled as if it had just landed there.

"Here's a remnant of the Swiss cheese spasm of volcanism — the real whopper from Yellowstone," says Dr. J. David Love. White-haired and weathered, he's the ring-leader of the crew, their interpreter of the teachings of rocks.

Blue eyes sparkling like those of a boy describing fireworks on the Fourth of July, Love says, "1.9 million years ago, seething gases and frothy lavas came exploding out of the huge caldera that's now Yellowstone Lake and racing down here fast as a horse could run. Nuée ardente, or fiery clouds, as the French called it. Covered several hundred square miles, and completely obliterated all life in its way."

The students, forgotten notebooks in hand, stare off into the fuzzy horizon. It's hard to imagine this valley as barren as the moon — with no aspen or elk or trout-filled creeks.

"Come back here in August and you'll find the best huckleberries you ever ate. Anywhere there's granite or rhyolite, the volcanic brand of granite, you're likely to find huckleberries." A chorus of "Mmmms" emerges from 12 bulky rain-suits. Then: "How long did the eruption last?" "What do gooseberries like to grow on?" "If it was so big, why don't we see more evidence of it?" "Doctor — could there be another one?"

Love continues the volcanic story, but the wind picks up and the sleet pelts harder. "Weather's just like the geology around here — restless and unstable. A little hard on the scientific curiosity sometimes." So it's back to thaw out in the cars for a spell.

Love is the supervisor of the Laramie

office for the Central Environmental Geology Branch of the U.S. Geological Survey. He is the senior author of the geologic map of Wyoming and has written over 160 papers on the geology of Wyoming. The veteran of many field seasons in the tilted, twisted realm of rock in the Teton Mountains, he coauthored the *Creation of the Teton Landscape*.

For the last 12 summers Love has been teaching courses in geology for the Teton Science School. Love's offering is a far cry from a conventional academic course, however. How many schools offer gold panning as part of the curriculum?

Students are a mixed bag of locals, tourists and college students. Some have traveled clear across country to spend five days looking at the area through Love's eyes. This year's group includes a Forest Service hydrologist and mineralogist, five students from California majoring in geology, an ex-naval officer and his wife, an elementary school teacher, a planner, a rancher, a writer and an art student and her mother.

It is not just the rock story they have come to learn. It's the connections between rocks and the rest of the environment — the interdependence of living and non-living things.

They discover relationships between elk and selenium; the radioactivity of Yellowstone's Pitchstone Plateau and wildlife genetics; the tilting valley floor and flood control on the Snake River.

A student says, "Geology is like learning a new language — it sounds so foreign and unintelligible 'til you realize how it's all related to things you already know!"

Love's analogies help simplify complex concepts for the neophytes. "You see the valley block is like a giant trap door and keeps dropping down along the Teton fault, about a foot every 300 years."

"But that's not all," he says. "The Tetons are rising. It's like putting your thumbs in a bowl of jello. Push down here, and something will squeeze up there."

Also, for some unknown reason, central Yellowstone is swelling up again, at the alarming rate of an inch a year. "It's sort of like getting pregnant, with stretch symptoms and all kinds of readjustments," Love says, winking. "And the quakes produced may have some interesting effects on Jackson Lake Dam."

Each day of the course the geologic picture becomes increasingly clear. Natural disasters, such as quakes, landslides, floods, volcanic eruptions, seem to be the only thing you can count on. Love shows students evidence of recent crustal movement. They gulp at the sight of the porous volcanic tuff on which the dam is built. They look at leaning power poles and landslide debris, consequences of digging into unstable bentonite shales for a highway. They watch houses and the new town water tank go up on similar material. They learn about the two faults that cut through the town of Jackson like scissors, and wonder what price will be paid by developers.

One afternoon when rainclouds cover the valley like a steel lid, the group retreats to the warmth of the science school. "One's attention does tend to diminish proportional to the amount of moisture and wind,"



Photo by Kurt Rademacher

STUDENTS TRAVEL clear across country to see the Tetons through Dr. J. David Love's eyes.

Love says, peeling off his baby blue rain-suit. His shirt underneath is decorated with a geologic map of the various strata colored with patches of plaid and calico.

The school is an old dude ranch tucked in the trees below the Gros Ventre Mountains. The main lodge smells like old logs and black coffee. On a clear day you can see the Tetons out the east-facing windows. Books on ecology fill the shelves, and maps and posters with queries such as "Who made this track?" line the walls.

The students pull heavy log chairs around the fireplace. The topic is a hot one: geologic formations containing oil and minerals in the area. Love diagrams how a formation called the Overthrust Belt skidded north 75 miles — "God's gift from Utah and Idaho to Wyoming." The formation is now under intensive exploration for oil and gas. He shows how arched or flat-lying formations cap oil reservoirs. Then he examines the beds at the controversial proposed Cache Creek drilling site near the town of Jackson. The beds are vertical — not horizontal.

"It doesn't make sense! Didn't they consult geologists before deciding on that site?" one exasperated geology major bursts out.

"No, they ask engineers," Love says. "They've got status."

"We're in the middle of an area of controversy," Love says. "And the people of

Jackson are going to have to come to grips with the question of how precious they feel their landscape is."

Over cups of hot chocolate, the discussion moves from environmental problems to tales of Indians, trappers and the gold rush. Love's got quite a sleeveful.

Born in 1921 on a ranch near the Wind River Indian Reservation, Love is familiar with the old Arapahoe and Shoshone ways of life. He tells of their myths, the wild plants they ate and used for medicine: henbane for the heart, lithosperm as a contraceptive, tansy for abortions.

"They were no dummies," he says. "In fact, we're just now discovering scientific basis for what they figured out on their own."

The Tetons fade in and out of view. Time to head out to the elk refuge, before it pours again.

"Dr. Love, do you think there's room in this area for an up and coming geologist?" one of the California geology majors asks shyly.

"You bet," he answers with an impish smile. "As long as you're eager, and inquisitive, and don't mind admitting what you don't know. And stand up for what you do know, no matter how unpopular you get with engineers, builders or federal agents."

As the group heads out the door, the mother of the art student says, "If I could do it all over again, I'd go into geology."

"A delightful book about wild foods that tells you exactly what you want to know about salad greens, potherbs, roots, fruits, berries, herb teas and mushrooms—plus a chapter on poisonous plants."

Dr. Sherman Preece Jr.,
Chairman, Dept. of Botany,
University of Montana

Eating Wild Plants

by Kim Williams

Handy size and sturdiness make this book just right for slipping into your pack.

Mountain Press Publishing Co.
Paperback with illustrations.
196 pgs. \$4.95 plus 50 cents postage each.
(Wyoming residents please add 3% sales tax.)

Order from High Country News,
Box K, Lander WY 82520.

Please send me — **Eating Wild Plants.**

Name _____
Address _____
City _____
State & Zip _____

Checks must accompany all orders.

BULK RATES

on HCN subscriptions and back issue orders* can save you money — up to 60 percent off the regular price. All you have to do is order 3 or more copies to go to the same address.

single copies
3-20 \$4.00
21-50 \$3.40 each
51-up \$2.00 each

subscriptions (prices per sub)
Classroom-9 mos. Full Yr.
3-20 \$7.20 \$9.60
21-50 5.40 7.20
51-up 3.60 4.80

Get HCN together with your class, your group, your neighbors down the road — and save.

*Back issue bulk rates apply only to multiple copies of the same issue; while supply lasts.





HCN Bulletin Board



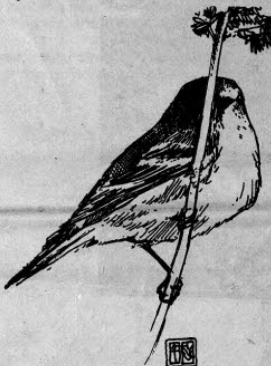
LOONEY LIMERICKS

by Zane E. Cology

There once was a leader named Jim
Whose political fortunes looked dim
Til an energy hunt
Of which we got the brunt
Made votes, like oil, flow to him.

COMMUNITY RENEWABLE ENERGY SYSTEMS

The Solar Energy Research Institute is sponsoring a conference to show how renewable energy sources such as the sun, wind, water and geothermal can help meet community needs. The fee is \$30 for the Aug. 20-21 conference. For more information, contact SERI at 1536 Cole Blvd., Golden Colo. 80401 or call (303) 231-1467. Ask about the Community Renewable Energy Systems Conference.



WILDLIFE ART CONTEST

The first annual Northern Plains Regional Art Competition and Art Show is planned November 9-11 in Bismarck, N.D. Competition is open to artists and sculptors from North and South Dakota, Wyoming, Nebraska, Montana and Minnesota whose entries depict indigenous wildlife in their natural habitat. Up to \$10,000 in purchases will be made by various corporations for the top five entries, and seven merit awards will be made. For more information, write to Sam Dart, N.D. Wildlife Federation, Route 5, Carufel Addition, Bismarck, N.D. 58501 or call (701) 223-8741.

PASSIVE SOLAR HEATING

Several free booklets are available from the National Solar Heating and Cooling Information Center at Box 1607, Rockville, Md. 20850 or call toll free (800) 523-2929.

INTERMOUNTAIN PROJECT

The draft environmental impact statement for the Intermountain Power Project says choosing the Lynndyl, Utah, site would cause the least environmental destruction. However, the 3,000 megawatt coal-fired power plant would contribute to air pollution and other problems in the central Utah area. The three-volume statement is available from the BLM. Hearings are scheduled Aug. 14 in Loa, Utah; Aug. 15 in Delta, Utah; and Aug. 16 in Salt Lake City, Utah; Aug. 17 in Las Vegas, Nev.; Aug. 20 in Los Angeles, Calif.; and Aug. 21 in Victorville, Calif. For times and exact locations, contact the BLM. Written requests to testify should be sent to Donald L. Pendleton, District Manager, BLM, 150 E. 900 North, Richfield, Utah 84701. Written comments will be accepted until Aug. 30 at the same address.

NATIONAL PARK FILM

Visitors to Mammoth Hot Springs in Yellowstone National Park this season will be able to see a new film on the history of the national park idea and its spread around the world. The film includes a segment showing Margaret Murie of Moose, Wyo., giving a "very, very eloquent statement on the value of wilderness preservation not only for this generation but for those to come," Alan Mebane, chief naturalist at Yellowstone, says.

ENVIRONMENTAL SCIENCES COURSES

Advanced courses in environmental sciences will be offered at the Colorado School of Mines this fall. The courses include: environmental impact analysis and environmental impact statement preparation, a critical analysis of the National Environmental Policy Act, air pollution, environmental law, and natural resources law. For more information, write to Environmental Sciences Program, Green Center, Room 252, Colorado School of Mines, Golden, Colo. 80401 or call (303) 279-0300, ext. 2427. Classes begin Aug. 30.

GRAZING IMPACTS

Environmental consequences of a proposed grazing management program on 213,057 acres of public land in central Utah's Parker Mountain area are discussed in a draft environmental statement now available from the Bureau of Land Management. Written comments will be accepted until Aug. 27 and should be sent to the District Manager, BLM, 150 E. 900 North, Richfield, Utah 84701. A hearing will be held Aug. 16 at 7:30 p.m. in Loa, Utah.

POWDER RIVER BASIN

The draft environmental statement on coal development for the Northern Powder River Basin in Montana is now available from the U.S. Geological Survey, National Center, Mail Stop 108, Reston, Va. 22092. Comments can be sent to that address until Sept. 7. Public hearings on the statement will be held on Aug. 22 at the Rosebud County Library in Forsyth, Mont., and on Aug. 23 at the Sheridan Center Motor Inn in Sheridan, Wyo. Hearings will begin at 1 p.m. and 7 p.m.

EMINENT DOMAIN

Wyomingites interested in eminent domain, the government's power to condemn land for purposes such as transmission lines, can attend a seminar in Douglas, Wyo., on Aug. 13 at the Country Inn. The seminar is sponsored by the University of Wyoming and leading agricultural and industrial organizations in the state and will be attended by representatives of the state legislature's subcommittee studying the issue. It will begin at 10 a.m. and end at 4 p.m.

MODEL SOLAR PROJECTS

The Center for Renewable Resources is conducting a national survey to identify and publicize model solar projects. The year-long project will include publication of a comprehensive catalog of model projects, a national conference, meetings in each state, and a book highlighting some of the most innovative and creative projects. The conference will be Aug. 16-19 at the University of Colorado in Boulder. For more information, contact the Center for Renewable Resources at 1028 Connecticut Ave., NW, Washington, D.C. 20036 or call (202) 466-6880.

Denver remains as hazy as ever

Colorado pollution solutions wither in House-Senate squabble

by Todd Engdahl

DENVER — The Colorado Legislature convened Jan. 3 determined to do something about the smog in this hazy capital, but it adjourned July 6 without having done a thing other than deciding to once again study the problem.

Metropolitan Denver's air pollution has been a political problem for at least a decade, and fights among lawmakers and with Gov. Dick Lamm blocked solutions in 1978.

When lawmakers returned to work in 1979, things looked hopeful at first.

The legislators and Lamm had resolved their 1978 arguments over which agency should run a pollution-control program. The 1979 pollution-control measure was introduced as Senate Bill 1 as a symbol of its importance and in hopes of quick passage.

But those hopes had vanished by the end of the longest legislative session in Colorado history, withered by House-Senate differences over how to combat the pollution problem.

The Senate wanted a program under which most automobiles in the state's 10 most populous counties would have to pass tailpipe emission inspections. Cars that

couldn't pass would have to be fixed and adjusted.

But the House held out for a program that only would have required automobiles to undergo annual tuneups to manufacturers' specifications. There wouldn't have been any inspections.

Try as it might, a House-Senate conference committee couldn't come up with any compromise or combination of those two approaches.

The only agreement was a study of the problem, under which an outside consultant will examine two test groups of cars, one group using the inspection-and-maintenance system and one group using the tuneup system.

The results will be reported to the 1980 Legislature, which will have to wrestle with the problem all over again.

WATER, WASTE BILLS QUIETLY PASSED

Other than the pollution issue, the 1979 Colorado Legislature devoted little attention to environmental issues. It spent most of its time on fights over the state budget and over how to return the state's multi-

million dollar surplus to the taxpayers.

But the Legislature quietly did manage to pass a number of significant environmental and natural resource bills.

It approved a lengthy, technical bill on pollution, which conforms state pollution standards to federal rules.

The Legislature also passed a package of bills intended to tighten up regulations on the transport and storage of hazardous wastes in Colorado.

Water law received a great deal of attention from the small group of legislators who take an interest in that emotional-but-technical subject.

The Legislature approved the diversion of \$8 million in sales tax money to the state's Water Conservation Fund, which is used to help build small water projects. The move is seen as the first step in allowing the state to finance and build some of its own water storage projects, now that the federal government has lost interest in building many reclamation projects in the West.

Lawmakers also made several technical changes in state water law designed to tighten state control over water use. The changes were made partly in response to recent claims made on massive amounts of

underground water by a small group of speculators. Those claims face lengthy litigation in state water court.

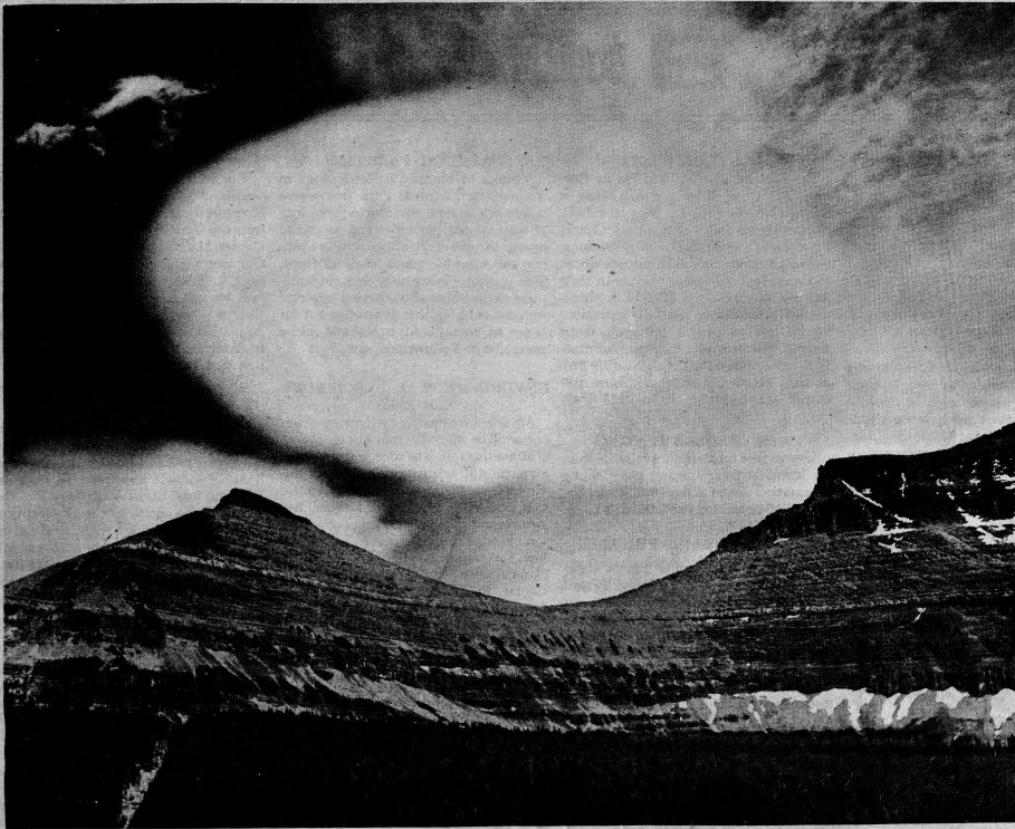
The Legislature also made some significant but little-noticed changes in mining law, including revamping the state reclamation program for surface coal mines.

There was some fighting over wildlife and parks issues. Three bills that would have restricted the Division of Wildlife's ability to acquire land were vetoed by Lamm, while authority and money for the Division of Parks to acquire more land were approved quietly.

Although the prospects of a gasoline shortage began looming before the session ended, the Legislature did little to deal with that problem other than to give the governor expanded powers to order mandatory fuel conservation measures during emergencies.

The Legislature did, however, provide incentives for another type of energy conservation by giving property tax breaks to homeowners who install solar or other alternate energy devices on their homes.

— on —
s, are
science
Todd Engdahl is a reporter
Denver Post.



Where the mountain crosses
on top of the mountain
I do not know myself where
I wandered where my mind
I wandered away.

Dream Sonnet Papago

From *American Indian Poetry*, edited by Margot Astor,
printed with permission from
Day Publishers.

the mountains with luminous discipline
are coming out of the blackness
To take their places one in front of the other.

....I can say to myself as if I were
A wanderer being asked where he had been
Among the hills: "There was a range of mountains
Once I loved until I could not breathe"....

from "Morning Star"
Thomas Hornsby Ferril

from *New and Selected Poems*,
Copyright 1952. Reprinted with permission
from Harper and Row Publishers, Inc.



July 27, 1979 — High Country News-9

the mountain crosses,
of the mountain
ot know myself where
ered where my mind and my heart seemed to be lost
ered away.

Dream Song of a Woman, page

American Indian Poets and
edited by Margot Astrov. Re-
with permission from John
Publishers.

Wanderers' Songs

The peace and remoteness of wilderness has always figured in the work of poets and artists. They have tried to understand and convey what it means to be far from the world of men and affairs. In words, images and music they have tried to describe the power of wild places.

Photography by
David J. Spear

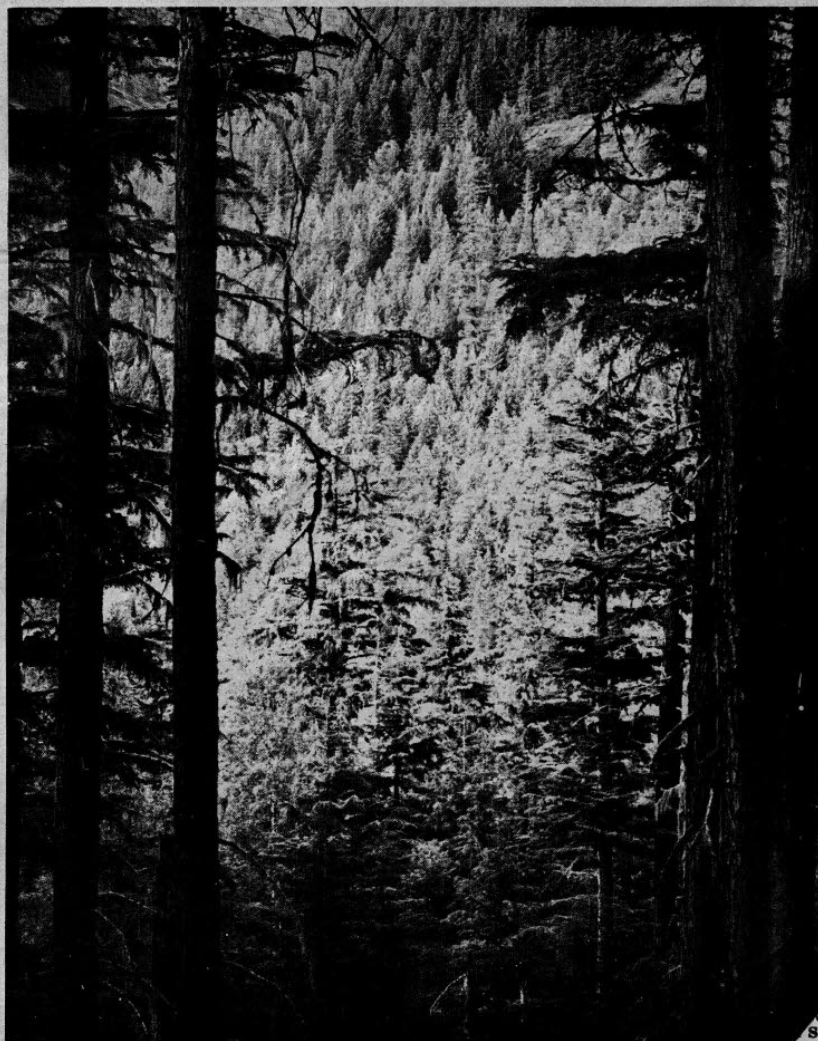
Passing the Night on a River in Chien-te

I guide my boat to a mooring by a misty islet.
With the setting sun, a traveler's sorrows revive.

Wilds so vast, the sky stoops to the trees;
The river so clear, moon close to man.

Meng Hao-Jan

from Sunflower Splendor: Three
Thousand Years of Chinese Poetry.
© 1975 by Wu-Chi Liu and Irving
Yucheng Lo. Reprinted with permis-
sion from Anchor-Doubleday Pub-
lishing Co.



, con-
wis, are
Science

Liability could kill nuclear option

Lending institutions and utilities are deeply concerned with one of the big questions left in the wake of the Three Mile Island nuclear accident: liability.

The courts have yet to determine how many million dollars of liability the General Public Utilities and its three subsidiaries, and the plant designer, Babcock & Wilcox, will have to pay. On top of that, Congress is considering revising the Price-Anderson Act, which limits liability for future accidents.

Outgoing Deputy Energy Secretary John O'Leary says the mounting public pressure to shift the liability for nuclear accidents to utilities and equipment vendors will make utilities choose coal-burning plants over nuclear plants from now on.

According to Nucleonics Week, while the Price-Anderson Act restricts liability to \$560 million, attorneys for the plaintiffs argue that the accident actually involved several releases and thus several accidents, each one of which is limited by \$560 million in liability claims. Following the precedent of the Karen Silkwood case, they may claim punitive damages and argue that Price-Anderson Act does not limit punitive damages. Karen Silkwood's family was awarded \$10.5 million by a U.S. district court when the Silkwoods' attorney, Gerry Spence, convinced the jury that Kerr McGee Corp. had been negligent in handling plutonium, an extremely toxic manmade radioactive element.

Using another legal argument from the Silkwood case, the plaintiffs are saying the defendants are automatically liable for any damages from the accident, according to Nucleonics Week. The argument rests on the premise that generation of nuclear power is so dangerous that those responsible

for the activity are automatically liable for anything that goes wrong.

Plaintiffs include people who say they suffered economic harm as well as people who fear adverse health effects from exposure to radiation. The suits ask for medical examinations of everyone living within 25 miles of the plant four times a year for 20 years. Cancer caused by exposure to radiation usually doesn't show up for many years.

Attorneys for the industry say that if the \$560 million ceiling set by Price-Anderson doesn't hold up in the litigation, the future of nuclear financing could be shaky, according to Nucleonics Week.

On the Congressional front, modification of the Price-Anderson Act appears likely, according to Nucleonics Week. Congress is considering several proposals, ranging from adjusting the liability limit because of inflation to lifting all limits on liability. The inflation bill could raise the liability limit to \$1.3 billion.

Critics of the act say it is a federal subsidy for the nuclear power industry. Rep. Ted Weiss (D-N.Y.) is sponsoring the bill that would lift all limits. If an accident threatened to bankrupt a utility company, the utility could get government loans under Weiss's proposal.

Under the present system, a private insurance pool provides \$160 million, a nuclear generating station owners' pool provides \$335 million and the federal government provides the balance, or \$65 million.

Nucleonics Week is available from McGraw Hill, Inc., 1221 Avenue of the Americas, New York, 10020. Subscriptions are \$555 per year.

Group says antinuclear sabotage caused Three Mile Island accident

In full page newspaper ads, the Fusion Energy Foundation is charging that sabotage was the "most probable cause" of the Three Mile Island nuclear accident March 28. Listing 10 different "facts" to support its contention, the foundation asks for donations for an "independent commission of inquiry" to investigate the accident.

The ad accuses not only plant operators but also top government officials of involvement. It implies plant operators intentionally caused a loss of feedwater flow to the generators, using as evidence engineering studies that prove the probability of this happening accidentally are 1 million to one.

"A mass of evidence points to the existence of a top-down policy to sabotage the

development of nuclear power throughout the United States. The strong possibility exists that government agencies are directly involved," the ad says.

The group accuses the Nuclear Regulatory Commission of deliberately exaggerating the dangers during the accident. "Is the highly suspicious TMI incident merely an element in a larger policy of energy and economic shutdown?" it asks.

The Fusion Energy Foundation is the publisher of *Fusion*, a magazine that last year linked Sun Day organizers and other solar energy advocates with terrorism (see HCN, 8-25-78).

Indians excluded from Camp David

While Indian tribes may control half of the nation's uranium and a third of Western coal, no representatives of Indian interests were invited to advise President Carter at the recent energy policy meeting at Camp David, according to the Council of Energy Resource Tribes.

"While we support the president's program, we're a little bit worried about what it will mean for Indian tribes," says Ellen Brown of the Washington, D.C., CERT office. "Energy is important, but the viability of the land must be retained," Brown says.

CERT is worried about the Energy Mobilization Board, which Carter says will make it possible to expedite energy projects. "Environmental regulations — including tribal rules and regulations — that have been passed so far should stand," Brown says.

Brown says CERT, which represents more than 20 energy-rich tribes, offered to send someone to Camp David. "We're disappointed that the president apparently has no desire to work with the tribes," she says.



The HCN Hot Line

energy news from across the country

NORTHWEST NUCLEAR

QUESTIONS. Both houses of the Oregon legislature have passed a bill calling for a moratorium on nuclear power plants in the state until the problem of permanent disposal of nuclear wastes is solved. The fate of the bill is now up to the governor. In Washington, the Seattle City Council is studying the possibility of withdrawing its support from three nuclear power plants now under construction because the price tag for the plants has doubled. Seattle City Light, a city-owned utility, and two county public utility districts are the major participants in the three plants.

TOTAL COST OF NUCLEAR. A Senate committee has approved a measure introduced by Sen. Mark Hatfield (R-Ore.) that requires the Bonneville Power Administration to include costs of waste disposal and decommissioning when figuring the cost of a nuclear power plant. A Hatfield aide said the amendment, if adopted in the final bill, will make it difficult if not impossible to build more nuclear plants in the Northwest because their total cost would exceed that of other power sources, such as coal-fired plants.

NUCLEAR HEAT. Governors of Nevada, Washington and South Carolina have vowed to shut down nuclear waste dumps within their boundaries — the only commercial nuclear waste dumps in the country — if the federal government doesn't improve its safety controls. Nuclear Regulatory Commission Chairman Joseph Hendrie said the governors' concerns are "well justified," according to a United Press International report. Nevada Gov. Robert List says federal responsibility for transportation of the wastes is split among four agencies, which leads to a dangerous lack of coordination. The three states have been assured the problems will be cleared up. In the meantime, Gov. Dixy Lee Ray of

Washington has agreed to accept wastes from the Three Mile Island nuclear accident, enough to fill 600 55-gallon drums and eight trucks.



Photo by Terrence Moore

BACKING UP? Since this photo was taken in 1973, strict Wyoming air standards have forced the plant to clean up. However, under a bill introduced by Sen. Henry Jackson (D-Wash.), state standards could be waived for facilities that want to switch to coal. The facility would still have to meet federal standards. The National Clean Air Coalition expects pressure in both the House and the Senate to weaken air standards. Photo of the Dave Johnston coal-fired power plant.

NEXT TIME YOU FLUSH YOUR TOILET
THINK OF YOUR NEIGHBORS DOWN-RIVER

Thoughtful people do not wash their wastes into sewers. That is unkind to our neighbors downstream, and to our lakes and rivers. It also wastes a torrent of fresh water.

Such profligacy is not necessary. The Clivus Multitrum is a waterless waste treatment system for the home or public facility which saves all that water and protects our environment. Toilet wastes and organic garbage are composted into a rich fertilizer right in your basement, conserving water, nutrients, and energy.

Contact:

Clivus Multitrum Northern Rockies
205 Meadows Rd.
Whitefish, MT 59937
or these local distributors:

May Reynolds
1290 S. Second St.
Lander, WY 82520

Mike Evans
P.O. Box 1152
Saratoga, WY 82331

Charles Woodward
P.O. Box 91
Victor, ID 83455

Clint Elston
P.O. Box 18
Fraser, CO 80442



Clivus
Multitrum
organic waste
treatment system

AMORY LOVINS

AT FEATHERED PIPE RANCH

• September 24-30, 1979



Soft Energy Path Explorations is a special opportunity for individuals and organizations to directly benefit from Amory Lovins' experience with distributive energy systems, emphasizing practical implementation of "soft" technology in relation to participants' needs and situations. In an open exchange of ideas and resources, a series of presentations and discussion will focus on techniques for problem identification, trouble-shooting, skill-sharing, and networking, related to renewable and conserving energy strategies. The longer range goal of this program lies in participants' enhancing their communities' awareness of energy needs and uses, and developing alternatives to existing systems to further "soft path" solutions on a widespread basis.

The workshop will be held for seven full days at the Feathered Pipe Ranch, an informal atmosphere conducive to learning, relaxation, and renewed perspectives. Workshop fee is \$400.00 which includes all presentations, meals, and lodging.

HOLISTIC LIFE SEMINARS
BOX 1682, HELENA, MT 59601
406-442-8196

Unless natural resource agencies can 'do good work faster' Carter energy steamroller threatens environment

by Joan Nice

FORT COLLINS, Colo. — Federal natural resources officials told an audience of over 600 environment and wildlife professionals here that if they couldn't resolve conflicts between development and the environment faster, they would be steamrollered by the nation's latest push for energy independence.

Where there is a choice between an oil refinery and the disturbance of some living creature, "the species will lose — unless you are creative enough to figure out quickly how we can both protect the fish and wildlife resources and still have the refinery," Interior Department Solicitor Leo M. Krulitz told "Mitigation Symposium" participants at Colorado State University.

Fish and Wildlife Service Director Lynn A. Greenwalt said that after Carter's July 15 energy speech, it is no longer up to environmental agencies to decide whether a project will be built — only to suggest how the project's impacts can be swiftly minimized.

"The president has told us to do a faster job of responding to energy needs," Bureau of Land Management Director Frank Gregg told High Country News. He said that the Carter directive did not preclude "careful, responsible analysis" of federal actions, but it did mean his agency was "going to have to do good work faster." Gregg said that the agency's wilderness review, due to Congress by 1991, probably would be completed before that date. He said that he thought the agency's coal leasing program would proceed as planned, although the president's synthetic fuels program might push coal need projections upward.

In order to make decisions speedily, agency officials "may have to rely more on

judgments and risk error," Krulitz told High Country News.

"There's never enough data," he said. "At some point you just have to stop and say now's the time to make a decision."

In the conference's keynote speech, Krulitz listed the problems that he thinks must be solved if the Fish and Wildlife Service Coordination Act, the National Environmental Policy Act, the Endangered Species Act and other environmental protection laws are to survive the energy push.

First, the resolution of conflicts between agencies takes too long, he said. "The memorandum of understanding between the Corps of Engineers and Fish and Wildlife Service on 404 (dredge and fill) Permits provides for more appeals than are available to a convicted criminal through our court system," he said.

He also said that construction agencies and environmental agencies "must work together to solve real problems and forgo the pleasures of a good old-fashioned fight. We no longer can afford the luxury of fighting and litigating over technical procedures and processes. Somehow we must find a way to get quickly to the merits of the controversy itself."

Krulitz warned against using environmental laws as "spear-carriers" for other causes.

"Too often groups opposing a project for a variety of reasons will lose the battle on Capitol Hill. They will then go out and try to find an endangered species to use to kill the project anyway. As a result, the Endangered Species Act is itself endangered today," he said.

"Everyone knows how to play the game," Krulitz said. "A railroad which doesn't want barge competition goes looking for an endangered species to use to block construction of a canal."

Krulitz called for mitigation efforts that

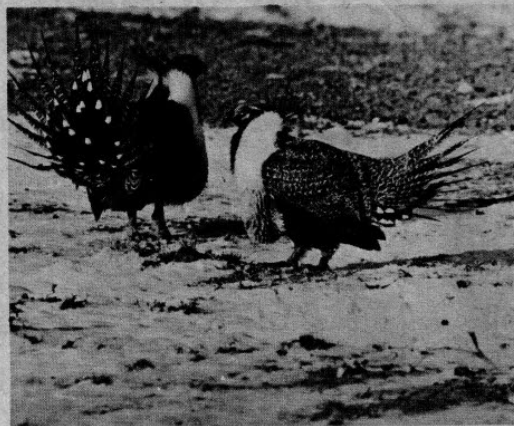


Photo by Don Domenick
Colorado Division of Wildlife

WHERE THERE IS A CHOICE between an oil refinery and the disturbance of some living creature, "the species will lose — unless you are creative enough to figure out quickly how we can both protect the fish and wildlife resources and still have the refinery," says Interior Department Solicitor Leo M. Krulitz. The photo above shows sage grouse in Colorado, a state that President Carter has slated for intensive energy development.

are "more cooperative, creative and timely...so that those efforts don't interfere with the higher priority of achieving energy independence as rapidly as possible."

In his July 15 energy speech, President Carter proposed setting up an Energy Mobilization Board "to cut through the red tape, the delays and the endless roadblocks to completing key energy projects."

According to Krulitz, the board would identify critical projects and set a binding

time schedule for federal, state and local laws," Krulitz said.

One high-level official told High Country News that he doubted whether his agency, the Bureau of Land Management, was capable of speeding up its data-gathering and decision-making processes, no matter how urgent the President's call. Due to a shortage of staff and money, "There's just no blood in the turnip," he said.

TVA expands its S.D. uranium domain

As part of the settlement of a suit with Westinghouse, the Tennessee Valley Authority has acquired 16,000 acres of uranium property in South Dakota.

The property was formerly owned by a Westinghouse subsidiary, Wyoming Minerals, and adjoins leases already owned by TVA in the Edgemont area in southwest South Dakota.

The total out-of-court settlement is worth \$130 million to TVA, according to *The Mountain Eagle*. It ends a suit TVA filed in 1975 when Westinghouse announced it wouldn't deliver 3.2 million pounds of uranium at the contracted price.

Westinghouse has guaranteed that the property will produce six million pounds of uranium. If it falls short, the company will pay TVA five dollars a pound for every pound under six million. The company will also advance TVA \$2 million for exploratory drilling.

The mining will be done by Silver King Mines under a contract with TVA.

The \$130 million agreement includes the South Dakota uranium properties, half a million pounds of uranium at \$8.24 a pound, \$32 million in cash, a two-thirds discount on parts for both its coal and nuclear plants, and improved fuel warranties, according to the *Eagle*.



energy news of the Rockies and Great Plains

SOLAR ADOBE PRODUCTION. The Solar Energy Research Institute and the U.S. Department of Energy are sponsoring a test facility in New Mexico for the production of adobe bricks. The use of passive solar heating is expected to accelerate the adobe drying process, permit year-round production of adobe in cooler climates and improve the quality of the product. SERI says that half of the world's population lives in houses of adobe or closely-related types of construction. Because of the simplicity of the system, it could be readily adaptable to the needs of developing countries. The test facility will be built in Espanola, N.M., by the Home Education Livelihood Program.

TWO ARIZONA NUKES NIXED. Arizona Public Service Co. recently halted plans to build two nuclear reactors at its Palo Verde station near Phoenix. Construction had not begun on the units, which were expected to meet one-fifth of the area's increased demand for electricity in the 1980s. About half of the 850 megawatts

generated by the \$2.8 billion project would have gone to Southern California utilities. The Arizona Public Service Co. said California and federal regulations would "delay the project, increase the cost and jeopardize the integrity of future energy supplies for Arizona." Three other nuclear reactors at Palo Verde, which have already been licensed, will be built on schedule, and put on line by the mid-1980s. A California Public Utilities commissioner said, "There is absolutely no substance to the APS criticism. They cannot document any delays. I think they just decided they didn't need the power." The main reason APS backed out, says Environmental Defense Fund's Tom Graf, "is they finally realized what a white elephant this is. And in the wake of Three Mile Island, they realize the costs will be out of sight."

MONKEY WRENCH GANG. A 500 megawatt unit of the Jim Bridger power plant near Rock Springs, Wyo., was sabotaged in late June. Aluminum oxide, an abrasive substance used in sand blasting, was poured into the lubricating system of the main turbine on Unit Two of the power plant, causing scratches on the turbine shaft and bearings. The damage to the equipment was estimated at \$100,000, and Pacific Power and Light, the major owner of the plant, suffered a loss of \$2 million to \$3 million worth of electrical generation. Metal oxides were poured into the crankcases of heavy equipment by the band of eco-saboteurs in Edward Abbey's novel, *The Monkey Wrench Gang*.

RADIATION COVER-UP? The Colorado Bureau of Investigation is looking into charges that a Commonwealth Edison Co. subsidiary regularly exposed its uranium mill employees to excessive radiation and falsified state health reports. Gov. Richard D. Lamm ordered the investigations of Cotter Co., which mines 175 miles south of Denver, in response to a recent *Chicago Sun-Times* report and interviews by his environmental advisors with Cotter workers. Some employees were exposed to nearly seven times the maximum permissible level of airborne radioactivity, according to the *Sun-Times*. Comments from workers indicate that from 1968-1977 it was almost routine for mill officials to fabricate regulatory reports on how much radioactive dust workers were inhaling, the report says. Cotter officials have denied the charges. Cotter's \$57 million plan to triple the size of its Canon City processing mill has been stalled by the allegations.

STEERING TOWARD NEW GAS. The city of Lamar, Colo., is being allowed to continue using natural gas in its power plant instead of converting to coal — if it also uses an alternate energy source. Its alternative is waste from a 50,000-steer feedlot which will provide more than a mill a cubic foot of methane a day, according to the *Rocky Mountain News*. Bio-Cor Colorado is designing the project. It received a low-interest loan from FWS, are partment of Agriculture to help Science project.

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Besten Old Colony Insurance Company
390 West Jackson Boulevard, Chicago, Ill.
60606

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$61,378
Gross Premiums Paid	120,463
Direct Benefits and Losses Incurred	32,421.36
Total Admitted Assets	27,411.36
Liabilities	2,000,000
Capital Stock Paid Up	4,887,181
Surplus	19,889,903

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Beneficial National Life Insurance Company
3700 Wilshire Boulevard, Los Angeles, California 90010

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$45,010
Gross Premiums Paid	62,610
Direct Benefits and Losses Incurred	54,047
Total Admitted Assets	206,857,992
Liabilities	165,924,678
Capital Stock Paid Up	36,203,660
Surplus	96,857,413

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Beneficial Life Insurance Company
P.O. Box 151028, Salt Lake City, Utah 84115

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$18,000
Gross Premiums Paid	618
Direct Benefits and Losses Incurred	618
Total Admitted Assets	3,561,914
Liabilities	2,882,389
Capital Stock Paid Up	109,275
Surplus	2,013,705

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Beneficial National Life Insurance Company
Two Park Avenue, New York, New York

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$876,439
Gross Premiums Paid	5,983
Direct Benefits and Losses Incurred	2,381
Total Admitted Assets	1,171,171
Liabilities	62,577,652
Capital Stock Paid Up	7,455,274
Surplus	96,857,413

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Bankers Life Insurance Company
711 High Street, Hartford, Conn. 06107

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$6,399,354
Gross Premiums Paid	2,466,801
Direct Benefits and Losses Incurred	4,771,025.335
Total Admitted Assets	5,576,598,279
Liabilities	194,427,076
Capital Stock Paid Up	1,726,086,780
Surplus	31,197,875

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Beneficial Life Insurance Company
36 South State Street, Salt Lake City, Utah

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$1,720,000
Gross Premiums Paid	967,099
Direct Benefits and Losses Incurred	24,705
Total Admitted Assets	335,858,247
Liabilities	312,500,000
Capital Stock Paid Up	21,857,857
Surplus	146,226,477

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Bankers Multiple Life Insurance Company
Bankers Building, Des Moines, Iowa 50300

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$18,110
Gross Premiums Paid	62,400
Direct Benefits and Losses Incurred	61,300.049
Total Admitted Assets	41,763,065
Liabilities	20,320,000
Capital Stock Paid Up	38,834,450
Surplus	38,834,450

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Brumstone Casualty Corporation
320 18th Street, Rock Island, Illinois 61201

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$72,726
Gross Premiums Paid	11,457
Direct Benefits and Losses Incurred	10,429,650
Total Admitted Assets	9,000,000
Liabilities	23,311,097
Capital Stock Paid Up	146,226,477
Surplus	146,226,477

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Bankers Life Insurance Company
140 Madison Road, Parsippany, New Jersey 07054

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$1,041,000
Gross Premiums Paid	22,000
Direct Benefits and Losses Incurred	27,000,000
Total Admitted Assets	27,000,000
Liabilities	27,000,000
Capital Stock Paid Up	4,000,000
Surplus	15,000,000

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Barbette Life Insurance Company
Barbette National Insurance Company
1771 Howard Street, Chicago, Illinois 60606

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$8,586
Gross Premiums Paid	5,611
Direct Benefits and Losses Incurred	3,063
Total Admitted Assets	609,852,000
Liabilities	574,006,270
Capital Stock Paid Up	26,589,270
Surplus	161,111,810

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Bankers Reserve Life Insurance Company
3640 S. Gallegos, Englewood, Colo. 80110

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$1,727,880
Gross Premiums Paid	674,217
Direct Benefits and Losses Incurred	63,885
Total Admitted Assets	4,288,449
Liabilities	4,288,449
Capital Stock Paid Up	500,000
Surplus	1,542,105

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Benefit Trust Life Insurance Company (A Mutual Legal Reserve Company)
1771 Howard Street, Chicago, Illinois 60606

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$673,000
Gross Premiums Paid	673,000
Direct Benefits and Losses Incurred	1,078,170
Total Admitted Assets	144,240,681
Liabilities	128,129,616
Capital Stock Paid Up	None
Surplus	161,111,810

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Birmingham Fire Insurance Company of Pennsylvania
320 18th Street, Rock Island, Illinois 61201

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$7,477
Gross Premiums Paid	7,678
Direct Benefits and Losses Incurred	3,902
Total Admitted Assets	65,381,000
Liabilities	55,490,000
Capital Stock Paid Up	5,465,512
Surplus	25,710,726

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Birmingham Fire Insurance Company of Pennsylvania
320 18th Street, Rock Island, Illinois 61201

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$7,477
Gross Premiums Paid	7,678
Direct Benefits and Losses Incurred	3,902
Total Admitted Assets	65,381,000
Liabilities	55,490,000
Capital Stock Paid Up	5,465,512
Surplus	25,710,726

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Bankers Security Life Insurance Company
Birmingham Fire Insurance Company of Pennsylvania
320 18th Street, Rock Island, Illinois 61201

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$48,275
Gross Premiums Paid	46,729
Direct Benefits and Losses Incurred	3,110
Total Admitted Assets	129,706,019
Liabilities	11,273,813
Capital Stock Paid Up	2,765,726
Surplus	12,765,726

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Bankers Security Life Insurance Company of Nebraska
Corner at "O" Street, Lincoln, Nebraska 68502

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$235,666
Gross Premiums Paid	217,732.75
Direct Benefits and Losses Incurred	423,635
Total Admitted Assets	61,544,000
Liabilities	61,544,000
Capital Stock Paid Up	4,000,000
Surplus	33,079,462

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

DEPARTMENT OF INSURANCE

STATE OF WYOMING

Bankers United Life Insurance Company
4333 Dagwood Rd., NE, Cedar Rapids, Iowa 52409

BUSINESS IN WYOMING FOR THE YEAR ENDING DECEMBER 31, 1978

Gross Premiums Received	\$1,238,010
Gross Premiums Paid	123,810
Direct Benefits and Losses Incurred	46,000
Total Admitted Assets	46,000,000
Liabilities	46,000,000
Capital Stock Paid Up	4,000,134
Surplus	4,000,134

Income during year ending December 31, 1978

Expenditures for year ending December 31, 1978

Pursuant to Section 26-3-129 (b), Wyoming Insurance Code, I certify that to the best of my knowledge and belief, the insurer above named is in all respects in compliance with the laws of this State relating to insurance, and it is duly authorized to transact the business of insurance in the State of Wyoming.

Dated May 24, 1979

a. John T. Langdon
Insurance Commissioner

STATE OF WYOMING

Financial statements of Insurance
Companies which are Authorized
to do business in Wyoming
Filed in High Country News
1.15.29; July 13, 27;
August 10, 1979



Western Roundup



Wallop to challenge federal water rights

The results of a squabble between a Wyoming senator and the Interior Department could have important ramifications for fish, livestock and campers on federal lands, especially those administered by the Bureau of Land Management.

After Interior Solicitor Leo M. Krulitz released his opinion on federal water, Sen. Malcolm Wallop (R-Wyo.) announced that he would introduce legislation to limit the federal government's water rights.

Wallop's principal objection concerns in-stream water uses. Krulitz said federal agencies should be able to either appropriate water or claim it under the reserved rights doctrine for instream uses — even though most Western states do not recognize them as legitimate claims to water. Instream uses include water for maintaining fish, wildlife and scenic values.

Wallop criticizes Krulitz for trying to establish a federal appropriations doctrine instead of just depending upon federal reserved rights. However, Interior Secretary Cecil Andrus says Krulitz only reaffirmed previous solicitors' opinions.

Under the reserved rights doctrine, the federal government has rights to enough water to fulfill the specific purpose for which some federal lands, including national parks and wildlife refuges, were reserved.

However, some federal lands, such as most Bureau of Land Management lands, have no reserved water rights. Krulitz says that water is still necessary on these lands for several congressionally-mandated purposes, such as livestock grazing and watering, timbering, and recreational campgrounds. In these cases, the federal government must appropriate water that has not previously been appropriated by others. To appropriate water, a claim for a specific use of water must be filed with the state. Appropriated water rights would carry the date when the use began while reserved rights carry the date when the land was reserved.

Krulitz says that when the federal government appropriates water, it will adhere

to state laws in virtually all respects, unless the state normally doesn't provide water for instream uses. Then the federal government intends to claim a right to instream water, with or without the blessing of the state.

Lands administered by the Forest Service weren't mentioned in the opinion since they aren't under the Interior Department.



Minimum flow law upheld in Colo.

A recent Colorado Supreme Court ruling upheld a 1973 law that allows the state to reserve water for minimum stream flows. Before the law was passed, a Colorado stream could be drained dry — as long as those who emptied it put the water to "a beneficial use." The 1973 law gave the state the right to reserve unclaimed water for instream uses — fish, wildlife and recreation.

The ruling was spurred by a lawsuit filed by the Colorado River Water Conservation District and the Southwestern Colorado Water Conservation District against the Colorado Water Conservation Board. The plaintiffs claimed that it is unconstitutional to reserve water without taking it out of the stream.

Some farmers in the state are upset by the Supreme Court decision, according to a *Denver Post* story. It won't affect most farmers' water rights, because most of them are senior to the state's post-1973 rights. However, it could mean the rights are less salable to non-agricultural users. When a change in water use is proposed, the 1973 law gives the state the legal right to step in and insist that the minimum streamflow rights it has acquired be protected.

Predator control plan due by September

By September Interior Secretary Cecil Andrus is expected to choose among several alternatives for controlling coyotes and other Western predators. The Interior Department has released a final environmental impact statement examining nine options for minimizing predator damages to livestock.

The alternatives Andrus is considering are: ending the federal predator control program; transferring the program to the Agriculture Department; contracting with states to control predators; working toward controls that do not require killing of coyotes; limiting control to shooting coyotes on the ground or from low-flying aircraft; stepping up all currently used control programs; compensating livestock owners for losses caused by predators; reducing coyote populations; and killing only coyotes that directly threaten livestock.

The predator control program concentrates on coyote predation, but it also includes bobcats, black bears, mountain lions and red and gray foxes. The program affects 16 states.

Predator control policies have been in

limbo since 1972, when all chemical toxicants were banned. The ban move was aimed primarily at sodium fluoracetate — or Compound 1080. Andrus will consider reintroducing 1080 among the alternatives. Another controversial predator control device, the M-44 or "coyote getter," may also see increased use. The device, coated with scent and driven into the ground, propels deadly sodium cyanide into the mouth of an animal that tugs on it.

Researchers report that a new toxic collar is "a useful technique" to reduce coyote predation on sheep. The collar, filled with 1080, is placed around a sheep's neck — the place a coyote normally attacks first. The poison is released when the collar is ruptured. A Denver Research Center biologist says, "The toxic collar is a selective tool to kill only those coyotes that attack sheep. But as far as we know, every coyote that bites and punctures a collar dies...Predation slowed or stopped on every ranch where coyotes ruptured toxic collars in 1978."

The main drawback to using the selective technique is its cost.



Photo by Phil White

LET IT BURN. Under a policy adopted in 1976, the National Park Service allowed this fire in Yellowstone National Park to burn. The lightning-caused fire, which was detected July 1, is the largest natural fire in the park since the plan was established. Recent research indicates that fire helps forests by preventing ecological stagnation and clearing the way for vigorous new plant and tree generations. "Fire control is a timber cultivation tool and there are some areas we simply can't let burn," Yellowstone Fire Management Coordinator Jim Sweeney told the *BILLINGS GAZETTE*. "But as far as most undeveloped areas are concerned, fire suppression has as much place in Yellowstone as growing rice."

Jackson Hole plans 'son of scenic area'

A scaled-down version of the Jackson Hole Scenic Area proposal is now being considered by county officials. The proposal, which a *Jackson Hole News* cartoonist has dubbed "son of scenic area," calls for identifying areas within Teton County that possess significant value as wildlife habitat or scenic corridors. Easements would be bought with federal money to preserve those values on a "willing-seller, willing-buyer" basis.

The previous plan ran into trouble in the last Congress because of local opposition to federal condemnation powers.

Jean Hocker, who heads the committee that drew up the proposal, says that the easements will be tailored to the specific parcel, and will not necessarily totally exclude development.

Wyoming Sen. Malcolm Wallop (R) says that he will support a scenic area proposal

only if there is a strong show of community support for the plan. Wallop and Rep. Richard Cheney (R-Wyo.) both oppose the use of the federal power of eminent domain to purchase easements on property. Teton County is currently holding public hearings on the scenic area concept.

Rockies' rain, snow contaminated

The rain and snow at a site near the Continental Divide in Colorado is nearly five times as acidic as it was three years ago. The culprit, according to University of Colorado researcher Michael Grant, is nitric acid from the auto and industrial emissions of either Denver or Los Angeles.

"You can lose species and abundance of species as a result of acid precipitation," Grant said in a *Denver Post* story. "In the eastern U.S. a number of fish species have died out in particular lakes. How susceptible Western species are remains to be seen."

Grant said he isn't sure whether the acidity will continue to increase at such a rapid rate. "If it did continue for, say, a half-dozen years, the results would be disastrous," he said.

Results of the three-year study, conducted by Grant and William Lewis, are scheduled to be published in *Science* magazine this summer.

Saplings hazardous

The U.S. Forest Service has decided not to plant 370,000 lodgepole pine seedlings in a clearcut area in the Targhee National Forest because they could pose a danger to grizzly bears in the area.

U.S. Fish and Wildlife Service experts say signs of strychnine that are implanted in the seedlings' roots to kill pocket gophers could kill the bears, which feed on small caches of food stored by gophers near the roots of the seedlings.

14-High Country News — July 27, 1979



FROM KEROSENE TO LIGHT POLLUTION

by Myra Connell

In a recent talk with a newspaper reporter I thoughtlessly referred to myself as a rabid environmentalist. "Devoted" would have been a more accurate adjective. I was a little dismayed when the reporter quoted me verbatim.

A friend in Colorado read the article and wrote, "Noticed that you are a 'rabid environmentalist' — that's OK until the light goes out! So (I) hope that all environmentalists think of that, too."

I did think about it and about light in general.

I am fortunate to have been born after the use of kerosene had replaced firelight, tallow candles and whale oil. A single lamp

sat in the center of the dining table at my childhood home, and six or eight people clustered around the table reading or playing cards each winter evening. Someone had the chore of tending the lamps — replenishing the coal-oil (as we called it), trimming the wicks and polishing the chimneys. If this task was neglected, we had a very poor light. My brother used to say, "This damn glim! You'd have to strike a match to find it."

Later on we had one of the mantle lamps, which gave better light, but it was never satisfactory because of the delicate mantles.

Sometimes we kids would play too late at the neighbors and have to go home after dark, our way lighted only by stars and moonlight. From a high place in the trail a tiny pinpoint of light shone from our ranch two miles away — the only light to be seen, and we were delighted when we saw it.

To my Colorado friend I could retort, "I would be the last person to want the lights to go out!" No one appreciates plentiful light and the convenience of power more than I. I never press a button, start my

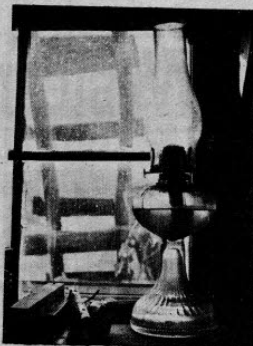


Photo by Sara Hunter-Wiles

washing machine or switch on the weed-eater that I don't think "How wonderful!"

When electricity finally reached the farms and ranches through the Rural Elec-

trification Administration, it was a great boon to the country people. And it became a real thrill for me to view our valley from the mountain heights — a yard light at every farm, brightly lit drilling rig towers, street lights at three or four towns and villages.

But everything has its price. The populace went mad over cheap electricity, and now overuse contributes to the energy crisis.

Every household (including my own) has lights galore and appliances for practically every task. Every town burns street lights all night long. Only the brightest stars are visible from my house since the city placed a street light at my corner. School teachers close the drapes over the windows and burn lights all day.

No, my Colorado friend, we rabid environmentalists don't want the lights to go out. We only want them to be used sensibly and sparingly so that we can enjoy the blessing of electricity for our lifetime, and we'd like our great-grandchildren to be able to enjoy it, too.

After all, who wants to have to strike a match to find the kerosene glim?

STATE OF WYOMING PUBLIC NOTICE

PURPOSE OF PUBLIC NOTICE

THE PURPOSE OF THIS PUBLIC NOTICE IS TO STATE THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS UNDER THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972 (FWPCA), P.L. 92-500 AND THE WYOMING ENVIRONMENTAL QUALITY ACT (35-11-101 et. seq., WYOMING STATUTES 1967, CUMULATIVE SUPPLEMENT 1973).

IT IS THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS TO (1) ONE COMMERCIAL FACILITY, (2) TWO OIL TREATER FACILITIES AND (3) ONE INDUSTRIAL FACILITY; TO REACTIVATE (1) ONE MUNICIPAL DISCHARGE PERMIT AND TO MODIFY (1) ONE INDUSTRIAL AND (9) NINE MUNICIPAL DISCHARGE PERMITS WITHIN THE STATE OF WYOMING.

APPLICANT INFORMATION

(1) APPLICANT NAME: THE G.N.C. CORPORATION
"GARDENS NORTH TRAILER COURT"
MAILING ADDRESS: 203 EAST MAIN
RIVERTON, WYOMING 82501
APPLICATION NUMBER: Wy-0028282

G.N.C. Corporation proposes to build a 323 space trailer court, named Gardens North, approximately 2 1/2 miles northeast of Riverton, Wyoming.

Sewage treatment will consist of a package treatment plant with chlorination. The discharge will be to Spence Draw (Class IV stream).

The proposed permit will require compliance with national secondary treatment standards effective immediately upon discharge. Since the discharge is to a Class IV stream and will flow approximately one mile before reaching the Wind River, a strict year round fecal coliform limitation of 200-400 organisms per 100 ml and a total residual chlorine limit of 1.0 mg per l are included in the permit.

Quarterly self-monitoring will be required for all parameters with the exception of residual chlorine which must be monitored daily.

The permit is scheduled to expire June 30, 1984.

(2) APPLICANT NAME: AMERICAN BERYLLIUM AND OIL CORPORATION
MAILING ADDRESS: 39 EXCHANGE PLACE NO. 24
SALT LAKE CITY, UTAH 84111

FACILITY LOCATION: WILD HORSE BUTTE FIELD
NE 1/4, SW 1/4, SECTION 2, T42N, R95W
HOT SPRINGS COUNTY, WYOMING

APPLICATION NUMBER: Wy-0028291

(3) APPLICANT NAME: DIAMOND-B INDUSTRIES
MAILING ADDRESS: P.O. BOX 606
NEWCASTLE, WYOMING 82701

FACILITY LOCATION: WAGNER FEDERAL LEASE
NO. 018920, TANK NO. 6863
NW 1/4, SW 1/4, SECTION 9, T44N, R62W
WESTON COUNTY, WYOMING

APPLICATION NUMBER: Wy-0028304

Facilities are typical oil treaters located in Hot Springs and Weston Counties, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharges are to Hayden Draw (Class IV stream-American Beryllium) and Beaver Creek via an unnamed drainage (Class II w.w. stream-Diamond-B Industries).

The discharges must meet Wyoming's Produced Water Criteria effective immediately. Chapter VII of the Wyoming Water Quality Rules and Regulations infers that as long as the Produced Water Criteria is met, the water is suitable for beneficial use. There is no evidence to indicate that limitations more stringent than the Produced Water Criteria are needed to meet Wyoming's Water Quality Standards. The Department will continue to evaluate these discharges and, if necessary, will modify the permits if evidence indicates that more stringent limitations are needed.

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, 1980, for the American Beryllium permit and December 31, 1981, for the Diamond-B permit.

(4) APPLICANT NAME: KERR-McGEE COAL CORPORATION
MAILING ADDRESS: CALLER BOX 3014
GILLETTE, WYOMING 82716

FACILITY LOCATION:

EAST GILLETTE MINE NO. 16
SECTIONS 22 AND 28, T60N, R71W
CAMPBELL COUNTY, WYOMING

APPLICATION NUMBER:

Wy-0028312

The Kerr-McGee Coal Corporation operates a large open pit coal mine located approximately eight miles northeast of the City of Gillette, Wyoming. Water which collects in the mine pits will be used for dust control or will be routed to two settling ponds. The discharges from both settling ponds flow via unnamed draws to unnamed closed basins (Class IV waters).

Under Federal law the discharges are not considered to be "waters of the U.S." and, therefore, Federal laws and regulations do not apply, however, the discharges are to "surface waters of the State" as defined under Wyoming regulations and State requirements do apply.

The discharge permit application for this mine indicates that the pit water does not contain abnormal concentrations of any trace metal, therefore the proposed permit contains no limitations on such parameters. Because the discharges are to closed basins which are designated as Class IV waters, the State does not believe there is a need to include limitations on total suspended solids in the proposed permit. The proposed permit does include limitations on pH and oil and grease which are important considerations in use of the water by stock and wildlife.

The proposed permit requires continuous monitoring of discharge volume, quarterly monitoring of pH and visual monitoring of oil and grease. Self-monitoring reports must be submitted on a quarterly basis. The permit is scheduled to expire July 31, 1984.

(5) PERMIT NAME:

TOWN OF CLEARMONT, WYOMING

MAILING ADDRESS:

P.O. BOX 127
CLEARMONT, WYOMING 82835

PERMIT NUMBER:

Wy-0022063

The wastewater treatment facilities serving the Town of Clearmont, Wyoming, consist of a two cell non-aerated lagoon system. Until very recently this system has had no discharge, however, the second cell has now begun to discharge and it is, therefore, necessary to reactivate the Town's discharge permit. Any discharge will be to Clear Creek (Class II stream).

The proposed permit for this facility requires only that the existing facilities be operated at maximum efficiency. When the Town is offered Federal construction grant funds the wastewater treatment facilities must be upgraded to meet Federal effluent standards and Wyoming's in-stream water quality standards. Upon completion of these facilities, the permit will include limitations on BOD-5, total suspended solids, fecal coliform bacteria, pH and a prohibition against the discharge of total residual chlorine. A schedule of compliance to meet these limitations must be submitted within 120 days after the offer of grant funds. Upon receipt and approval, the schedule of compliance will become an enforceable part of the permit. The proposed permit also contains a limitation on ammonia which is designed to insure compliance with Wyoming's in-stream water quality standard for that parameter. Since the State considers ammonia removal to be tertiary treatment, the achievement of that limitation will be required only if Federal construction grant funds for tertiary treatment are offered.

At this time it appears that violation of Wyoming's in-stream standards for dissolved oxygen will not occur provided National Secondary Treatment Standards are achieved. However, this position will continue to be evaluated (and the permit modified if necessary) as more information becomes available.

The proposed permit contains a section which requires the Town to begin planning for expansion of the wastewater treatment facilities once 80 percent of the design flow is reached.

Self-monitoring requirements in the proposed permit require the monitoring of all limited parameters on a routine basis with reporting of results quarterly. The proposed permit is scheduled to expire July 31, 1984.

The Town of Clearmont has been exempted from meeting Federal effluent requirements by July 1, 1977 since, in accordance with Federal requirements, it specifically requested an extension due to the previous unavailability of Federal construction grant funds. In addition, the Town has requested and received less stringent effluent limitations for the parameter total suspended solids as authorized by Federal regulations for stabilization pond systems with a design flow of less than 2.0 MGD.

(6) PERMIT NAME:

THE KEMMERER COAL COMPANY

MAILING ADDRESS:

FRONTIER, WYOMING 83121

PERMIT NUMBER:

Wy-0000051

The Kemmerer Coal Company operates a large open pit coal mine known as the Elkol-Sorenson mine located near Kemmerer, Wyoming. The existing discharge permit for this facility was issued on November 6, 1978, and that permit identified a total of fourteen separate discharge points. Many of those discharge points were very tentative and it has now become clear that many of the discharge point locations are incorrect. The State and the Company agreed that it would be beneficial to modify the permit and to identify only those discharge points which are definite. This proposed modification identifies only seven discharge points.

The Elkol-Sorenson mine is located on the high ridge which forms the divide between the Bear River Drainage to the west and the Green River Drainage to the east. Six of the seven discharge points are to the North Fork of Little Muddy Creek (Class III stream) via an unnamed drainage which is in the Green River Drainage. One discharge will be to the South Fork of Twin Creek (Class IV stream) via an unnamed drainage which is in the Bear River Drainage.

Wyoming Water Quality Rules and Regulations, Chapter VI, require no discharge of industrial wastes to the Green River Basin wherever such a policy is practicable. The purpose of this policy is to reduce salt loading to the Colorado River system. In this case, the Company submitted documentation to the Department indicating that no discharge is not practicable in their case. The Department agrees with the Company's assessment, therefore, the discharge is allowed. The permit does require that the total dissolved solids (salt) content of the discharges to the Green River side of the divide be monitored and reported.

All discharge points except 001 will consist of runoff from disturbed areas and such discharges are expected to be

SERVICE DIRECTORY

Climb Every Mountain

You'll feel like it with this custom-made hiking and backpacking boot hand-crafted with the finest materials and tailored to the measurements of your feet. Can be made to fit any foot. Comfort fit and long life guaranteed. Available in a wide range of weights and flex. Call, visit or write for our brochure which includes measurement and mail order instructions.

Randall I. Merrell Custom Boots
228 South 1500 West #9
Vernal, Utah 84078
(801) 789-3079



Custom Solar Applications

Solar Greenhouse Design
Fiberglass Box HC 466-2205
Glazing Crowheart, Wyoming
Materials 85912 307-406 2224

HIGH-LITE SKYLIGHTS

pay for themselves.
Warm your home in winter.

Plasticrafts • 2800 N. Speer Blvd
Denver, Co. 80211 • 303-433-9801



A structure standing the test of ages.
An alternative for the adventuresome in spirit.
A portfolio on our tips is available for \$1
FOOFARAW 855 North Cedar
Laramie, WY 82070

GRAND TETON ENVIRONMENTAL CENTER

EXCITING COURSES FOR SUMMER

HIGH SCHOOL FIELD ECOLOGY

Six week coed summer field course
June 21-August 1

One year H.S. science credit.

SIXTEEN SUMMER FIELD SEMINARS

One week field courses in a variety of subjects beginning

June 4 through August 31, with or w-o credit.

GRAND TETON SUMMER FIELD ECOLOGY

Two week college course, August 4-17.

With or w-o credit (six quarter units or 4 semester grad or undergrad credit.)

for more information write:

TETON SCIENCE SCHOOL

Box 68H, Kelly WY

Phone: (307) 733-4765

LARSEN'S BICYCLES

223 EAST 2nd PHONE 734-5481
POWELL, WYOMING 82435



THE RALEIGH BICYCLE COMPANY

FOR HIGH QUALITY LOW-IMPACT LIVING:

Clivus Multrum composting toilets
Sunlite® fiberglass glazing
Saver-shower®
Wood-burning water heaters



TETON TINKERS & TRADERS - CO 91
VICTOR, IDAHO 83455
208-787-2495

very infrequent. As a result, the permit requires that flow volume of these discharges be monitored only on an instantaneous basis. Discharge 001 will consist of mine water and will be continuous. As a result, continuous flow monitoring is required at this discharge point.

The proposed permit requires compliance with National Best Practicable Treatment Standards for coal mines effective immediately. Effluent limitations more stringent than the Federal standards are not necessary to comply with Wyoming's in-stream water quality standards. The quality and quantity of the discharges must be monitored on a regular basis with reporting of results to the regulatory agencies quarterly.

Due to the fact that the U.S. Environmental Protection Agency is in the process of developing toxic effluent limitations for coal mines, a relatively short term permit (expiration date December 31, 1980) is proposed.

(7) PERMIT NAME:	TOWN OF BYRON, WYOMING
MAILING ADDRESS:	P.O. BOX 126 BYRON, WYOMING 82412
PERMIT NUMBER:	Wy-0020281
(8) PERMIT NAME:	TOWN OF COKEVILLE, WYOMING
MAILING ADDRESS:	P.O. BOX 254 COKEVILLE, WYOMING 83114
PERMIT NUMBER:	Wy-0021032
(9) PERMIT NAME:	TOWN OF DIXON, WYOMING
MAILING ADDRESS:	P.O. BOX 988 DIXON, WYOMING 82323
PERMIT NUMBER:	Wy-0021938
(10) PERMIT NAME:	TOWN OF GREYBULL, WYOMING
MAILING ADDRESS:	P.O. BOX 271 GREYBULL, WYOMING 82426
PERMIT NUMBER:	Wy-0020583
(11) PERMIT NAME:	HUNTLEY ATTENDANCE CENTER
MAILING ADDRESS:	HUNTLEY WYOMING 82218
PERMIT NUMBER:	Wy-0021695
(12) PERMIT NAME:	TOWN OF SINCLAIR, WYOMING
MAILING ADDRESS:	P.O. BOX 247 SINCLAIR, WYOMING 82334
PERMIT NUMBER:	Wy-0020397
(13) PERMIT NAME:	SAINT STEPHENS SCHOOL
MAILING ADDRESS:	P.O. BOX 294 ST. STEPHENS, WYOMING 82834
PERMIT NUMBER:	Wy-0021636
(14) PERMIT NAME:	TOWN OF TENSLEEP, WYOMING
MAILING ADDRESS:	P.O. BOX 5 TENSLEEP, WYOMING 82442
PERMIT NUMBER:	Wy-0020168

The wastewater treatment facilities serving the Town of Byron, Wyoming, consist of a three cell non-aerated lagoon system. The last cell discharges to the Snake River (Class II water) via a siphon.

The wastewater treatment facilities serving the Town of Cokeville, Wyoming, consist of a three cell lagoon system in which the first cell is aerated. The third cell discharges to the Bear River (Class II water).

The wastewater treatment facilities serving the Town of Dixon, Wyoming, consist of a single cell non-aerated lagoon. The lagoon discharges to the Little Snake River (Class II water) via an unnamed drainage.

The wastewater treatment facilities serving the Town of Greybull, Wyoming, consist of a single cell non-aerated lagoon of approximately 25 surface acres. The lagoon discharges to the Big Horn River (Class II water).

The wastewater treatment facilities serving the Huntley Attendance Center consist of a septic tank which discharges directly to Kater Drain (Class III water).

The wastewater treatment facilities serving the Town of Sinclair, Wyoming, consist of two Imhoff tanks, one of which serves the east side of town and one which serves the west side of town. The tank on the east side discharges to the complete containment pond which also serves the Sinclair refinery. The tank on the west side discharges to

Sugar Creek (Class IV water) via an unnamed drainage. This permit applies only to the discharge from the west Imhoff tank.

The wastewater treatment facility serving the St. Stephens School near Riverton, Wyoming, consists of a two cell stabilization pond system in which the first cell is aerated. The effluent from the second cell enters the Little Wind River (Class II water).

The wastewater treatment facilities serving the Town of Ten Sleep, Wyoming, consist of a single cell non-aerated lagoon. The lagoon discharges to Ten Sleep Creek (Class II water).

The present permits for these facilities require only that the existing facilities be operated at maximum efficiency, however, the Towns have now been offered Federal construction grant funds which means the wastewater treatment facilities must now be upgraded to meet Federal effluent standards and Wyoming's in-stream water quality standards. The proposed permits include limitations on BOD-5, total suspended solids, fecal coliform bacteria, pH and total residual chlorine. Schedules of compliance to meet these limitations must be submitted by December 1, 1979. Upon receipt and approval, the schedules of compliance will become an enforceable part of each permit.

The only permit which contains ammonia limits is the Dixon permit. The ammonia limits included in this permit are designed to insure compliance with Wyoming's in-stream water quality standard for that parameter. Since the State considers ammonia removal to be tertiary treatment, the achievement of that limitation will be required only if Federal construction grant funds for tertiary treatment are offered.

Because the receiving stream of the Sinclair discharge is a Class IV water, no ammonia limitations apply and the basic secondary treatment standards for BOD-5 and total suspended solids are sufficient.

All of the other above listed facilities have high dilution factors in the receiving stream and it is not necessary to set limitations on ammonia to insure compliance with in-stream ammonia limitations.

At this time it appears that violation of Wyoming's in-stream standards for dissolved oxygen will not occur at any of these facilities provided National Secondary Treatment Standards are achieved. This position will continue to be evaluated (and the permits modified if necessary) as more information becomes available.

The proposed permits contain a section which requires each Town to begin planning for expansion of the wastewater treatment facilities once 80 percent of the design flow is reached.

Monitoring of all limited parameters is required on a routine basis with reporting of results quarterly. The proposed permits are scheduled to expire July 31, 1984.

The Towns have been exempted from meeting Federal effluent requirements by July 1, 1977 since, in accordance with Federal requirements, they specifically requested an extension due to the previous unavailability of Federal construction grant funds. In addition, the Towns have requested and received less stringent effluent limitations for the parameter total suspended solids as authorized by Federal regulations for stabilization pond systems with a design flow of less than 2.0 MGD.

(15) PERMIT NAME:	CITY OF GILLETTE, WYOMING
MAILING ADDRESS:	P.O. BOX 3003 GILLETTE, WYOMING 82716
PERMIT NUMBER:	Wy-0020125

The wastewater treatment facilities serving the City of Gillette, Wyoming, consist of an activated sludge plant with no disinfection units. The plant discharges a portion of its effluent to the Wyodak Stream Electric generating plant and the remainder to Stonepile Creek (Class IV water). This permit addresses only that portion of the effluent which is discharged to waters of the State (Stonepile Creek).

The present permit for this facility requires only that National Secondary Treatment Standards for the parameters BOD-5 and total suspended solids be achieved. However, the City has now been offered Federal construction grant funds which means the plant must be upgraded to meet Wyoming's in-stream water quality standards. Because the receiving water is Class IV, the only additional limitation which must be met is a strict year round limitation on fecal coliform bacteria.

The proposed permit contains a section which requires the City to begin planning for expansion of the wastewater treatment facilities once 80 percent of the design flow is reached.

Monitoring of all limited parameters is required on a routine basis with reporting of results monthly. The proposed permit is scheduled to expire July 31, 1984.

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 are protected.

PUBLIC COMMENTS

Public comments are invited any time prior to August 27, 1979. Comments may be directed to the Wyoming Department of Environmental Quality, Water Quality Division, Permit Section, Hathaway Building, Cheyenne, Wyoming 82002, or the U.S. Environmental Protection Agency, Region VIII, Enforcement Division, Permits Administration and Compliance Branch, 1860 Lincoln Street, Denver, Colorado 80296. All comments received prior to August 27, 1979, will be considered in the formulation of final determinations to be imposed on the permits.

ADDITIONAL COMMENTS

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.

14-High Country News



by Mari Sandoz, University of Nebraska Press, Lincoln, Neb., 1935, \$3.50 paperback.

Review by Dan Whipple

I stumbled across the work of Mari Sandoz quite by accident. A friend of mine left Sandoz's book, *The Cattleman*, lying around long enough for me to read it. I was impressed and ordered Sandoz's master work, *Old Jules*.

Old Jules is Mari Sandoz's father. He was an irascible, unkempt, belligerent old coot who was among the first settlers of the

"He will always look like the grass where the buffalo have eaten and smell of the new ground his feet have walked on."

Nebraska sandhills. His story is an epic of the settlement of the West that belies the movie traditions. Yet *Old Jules* is full of drama — hardship, success, failure and tragedy.

From his daughter's perspective, he was not a very likeable fellow. But Sandoz almost forgives her father for his uncouth and overbearing ways. She quotes one of Jules's friends, Big Andrew: "One can go into a wild country and make it tame, but like a coat and cap and mittens that he can never take off, he must always carry the look of the land as it was. He can drive the plough through the nigger-wool, make fields and roads go every way, build him a fine house and wear the stiff collar, and yet he will always look like the grass where the buffalo have eaten and smell of the new ground his feet have walked on."

Jules made a haphazard living as a surveyor, locating free government land for homesteaders, helping new arrivals stake claims on abandoned homesteads, and, later, fighting to keep the lands open for the settlers and away from the fences of stockmen. In doing so, he fought some of

and phrases bring the land and people to life.

It is probably unnecessary to say that Sandoz is a classic writer in the Western

tradition. But it does not hurt to remind people that a literary gem like *Old Jules* exists, particularly for those interested in an accurate picture of the settlement of the West.

UFOs preach environmental concern, researcher finds

by Philip White

The anti-nuclear and wildlife conservation forces may have an unidentified ally, if R. Leo Sprinkle, director of counseling at the University of Wyoming, is right.

Sprinkle, who has a Ph.D. in guidance and counseling from the University of Mis-

souri, has stopped scoffing at unidentified flying object reports and is actively investigating them. He has seen UFOs several times himself and has interviewed many people contacted by UFOs, sometimes using hypnotic time regression techniques to elicit greater recall.

From his 20 years of UFO research, a central theme has emerged, Sprinkle tells HCN: "We must have concern for natural environmental processes, not contribute to pollution, be careful of nuclear devices and radiation."

"I've come to the opinion that the UFO experiences are a display to teach us something about ourselves and our planet and how to move toward being planetary persons and then cosmic citizens," Sprinkle says.

Many contactees' lives are changed by their UFO experiences, Sprinkle says. They move toward greater self-awareness and planetary concern.

Pointing to a book called *Stalking the Wild Pendulum* by Itzhak Bentov, Sprinkle says his UFO research supports the author's concept that "the whole universe is alive, that our mechanistic view of the universe is far from complete. We get a feeling of oneness with plants, animals, rocks, planets, stars and other levels of life, or consciousness, that may be around."

Sprinkle says the message is that "we should not only preserve, but appreciate, what we have here."

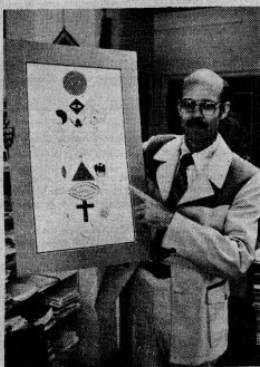


Photo by Phil White

R. LEO SPRINKLE discusses a chart drawn to show one woman's changes in belief, which culminated in her efforts to be a good "cosmic citizen."



the battles that are still being fought in the West today over federal land.

Jules had a few brushes with fame and the famous. When he severely injured his leg shortly after settling in Nebraska, he was treated by Dr. Walter Reed, who in later life eradicated yellow fever during the building of the Panama Canal. Reed and Old Jules maintained a life-long correspondence.

Jules also testified in a major land fraud case — making enemies of neighbors who had located illegally on government land in the process.

Sandoz's writing makes the West breathe and bleed. Her perfect metaphors

Dear Friends,

HCN EXCLUSIVE!

It took three weeks for the dailies to catch up with High Country News.

On June 1, 1979

HCN published the front page story 'Could...Old Faithful Falter?' — reporter Phil White's exposé of how proposed geothermal exploration threatens nearby Yellowstone's geysers.

Not until June 20

did the story appear in any other regional newspapers. The *Billings Gazette* picked it up on that date, followed by the *Denver Post* on June 24, the *Idaho Statesman* on June 27, the *Los Angeles Times* on June 30, and the *Washington Post* on July 1st.

For timely, in-depth reporting, get *High Country News*. It beats the dailies.

Only \$12 for one year (25 issues).
Enclosed is my \$12. Sign me up now.

Name _____
Address _____
City _____
State & Zip _____

Send to HCN, Box K, Lander, WY 82520.

EXTRA!
EXTRA!

It is with guarded optimism that we bid farewell to the oldest and most unreliable member of the circulation department.

For some time now we have been aware that our addressograph was on its way out. After 40 years of faithful service addressing bank statements, invoices, and, most recently, newspapers, the machine began to hint it was ready to retire. Occasionally it would eat a stencil plate, chew it for a moment, then spit it out at the nearest forehead. But we usually managed to get the paper to the post office on time.

Until recently, that is. The June 29th and July 13th issues were late. June 29th, the machine's infirmities stretched a one-day job into two. Last issue, we got the paper out only because of the generosity of the county clerk, Jim Farthing, who got up early Saturday morning to let us use the county's addressograph.

Help is on the horizon, however. In June we ordered a new (reconditioned) machine, which should arrive before the August 10th issue. Meanwhile, the company that manufactured the machines is lending a hand-powered addresser to mail this issue. Keep fingers crossed.

Since our old machine isn't functioning, we will not be sending renewal cards for awhile. Keep an eye on your expiration date.

— the staff



Wilderness woes

society de-emphasizes
West. 1

Medicine Bow

cursed wind now
blessed. 1

J. David Love

makes rocks talk. 6

Colorado

legislative disputes
keep air dirty. 7

Carter on energy

HCN reacts. 2
officials react. 11