

The Environmental Bi-Weekly



High Country News

Vol. 8 No. 14

Lander, Wyoming

Friday, July 2, 1976



Solar made simple, cheap

San Luis Valley shows rural ingenuity

People in southern Colorado's San Luis Valley aren't waiting for federal or state lawmakers to solve their energy problems. They have taken the matter into their own hands — and have several dozen working solar systems as proof of their success.

Incomes in the valley are generally low. Forty per cent of the families earn less than \$5,000 a year. Sometimes over \$100 a month of that goes for home heating bills. While they can't afford such high bills, neither can they afford most of the solar energy systems commercially available.

In their favor are the abundant sunshine available in the cool, sparsely populated valley and the personal resourcefulness which still seems a part of the rural heritage. San Luis Valley people have the skill and the sun to make solar energy work. Their systems are not as elaborate, durable or efficient as commercially available ones. Many are hastily made out of scrapped materials by amateur builders and only provide a small portion of a home's energy needs. But crude as they may look, the devices are providing significant returns of money and energy — at a time when most of the public is still waiting for the cost of commercial collectors to go down. Why worry if a collector has a few air leaks, if it only cost you \$85 and a day's labor to build and is saving you \$30 a month on your heat bill?

Word of individual solar successes has spread interest in solar energy in the valley. This winter Akira Kawanabe and his employer, the San Luis Valley Council on Governments, set up a six-week course at Adams State College in Alamosa, Colo. Students met with physicist and teacher Malcolm Lillywhite of Evergreen, Colo., all day every Saturday to learn how solar energy systems work.

When the course ended, the San Luis Valley Solar Energy Association was formed. Now over 50 families strong, the group provides community leadership for energy conservation and solar energy projects.

While it shrinks individual heat bills, the sun is also helping solve community problems in the San Luis Valley. The surge in building has created new jobs. Some have been filled by delinquent teenagers. The sun has also brought diverse elements of the community together. Kawanabe says that solar energy organizing has given the regional council of governments, held suspect by some for its land use planning efforts, a boost in prestige and credibility.

Private enterprise in the valley has also caught on to solar energy. Bill North, a



PHARMACIST STIRRING UP NEW STORAGE SYSTEM. Paul Wise, a retired pharmacist, is experimenting to find an improved storage material for the heat he collects in his home-made solar collector. The system,

which has a recycled look, only cost Wise \$158.39. It and a wood stove provide all the heat he needs — even in winter.

local contractor, has built 27 solar systems. Most of North's collectors can only provide daytime heating. But they do save energy and money. And they are about four times as cheap as most commercial systems.

A second business has recently been formed by Adams State College student Arnold Valdez. Valdez is building solar water heaters, which make excellent portable showers, he says.

Kawanabe is hoping to earn some state or federal support for future energy conservation and solar energy projects in the valley. While everyone wants to build something, no one wants to study larger questions, he says. Kawanabe is looking for funds for an assessment of the valley's climate, energy needs, potential for energy conservation, and vulnerability to higher fuel prices.

"If energy prices go up, what will happen (continued on page 5)

Regional EIS not required High court rules against Sierra Club

The U.S. Supreme Court ruled June 28 that the federal government does not have to prepare a regional environmental impact statement for coal development in the Northern Great Plains. The decision finally settled the suit brought by the Sierra Club and several other environmental groups in 1973 against the Interior Department.

The ruling was hailed by industry representatives in the region. Several environmentalists, while disappointed, said they didn't think the rul-

ing in itself would signal an immediate coal rush.

The new leasing program designed by the Interior Department sets an extended timetable for coal leasing (see HCN 6-18-76, page 10). It includes preparation of subregional impact statements, which are smaller than what the plaintiffs in the suit had in mind. Since only one of the subregional statements has been completed, leasing of new tracts is still at least 10

(continued on page 6)

2-High Country News — July 2, 1976



HCN Letters

CAVES PROTECTION

Dear editors:

The Student Senate of the Associated Students of the University of Wyoming is attempting to help the members of the Vedauwoo Student Grotto (a university speleological club) find alternate sources for publicity and funding for their campaign to save the Horsethief-Big Horn caves from destruction.

These caves contain rare formations of gypsum and calcite not found anywhere else in Wyoming, and prehistoric animal skeletons of archeological and scientific value. The caves are in danger of being destroyed by the drilling and blasting of uranium exploration in the area.

The Vedauwoo Student Grotto has already published and distributed two pamphlets and has held conferences with various environmental groups and the mining companies.

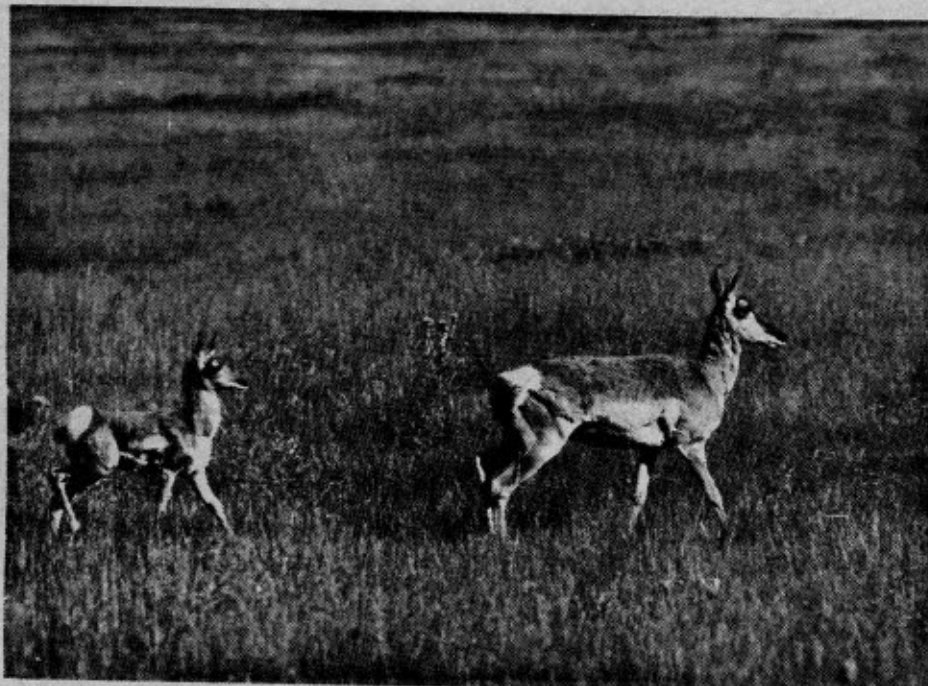
To continue their efforts, they need \$300 for slide duplication (they present slide shows on the cave to the public), production of booklets, and postage. They also need funds to pay legal fees. The Associated Students cannot use its state funds for legal fees, hence the search for alternate sources.

If any of your readers can help, please have them contact me.

Bruce Lawton
ASUW President
Box 3625 University Station
Laramie, Wyo. 82071

SMALL SUCCESS STORY

(Editors' note: Hank Rate asked us to share the following letter with HCN readers who responded to an article in the Oct. 12, 1973, HCN entitled "Save the Cedar-Bassett." The Cedar-Bassett area is the home of one of the finest resident elk herds in Montana, according to Rate. The



Pronghorn antelope doe and fawn. Photo by the National Park Service.

area is also notorious for its geological instability.)

Dear friends:

YOU DID IT! Next time you're tempted to say, "What good will my letter do?", remember your Cedar-Bassett efforts.

For those of you who haven't received official notification from the Forest Service, they have decided to throw out their 1973 draft statement (stating their intent to road and log Cedar Creek), and include the Cedar-Bassett country in their North Absaroka study area.

This is a far cry from wilderness or roadless classification, but it assures that the area will be considered as an integral part of the large wilderness mass in the North Absaroka. It also buys us 8 to 10 years (from 1973), since they indicate that the earliest date the study can be started is 1978. As we have claimed all along, time is on our side. And hopefully time will erase some of the hard feelings that must have been created by our recent wars.

The only stated reason for not issuing the final statement was the 241 written responses to the tentative decision to road and log the area. So each and every one of you can take personal credit for the accomplishment.

Except in athletics, no victory is clear-cut, and there are a number of things that

need watching in this area. Crevice and Bear Creek need the same protection, and we need to verify that they will be included in the North Absaroka. We need to be sure that a geothermal leasing program (or other activity) does not destroy the wilderness character of this country before it can be considered with the North Absaroka. The West Side of the Yellowstone is just now being studied.

Farther afield, the earlier recommendation for wilderness classification of lower Slough Creek is threatened by an ancient road right-of-way (alleged) that the Forest Service uncovered, but now is fighting. The Gallatin Sportsmen are pushing for a declared game range, part of which includes Porcupine-Buffalo Horn in our country.

Hank Rate, Corwin Springs, Mont.
Bill Hoppe, Gardiner, Mont.

ANTI-PREDATOR POISON

Dear Bruce,

You did a fine job on your profile of me (HCN, 6-18-76, p.16). There are only two little quotes where I must have mumbled.

"Randall thinks the sheepman needs help." Really, they don't! The help I had in mind was the sheepherder type that know how to graze sheep through an area without damaging the land — or camping in the same spot for weeks — until the vegetation is ground into a dust bowl. A good herder can do a lot to alleviate predator problems — just by staying with the sheep. Nowadays, most of them stay in the wagon.

"Randall isn't totally against the use of predator poisons." Possibly strychnine eggs for skunks in rare cases — where it might alleviate a rabies outbreak. Usually,

Ken Bohlig memorial

A 31 year old Montana wilderness advocate and friend of High Country News died in the Salmon River Breaks June 4 in a climbing accident.

The Montana Wilderness Association, in a tribute to Bohlig, said he brought MWA a "skilled and eloquent mind, a cool and joyous daring, and the fine-honed wisdom of an experienced activist. . . . The good fortune of Ken's affiliation came to us swiftly, only a few years ago, as though nature, in a stroke of beneficent self-interest, had dispatched him as special envoy."

The Montana Wilderness Association and the Sierra Club have established the Ken Bohlig Wilderness Memorial. Contributions can be sent to: Ken Bohlig Wilderness Memorial, Box 84, Bozeman, Mont. 59715.

rabies has already infected those animals that are susceptible by the time the poison is exposed, and animals that are affected with rabies will not eat poison — or anything else. Rabies is one of nature's tools for thinning dense populations — at the same time, rabies scares the hell out of the public. Usually, about all that is accomplished with poison during a rabies outbreak is some public relations that assures everyone we are on top of the problem.

Strychnine, 1080, thallium — no way these toxicants should ever again be allowed in the hands of predator control people. If we could get good biology in, and power politics out, we could start digging out some answers to the predator problems. I don't believe that poison will be any part of the answer.

Dick Randall, Defenders of Wildlife
Rock Springs, Wyo.

SPELEOLOGISTS SEEK SUPPORT

Dear HCN:

We write seeking the air of the readership in an important conservation project in Colorado. Colorado Fuel and Iron Corp. has placed mining claims on extensive sections of federal and private lands near Glenwood Springs, for a limestone quarry for planned smelting operations. These mining operations would seriously affect hunting, fishing, and camping in part of the Willow Peak-Deep Creek area of the White River National Forest and profoundly disturb a much larger portion of the eastern flank of the White River Plateau.

Legal requirements of local and federal agencies have so far prevented immediate development. Forest Service authorities are in the process of recommending withdrawal of certain segments of the proposed mining area from mineral claim entry, and the Garfield County Planning Commission has already rejected one environmental impact statement submitted by CF&I Corp.

However, involved public officials probably cannot long withstand wealthy corporate interest without a show of public support. We therefore urge — beg — concerned readers to write a postcard of support to the responsible public officials.

Send cards to: Board of County Commissioners, Garfield County Courthouse, Glenwood Springs, Colo. 81601, and Board of County Commissioners, Eagle County Courthouse, Eagle, Colo. 81651.

Norman R. Pace
for the Colorado Grotto of the
National Speleological Society
Denver, Colo.



HIGH COUNTRY NEWS

Subscribe today. \$10 for 25 issues. We strive to keep you informed on the energy developments of the region. Stripping, solar, clearcutting, wilderness are just a few of our beats. Join us won't you?

Enclosed is \$10. Send HCN to:

Name _____
Address _____
City _____
State _____ Zip _____

Mail to: Box K, Lander, Wyo. 82520

High Country News

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

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

Subscription rate \$10.00
Single copy rate 35¢

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

Box K, Lander, Wyoming 82520



Guest Editorials

HCN

Modest proposals : A depletion allowance for you!

by Paul Danish

(The following guest editorial is reprinted from the NEW MEXICO INDEPENDENT, Albuquerque, N.M.)

As usual, Congress bungled its handling of the Oil Depletion Allowance. It eliminated it.

What it should have done is transferred it — with some modifications — from the oil companies to the consumers.

The depletion allowance, you will recall, was the golden loophole which permitted petroleum producers to deduct 27.5% of their gross revenues from their federal income taxes (the percentage was somewhat lower in recent years).

The allowance was justified by the theory that since petroleum is a non-replenishable resource, the oil companies needed the non-taxed 27.5% of their revenues to go out and find additional oil to replace their depleted reserves.

Unfortunately, however, in order to take advantage of the depletion allowance the petroleum producer actually had to deplete the nation's petroleum resources, which

are lamentably finite. Our present state of semi-vassalage to his excellency the Shah of Iran and King Khaled is the result.

It follows that if a depletion allowance is to serve the public interest it should not encourage depletion of a particular resource but should encourage its conservation.

Since the raison d'être of oil companies is to deplete petroleum, it is unlikely that they will conserve it, no matter how generous a tax break they are given.

Granting the depletion allowance to the consumer, however, would be an entirely different matter. The government could reasonably expect the average American to avoid depleting the nation's petroleum reserves if paid as handsomely to do so as the oil companies have been paid to deplete them.

Obviously it would be rather complacent for the government to allow the taxpayer to claim a 27.5% depletion allowance for every barrel of oil he did not use. Some citizens might not be above gilding the lily.

Consequently instead of a depletion allowance the consumer should be granted an oil substitution allowance. The latter

would permit the taxpayer to write off 27.5% of any replenishable energy resource he or she consumed in lieu of a petroleum (or other non-replenishable) fuel.

The motorist who chose to run his or her auto on grain alcohol or on methane derived from chicken droppings, for instance, would be permitted to deduct 27.5% of its cost from his or her income. Similarly the homeowner who heated his house with wood instead of fuel oil and cooked with charcoal instead of natural gas would be able to claim the deduction.

A solar-heated home would also be eligible, although fairness would dictate that the owner keep track of the number of BTUs pumped out of the solar collectors and into the home. He would then be allowed to claim a deduction based on 27.5% of the cost of an equivalent amount of oil.

The consumer living in an all-electric home or driving an electric-powered vehicle, or the industry consuming large quantities of electric power would not be allowed to claim the allowance, however, unless it could be demonstrated that the powerplants supplying them utilized replenishable fuels. Consequently private and indus-

trial consumers of electricity will have a vested interest in forcing utilities to convert to solar power, methane synthesized from organic matter, and wood and-or cow chips.

Additional savings could be realized by allowing people who rode bicycles or walked to claim the 27.5% substitution allowance on part of their food.

Not only will the oil substitution allowance conserve the nation's scarce petroleum reserves, therefore, but it will contribute greatly to converting the country to renewable fuels, something it will eventually have to do anyway. Whole new industries will spring up to supply wood, methane, ethanol, and solar collectors, replacing the increasingly irrelevant oil companies.

It is well known, for example, that the Energy Research and Development Administration (ERDA) is about to spend several billion dollars annually studying alternative energy sources which were discovered years ago.

Paying the American people to solve the problem is a far more satisfying approach than paying ERDA to reinvent the wheel.



Public lands should stay public

by Mike Leon

(The following guest editorial is reprinted from the SHERIDAN PRESS, Sheridan, Wyo.)

In 1899, Wyoming's constitutional convention adopted an ordinance which said: "The people inhabiting this state do agree and declare they forever disclaim all right and title to the unappropriated public lands within the boundaries thereof."

And in 1947, amid a cry for the "return" of public land to Wyoming, Sen. Leslie Miller observed that Wyoming could hardly demand a return to itself of something it had never owned.

These observations can be found in Dr. T. A. Larson's "History of Wyoming." Speaking of history, I am reminded of a quotation from Cicero which I ran across recently: "Not to know what happened before one was born is always to be a child."

There is a tremendous thrust today to negate federal authority over public lands and it comes from two contesting sources: those who would exploit Wyoming and those who would preserve it.

Rhetorically speaking, this thrust may not be the same as the call for the "return" of public lands, but substantively it is.

For example: William H. Budd who is executive secretary of the Wyoming Mining Association has just let fly with another broadside against federal regulations. Budd says we don't need federal laws about land reclamation on federal properties. The state is entitled to such regulation he claims. Why, if you shoot a deer illegally on federal land who arrests you? A state employee, of course.

This simplistic reasoning ought to give pause to every environmentalist who prefers to see the state in charge of federal lands. Mr. Budd and his association were, not long ago, fighting the federal strip mine law, twice vetoed by President Ford.

For example: Mr. Budd is indignant at

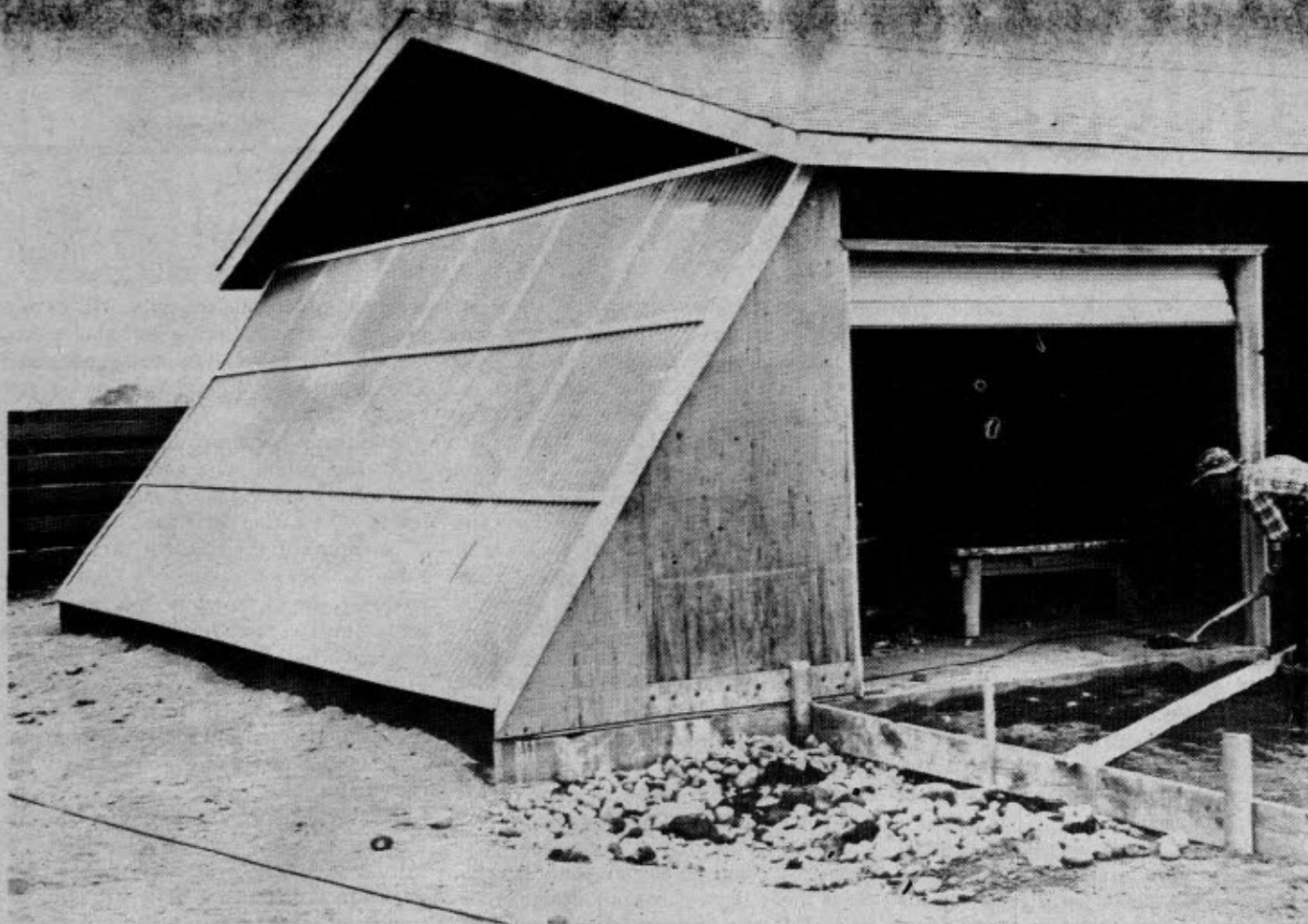
the intrusion of the Environmental Protection Agency into industrial affairs.

Now, at the same time, an environmental group from Meteteese pursues a parallel line of attack by asking the State Department of Environmental Quality to declare 890 acres of the Shoshone National (get that: "National") Forest as Wyoming State "designated lands." The director of DEQ has responded with what seems to me to be conflicting statements. First, he says that the designated lands classification would not stop construction of a proposed copper porphyry mine by Ammax but would merely express the feelings of the Council. So far so good. Then he says that although the land is in national forest, Wyoming controls the area in question. Meaning what?

The question of federal-state relations is always a pregnant one, no doubt about it. But the question of whether the federal government controls federal lands is, in my opinion, a sterile debate, long since settled by law, by tradition, by administration, and by history. That the environmental movement is joining in the current push to minimize the federal presence on its own lands is indicative that Cicero's 2056 year old observation is still relevant.

For Wyoming's exploiters, there is a bonanza in weakening federal legislation on land reclamation and other matters, and in eventually inducing Congress to give up its time-honored authority over the federal lands. (It was merely 30 years ago that an effort was made to induce Congress to sell public lands at a few cents an acre.) For the rest of us there is nothing but trouble in such a hassle over jurisdiction and authority.

For what we need is the best performance from both levels of government, cooperation between them, in the effort to protect Wyoming. That goal is not easily obtained. But it will not be obtained at all if we do not establish it and work for it relentlessly.

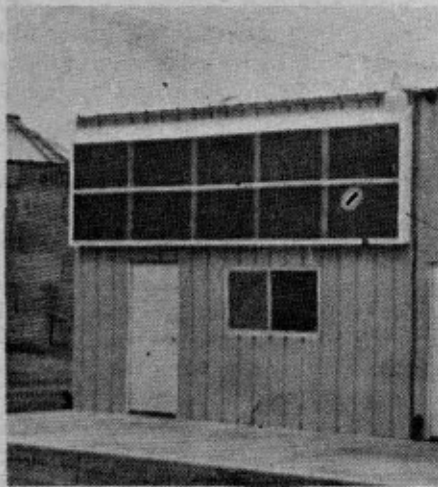


INCREASING SOPHISTICATION. While many of Bill North's commercial installations trap heat for use only while the sun is shining, this system also includes heat storage in rocks buried 30 inches under the floor of the new building. The fiberglass and sheet metal collector is 10 x 24 feet, designed to heat a 24 x 46 foot building near Center, Colo. Thermostatically controlled fans pull heat out of the rock storage when necessary. The ceiling has 12 inches and the walls have four inches of fiberglass insulation.

WARMEST CRAWL SPACE. Institutional problems have beset solar energy advocates from the beginning. Here, the obstacle was created by the most basic American institution of all — the family.

The owner of this home near Center, Colo., bought a solar collector from Bill North to help pare down an electric heat bill that runs as high as \$112 a month. North built the 80 square foot collector shown here and ducted the heat under the floor. Unfortunately, the homeowner's wife will not allow any holes to be cut in the home's wall-to-wall carpeting.

The couple is believed to have the warmest crawl space in Colorado.



VERTICAL PANEL HEATS SHOP. Bill North built the solar panel for this shop and office building near Center, Colo. The owner, Bob Felmley, was pushed toward a solar system by high propane prices. This system cost less than \$300. It includes a thermostatically controlled fan to draw heat into the shop from the collector. Felmley reports that even on cold, windy days the solar panel brings the temperature in the shop up to 55 degrees.

North's collectors save energy, cash

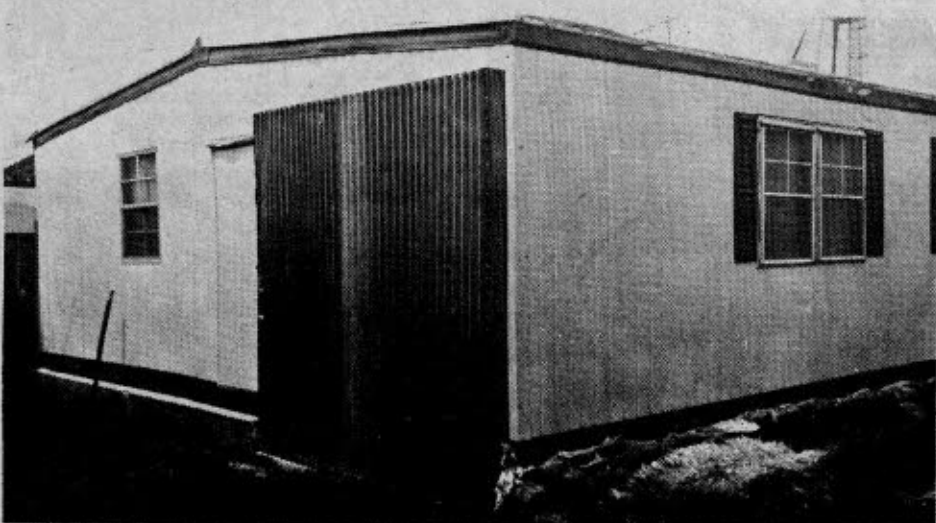
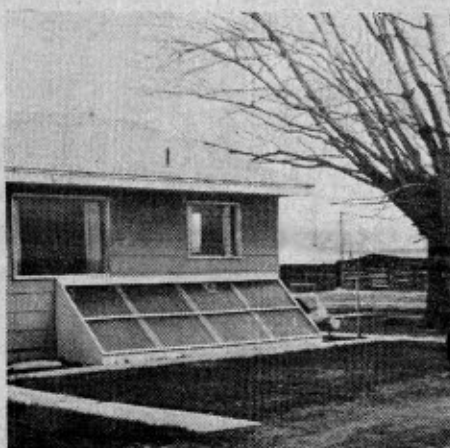
Bill North is one of several small businessmen in the San Luis Valley who is both profiting from and contributing to the current surge of interest in solar energy. A contractor, North has built 27 solar collectors in the San Luis Valley. Most of his installations don't have storage systems and are designed for supplementary daytime heating only. He charges about \$4 per square foot of collector.

Some of his customers are saving \$30 a month on what used to be a \$150 a month winter propane bill, North claims. The payback time for these collectors in the sunny but cold San Luis Valley appears to be short compared to other commercial systems — only two or three years in some cases.

North's panels are made of fiberglass guaranteed for 10 years and corrugated aluminum. Heat is collected by moving air along the back of the aluminum and sending it into the crawl space of a home. The product is a simple, cheap supplement to existing home heating systems.

North has 15 orders for collectors which he hasn't found time to build yet.

Fitting existing homes with collectors is sometimes challenging, he says. "The 50 to 70 year old farmhouses in this valley weren't built for collectors," he says. But the region's older homes do have one feature which North uses to advantage. Because of a high water table, most of the homes are built up off the ground. North says he uses the air in the crawl space to temporarily store the heat until it is needed in the house.



SIMPLE AND CHEAP. This solar collector cost its owner only \$85 and one afternoon's labor. Bill North was the builder. It is made of fiberglass and corrugated sheet metal. It is connected to existing duct work in the mobile home.

When the sun is out and the family wants heat from the panel, they remove a sweater stuffed in the duct work. When they do not need the heat, they stuff the sweater in the duct.

The owner learned about overheating problems the hard way. Once, when he had the sweater in the duct, the collector blew up. Now, even with the fiberglass yellowed from the high heat of the explosion and a crack between the fiberglass and the frame, the panel is working well, the owner says.

The home is in the Center, Colo., area at an altitude of over 7,500 feet where winter temperatures of 20 degrees below zero are not unusual. The owner was using about \$150 worth of propane a month. Now, during the heating season his bills are cut by as much as \$30 a month. The home is 24 x 60 feet and is poorly insulated.



SOLAR HOUSE near Center, Colo., with vertical collectors built by Bill North.



SUN PIONEER. Arnold Valdez, a San Luis Valley pioneer in using the sun to conserve fossil fuel energy. Above, Valdez's second home.

Rural ingenuity...

(continued from page 1)

to our rural economy?" Kawanabe asks. "These kinds of studies are very difficult to get a community-wide effort on."

His program would also support energy education and demonstration projects.

Kawanabe, an architect by training, was raised on a potato and barley farm in the San Luis Valley. He believes that other rural communities are ready for do-it-yourself energy conservation programs, but they lack information and advice.

He suggests that those who are teaching energy conservation and solar energy applications in other communities try to steer clear of politics. The majority of the people who are interested will not be intellectuals trying to restructure American society, he says. They will just be trying to solve their own problems. Nor will they usually be interested in too much technical detail.



AKIRA KAWANABE has helped spread word of the solar energy successes in San Luis Valley.

They will want to know the most inexpensive way to build a solar system that works.

Most important, Kawanabe says, is for people to disseminate information on solar energy in rural areas. Since the word has started to spread in the San Luis Valley, solar energy projects have become contagious. —JN

San Luis Valley people have the skill and the sun to make solar energy work.

Three houses and shower business

The homes of Arnold Valdez of San Luis, Colo., reflect the growth of his concern about energy. A student at Adams State College in Alamosa, he built his first home of adobe in a style that is traditional in the Chicano community in the San Luis Valley.

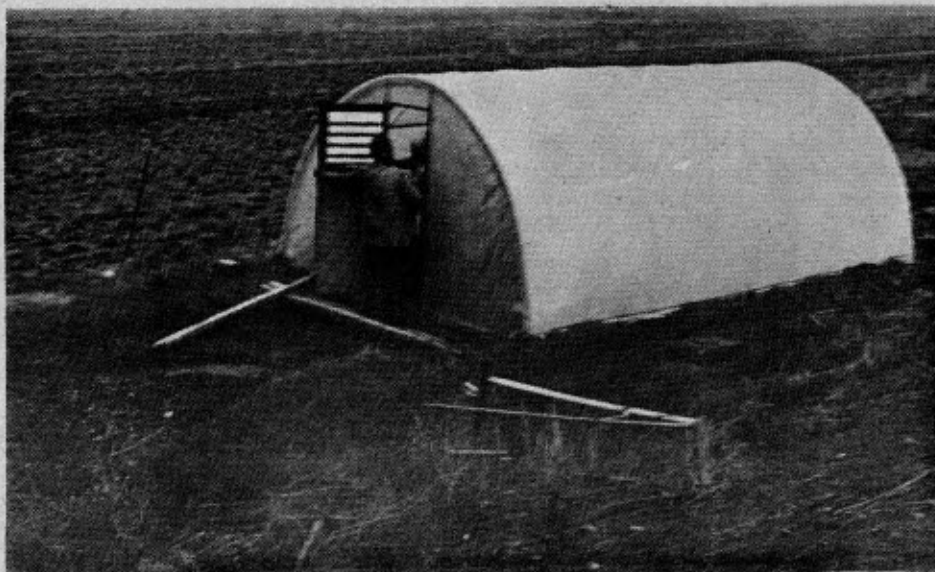
Now he can point to the shortcomings of his original plan — only two small windows on the sunny south side. He is patiently testing out newer ideas.

Valdez's second home (shown in photo) is an adobe tower, carefully planned to collect

the sun in south and east facing windows. On the bottom floor is a solar heated sauna bath.

A third project will be a 2,000 square foot adobe home with a solar greenhouse on the east wall. The south wall will be all windows. To maintain a fairly even temperature, he will build two-foot-thick walls made of two layers of adobe and a layer of ground pumice.

Valdez is becoming well-known in his community for the solar devices he has built which include both water and air heaters. His portable solar showers have been purchased by Adams State College archeologists to use on their digs. They have also been used by migrant farm workers.



HOT WATER WARMS GREENHOUSE. At first, Marshall and Judy Cowan of Mosca, Colo., were disappointed when their new 2,000 foot deep irrigation well produced 86 degree (F.) water. They had to build a cooling pond to use the water for irrigation.

But since the initial disappointment, they've discovered how to use the hot water to help grow potatoes, tomatoes, and marigolds. They set a commercially built greenhouse over their hot water ditch. Seedlings started in February were put in the new greenhouse on March 1st. By the end of April, they had ripe tomatoes. The 10 x 20 foot greenhouse cost about \$400, the Cowans say.

Pharmacist stirs up storage system

Paul Wise built a solar collector and storage system for \$158.39. While it may not be beautiful, it and a wood-burning cook stove provide all the heat necessary for Wise's home 8,000 feet above sea level in Mogote, Colo.

Wise, a retired pharmacist, is also experimenting with chemical storage systems. He hopes to perfect a system which may hold heat more efficiently than rock or water storage systems. He's currently using 200 pounds of sodium sulphate held in three-pound coffee cans. Heat is moved from the top of the collector into a wooden cabinet inside the house which contains these cans.

Wise's somewhat leaky 6 x 10 foot collector is made of salvaged glass and corru- (continued on page 6)

6-High Country News — July 2, 1976

Identify with ear tags? Or spray them out?

Proposals for poachers

by R. C. Burkholder

According to the Rock Springs (Wyo.) **Daily Rock**, poachers killed an estimated 4,563 deer, antelope, elk, and moose in southwestern Wyoming during 1975. Thirty-nine percent of the animals killed illegally were shot and left to rot in the field.

Ain't good, but what can be done about it?

Since this seems to be the day and age of proposals and alternative proposals, I'd like to present some of my own and the reasons why they probably won't work.

1. Initiate an environmental-eco-socio-bio-study of poachers; that is, investigate natural history of poachers to obtain information to effectively resolve, later, the problem of poaching. I would suggest the full biological study approach, including but not limited to:

a. zapping each poacher caught in the act with a sufficient amount of a muscle-relaxant tranquilizing drug to assure his cooperation during the remainder of the study.

b. identifying the poacher by tattooing an identification number on the inside of his lower lip, branding an identification number on his right hip, and attaching numbered ear tags to one or more of his ears.

c. collecting poacher blood, teeth, and parasites for laboratory study and analysis.

d. weighing and measuring the poacher to obtain data for tables, charts, and graphs.

e. installing internal or external electronic monitoring devices for field tracking and data accumulation.

There will be no need to worry over an occasional over-dose of the tranquilizing drug since the loss of a poacher now and then will not, according to previous studies in related areas, have a deterrent effect on the act of poaching by the remaining poacher population.

On the other hand, **someone** will surely oppose the study of poachers as "cruel and unusual."

2. Develop a formal Poacher Education Program designed to educate poachers in the error of their ways. Attendance will be mandatory for individuals tried and convicted of one or more poaching offenses and for individuals identified as potential poachers.

Educational systems and programs, on the other hand, as we all know, rarely if ever are successful in meeting desired goals.

3. Plan public poacher-conservationist meetings to encourage improved communications, interpersonal relations, and psycho-human understanding on a one-to-one and group-to-group basis.

After the fight, I'm afraid the group with the loudest and shrillest voices, the biggest political muscle, and the sharpest and shrewdest attorneys will prevail.

4. Inasmuch as most poaching is done with firearms of one sort or another, we can register, license, and confiscate all firearms since any firearm could be used by a poacher for poaching purposes.

On the other hand, few, if any, poachers would register or license their firearms with the result that only the firearms of non-poachers would be registered, licensed, and confiscated.

5. Establish an open hunting season on

poachers and issue free Poacher Permits to all law-abiding, non-poaching hunters, trappers, and fishermen. There would be, of course, no bag limits and no limitations or restrictions on methodology. Poachers could be taken by shooting, trapping, snagging, trolling, set-lines, poison bait stations, strafing from the air, artillery barrages, snares, etc.

As I understand it, the Poacher Protective and Defense League (P.P.D.L.) has already expressed opposition to this proposal.

6. Develop and implement a chemical poacher-control spray program utilizing a spray which is non-toxic, of course, to other forms of wildlife.

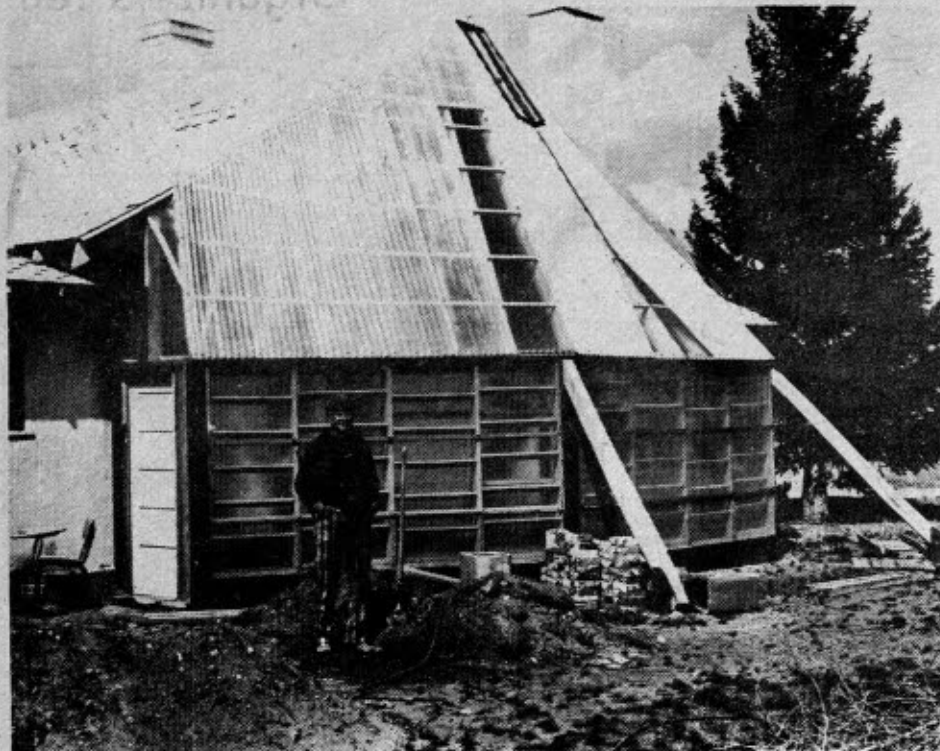
7. Develop and implement a biological poacher-control program through the introduction of selected predators into the poacher habitat. Theoretically, predators such as grizzly bears, leopards, wolves, cape buffalo, rhinoceroses, etc. should have a limiting effect on the poacher population.

Realistically, however, experts in the field of poacher-predator relations are quite certain that the poachers would simply poach the predators to the point of, or beyond, extinction.

8. Develop and implement a physical poacher-control program by constructing poacher-proof fences around all wildlife habitat. As is so often the case, this answer creates other problems which need to be answered. For example, what do we do about poachers who are fenced in, rather than out of, the areas to be protected? Also, how do we keep the deer, antelope, elk, and moose from wandering within rifle range of the poacher-proof fences?

9. My last proposal, the one most likely to be widely accepted, is to simply ignore the poacher and poaching problem because it, like a lot of our other problems, will, in time, go away. In the meantime, unfortunately, so will our deer, antelope, elk, and moose!

R. C. Burkholder is a freelance writer from Ogden, Utah.



SOLAR GREENHOUSE. A home-built solar energy project is helping Mr. and Mrs. Ken Holhaus of San Acacio, Colo., stretch out a short growing season.

Thanks

Our kindest thanks to Charles and Frances Nations, who did the research and provided the photos for this story on rural resourcefulness. Extremely resourceful themselves, the Nations are forming an energy conservation group based in Lander, Wyo. They have also prepared a slide show on solar energy which will be available this fall. If you are interested in the group or their show, you can contact the Nations at 711 S. 3rd, Lander Wyo. 82520.

Rural ingenuity...

(continued from page 5)

gated sheet metal. Cracks in the glass have been repaired with tape.

Heat is pulled from the storage cabinet in Wise's kitchen by a small fan high on the kitchen wall. Convection currents carry the heat into the rest of the house. Four-inch holes cut into the wall near the floor connect cold air with the base of the collector.

Scrap materials cut costs

If the materials for this solar-heated greenhouse built onto the side of an existing home had been purchased new, the greenhouse would have cost about \$1,000. But Mr. and Mrs. Ken Holhaus of San Acacio, Colo., did it for much less by using scrap material whenever possible. Ken Holhaus, who did most of the construction work himself, is a retired teacher and military man with some construction experience.

The Holhauses have recorded temperatures as high as 110 degrees inside the peak of the greenhouse when the temperature outdoors was only zero. Using an existing upper window they let heat from the greenhouse help warm their home this winter. Louvers on the vertical portion of the structure are designed to keep plants from overheating in summer.

The top part of the greenhouse is covered with corrugated fiberglass. The lower part is made of storm windows, louvers, and Warp's Flex-O-Glas.

Heat is stored only in the container mass of the planters in the greenhouse.

High court ruling. . .

(continued from page 1)

months away. The plaintiffs sought an impact statement covering new coal development in Montana, Wyoming, the Dakotas, and Nebraska.

Technically, there were no legal barriers to leasing even before the high court released its decision. The Supreme Court had already lifted the injunction which a circuit court had imposed in connection with the suit, and the Interior Department had lifted its self-imposed moratorium on leasing when it announced its new coal regulations.

There were probably a number of companies which had hesitated to invest heavily until the court made its ruling, however.

Kit Muller of the Northern Plains Resource Council said that due to the complexity of Western coal situation, he wasn't sure what effect the ruling would have on the tempo of development. He pointed out that other pend-

ing legal decisions and pending legislative and administrative actions may have more influence now.

While disappointing in some regards, he said the decision by no means meant opening up the West for uncontrolled coal development.

He said that the Northern Plains Resource Council, which was one of the plaintiffs in the suit, still believes there are some very significant questions that won't be addressed in the subregional impact statements. One example is the shift in coal development from the Eastern states to the West. He said this question was not discussed in any detail in the first subregional impact statement released — on the Eastern Powder River Basin.

Muller and other environmentalists speculated that Interior might not have required the subregional statements if it hadn't been for the suit, signifying a small victory.

Organizers tell how to sell tax

July 2, 1976 — High Country News-7

Jeffco buys open space with sales tax

by Marjane Ambler

As Colorado entered the 1970s, the east slope of the Rockies was quickly filling up with homes of people who wanted the best of two worlds: proximity to their jobs in the Denver metropolitan area, and convenient access to the joys of mountain living. The population of Jefferson County, which lies west of Denver at the base of the mountains, had doubled within 10 years. The people who had come for the wide open spaces were eating them up.

The situation is the same in much of the West today, where appealing physical settings border population centers. But in Jefferson County, there's hope for some open space because of the foresight of a few people.

A coalition of volunteers through an intensive educational campaign convinced the voters of the county to tax themselves to purchase and preserve open space. When the voters decided 3-2 to assess a one half per cent sales tax, Jefferson County became the first county in the nation to adopt a sales tax to buy open space.

That was November 1972. This year \$4.1 million is in the budget, and a total of 7,000 acres of land and trails have been purchased in the country.

It wasn't easy, Carol Karlin, who initiated PLAN Jeffco, will quickly tell you. But it was successful with unexpected side benefits, and the organizers are eager to share their suggestions with others interested in preserving open space.

PLAN Jeffco was the citizen group which organized to promote the open space sales tax. After an open space conference, the energies of over 400 volunteers were harnessed, and several businesses agreed to help financially.

Although the county realtors' association refused to support the effort, one subdivider, Witkin Homes, helped finance it. A local bank, conservation groups, architects, homeowner associations, horsemen, and the local Rotary chapter all rallied behind the project.



TRAILS CLOSE TO HOME. Jefferson County uses its sales tax revenues to buy land or to buy easements for trails. Walkers can take short outings after work, and people can hike from near their homes rather than depending on car transportation to get them into the mountains. Some trails are paved for bicyclists.



OPEN SPACE ADVISORS. Open space purchases are chosen by the 10 member Jefferson County Open Space Advisory Committee, some of whom were active in the effort to pass the sales tax. Carol Karlin (front row, left) first came up with the idea early in 1972. She looked out her back door and thought that somebody would have to do something if her children were going to be able to enjoy the open spaces she had enjoyed at the base of the Rockies. So she did. Her spark ignited the League of Women Voters and then more people who formed PLAN Jeffco. Members of the advisory committee are (left to right, back row) Frank Leek, Dennis Boeka (who is no longer on the committee) and Mike Moore, the chairman. Front row: Karlin, Ruth Thorton, Ray Printz, and Darrell Skelton. Printz is the director of the five member staff. Other committee members not pictured are Phyllis Stutzman, Mike Davidson, Donna Paschke, Tony Sabatini, and Bill Flint.

UNPAVED SPACES

The group carefully avoided a growth v. no growth controversy. "Normal, planned, orderly growth is welcome. But the planning must include some spaces which are left unpaved, unchanneled, unbuilt upon," speakers in the PLAN Jeffco Speakers Bureau would explain.

"We need some places where children can play safely on green parkways away from trucks and automobiles, where horse-riders can trot along winding trails, where bicyclists can pedal along far from the roadway noises, where hikers can meander through meadows and forests, where people can simply sit and look at a hilltop unfettered with roads and fences and billboards."

This approach showed that many different interest groups would benefit. In addition, business people supported the plan since fair market value is paid for land. The Open Space Program has never had to use its power to condemn land.

In fact, Karlin reports that realtors have come to the Open Space Advisory Committee asking the county to buy land from them that they can't sell for anything else. For example, natural hazard areas, such as flood plains, are best used as open space. The realtors have also found that having open space nearby increases the value of their land.

Business minds appreciate the fact that thousands of federal matching dollars come into the county now from the U.S. Bureau of Outdoor Recreation to help buy open space. The county also works with the Nature Conservancy and the Colorado Open Land Foundation on some purchases.

Another selling point is the employment provided for young people. This summer 150 young people are being paid minimum wage to develop and maintain trails and to clean up parks.

NOT FOR DEVELOPMENT

Trail improvement is the only development provided for, Karlin says. The advisory committee who helped draft the regulations figures that if the open space program

concentrates on purchasing property, cities can use their own funds to add facilities such as playground equipment or tennis courts if the open space is near a population center. Generally, land is left in its natural state.

In some cases, land is leased by ranchers who run cattle on it. Other land is open to fishing. Trails connect parks, in one case offering a 15 mile ride or hike in the hills. Some mountain parks owned by the city of Denver were inaccessible before except by crossing private land where, Karlin says, intruders were met by shotguns and dogs. Now Jefferson County Open Space Program is getting easements and buying land for trails connecting them to open space lands, thus benefiting both Denver and Jefferson County.

A 10 member citizen advisory committee, appointed by the county commissioners, decides how the county's share of the money will be spent. The cities' share is split among the cities in the county, with the percentages based upon relative populations as determined by automobile registrations.

A director and a staff of four do the day to day work of administering the program. "We never realized it would take so much administration," Karlin says.

WHY BUY LAND?

Largely through her work with the League of Women Voters, Karlin was aware of several possibilities for keeping

space open including conservation easements and zoning. However, she says, "The only way to preserve open space is to own it. Zoning is tenuous and may change with a whim."

Under Colorado state law, the county could require developers to dedicate a certain amount of land to open space, but it could be used only by the private residential owners and is usually small.

As in other states, the Colorado Division of Parks and Outdoor Recreation has limited funds and has been buying only inexpensive land in sparsely populated areas.

The Jefferson County League of Women Voters was the first group to endorse the campaign. Although the league opposes regressive taxes, the sales tax seemed to be the only alternative since the county had nearly reached its mill levy limit and since counties don't have the power to levy income taxes.

While proud of the results of the work of the team of volunteers in PLAN Jeffco, Karlin regrets it being so "piecemeal." She would like instead to see a state program — well-funded — for acquisition of open space.

PLAN Jeffco has published a handbook outlining their organization and strategy, and a few copies are left. For more information, contact Carol Karlin at 7301 W. Bayaud Place, Lakewood, Colo. 80226 or the Open Space Program office at 1801 19th St., Golden, Colo. 80401.



SPACE FOR HISTORY. Some of the land purchased by the Jefferson County Open Space Program is rich in history. The ruins of John Brisbane Walker's once elegant castle remain here in Mount Falcon Park. Walker had planned to build a summer home for the Presidents of the United States.

Boise Cascade gives \$100,000 for land

With the addition of \$100,000 from Boise Cascade, the Nature Conservancy has raised enough money to buy a 480 acre tract on Silver Creek in Idaho. The donation is the largest cash corporate contribution ever given to the conservancy. The group is purchasing the land from Sun Valley Company and will be keeping it open to the public. Former Oregon Gov. Tom McCall congratulated Boise Cascade and urged other corporations to also donate cash or land to protect natural and fragile resources. McCall is the national co-chairman of the American Land Trust, which is trying to raise \$200 million to purchase available land during the bicentennial year. All purchases will be turned over to either the Nature Conservancy or to the government, according to a report in Ketchum Tomorrow.

Salmon, s Dams

by Sarah Doll



Spillway section at Bonneville Dam, first plug in the Columbia River. The seven dams that followed put slack water from the sea to Lewiston, Idaho. The struggle to save salmon and steelhead began with this dam, and the dams remain the major threat to the future of the fish. The U.S. Congress will decide on a

\$45 million Lower Snake Compensation Plan designed to replace fish losses in that stretch of the river. The Federal Power Commission will decide whether Idaho Power Company will be required to meet mitigation responsibilities for salmon and steelhead at their Hells Canyon dams.



Historically, Columbia Basin Indian tribes have dipped into the anadromous fish runs at spots like Celilo Falls, covered long ago by slack water behind a dam. Today, court decisions have given the Indians

rights to 50% of the annual run of seagoing fish. Idaho finds promise in this principle of allocation, since it may lead to allocation of a portion of the catch on a run to a fish producing state.

The anadromous fish of the Pacific Northwest — steelhead trout and chinook salmon — are spawned in inland freshwater streams. They swim and are swept to sea as smolt, and mature in the Pacific Ocean. After one to three years, they return upstream to their birthplaces to spawn, then die.

Liberty Millet, fishing the Salmon River in 1892, reported, "My season's catch amounted to between seven and eight tons, dressed . . . Have caught as many as 200 at a single haul." But he adds, "Salmon were formerly much more abundant than now." Nine fishermen on the Snake River in 1894 caught 2,985 chinook and 3,966 steelhead in two month's time.

Today, Idaho's season on these fish is closed, to protect a dwindling resource. Only about 16,000 steelhead are returning annually, down from 100,000 as late as 1962. Spring chinook are down to 20,000-25,000 a year, according to the Idaho Fish and Game Department.

The reason for the spectacular fall of these fish populations can be easily summarized: men started building dams.

Steelhead and salmon populations may have been declining somewhat at the close of the 19th century, but they suffered an enormous blow with the completion of the Swan Falls Dam in Idaho in the early 1900s. The first plug on the Snake River, it was an impassable barrier to upstream-headed fish, and local peoplescooped up the boiling masses of fish just below the dam with pitchforks. After a few years, there were no more.

As each successive dam has been built on the Columbia River System, of which the Snake River in Idaho is a tributary, it posed new problems for the returning fish. Ladders have been built to enable them to bypass the dams, but many fish are unable to find the ladders, and many more do not have the energy reserves necessary to get up and over several dams. An even more serious threat is presented to the downward-migrating smolt.

First, the smolt enters a vast body of still water which, particularly in periods of low water flow, provides little push in getting downstream. The reservoir is more likely than a stream to be too warm and too polluted, and the chances of encountering large predator fish are also great. If the smolt makes it as far as the dam, they will go over the spillway (likely in time of high water) or through the power generation turbines, which are estimated to let only 30% through alive in a low flow year.

On arriving downstream from the dam, if they do, the smolt often encounter nitrogen-supersaturated water. According to Royce Williams of Idaho's Fish & Game Department, most of the Columbia River and some of the Snake no longer have enough free flowing water to expel the gases, and are supersaturated the entire length during periods of high flow. The fish breathes the nitrogen; when it moves to shallower water the nitrogen expands in the blood, and can be lethal.

Any smolt that survives all this has the next dam in the series to face.

Some of these man-caused problems can be alleviated by man to some extent. One solution has been to trap the smolt above the Little Goose Dam on the lower Snake and transport them by truck, releasing them below the Bonneville Dam, the last barrier. Another has been screening the

steelhead struggle s take their toll

water flow into the turbines, and providing bypass systems. To prevent nitrogen supersaturation, "flip lips" or deflectors are being installed on spillways, and experimentation with control of water flow from the dam has been done. How soon these dam improvements take place depends largely on Congressional appropriations.

Idaho has been working with the U.S. Army Corps of Engineers on a \$45 million compensation plan to replace fish lost to dams with hatchery fish. This plan still awaits action by Congress. The Corps supports wildlife mitigation; that is, once it has irreparably harmed wildlife habitat, it is willing to help the wildlife by some other method.

Dams are the principal cause of the demise of the anadromous fish, but there are other problems. Channelization of streams, usually for flood control, removes the pools, riffles, and undercut banks that make good fish habitat, and can cut fish populations of a given stretch of water to one eighth the former number. Sedimentation of streams is a serious problem, especially below clearcut forests and overgrazed pastures. And pollution, from Idaho's growing cities and its fertilized fields, takes its toll.

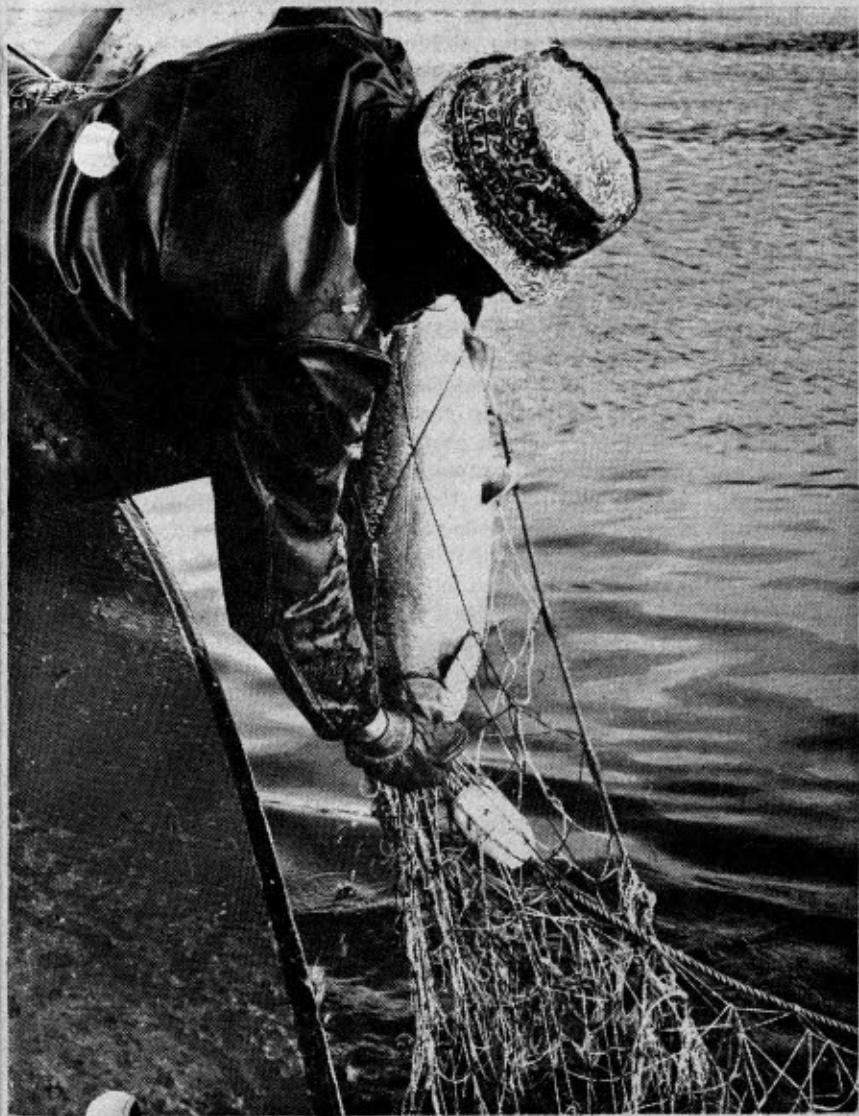
Like many other wildlife forms in the United States, these fish are political animals. Washington and Oregon have signed the Columbia River Compact, which controls the fishery resource. Idaho, resentful

of its exclusion since it provides spawning grounds for many of the fish, has taken its case for inclusion to the U.S. Supreme Court. At present 50% of the catch is allocated to Indian tribes downriver. There is no non-Indian commercial fishing of salmon allowed, but steelhead are fished commercially. Downstream commercial fishermen oppose Idaho's entry to the compact, because then Idaho fishermen might have a guaranteed percentage of the fish harvest.

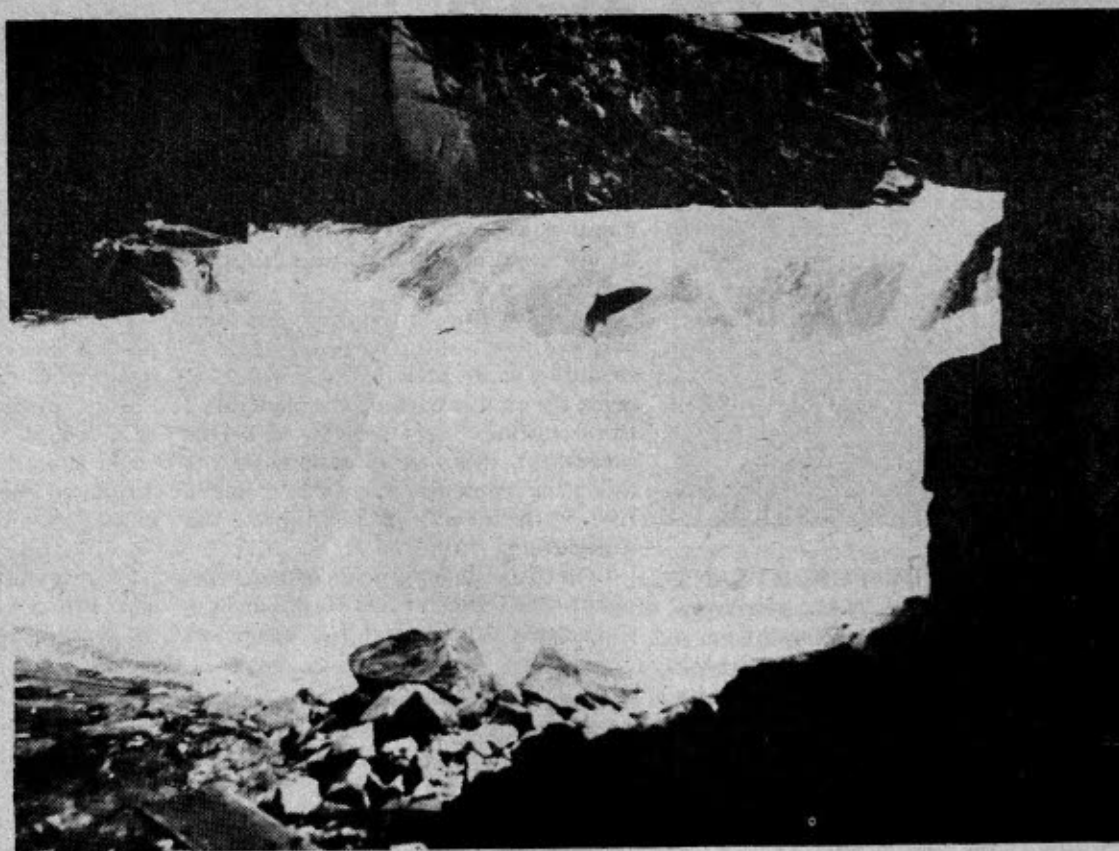
With the recent Congressional approval of the Fishery Conservation and Management Act, extending the United States' regulatory powers offshore to 200 miles, Idaho now has a voice in the taking of anadromous fish at sea.

In spite of opposition from most Idahoans, plans for new dams continue. The Swan Falls-Guffy project, which calls for two new dams near the old Swan Falls Dam south of Boise, has won approval from the Idaho Water Resource Board and the Idaho Supreme Court. It would flood 28 miles of the Snake River and be used for hydroelectric power production. Most environmentalists and several economists are critical of the proposal.

If more dams are to be built, flip lips and turbine screens, while a remarkable advance, will not be enough to save Idaho's fisheries. Many of Idaho's citizens care. They need everyone's support in making themselves heard.



Fast becoming an economic fatality of the dwindling fish runs are the gill-netters on the Columbia. Recent closures of both commercial and sport fishing in the Columbia and Snake have hit the commercial fishermen hard. At packed public hearings, commercial fishermen have told of losing millions of dollars tied up in their equipment and livelihood.



All photos courtesy Idaho Fish and Game Department.

Often lost in the economic and sport aspects of the salmon-steelhead struggle is the intrinsic value of the fish themselves. When all the meetings, symposiums, court decisions and public demonstrations are over, the salmon and steelhead that are left will be there because people recognize the value and beauty of this unique form of life.



Four-inch summer chinook mill in a holding tray at McCall Hatchery in Idaho. Tiny bits of coded wire will be injected into their noses before they head for the ocean. Wire recovered will tell Idaho how many of her chinook are being taken by ocean troll fishermen. The research has become important because of the new 200-mile fishing limit and Idaho's new ability to vote in the ocean fishing regulations. Idaho finds irony in the fact it can vote on the ocean fishery but has no clout in the river fishery, which has direct impacts on the salmon and steelhead resources of Idaho.

10-High Country News — July 2, 1976

**SOLAR ELECTRIC POWER PLANT**

In Albuquerque, N.M., construction has begun on a solar tower, a prototype of the technology which may eventually provide electricity from the sun on a massive scale. The tower is a U.S. Energy Research and Development Administration (ERDA) project. It will consist of 320 huge mirrors on the ground all focusing sunlight on a boiler perched on top of a 200 foot concrete tower. The boilers will make steam, which could be used to generate electricity. ERDA's Sandia laboratory will begin testing the tower next year. By 1980 the government hopes to build a similar tower which will generate enough electricity to supply a town of about 10,000 people. The problem of storing the heat collected by the mirrors is being explored by three ERDA contractors: Martin Marietta Corp., McDonnell Douglas Corp., and Honeywell Inc.

This photo shows two Martin Marietta researchers — Merton L. Clevett (left) and Floyd A. Blake (right) — demonstrating the solar electric generation principle. Here a battery of shaving mirrors are focused on a small steam engine which lights a light bulb. Photo by Martin Marietta.

Can Pawnee meet Colorado air regs?

Information introduced at a public hearing before the Colorado Air Pollution Control Commission has cast doubt on Public Service Co. of Colorado's ability to meet state ambient air standards at its proposed Pawnee plant. The 500 megawatt plant would be the largest coal-fired plant in Colorado. The proposed site is in northeast Colorado near Brush.

Attorneys for the state and the Environmental Defense Fund revealed figures from a coal contract which show that AMAX coal company has agreed to supply coal containing between .48% and .53% sulfur. The figures surprised some observers, because Public Service Co. has been saying it can blend AMAX coal to achieve .38% sulfur and, therefore, meet state standards.

"Public Service Company is basing its claims to meet state standards of unrealistic, far-fetched assumptions," EDF geologist Mohamed El-Ashry told HCN, "Blending will not enable the utility to achieve a sulfur content lower than what is promised in the contract."

A study done for the utility by Dames & Moore, a consulting firm, predicted that if coal with a sulfur content of .38% were burned, on the average the plant would

After a three year battle, the utilities seeking to build Colstrip Units 3 and 4 in Montana have won final approval from the state. The new units will add 1,400 megawatts of coal-fired generating capacity to the existing 660 megawatt facility in southeastern Montana.

The State Board of Natural Resources vote was close — 4-3. The board placed 14 conditions on the permit. The president of one of the utilities backing the plant called the conditions "very strict and maybe somewhat burdensome." But he added, "At this point it appears that we'll be able to live with them," according to the Missoulian.

Both of the state agencies opposing the plant — the Department of Health and Environmental Sciences and the Department

of Natural Resources — have indicated they will not appeal the decision.

The two other opponents of record were the Northern Plains Resource Council and the Northern Cheyenne Indians. They have not decided whether or not to appeal yet.

Conditions attached to the permit by the natural resources board include requirements that:

—the project's surge-pond facilities be enlarged enough to hold a 50-day supply of water at all times. A utility spokesman has estimated that this will add at least an extra \$10 million to plant costs.

—rural electric cooperatives be given an opportunity to participate in ownership of the generating plants. The plants are pres-

ently backed by five private power companies — Montana Power Co. and four northwest utilities.

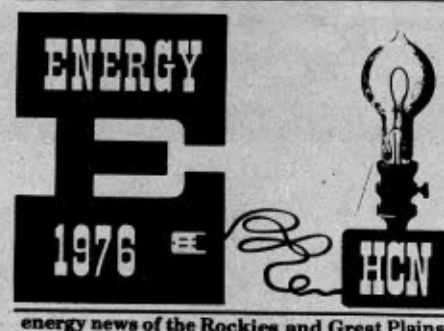
—sponsoring utilities operate water-gauging and air quality monitoring stations at their own expense in cooperation with the Board of Health.

—Bechtel Corp. the prime contractor, try to work with the Northern Cheyenne Indian tribe to set up a training program for Indian workers.

—construction guidelines minimize environmental damage.

—the transmission line route is up to the board, with the selection process for rights-of-way to involve landowners.

The two new units are scheduled to be complete in mid-1980 and mid-1981.



GENERATOR EXPLODES. A generator explosion at Utah Power and Light Co.'s Huntington plant in Utah was termed a near financial disaster by the Kemmerer (Wyo.) Gazette. The plant lost about 415 megawatts of generating capacity. About one-third of the physical damage to the plant, estimated at \$29 million, will be paid by insurance. The purchase of outside power while the unit is being replaced will increase operating costs by \$6 million this year and by \$1 million for each month afterwards that the plant remains out of service. UP&L will ask that these costs be considered in its next application for a rate hike.

SITING PROCESS APPLICABLE TO NAUGHTON. The fourth and fifth units of Utah Power and Light's Naughton plant in western Wyoming will have to go through the state's industrial siting process, the Industrial Siting Council has ruled. UP&L had asked that the two new 400 megawatt units be exempted from the process because necessary permits had been obtained before the siting act went into effect March 1, 1975. State officials argued that while three permits have been granted, UP&L is still lacking 12 other permits. Siting council President John Troughton expressed some surprise at the number of permits required for utility approval.

WYOMING'S SECRET TAPES. A Wyoming district court has ruled that a conservation organization cannot have access to a taped record of a power plant siting hearing. Laramie River Conservation Council sought the taped record of the state Industrial Siting Council's deliberations on the proposed Laramie River Station to be built near Wheatland, Wyo. Tyler Dodge, chairman of LRCC, says the "people of Wyoming are entitled to know how the siting council reached its decision" to approve the 1,500 megawatt power plant. Not releasing the taped record of the meeting "works an extreme injustice on the public's freedom of information," he says. The siting council says that the tapes were made by a private party at the meeting and are not a part of the public record. LRCC is planning an appeal of the siting council's approval of the plant.

LEASES WON'T WAIT. Bureau of Land Management Director Curt Berklund says he probably won't hold up oil and gas leasing in the Flathead National Forest in Montana unless downstream flows would be endangered on the Flathead River. The BLM has been under pressure to hold up leasing until an agreement was reached with Canada on controlling water pollution in the Flathead from the proposed Cabin Creek coal mine just over the border in Canada. The U.S. Forest Service recently completed an environmental impact statement on the leasing, according to the Missoulian.

SOLAR FOR THE POOR. The South Central Idaho Community Action Agency in Twin Falls has received a \$2,500 grant to install a solar furnace in a low income family's home. An agency official told United Press International that grants to install more solar heating systems in poor people's homes may be obtained if the pilot project is successful.

PRIORITY TO HOMES, FARMS. The Idaho Statesman, taking its cue from Oregon Gov. Robert Straub, would like to see that lower cost electricity from the publicly owned Bonneville Power Authority be sold to southern Idaho consumers. Straub had suggested that the BPA power that now goes to big industrial customers be shifted to go to residential and farm customers while the private utilities would supply the big energy-using industries. "Consumers can't afford the cost of building the energy plants that would be required to continue past patterns of growth... So emphasis must be given to making better use of existing power supplies, to correcting inequities in rate structures and to protecting the pocketbooks of residential customers, businesses, and farmers," the editorial says.

ARIZONA NUCLEAR SUIT. An Arizona-based group has filed suit to halt Southern California Edison Co. and other utilities from constructing a nuclear power plant 36 miles west of Phoenix, according to the Los Angeles Times. The suit, filed in Los Angeles federal court, seeks to halt construction until the proposed facility is proven to be 100% leak free and until a foolproof waste disposal system is developed. The group, Save Needed Environmental Levels League, claims that inadequate environmental impact reports have been prepared. Southern California Edison was one of the two companies which withdrew their plans to build the Kaiparowits coal-fired power plant in Utah, largely because of anticipated lawsuits, environmental constraints, and increasing costs.

ADS TO FIGHT SAFE POWER. The Public Service Company in Colorado is "going full guns" in an effort to block passage of the Safe Power Amendment in that state, according to the Monte Vista Journal. The amendment would require hearings and a two-thirds vote of the legislature before a nuclear power plant could be built in the state. The Public Service Co. has hired Sam Lusky Associates to mount an attack on the initiative, which would be on the November ballot.

PARAHO SPARED. The Paraho demonstration oil shale retort near Rifle, Colo., has been given at least two more years of life. Due to lack of private interest, Paraho had announced it would have to close, but last month the Energy Research and Development Administration offered the project a new \$12-\$15 million contract for 100,000 barrels of shale oil. The cost to the government will be \$120-\$150 per barrel.

July 2, 1976 — High Country News-11

Melcher takes new tack to pass House strip bill

With the proposed federal strip mine regulation bill tabled in the House Rules Committee, Rep. John Melcher (D-Mont.) has introduced a similar bill back into the Interior Committee to get the measure rolling again.

Melcher's original bill (HR 9725) was held up by the Rules Committee, supposedly because the House had already considered a similar bill in the same Congressional session. The House had passed a similar bill which was vetoed by President Gerald R. Ford and the House had failed to override the veto.

Up until two weeks ago, Melcher's tactic has been to try to obtain enough signatures on a discharge petition to wrest the strip bill from Rules and bring it before the full House for a vote. So far, not enough con-

gressmen have signed the discharge petition to free the bill.

Melcher's new bill (HR 13950) is "substantially the same" as HR 9725, he says. The major difference between the two is that the new bill offers small coal mine operators (those producing less than 250,000 tons per year) relief from some financial and timing hardships posed by the original bill, according to Melcher's aide, Harry Crandell.

Crandell says the amendments are generally accepted by conservation group lobbyists and the small coal mine operators. They are printed in the March 22, 1976, **Federal Register** on page H2189. The full House Interior Committee is scheduled to consider the bill this week. Meanwhile, the drive for more signatures on the discharge petition continues.



TEXACO TURNED DOWN

The government has turned down Texaco and its partner, Natural Gas Pipeline Co. of America, in their request for federal funding to build a coal gasification plant in northeast Wyoming. The U.S. Energy Research and Development Administration (ERDA) agreed to pay for half the cost of gasification demonstration plants proposed by companies in Ohio and Illinois, however. Texaco had proposed a \$230 million plant on its coal-rich Lake DeSmet properties in the Powder River Basin. While both projects chosen will burn high sulfur coal, only low sulfur coal is available at the Lake DeSmet site. ERDA cited the fact that Texaco wanted to retain rights to the process developed, despite the federal aid they might have received to develop it. Texaco had also refused to share with the government money earned by the process. ERDA said another drawback was the low thermal efficiency of the Texaco gasification process and the relatively high product cost.

"We are glad to see that ERDA has decided to spare the communities of Buffalo, Sheridan, and the surrounding area the enormous social impacts and tax burdens that the plant would have imposed," said Ed Swartz, chairman of the board of the Powder River Basin Resource Council.

Photo of Lake DeSmet by Tom Bell.

House synfuels bill amended — coal gas, shale subsidy sliced

The House synthetic fuels loan guarantee bill (HR 12112) has been amended by the House Commerce Committee to give increased emphasis to biomass conversion, energy conservation, and the development of renewable energy resources.

The original version of the bill called for a \$4 billion program of loan guarantees and grants to stimulate coal gasification, shale development, and, to a limited extent, renewable energy resources such as solar, wind, ocean thermal gradient, and geothermal. Various forms of the bill passed the House's Science and Technology Committee, Banking Committee, and Ways and Means Committee.

The Commerce Committee's subcommittee on Energy and Power, chaired by Rep.

John D. Dingell (D-Mich.), amended the bill and made it more acceptable to conservationists. As passed by the full Commerce Committee, the bill's loan guarantee program is chopped in half to \$2 billion. The committee "scaled down the oil shale program and eliminated the provision for high-Btu coal gasification programs," reports **Coal News**. The modified bill also sets up a program based on price supports rather than loan guarantees for synthetic gas made from coal. Renewable energy resource development would still qualify for loan guarantees.

These changes "might be severe enough to see the legislation mired in chaos through the end of the year," according to **Coal Week**.

LEASING AMENDMENTS PASS. A bill which would increase the states' share of mineral royalties has passed both houses of Congress and awaits President Gerald Ford's signature. The bill has been hailed by Wyoming congressmen as a boon to energy-impacted communities in the state. The Interior Department and some coal company officials have opposed the bill for other provisions relating to coal leasing. The bill, the Federal Coal Leasing Amendments Act of 1975, increases the state's portion of royalties from 37½% to 50%. It also increases the overall size of royalties from 8% to 12½% of the sale price. One provision, which has been opposed by both the Interior Department and industry, funds a federal coal exploration program. The Interior Department should not be involved in the exploratory stage of development, Interior Secretary Thomas Kleppe has said. The original Senate leasing bill included strip mining regulations for federal land, but Sen. Lee Metcalf (D-Mont.) removed the regulations. Advocates of comprehensive strip mining regulations approved of Metcalf's move, according to Sarah Ignatius of Northern Plains Resource Council. Although Rep. John Melcher (D-Mont.) tried to attach strip mining regulations for all lands to the House leasing bill, Rep. Patsy Mink (D-Hawaii) resisted. Ignatius says Mink was afraid of getting her leasing bill bogged down with other legislation which might endanger its chances of passing.

UTILITY CUTBACK. Many utilities abruptly curtailed their capital spending plans in 1974 and 1975, according to the David L. Babson Co. investment counseling newsletter. "With consumption of electricity flat in 1974 and up only two per cent in 1975, last year's peak demand came to about 65% of the industry's total generating capacity. Since a 20% reserve margin is generally considered to be normal, utilities have been in no hurry to add new units," reports the newsletter.

INVESTMENT IN WIND. In Alaska the governor's budget includes \$250,000 for wind-generated power projects to help supply energy to isolated villages. One proposed project is a vertical axis wind turbine at the University of Alaska Community College at Kopezeue. The turbine would be used to test the effects of ice, snow, rain, and severe wind on wind machines. The proposed budget has been sent to the legislature for approval.

U.S. USING LESS ENERGY. U.S. energy consumption in 1975 was down about 2.5% from 1974 and 4.8% from 1973, according to the U.S. Bureau of Mines. The bureau attributes the decline to economic recession, higher fuel prices, and a mild winter.

MINING BANS CONSIDERED. The Interior Department and the U.S. Environmental Protection Agency (EPA) are working together to decide how to judge whether public lands are suitable for mining or not. According to **Coal Week**, the two agencies are leaning toward the following policies: 1) If the government decides adequate reclamation is not possible, the land won't be leased. 2) If public health and safety would be jeopardized by mining in an area, that land won't be leased. 3) If EPA has its way, says **Coal Week**, mining's effect on water quality would also be assessed before deciding whether or not to permit mining. 4) The value of the coal resource in an area will likely be another important criteria. If the current land use has greater value, mining would probably be prohibited.

SOLAR BOOM. The year 1975 saw unprecedented growth in the solar energy industry. The number of firms in the industry rose from 39 in 1974 to 118 in 1975. The number of solar collectors manufactured increased by 400% from 1974 to 1975, according to the Federal Energy Administration.

LITHIUM CARS BY 2000. If tests of new lithium batteries are successful and if enough lithium ore can be found, several million electric cars may be in use by the turn of the century, according to scientists and officials from the Energy Research and Development Administration and the U.S. Geological Survey. At present about 4.1 million tons of lithium are estimated to be known to exist in ores in Utah, California, Nevada, South Dakota, and North Carolina, according to a United Press International report.

12-High Country News — July 2, 1976

Reckoning from Washington

RONCALIO MAY BECOME POWER

by Lee Catterall

Washington's sex scandal, plus an unprecedented exodus of congressmen, could catapult Rep. Teno Roncalio (D-Wyo.) into the energy limelight on Capitol Hill.

Chances are good that Roncalio will wind up as chairman of either the powerful Joint Committee on Atomic Energy or an important interior subcommittee. In either spot, but especially as head of the joint committee, Roncalio would be one of the most important people legislating on the energy issue in the next Congress.

Chairmanship of the Atomic Energy Committee had been destined for Rep. John Young of Texas. However, Young's future was clouded by charges last month by former Young employee Colleen Gardner that she was paid as much as \$26,000 a year in public money to provide him sexual favors.

If Young's reputation remains tarnished by the scandal, House Democrats would hardly be expected to promote him to a chairmanship.

Chairmanship of the joint committee rotates every two years between the House and the Senate. Next year, it will return to the House. Rep. Melvin Price of Illinois is the senior Democrat on the committee but instead is expected to remain chairman of the House Armed Services Committee.

Young is next in line for the job, followed by Roncalio.

Adversaries in the nuclear debate give Roncalio high marks. A nuclear industry lobbyist described him as "fair" and "candid," although not a patsy. Although Roncalio "believes strongly in nuclear power," the lobbyist said, "he will not support nuclear power blindly."

A leading anti-nuclear lobbyist described Roncalio as "honest" and "very fair," although "you can't predict how he's going to vote. He's one guy who listens to us."

The Interior Committee shuffle is more complex. Committee chairman James Haley of Florida and the next senior Democrat, Roy Taylor of North Carolina, are retiring. Chairmen Patsy Mink of Hawaii, of the energy and minerals subcommittee, and John Melcher of Montana, of the public lands subcommittee, both are seeking Senate seats. Roncalio will rise from 13th to ninth in seniority on the full committee.

A major scramble will occur next year for chairmanships of various interior subcommittees caused by the four departures.

"One of them will be mine," Roncalio told **Reckoning**.

Roncalio received his first subcommittee chairmanship last year, succeeding retiring Rep. Kenneth Gray of Illinois as head of the public buildings and grounds subcommittee, under the Public Works Committee.

Roncalio resigned his chairmanship of the subcommittee in February after little more than a year. He said he had become "sick and tired" of being bombarded with parochial requests of little importance to Wyoming.

"I just didn't want to be the United States real estate landlord," he said.

Last year, Roncalio became chairman of an atomic energy subcommittee on international agreements, a position he still holds.

Train proposes clean air compromise

After months of work on amendments to clarify the Clean Air Act, both houses have delayed consideration until after July 19. There is some speculation among Capitol Hill observers that a bill won't clear the Congress this year at all, according to the National Wildlife Federation's **Conservation Report**.

Both the House bill and the Senate bill include compromises on the major issues of automobile emissions and significant deterioration, and further weakening amendments are expected from the Ford Administration and from industry, according to the National Clean Air Coalition.

To counter Sen. Frank Moss' (D-Utah) attempt to delay significant deterioration provisions of the bill, the head of the Environmental Protection Agency (EPA) has suggested reinserting the Class III designation into the Senate bill. The elimination of the Class III designation is considered by conservationists to be one of the main advantages of the Senate bill over the House bill.

EPA Administrator Russell E. Train told Moss that Congress must act on significant deterioration rather than delaying it as Moss proposes in order to put an end to further litigation and to remove EPA from the local decision-making process. He said neither the House nor the Senate bill would have a slow-growth effect.

However, he admitted that "added flexibility to accommodate the major concentrated development that may be desired in the long run in certain areas would be provided — consistent with the existing air quality standards — by a Class III or a limited variance option." Class III designation would allow air quality to deteriorate to a level close to the lowest allowable for health and welfare standards.

Moss is pleased with Train's call for a Class III designation since the "original reason the Moss amendment was proposed was to ensure that provisions were made in an explicit way for industrial development," according to **Land Use Planning**

Reports. For the record, Moss still favors a one year study.

Train's compromise proposal may have been prompted by President Gerald Ford's announcement that he doesn't want significant deterioration provisions of the bill applied until there is "sufficient information concerning final impact." He says the amendments have a "potentially disastrous effect on unemployment and on energy development."

The House bill is similar to the Senate bill on significant deterioration except that it still includes a Class III and that it requires mandatory Class I classification for only national parks and wilderness areas over 25,000 acres. The Senate bill has mandatory classification for parks wilderness areas over 5,000 acres. The Senate bill also requires that all new major sources of air pollution use the Best Available Control Technology to reduce emissions.

COSC to survey candidates for Colorado legislative seats

Colorado Open Space Council (COSC) lobbyists learned two lessons from the 1976 Colorado legislative session, according to Ronald Lehr of COSC. First, more citizen participation is needed. Second, lobbyists must organize when positions, ideas, and people are most fluid. This calls for action now when candidates are running for office and when bills are being drafted.

COSC is now developing a short list of priority legislative issues which will be used for a survey of legislative candidates. Responses to the survey, showing the candidates' stands on the issues, will be published prior to the November elections. They also will seek to form coalitions with other groups on some needed legislation.

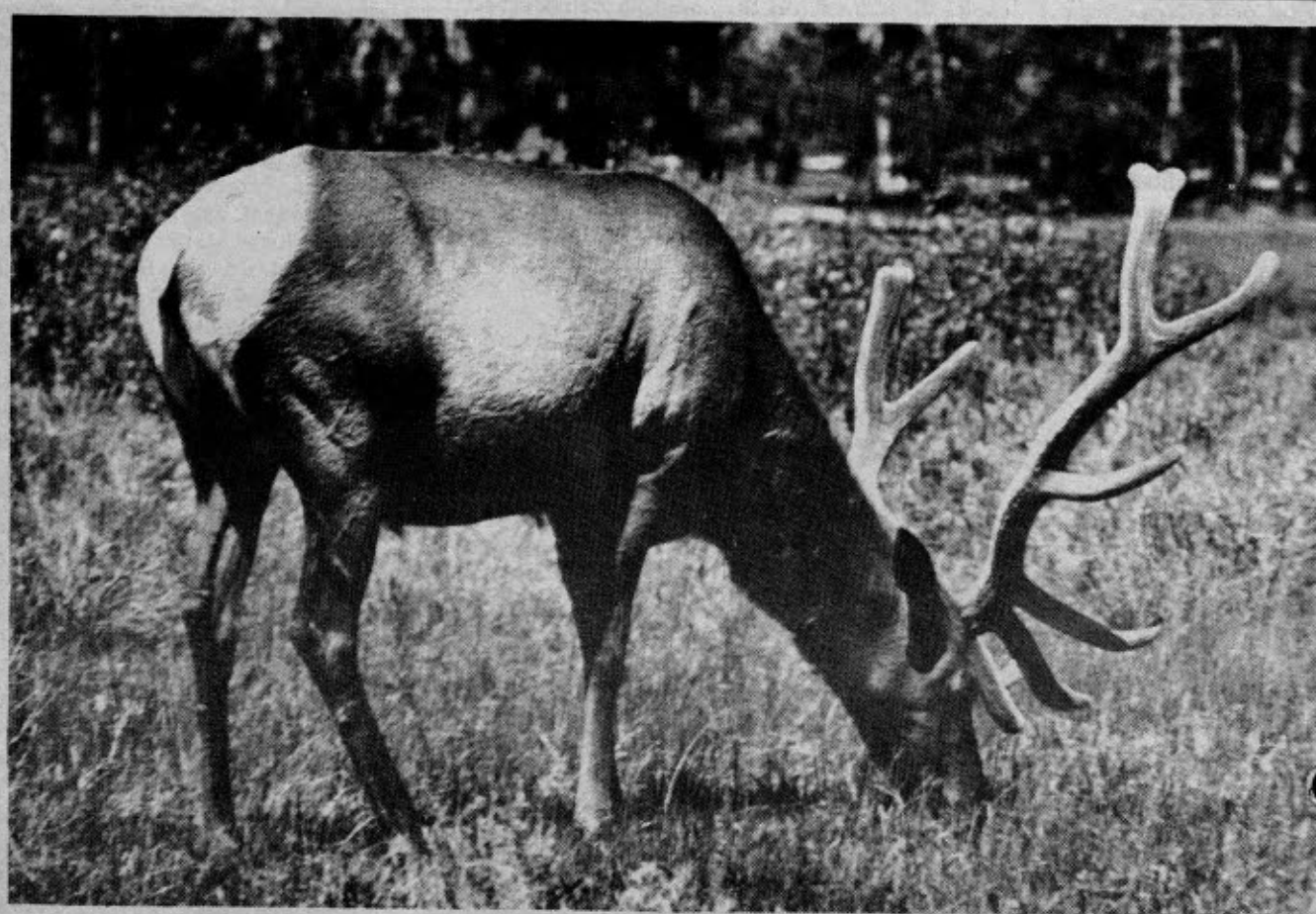
In analyzing the 1976 legislative session, Lehr says it suffered from an excess of partisanship. The basic conflict was between the Republican-dominated senate and the Democratic house and governor's office.

The house Democratic majority generally favored environmental legislation. In a few instances, however, the house also acted in an overly partisan fashion, Lehr says. Ill-conceived legislation passed house floor votes in "surges of Democratic unity," and house committees voted down promising energy conservation measures, he says.

Out of this political melee, environmentalists could savor a few signal victories. Passage of the mining reclamation law was a solid step forward, Lehr says. A conservation easement bill was signed into law. A "badly flawed" open space property tax break for large land owners was killed in the closing days of the session. A bill allowing the use of sewage sludge as fertilizer passed.

A large number of environmental bills were killed during the session. Majority Republicans on senate committees refused to pass such bills as strict liability for nuclear reactor operations, applicator certification for restricted use pesticides, a state Department of Transportation, energy standards for subdivisions, municipal regulation of subdivisions, and ending of the 35-acre limitation in a law now on the books for subdivisions.

An analysis of the environmental legislation for the 1976 session has been published by COSC. The legislative analysis includes summaries of environmental bills, voting records, and subjective views of the performance of individual legislators. It is available from the COSC office, 1325 Delaware St., Denver 80204, for a charge of four dollars.



Bull elk in velvet.

Photo by Stouffer Productions, Ltd. of Aspen, Colo.



Western Roundup

HON



BURROS THREATEN GRAND CANYON

Burros in Grand Canyon National Park, which may be doubling in population every four years, are having a devastating effect on the park, according to the NATIONAL PARK SERVICE NEWSLETTER. Two research biologists, Philip L. Shoemaker and Steven W. Carothers, say in their article that a recent study proved conflict between the burros and desert sheep. It also revealed dramatically reduced vegetation cover and small mammal populations in an area inhabited by the burros. Under National Park Service (NPS) management policies, the burros could be eliminated, but due to public pressure, the NPS decided to stop killing them in 1969. There are now one to two thousand burros, which the article says is probably the largest number ever inhabiting the Grand Canyon at any one time.

Photo by M. W. Williams and courtesy of the National Park Service.

Hunters oppose roads in game areas

The Idaho Department of Fish and Game, with approval of the Fish and Game Commission, is going on record opposing the building of more roads into big game areas. "The commission opposes building additional permanent access in big game areas and encourages legal or physical closures of all unnecessary roads within big game areas on U.S. Forest Service and Bureau of Land Management lands," a policy statement says.

The policy statement is in response to a 1971 department-sponsored survey of Idaho hunters. In that survey, 48% of respondents thought overcrowding of big game hunting areas was occurring because of too many roads, and 75% thought no more roads were needed for big game hunting. Only 10% asked for more access roads.

Bunker Hill building giant stack

The Bunker Hill Co. has announced that it will build a 715 foot stack to meet federal air pollution control regulations even though the U.S. Environmental Protection Agency (EPA) has said it would not be enough. In an announcement which emphasized the company's financial benefits to the community, Bunker Hill officials said they will spend \$8 million to construct the stack at their lead smelter in Kellogg, Idaho. Company president James Halley said, "In spite of present and future uncertainties, we are proceeding on the basis of the belief that we can meet any reasonable or future regulations and that the courts will protect us from regulations which are technically impossible or economically unreasonable," according to an Idaho Statesman report. EPA says the stack would be inadequate since it would only disperse the pollutants.

Wild Missouri bill widely supported

The House Interior subcommittee on national parks heard only favorable comments at its hearing June 21 on a bill (S. 1506) to designate part of the Missouri River in Montana as a wild and scenic river. The Wilderness Society opposed an amendment proposed by Rep. John Melcher (D-Mont.), which would allow future pumping of river water for agricultural, fish, wildlife, and recreational uses. The society says the amendment is a bad precedent which leaves wide open the land acreage to be irrigated, and puts no limitation on the distance that water could be pumped from the river. Melcher says there is a great excess of water in the segment of the Missouri.

Other groups did not oppose the concept of irrigation pumping, but asked that it not be on the sections classified as wild. A representative of the U.S. Bureau of Outdoor Recreation (BOR) asked that action be deferred until a BOR study is available to Congress. The bill, which was passed last December by the Senate, would affect 149 miles of the Missouri River in the Missouri Breaks country of northcentral Montana. The BOR would like to exclude a 42 mile segment of the river between Fort Benton and Coal Banks Landing from the bill, according to Conservation Report, a publication of the National Wildlife Federation.

Montana wants pennies from heaven

Montana hopes to increase annual farm revenue in the state by as much as \$10 million by cloudseeding, according to a report in the Missoulian. The state is working with the U.S. Bureau of Reclamation to research possible effects and is testing public opinion on the proposed action. Richard Moy, an ecologist for the Montana Department of Natural Resources and Conservation, says, that if rainfall can be increased by 10%, farm revenue could jump by \$10 million a year. Meanwhile, following opposition to a five year experimental cloudseeding program in Colorado, Rep. Frank Evans (D-Colo.) has introduced a bill to require licensing and regulation of weather modifiers. He is concerned with the possibility of climatic disasters, among other potential problems. A 500 page report on the results of the bureau's five year study in southwest Colorado is available from the National Technical Information Service, Dept. of Commerce, 5285 Port Royal Road, Springfield, Va. 22161. It was prepared for the bureau by scientists from three Colorado colleges.

Audubon sues to halt Garrison work

The National Audubon Society has filed suit to halt the Garrison Diversion Unit in North Dakota. The society charged that the project violates the National Environmental Policy Act, the Fish and Wildlife Coordination Act, and the Migratory Bird Treaty Act. Audubon Assistant Midwest Regional Representative Richard Madson says the suit seeks an injunction restraining the U.S. Bureau of Reclamation (BuRec) from buying more land and from construction. A draft summary of a congressional subcommittee report indicates similar concerns on the part of subcommittee members. The summary, which was revealed in a Minneapolis Tribune story, says BuRec should identify alternatives to the current proposals to eliminate the adverse effect on the national wildlife refuge system. The report also objects to the "segmented" approach to environmental assessment which was used.



WILD HORSE LAW UPHELD

The U.S. Supreme Court has ruled that the federal government has the right to protect wild horses and burros on federal lands. The decision reversed a ruling by a federal court in Albuquerque, N.M. That court agreed with the state of New Mexico that the U.S. Constitution gives Congress authority only to protect public lands from damage — not the animals which pass across it, according to a United Press International report. New Mexico had challenged the federal 1971 Wild Free Roaming Horse and Burro Act. When a rancher asked the state livestock board to remove wild burros from public grazing land which he said were interfering with his stock, the board did so and sold them for slaughter under the state law.

The Supreme Court's ruling was unanimous. Justice Thurgood Marshall said there was no need in this case to decide whether Congress also had the power to preempt state law when wild animals roam onto private property. UPI says the decision was the second by the high court in two weeks upholding the federal government's power to protect animals on public lands. Earlier it had ruled that pupfish in Devil's Hole, Death Valley, must get the water they need to live despite claims by ranchers to the water. Devil's Hole is in Death Valley National Monument in Nevada and California and is the only known location of pupfish in the world. Photo of wild horses in Wyoming by Roger Slocum.

14-High Country News — July 2, 1976

David Calfee, lobbyist, answers

What ever happened to the federal land use bill?

by Bruce Hamilton

What ever became of the federal land use planning bill? In 1975, land use planning proponents lost a bill in the House by a mere three votes. But unlike the persistent strip mine regulation bill advocates, land use planning backers didn't even bother to reintroduce a bill in 1976.

David Calfee, the Environmental Policy Center's lead lobbyist on land use issues, says the proposed legislation is "really dead." "Nothing has been reintroduced and there's no way anything could move this session," he told HCN.

"Don't look for it again in 1977 either," Calfee says. "I don't think it will come up again in the same way or by the same name."

THE INDIRECT APPROACH

Calfee, a Yale law school graduate and a former Ralph Nader associate with the Public Interest Research Group, isn't discouraged by the apparent lack of interest in comprehensive federal land use planning legislation. He believes land use planning efforts are moving forward — but the focus has been redirected.

In the early 1970s there was a major drive by planning advocates to pass a comprehensive federal bill. Sen. Henry Jackson (D-Wash.) steered his bill through the Senate for several years in a row, but the legislation was always hung up in the House. Rep. Morris Udall (D-Ariz.) was the prime sponsor of the House bill and Rep. Sam Steiger (R-Ariz.) its chief opponent.

Calfee says the U.S. Chamber of Commerce and rural conservative organizations were the strongest lobbyists against the bill. "The implication presented by the bill's opponents was that the federal government was going to tell people what they

could and couldn't do with their property, the federal government was going to take private property away from people, and the federal government was going to do all the planning. None of these elements were really in the bill. This has never been the substance of any federal land use planning bill to my knowledge," says Calfee.

"Some of the opposition was outright misrepresentation," reports Calfee. "One congressman received a letter urging him to oppose the bill because it called for the confiscation of all private property upon the death of the owner, except in the case of congressmen, who were explicitly exempted from the provisions of the bill."

Calfee says the real thrust of the bill was to provide federal money to the states to encourage them to initiate planning efforts. "The purpose was not to enforce a national policy, but to give states the impetus to take their destiny into their own hands."

BITS AND PIECES

Now the emphasis is off of the comprehensive bill and Congress is working to enact "bits and pieces," says Calfee. "All the stuff that was in the land use planning bill is being picked up little by little." Calfee offers the following examples:

—**HUD 701 FUNDS.** Section 701 of the Housing and Community Development Act of 1974 provides grants for local units of government for comprehensive planning. "They took the guts of the Jackson and Udall bills and plugged them into requirements for 701 funds," says Calfee. To be eligible for 701 funds you must include planning for critical areas, large-scale developments, and developments of regional impact, according to Calfee.

—**FLOOD INSURANCE.** The flood insurance act amendments of 1972-73 are another federal land use planning action, according to Calfee. "Under the amendments, you can't get federal money to develop within a floodway or on a 100 year floodplain. In addition, you can't get federally insured money to build in a floodplain — which means almost all the money except pension funds and insurance company money. That's really explicit federal land use planning."

Grumman & Old Town

CANOES

HUNGRY JACK'S STORE
Wilson, Wyo. 83014

COUNTRY CRAFTSMEN

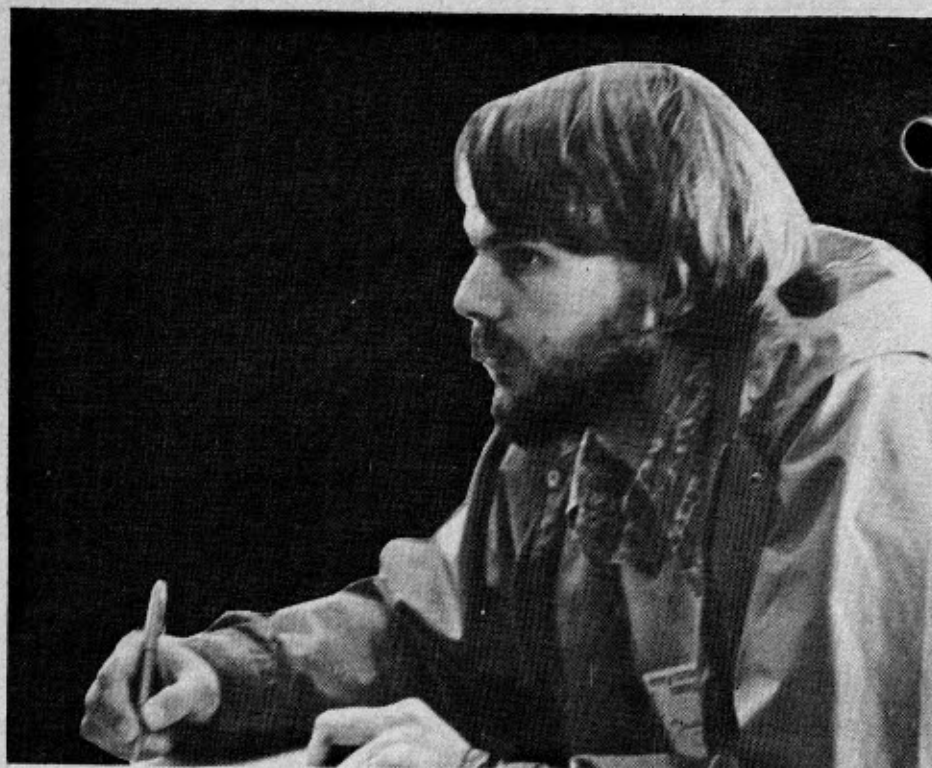


STOCK FEEDER KIT

Convert your old 15 or 30 gallon drums into rugged wet or dry stock feeders. Or add a grille and make a giant size barbeque pit.

Kit contains four heavy gauge steel legs and all the hardware to make two feeders or barbeques. No welding. Only \$14.95 Postpaid from:

COUNTRY CRAFTSMEN

 P.O. Box 3333H
Santa Rosa, Ca. 95402


David Calfee

—**COASTAL ZONE ACT.** The Coastal Zone Management Act of 1972 calls for land and water planning along the nation's coasts. Under the act, the federal government makes grants to states for the development and administration of coastal zone management plans. Calfee says the coastal zone act is to the coastal areas what the federal land use planning act could have been to all the states, if it had passed.

"Nobody called it communism in the coastal zone," says Calfee. "But when you move one mile inland the same program is labeled communistic." He says the coastal planning program is widely and enthusiastically received by the states — all 31 states with coastal areas are participating.

—**USDA PROGRAMS.** The U.S. Department of Agriculture has also initiated voluntary land use planning programs, according to Calfee. These programs include mapping prime agricultural land, providing technical assistance to rural communities, and helping rural areas identify sites of critical concern (hazard areas, wildlife habitat, etc.).

—**208 PLANNING.** Section 208 of the Federal Water Pollution Control Act of 1972 encourages communities to develop area-wide waste water management plans. Under section 208, the state identifies areas and designates a local agency to receive federal funds and to do the planning. The act focuses on waste water treatment, but the planning effort that directs the program can have important land use implications.

—**AIR QUALITY.** Implementation of the Clean Air Act is also having an impact on land use planning in the states. Early in 1975, the U.S. Environmental Protection Agency drew up regulations to control so-called indirect sources of air pollution. The proposed regulations called for federal pre-construction review of transportation systems and commercial parking facilities. Congressional opposition forced withdrawal of the proposed regulations.

Congress is now debating the significant deterioration provision of the Clean Air Act. The courts have ruled that the Clean Air Act requires that regions with pure air should be protected and significant deterioration of air quality should not be allowed. If Congress doesn't amend this provision, it could have far-reaching land use planning implications by limiting certain types and amounts of development in clean air regions.

—**STATE ACTION.** A number of states are passing their own land use legislation without federal direction. "If states would pass their own bills, there wouldn't be a need for a federal bill," says Calfee. An Interior Department survey released in mid-1975 found that Alabama was the only state that had no state land use measure either enacted or under study. Calfee says he has heard of a number of states "whose efforts toward land use planning have slowed down when the potential for federal assistance dried up."

NO TIME TO REST

Just because the drive for a federal comprehensive land use planning bill has lulled doesn't mean Calfee has slowed down his lobbying activities. He now finds himself busy as ever and working on a dozen fronts.

Calfee is working on the coastal zone act, making sure the flood insurance act amendments stay intact, seeking adequate funding for the HUD 701 grant program, and has taken on a new lobbying charge — energy conservation.

The energy field is nothing new to Calfee. When he worked for Nader he concentrated on natural gas pricing and Federal Power Commission issues. Calfee feels his energy and land use tasks will dovetail. Today's energy decisions have critical land use implications, he says.

Rural Resourcefulness — Solar Heaters

This issue of
High Country News
is now available in quantity at
the reduced rates below.

Send copies to:

 Friends
Members of Congress
Your local newspaper editors
Members of your labor union
Your religious study group
Your minister, priest, or rabbi
Your business associates
Your students — or teachers
State legislators and local officials

Special Rates on Quantity Orders:

 1-10 25c each
11-25 19c each
26-100 16c each
101 or more..... 13c each

Prices include U.S. postage.

 Enclosed is \$_____ for _____
copies of The High Country News.

Name _____

Address _____

City _____

State _____ Zip _____

Box K, Lander, WY 82520

 Bulk prices are applicable for one
month after issue publication date.

Classifieds

For sale. Used wood. Good for building.
Call (307) 332-4817. Rainbow Enterprises.

SOLAR ENERGY. Be a pioneer on this limitless new frontier! Read the mind-expanding monthly newsletter, **Solar Energy Digest**. Year, \$28.50; sample copy, \$2.40. Box 17776HC, San Diego, CA 92117.

For Sale craftwork. Soft leather tanned hides (\$27.50) deer, ½ elk, whole elk. Box 20, Centennial, Wyo. 82055.

HCN Bulletin Board

LOONEY LIMERICKS by Zane E. Cology

If we'd burn what's safely burnable,
And use containers returnable,
It would help a lot;
At each picnic spot
The change would soon be discernible.

ALASKA CONSERVATION JOB

The Fairbanks Environmental Center in Fairbanks, Alaska, is presently searching for a new executive director to begin work September 1. The director is expected to act on behalf of the center with respect to conservation issues, is responsible for general administration of the center, and is in charge of the center's on-going educational-media programs. Salary is \$700 per month. Applications are due by August 1. For more information write: Fairbanks Environmental Center, 1895 Pioneer Way, Fairbanks, Alaska 99701.

HARD WORKERS NEEDED

The Powder River Basin Resource Council is looking for new staff members to do organizing, research, writing, and general office chores. Pay is \$350 a month, plus 10 cents a mile for travel. Hours are long, but somewhat flexible. A commitment to the goal of the council, which is watchdogging coal development in northeast Wyoming, is a must. The group's members want to protect agriculture and small towns from the impacts of large scale coal conversion facilities. For more information, contact PRBRC at 150 W. Brundage, Sheridan, Wyo. 82801 or call (307) 672-5809.

CHALLIS HEARINGS

Public hearings on a draft environmental impact statement on livestock grazing on public lands in the Challis area of northeastern Idaho will be July 13 in the American Legion Hall in Challis and July 15 at the Rodeway Inn in Boise. The statement is the first of 212 grazing statements to be prepared by the Bureau of Land Management over the next 13 years. People unable to attend the hearings may submit comments to the State Director (330), Bureau of Land Management, Idaho State Office, P.O. Box 042, Boise, Idaho 83724.

SHOW FOR WYOMING

The Wyoming Outdoor Council is taking an energy slide show on the road this summer and fall. The group wants to schedule showings with civic groups, conservation groups, or other interested gatherings. If you can help the council connect with a group in your community, contact: Colleen Kelly, Executive Director, P.O. Box 1184, Cheyenne, Wyo. 82001 or call (307) 635-3416.

UTAH ENERGY MEETINGS

The governor's Blue Ribbon Task Force on Energy is holding energy seminars around the state of Utah. Meetings will be July 13 at the College of Eastern Utah, July 20 at Southern Utah State College, Aug. 3 in the Uintah Basin, Aug. 17 at Utah State University, Aug. 31 at Weber State College, Sept. 14 at Brigham Young University, and Sept. 28 at the University of Utah.

SNAPSE DOMES: Economical, energy efficient homes. Exclusive residences to greenhouses and barns erected and finished to your satisfaction anywhere in the Rocky Mountain area. All wood component panel shell kits shipped anywhere in continental USA — eight sizes. Solar heat, shakeshingles, foam insulation optional. Blueprints available. Write or call for information and prices: P.O. Box 554-H, Lander, Wyoming. 82520, (307) 332-5773.

MOUNTAIN TRAIL WORK

More volunteers are needed to inventory and maintain historic trails and sites in the Wind River Mountains this summer. Work will begin July 26 and end August 6. More information and applications for the project can be obtained from the Wyoming Mountain Men Trails Foundation, Wyoming Recreation Commission, Cheyenne, Wyo. 82001.

ECO-EDUCATION FOR BOATERS

Frances E. Joseph of Flagstaff, Ariz., is starting an environmental information center for professional boaters running the Grand Canyon. She hopes that this will be a good way to widely disseminate information about critical issues in the Four Corners region. If you can provide information, ideas, or other aid contact her at 644 Lake Mary Road, Flagstaff, Ariz., 86001 or call (602) 774-4288.

SOLAR PROJECT GRANTS

During the next eight weeks, the U.S. Department of Housing and Urban Development (HUD) will be receiving grant applications for solar demonstration projects. Awards will be announced sometime after Oct. 1. Grants will not be made to individuals for their private homes. For more information and a grant application form contact: RFGA-Integrated Projects, Solar Energy Staff, Room 8158, Department of Housing and Urban Development, Washington, D.C. 20410.

SPORTYAK RIVER TRIP

The Thorne Ecological Institute is sponsoring a river trip and desert ecology seminar September 3-8. Participants will float the Green River through Desolation Canyon in Utah in sportyaks — single person seven-foot rafts. The program — "Man and Landscape" — will be led by a professional ecologist and a land use expert. The cost of the trip is \$350. For more information write Carl Norbeck, Thorne Ecological Institute, 2336 Pearl, Boulder, Colo. 80302 or call (303) 443-7325.



Pasqueflowers. Photo by Del Owens.

DISTAFF CORNER

SOME FLOWERS GROW WOOL by Myra Connell

Nature, like God, works in mysterious ways, her wonders to perform. Consider, for example, the pasqueflowers with their insulating blankets of silky hairs that cover leaves, stems, and flowers. They have need of protection against cold temperatures for in some localities they bloom as early as March. In the Rocky Mountains one may find big patches in June, when winter is covering its retreat with a final delaying action. They thrive in the moist areas along the edges of melting snowdrifts.

Pasque comes from a French word that means Easter which in turn is derived from the Hebrew word for Passover. Early French settlers in South Dakota named the *Anemone patens* for the Easter festival because the South Dakota pasqueflower — the state flower — blooms about that time.

The traveler to the prairie and Rocky Mountain states in late summer is likely to miss this delightful wild flower.

Tom and I enjoyed our annual expedition to Popo Agie Falls on June 7 and found only seed heads where we formerly have found big patches of the lavender flowers on the

same date. The two-inch wide, feathery seed heads have the look of smoke flowing over the ground. They are sometimes called "prairie smoke."

Under the shade of lodgepole pines where the snowdrifts had lasted a little longer, we found a few still in bloom. The flower, about 1½ inches in diameter, has six petal-like sepals. With Tom's pocket knife I dug one, curious about its root system. I found a fleshy root attached by side branches to other plants close by. About three inches under the surface it divided into feeder roots. So apparently pasqueflowers multiply by both root and seed.

I went to the books to find out where the pasqueflower fits in scientifically, and at that point the confusion began. Botanists agree that it belongs to the crowfoot or buttercup family, Ranunculaceae. But some place it is in the wind flower genus, *Anemone*, and some place it is in a separate genus, *Pulsatilla*.

My Rocky Mountain specimen differs from *Anemone patens*, the South Dakota flower, in at least two ways: on the prairies they prefer a dry, rocky location; in the mountains, a moist one; the prairie species produces flowers before leaves, but my specimen showed both together. One botanist mentioned the western anemone, *A. occidentalis*, but I was unable to pin down specifics that would positively identify my plant.

Confusion now becomes chaos to one not a botanist. Of the crowfoot family there are 35 genera, 1,100 species. The South Dakota pasques are known variously as *Anemone pulsatilla*, *A. patens*, *Pulsatilla hirsutissima*, *Pulsatilla vulgaris*, *Pulsatilla ludoviciana*. Still other information calls the Western United States' species *Anemone nuttalliana*, all names of special meaning to the botanist whose responsibility it is to classify and describe.

To the non-botanist who just wants to enjoy all living creatures, the common names evoke more response — names like wild crocus, wind flower, and prairie smoke.

But, "what's in a name?" A pasqueflower by any other name would be as charming!



Limited Edition Scratchboard Prints

Edition of 600 prints,

100 Signed and numbered

One uncut sheet of four birds of prey, size 26x30 inches.....\$75.00
Add \$3 for shipping full sheet.

450 Signed and numbered sets

Set contains four 16x12½ inch prints (one print of each bird of prey.....\$60.00
Add \$1.50 for shipping set.

50 Artist's Proof — not available to public

Holly Leaf

1420 E. 91st Ave., Thornton, Co. 80220
303-288-1144

Dealer inquiries welcome

"Birds of Prey"

(Bald Eagle, Red Tailed Hawk,
Great Horned Owl, and Golden Eagle)

By

C. Holly Merrifield

Enclosed is check or money order.
Bill to: Bank Americard Master Charge
Credit card number Expiration date
If Master Charge, also enter 4-digit Interbank
Number appearing above your name
Signature _____
Name (print) _____
Address _____
City _____ State _____ Zip _____

16-High Country News — July 2, 1976



Wilderness World of John Muir

Edwin Way Teale, ed., Houghton Mifflin Company, Boston, 1976. \$4.95, paperback, 332 pages. Drawings by Henry B. Kane.

Review by Peter Wild

One night in 1872 an earthquake shook Yosemite Valley. The few settlers in the area leapt on their mules and fled toward the flatlands amidst thrashing pines and the thunder of falling cliffs. However, John Muir ran in the other direction shouting, "A noble earthquake!" Crouched behind a pine, he beheld what the panicked homesteaders would never see — in the moonlight the bulk of Eagle Rock shimmered, then gave way, falling in, "... an arc of fire fifteen hundred feet span, as true in form and as steady as a rainbow. ..."

From Wisconsin to the Amazon, from Alaska to Africa, Muir saw what others



Sketch of Half Dome in Yosemite from THE WILDERNESS WORLD OF JOHN MUIR.

passed by or fled from in nature. These selections, the crème de la crème of his 11 books, offer effervescent pleasure to those who feel close to the outdoors, whether they be devoted birders or weekend strollers.

It took a man of a singular type to climb a tree in order to study and enjoy a storm, as he did on another occasion. But Muir was no dilettante prolonging adolescence into adult years. He had the toughness to strike out alone and unarmed to become the first white discoverer of living glaciers in the

Sierras. He had the self-confidence to wander, a nearly penniless Yankee, through the thief-ridden swamps and coves of the South soon after the Civil War.

Yet, unlike other nature writers of the 19th century, Muir was not searching for the dramatic. He delighted first of all in common things, for instance the nest of a water ouzel in a ledge behind a rainbow of spray. Working as a shepherd during his first summer in the California mountains, he surprised a bear. Instead of backing off, the creature reared up and stared back, while the naturalist, "... fervently hoped that the power of the human eye over wild beasts would prove as great as it is said to be."

Muir is chuckling at himself, and at all of us, taking pleasure in the beauty and intricacy of nature that often mock man. Gathering shells in Cuba he ponders a sea flower clinging to coral and marvels how it survives the tons of waves smashing over it.

In some ways the volume is mistitled, for the selections show more than the familiar picture of Muir padding through the sequoias with his breadsack slung over a shoulder. We see his megalomaniacal father whipping him each night, whether the boy deserved it or not.

We see the future founder of the Sierra Club as an impressionable child in Scotland walking home from school with his friends, quaking through the dark because they might meet a "Dandy Doctor." This ghoulish member of the medical profession, the servant girls of the neighborhood had convinced them, would reach out of the

shadows, "... pop us under his long black cloak and carry us to Edinburgh to be sold and sliced into small pieces for folk to learn how we were made."

And we see the other sides of the wanderer, the man who could hobnob with cowboys and loggers as well as he could with the President, the activist who had the tenacity to hang on like a bulldog in the thick of the fight when it came to saving the wild places he loved.

Edwin Teale writes an introduction of anecdotes and brief paragraphs placing each selection from Muir's work in context. The continuous celebration — poetic, humorous, and visionary — comes complete with Henry Kane's drawings and an index. A modest price makes the book additionally attractive.

We see the other sides of the wanderer, the man who could hobnob with cowboys and loggers as well as he could with the President, the activist who had the tenacity to hang on like a bulldog in the thick of the fight when it came to saving the wild places he loved.

Dear Friends,

We continue to try to reach around the region for news. More than once in a while we feel like we're missing something.

When we are not traveling, the four of us on the editorial staff are usually sifting — scanning newspapers, environmental publications, books, and trade publications. Once we've decided what's worth pursuing, we do our own research — always trying to come up with the information that will be most interesting and useful to conservationists.

The system works pretty well for well-recognized stories. You, the reader, get a summary of the region's natural resources news. You also often get a bit extra — facts and interpretation which may not have been reported anywhere else, but which are of particular importance to conservationists in the West.

On the other hand, our emphasis on sifting also means that many of the stories in the paper have already been written about, albeit in one of the 100 or so sometimes obscure publications to which we subscribe.

What bothers us is that we know that it is often the stories which haven't appeared in any publication which need telling most.

Take the piece on solar energy in the

San Luis Valley, for instance. Inspiring — especially for other rural people in the Rockies. Interesting — have you ever thought of using a sweater as a damper, or known the site of the warmest crawl space in Colorado? And practical — we all gain confidence by seeing successes and save time and money by understanding failures.

And yet the San Luis Valley solar boom certainly isn't a well-publicized situation. While thousands of inches of news copy have been published in federal studies, Congressional legislation, and projects in cities, nobody has yet managed to put the spotlight on the rural solar scene, which is full of capable people spending money out of their own pockets to solve serious personal energy crises.

Why has such news been generally ignored? Probably not because the media or the public wouldn't think it was important. As a sign of changing energy attitudes and technology in transition these individually-initiated rumbles at the grassroots may be much more significant than all the legislated "changes" which receive generous coverage.

The news has probably been ignored because it's hard to get. Most news organizations can't afford to send a reporter out to an isolated valley in

southern Colorado, spending a full day getting there and then hours of uneventful travel through potato fields between interviews.

We, too, are guilty of missing rural news. It is subtle, slow to emerge, and unsung. But on the San Luis Valley story, we were lucky. Solar advocate Malcolm Lillywhite told us about San Luis Valley projects in his traveling slide show. He has worked with the people there and admires their accomplishments and their potential. Through his shows, he is letting a small segment of the public know about these pioneers in our society's shift from fossil fuels to renewable resources.

HCN was able to make it as far south as Gunnison, Colo., for a chat with Akira Kawanabe, who has worked through the regional council of governments to encourage solar energy projects in the San Luis Valley. He gave us a good overview of the situation — but it wasn't enough. We hadn't actually seen the buildings or talked to the people who built them and live in them. But, as usual, it was time for us to get back to the office.

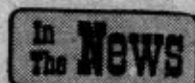
That's where our researchers came in. A retired couple in Lander, Wyo., Charles and Frances Nations, offered to cover the valley for us, taking notes

and photos. They were well-qualified for the job. Charles grew up in the San Luis Valley. Both he and Frances read everything they can find on solar energy — and plan to begin building a few experimental projects this fall.

One thing led to another. When we piled all the material together, we had a story — a very interesting one, we thought. And the Nations had a slide show which they hope to share with a number of groups in the state. After a premiere showing in Lander, they find they may be taking on another responsibility — the formation of a group to encourage solar energy and energy conservation projects in the Lander area.

You can see that we're beholden to our correspondents and our researchers. They are part of what makes us different from an ordinary newspaper — what gives us some ability to cover news of the rural areas and small towns of the West. We hope to continue to find readers who are willing to occasionally become writers or researchers or tipsters for us. But — beware of the side effects of such efforts. You may soon find yourself a sought-after authority on unsung heroes and become as busy as Malcolm Lillywhite or Charles and Frances Nations.

—the editors.



Coal suit lost.

no impact statement needed. 1

Rural enterprise.

modest solar systems. 1

Buying open space.

Jeffco taxes itself. 7

Frustrated fish.

dams block migration. 8

Colstrip approved.

three year delay ends. 10

Calfee on land use.

the back door approach. 14