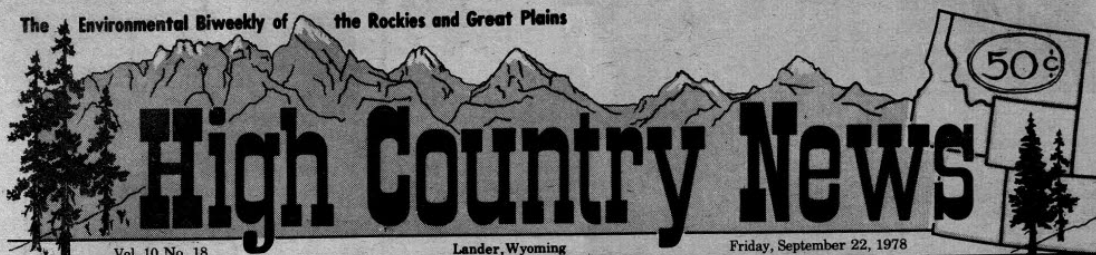


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The Environmental Biweekly of the Rockies and Great Plains



Vol. 10 No. 18

Lander, Wyoming

Friday, September 22, 1978

Conservationist offers remedy for Overthrust strife

by David Crosson

A Sierra Club member's attempt to compromise on oil and gas development on potential wilderness lands has won only mild praise and some criticism from the energy industry. Environmentalists and government officials' responses have been mixed, but generally favorable.

"I'm not looking for special favors for the oil industry," says Don Carpenter, president of Rainbow Resources.

"The proposal has some merits and some problems," says Jack Swenson, executive vice-president of the Rocky Mountain Oil and Gas Association.

Environmentalists and the oil industry have been at loggerheads about the future of land along the Overthrust Belt, a 60-mile wide swath of high petroleum-bearing potential that runs from northwestern Montana south along the Idaho-Wyoming border into Utah.

The compromise proposal, authored by Philip Hocker, Wyoming chairman of the Sierra Club, would allow for oil and gas exploration on some potential wilderness lands.

It comes in response to a major Forest Service planning effort on these and other lands, the second Roadless Area Review

and Evaluation (RARE II). The Forest Service currently is digesting comments — more than 11,000 have been received to date — regarding its 10 RARE II alternatives for designating Forest Service roadless areas as wilderness, non-wilderness or land earmarked for future planning.

More than 62 million acres of Forest Service roadless lands are being reviewed for inclusion in the wilderness system, which now contains about 16 million acres.

Along the Overthrust Belt, RARE II has been a bone of contention between conservation and energy development interests. With six recent field discoveries, the Overthrust Belt is considered by the oil and gas industries as the hottest prospect for a major petroleum discovery in the lower 48 states. At the same time, it traverses the largest remaining roadless region in the lower 48 states. At least one lawsuit already has been filed over the Forest

The nation's hottest new oil field lies under wild, roadless forests

Service's treatment of oil and gas leasing on roadless lands.

The Wyoming Wilderness Coalition, like conservation groups across the country, has rejected all 10 of the Forest Service's RARE II alternatives. In their stead, an "Alternative W" has been proposed by the coalition. It would designate five large areas in the Overthrust regions of the Bridger-Teton and Targhee Forests as wilderness — Commissary Ridge, Grayback,

(continued on page 4)

Jackson Hole News photo by Anna Dooling
A CONSERVATIONIST'S PROPOSAL would allow drilling for oil and gas in prime wilderness areas with high oil and gas potential. If the exploration was unsuccessful, the drill site would be reclaimed and the area would be recommended for designation as wilderness. This well is on Granite Creek near Jackson, Wyo.



Photo by Jim Hatchway

SOLAR CELLS will change sunlight to electricity for pumping drinking water to 50 homes in the Navajo village of Sweetwater.

Sun offers prosperity without disruption

by Dede Feldman

Deep within the Navajo reservation, only a few miles from an abandoned Kerr-McGee uranium mine, stands a solar heated hogan. The solar equipment was added several years ago as part of a demonstration project by Navajoes and members of the New Mexico Solar Energy Association. Across the reservation is another solar building, a classroom built by Navajo pupils at the school. Like the hogan, the solar classroom building is situated in an area of intense uranium activity.

Ross Smallcanyon, a Navajo, says that small scale solar projects generate a spirit of self-determination, something now lacking as a result of tribal preference for economic strategies such as uranium development.

"We want to show alternatives to the type of development going on now and make the decisions ourselves," says Gerald Wilken-

son, director of the National Indian Youth Council.

This summer members of the Navajo tribe and local Indian pueblos formed the Native American Appropriate Technology Action Council. Based in Albuquerque, the new group will go to reservations and construct small scale solar projects.

Council members are seeking technologies that are labor (and not capital) intensive, simple, cheap, and decentralized. They are also concerned about preserving natural resources and preventing destruction of traditional lifestyles.

BIRDSPRINGS SCHOOL

One solar project now under construction on the reservation is the Little Singer School in Birdsprings, Ariz. Two red domes will accommodate 44 students when they plate solar collectors on a V-shaped build-

(continued on page 6)

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GOOD ORDER

Dear Folks,

Need to set the record straight on the "Kerr-McGee Uranium Compromise" article in the Energy 1978 column of the 25 August issue.

The Wyoming Industrial Siting Council order does permit Kerr-McGee to continue construction of the four surface mines at the South Powder River Basin Uranium Facility, provided that the number of employees at those mines does not exceed 150. However, the four surface mines are not exempt from ISC jurisdiction. Kerr-McGee must obtain a siting permit for the entire facility; the order merely permits construction to continue while the siting permit application is being prepared.

The Powder River Basin Resource Council felt that the ISC's final order was a good one. It maintains ISC jurisdiction over the entire facility, thereby serving the purposes of the Industrial Siting Act, while at the same time not unduly burdening the company.

Sarah Gorin, staff
Powder River Basin Resource Council

DUBIOUS EXTRACTION

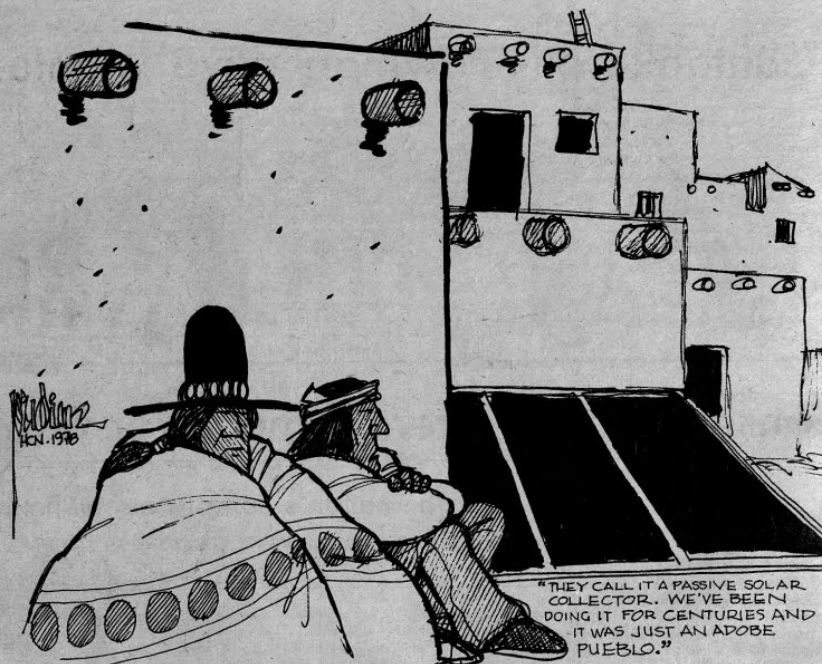
Dear HCN,

I applaud your level-headed coverage of the "wild horse" problem; however, I think these animals should be referred to as feral horses (or burros), not wild horses. They are not native animals. The Western mustang descended from stock introduced by the Spaniards and is no more indigenous to the U.S. than longhorn cattle or Angora goats. The mustang is the same species (*Equus caballus*) as the Thoroughbred, Appaloosa, Quarter Horse, etc. with which it interbreeds and is not unique except for being the first horse in North America. The American Mustang Association is working to preserve the gene pool of the early American horses, which makes more sense than perpetuating the hodge-podge of breeds that have escaped to run wild and interbreed on the Western plains for many generations.

I think it's time we stopped listening to the emotionalism that pressured passage of the Wild and Free-Roaming Horse and Burro Act (which is now preventing any sensible management of the feral equines of the West) and began looking at the range destruction they are causing and weighing the aesthetic and economic values of native game species (such as bighorn sheep and pronghorn antelope) against those of a feral exotic non-game animal of dubious extraction.

If we must continue this type of herd reduction, let's take the entire annual crop of colts in the fall at weaning time and let the breeding herds reduce themselves through natural attrition, eventually eliminating them from competition with cattle and native game animals. The colts would be much easier to handle and break than older animals and would be less likely to be rejected by their owners.

Duane L. Howe, D.V.M.
Dubois, Wyo.



Guest editorial

Balloonist not a hero in Albuquerque, N.M.

by Jack Kutz

It used to be said, "Heroes are made, not born." Today, that expression could be paraphrased: "Heroes are made — but sometimes at the expense of the rest of us."

In August, three wealthy Albuquerque businessmen floated a giant, \$125,000 helium balloon across the Atlantic and became an instant media-sensation. Their expensive flight was made possible by three things: the craftsmanship of South Dakota balloon-maker Ed Yost, the constant safety-monitoring of the U.S. Navy, Coast Guard and satellites; and — in a sense — by the sacrifice of much of Albuquerque's foothills.

The three businessmen consisted of a uranium company president, Maxie Anderson; a hang-glider manufacturer, Larry Newman; and a land developer, Ben Abruzzo. Their balloon, the Double Eagle II, will be preserved in the Smithsonian Institution.

Many Albuquerqueans, however, wish the Sandia Mountain foothills could have been preserved instead.

Developer Ben Abruzzo has long been a controversial figure in Albuquerque; in the past two decades, he has built a small empire in the mountains that rise above the eastern edge of the city. His interests include a ski area, an aerial tramway and vast housing developments that helped produce the wealth that made the balloon flight possible.

In February 1977, an Albuquerque newspaper *Seers Rio Grande Weekly*, said in an article, "development of the foothills is eliminating some of Albuquerque's most cherished open space, killing the wildlife and shutting off access to the mountains . . . the development in the area plays havoc with the natural drainage patterns, and the city planning department bemoans the cost to extend city utilities."

Abruzzo's ever expanding high-income

subdivisions have put him in frequent conflict with Albuquerque's environmentalists. In 1974, Abruzzo proposed a land exchange between his company and the U.S. Forest Service, offering two relatively inexpensive private properties for a prime piece of forest land in the foothills.

Albuquerqueans reacted angrily to the proposal, which would have removed 160 acres from the Sandia Mountain Recreation Area and placed another 160 houses in the foothills. Within a month, 5,500 people had signed petitions opposing the swap.

A heated 14-month battle between a local citizen's group, Save Our Sandias, and the developer finally ended when then Assistant Secretary of Agriculture Robert Long cancelled the swap on the basis that it was "not in the public interest."

Abruzzo irately declared the environmentalists had "subverted the democratic process" and publicly called them "fools . . . liars . . . smucks" and "obnoxious pigs."

He was later partially placated, however, when the Forest Service reappraised the two properties he had offered them — and then purchased the lands for half a million dollars more than the original appraisals.

Today, Abruzzo is a celebrated hero, the recipient of 16 international medals. He is currently enjoying the thrill of ticker-tape parades and TV appearances.

Yet, he will never know the quiet satisfaction enjoyed by the people he so often opposes.

He may never realize that because of people like these, the view from the balloon is just a little bit more magnificent.

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Jack Kutz is a free-lance writer, a member of the New Mexico Wilderness Study Committee and the Albuquerque Citizens Open Space Task Force.

Guest editorials do not necessarily express the opinions of the staff of HCN.

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Cantankerous cowman gave Montanans courage

(Ed. Note: Boyd Charter died Aug. 26 at his ranch in the Bull Mountains of Montana. He and his wife, Anne, were longtime opponents of strip mining and founders of the Northern Plains Resource Council and of the Bull Mountain Landowners Association.)

The tribute to Charter which follows was written by Kye Cochran of the Alternative Energy Resources Organization.)

by Kye Cochran

Boyd Charter had a straightforward value system. It went like this: You keep your word. You don't hurt other living things for sport or play or through meanness. You do what you can to help keep the earth and its inhabitants alive and happy.

In these times of people pushing "new and better" things to acquire and do, Boyd's values too often are equated with gullibility and stupidity, rather than the simplicity of truth.

When coal companies began sending representatives to eastern Montana in the early '70s to negotiate the buying-up of ranchers' land for strip mining of coal, they read Boyd wrong.

He used to tell of one encounter he and his wife Anne had with an acquisitive coal company representative who assumed that because Montana ranchers are hospitable to strangers, they are also ignorant and malleable.

"This fella didn't know that we had already sent some Montana ranchers down to Appalachia to find out from the people down there how the coal boys operated to weasel a person's land out from under him," Boyd said. "So we knew all their tricks. The Kentucky people told us how the company would send out a real slick talker, and he'd go about buttering up the poor unsuspecting landowner, being real friendly and telling him what a great place he had, and how his horses was so fantastic looking, why wasn't they on the race track, and how he'd never had such good coffee in his life, and did his wife really make these muffins, why, she ought to enter them in a contest and win a prize, and blah blah blah."

"Well," said Boyd, "when this fancy coal boy drove up to our place, there just happened to be a small bunch of my buckin'

horses down by the gate. Real scruffy-looking, but damn fine buckers. Seeing we had a visitor, Anne put on a pot of coffee, which has always tasted terrible at the ranch because our water comes out of a coal seam and has sulfur in it; and she brought out the remains of an old cake she had put together in a hurry with a mix a week before.

"Well, this sweet-talking son of a bitch started right in: 'My,' he said, 'you surely do have a beautiful place here! Look at them horses; why, they look like sure-enough thoroughbreds — they ought to be out at the racetrack in Denver!' and 'Gee whiz, Miz Charter, did you make this cake yourself? It ought to win a prize!' and 'If this ain't the best coffee I've ever tasted!' Just about that time," said Boyd, "I figured I'd had enough. I stood up. 'Listen to me,' I said, 'If you think them horses is beautiful, your eyes is lyin'; if you think this cake ain't stale, and this coffee is any better'n goat pee, your taste buds is lyin'; and every time you open up, god, your mouth is lyin!' The door swings out the same way it swung in: hit it, you lyin' sonofabitch!'"

The son of one of Butch Cassidy's Hole-in-the-Wall Gang, Boyd Charter was born

You don't hurt other living things for sport or play or through meanness.

in Baggs, Wyo., and spent much of his life as a cowboy and rancher, first in Jackson, Wyo., and later in the Bull Mountains of south central Montana. As a boy, Boyd used to creep downstairs at night and listen when members of the gang were gathered in the Charter living room. One tale he remembered concerned an elderly couple whom the gang were paying to keep fresh getaway horses ready at their ranch. After a bank robbery or similar piece of action, the gang could count on being able to change mounts on the run if the getaway happened to be in the direction of that ranch.

One time they robbed a bank, and headed for the old couple's place. When they arrived, they found the man and his wife very upset, and learned that the bank was about to foreclose on the ranch and turn them out.

"How much do you owe the bank?" asked Butch. "Three thousand dollars," answered the old man. "Okay, here's the three thousand," said Butch, counting it out. "Don't forget to get a receipt." The gang mounted the fresh horses and took off.

The next day, along came the bank man. The old rancher happily paid him, insisting upon getting a receipt. The bank man rode off with the money. A mile down the road, the gang jumped him and took possession of the useful \$3,000.

Boyd took great pride in being trustworthy, and expected the same of others. If someone betrayed his trust, he took immediate and direct action. When he was a cowboy near Jackson, he rode into town one day and stopped off at his favorite saloon.

"Hey Boyd," yelled one of his cronies at the bar, "you must be hard up these days."

"What do you mean?" he asked.

"Rentin' your favorite horse to that movie company," his friend replied.

"You've been seeing things. That horse is summering in a pasture out east of town."

"Hell it is! It's your horse all right, and

what's more they're swimmin' him back and forth across the river."

So Boyd hightailed it for the river, and sure enough, there was the movie star on his horse. Incensed, Boyd walked up to the man and said "Git down off my horse."

"This is a horse we rented for this movie," said the man.

"Git down off my horse!" said Boyd.

The man protested again.

Boyd picked up a stone. "Git down off my horse, dammit, or I'll GIT you off my horse!"

The man got off.

Many years later Boyd got a letter from his cousin in Oklahoma. The cousin said that he had recently been introduced to John Wayne. When Wayne heard the cousin's name, he said "Charter. Charter. . . you have any kin in Wyoming?"

The man said, "I have a cousin Boyd Charter who used to live in Wyoming."

"Boyd Charter!" exclaimed Wayne. "That's the name. Meanest man in the West!"

But Boyd wasn't mean at all. Feisty, and sometimes cantankerous, yes. Mean, no. You could tell by how gentle and trusting all his animals were. For a long time Boyd had a string of about 50 "buckin'" horses that were rented for use in rodeos. Boyd maintained that the best buckin' horses are those that simply like to buck, not those that buck through fear, anger or meanness. Many of his buckin' horses were so tame and gentle that his kids could ride them bareback around the corals.

Few people are so sure of what exactly they need for comfort and happiness that they cannot be tempted by the offer of money or power. Boyd was sure. He and Anne were comfortable and happy in their tiny log house. Their land was precious to them and important to their happiness. They didn't want any amount of money for

it. They wanted it to remain healthy and unscarred.

The people from Consolidation Coal Co. didn't understand that. They kept offering more and more money. Everybody has his price, they thought. Finally, they had a meeting with the Charters, and they

"No matter how much money you offer me, you will always be four dollars and thirty-six cents short."

handed them a blank check. Name your price, they said. Anything. Boyd was finally weary of all this persistence in the face of his often-repeated "no."

"I know you are one of the largest coal companies in the world," he told them, "and I know you're a subsidiary of one of the largest and richest oil companies in the world. I know you're so rich you could pay me as much money as I could imagine and not notice it at all. But no matter how much money you offer me, you will always be four dollars and thirty-six cents short."

Boyd's instinct for truth and his strength and tenaciousness have been and continue to be a source of inspiration for the many Montanans — and others — who knew him. His spiritual leadership, even when illness kept him from active participation, has lent courage to those battling to save Montana's land and air from devastation. Because of Boyd and the example he set for others, more and more "slick sonofabitches" — as he would call them — who offer false riches for the right to destroy true riches will find themselves four dollars and thirty-six cents short.



Anne and Boyd Charter

Photo by Terry Moore

High Country Citizens Alliance

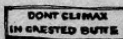
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Remedy for Overthrust strife...

(continued from page 1)

the entire Gros Ventre, Palisades and the West Slope of the Tetons — as well as several smaller ones. Only two of the RARE II alternatives (other than the unlikely-to-be-adopted proposal that all roadless areas be designated wilderness) simultaneously specify even three of these regions as future wilderness.

Hocker calls his compromise proposal "another step" to enhance the prospects for Alternative W. He calls Alternative W an "extreme concession" for wilderness advocates and says it was necessitated by the low priority given to wilderness by the Forest Service in outlining its RARE II alternatives. The compromise calls for the Forest Service to add to the RARE II designations of wilderness, non-wilderness and future planning a category called "special study." The new category would allow for oil and gas exploration where there are major conflicts between oil and gas interests and conservationists. No other non-wilderness activities could be pursued on the special study lands. If, after some specified period of time (Hocker suggests three years), commercial quantities of oil or gas are found, development would be allowed to proceed on that portion of the study area. However, if commercial quantities of oil or gas are not found, the undeveloped property would have to be returned to a wilderness state by the exploring interests under the scrutiny of an oversight committee that would include representatives of conservation organizations.

Some of the impetus behind Hocker's proposal appears to result from the Forest Service's leasing program. Most of the roadless lands along the Overthrust Belt in Wyoming and Idaho have already been leased or are under lease application. Hocker says, "The drilling operations now going on have been ramrodded through with too little time for Forest Service review, no exposure of plans to public comment and very fuzzy, slipshod regulation of operations."

Hocker does not see his "special study" category as a substitute for wilderness recommendations. Rather, he thinks that only areas of high oil and gas potential and high wilderness value should fall within the special study domain. "Oil and gas exploration just don't disturb the land that much," says Hocker, "and since we think this land can be returned to wilderness if oil and gas aren't found, we're willing to gamble that they won't find it."

Hocker expects to submit his compromise offer to the Forest Service with the backing of the Sierra Club. Already, he has the support of Bruce Hamilton, Sierra Club

Hamilton's sentiments, "It's a way of finding out if the Overthrust oil and gas speculation is fact or fiction and it probably will get the best results in the long run."

But environmentalists are not of a single mind on Hocker's proposal. "My opinion," says Howie Wolke, Wyoming representative for Friends of the Earth, "is that we may need something like this as a last resort. But it's premature right now. The Forest Service is going to have a hard time not recommending some of the Overthrust Belt for wilderness. And, with the concessions we've already made — on the Wyoming Range, for instance — we've shown we're willing to play ball and I think it's time to see a move from the other side."

Oil and gas interests appear cautious. "The proposal has some merits and some problems," says Jack Swenson, executive vice-president of the Rocky Mountain Oil and Gas Association, "but we're not proposing to contest it. With respect to wilderness, we're saying that as long as we can go in, we want to leave it and leave it as wilderness." RMOGA's Paul Driessen has a very specific problem with Hocker's three-year time limit for a special study, but otherwise thinks "it's fantastic that they put this thing together."

Don Carpenter, president of Casper-based Rainbow Resources, is less sanguine. "We seem to be getting away from laws. I'm not looking for special favors for the oil industry or the environmentalists. I'm looking for the issue to be decided. Is the land wilderness or not? The more we deviate from that, the more confused it becomes. I also would want to align myself with the gamut of multiple users. It just



Jackson Hole News photo by Richard Murphy

AT LOGGERHEADS. Conservationists and the oil and gas industry are at loggerheads over national forest land in the Overthrust Belt in Wyoming, Idaho and Montana. The photo above shows the site of a proposed oil and gas well near Cache Peak in Wyoming.

seems that people are being limited more and more in their access to public lands."

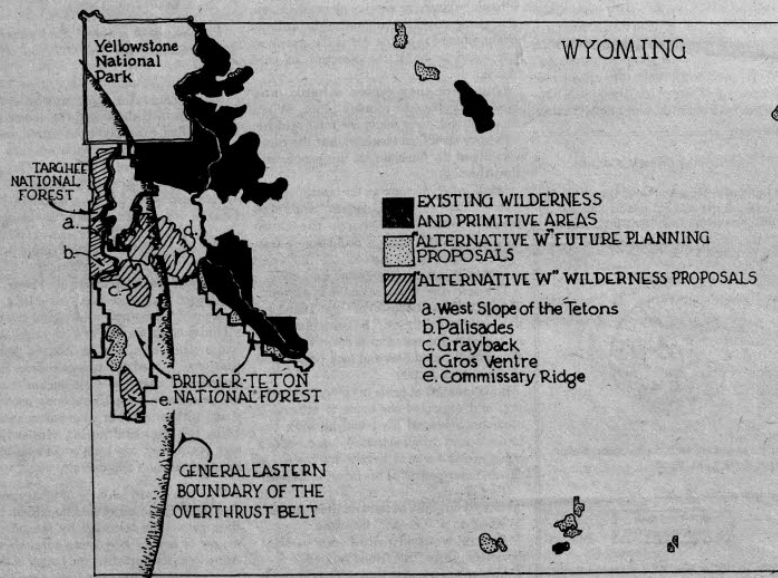
While no one within the Forest Service will take a stand yet on Hocker's proposal, Howard Banta, Washington-based Director of Minerals and Geology for the Forest Service, says, "my own perception is that it could be incorporated into the Forest Service's final recommendation as a subset of the future planning category... It's a policy decision... I don't think the Forest Service viewed any of its preliminary recommendations as the viable alternative so I think its final judgment will incorporate parts of many recommendations but

won't look exactly like any of the draft RARE II alternatives."

Earl Laser, branch chief of resources for the Bridger-Teton National Forest, says, "I think the danger of Hocker's proposal is that it could open the door for other commodity interests to say that they should be allowed to go into a special study land in the same way as the oil and gas industries. That could undermine the idea of wilderness as we define it in the West."

Hocker concedes that his compromise decision was a "difficult and bitter" one to make. "You know, six years ago or six years hence, this probably would not be an issue. Oil and gas have always been a boom and bust issue... We could be setting a dangerous precedent for wilderness. But this seems to be the best chance in this area for an equitable solution even though there is a risk involved."

"I'm not looking for special favors for the oil industry or the environmentalists. I'm looking for the issue to be resolved. Is the land wilderness or not?"

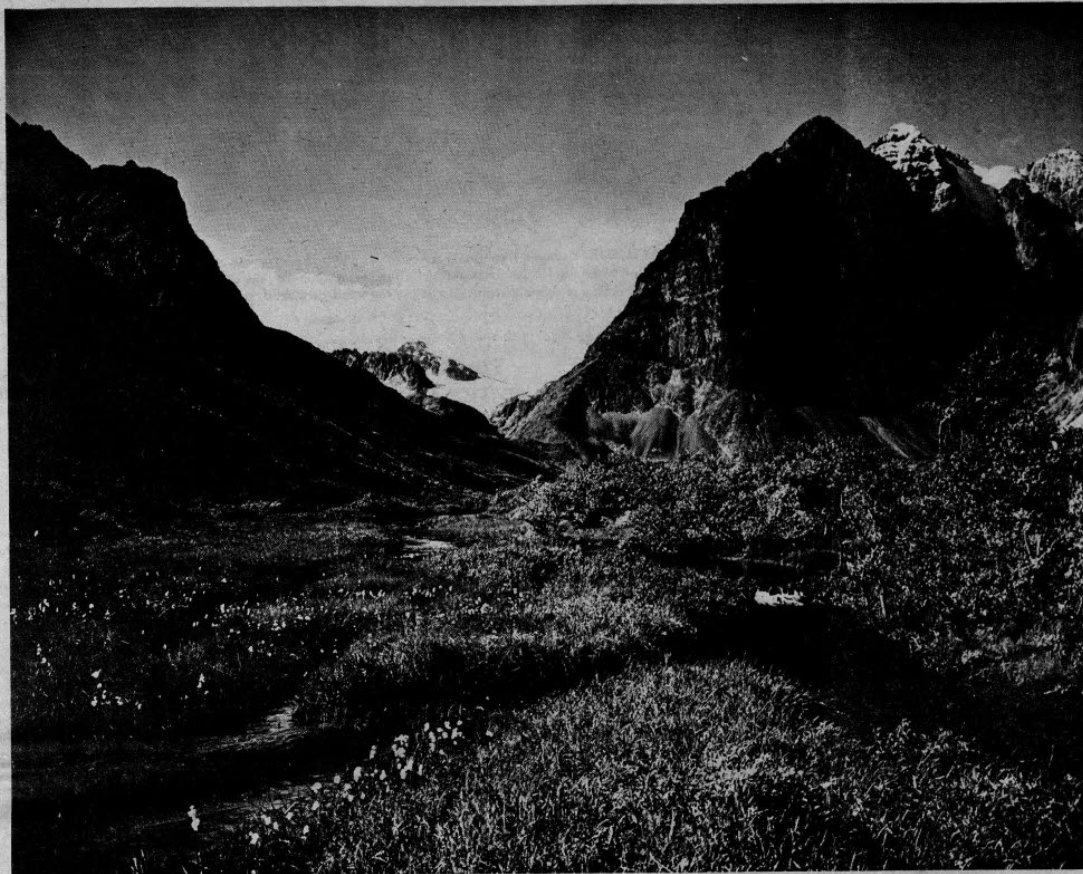


"Since we think this land can be returned to wilderness if oil and gas aren't found, we're willing to gamble that they won't find it."

representative for the northern plains states: "Hocker is taking the same approach that has been supported by the oil and gas industry on D-2 lands in Alaska and I think if we let oil and gas in delicately, we maintain the ability to preserve wilderness attributes."

Bart Koehler, Wyoming representative of the Wilderness Society, echoes

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Only dim hopes remain for passage of Alaska bill this year

In the Alaska National Interest Lands Conservation legislation that is languishing in the Senate Energy and Natural Resources Committee "Sen. Henry Jackson (D-Wash.) has all the cards," says a Senate staff member. "He's tried to appease everybody. That takes a long time."

The committee has taken such a long time completing work on the bill that now, as Congress nears its Oct. 15 adjournment date, passage is doubtful. The House passed a much stronger bill in May by a vote of 277-31.

"Unless Congress decides to meet after the November elections in a 'lame duck' session, there is virtually no chance the legislation will be approved," according to Land Use Planning Report.

"Hopes are dimming for a bill this year," says Brant Calkin, a lobbyist for the Alaska Coalition, "but we intend to pursue it to the last."

Among the people whom Jackson has been trying to please on the legislation are Alaska Sens. Ted Stevens (R) and Mike Gravel (D). Although Stevens is not a member of the committee to which the bill was assigned, he attends mark-up sessions and "has more input than any member of the committee," according to the Senate staffer. When Stevens was out of town in

September, the committee stopped all work on the bill until he returned.

If the bill reaches the Senate floor, Gravel has threatened a filibuster. Senate Majority Leader Robert Byrd says he will not schedule the Alaska bill for consideration by the full Senate this year unless a

filibuster can be avoided, however.

The Senate did not hold extensive hearings on the bill. "This meant that the senators were not as well-informed (as the House members) on the bill. There has been a lot of confusion," the Senate staff member says.

The bill also lacks a strong advocate in

the Senate. "If Sen. Lee Metcalf (D-Mont.) had lived, we'd probably have a bill by now," says Bruce Hamilton of the Sierra Club. "Metcalf was the original sponsor of the Senate version of the Alaska bill, a powerful and well-respected member of the Senate committee, and a strong defender of wilderness and wild lands."

Jay Hammond wins in Alaska by a slim margin

"If this thing ends within 100 votes, it's going to be terrible," said Alaska's attorney general as he watched the tally of absentee ballots in Alaska's Republican gubernatorial primary. Gov. Jay Hammond was slowly chipping away at the thin lead of former governor and former U.S. Interior Secretary Walter Hickel.

It turned out to be Hammond that won the race, eking out a "terrible" 101-vote margin that immediately was contested by Hickel. A recount, appears to be confirming Hammond as the victor, though Hickel still may fight the result. Should Hammond prevail, environmentalists, particularly supporters of the federal D-2 lands legislation, will be left with a difficult decision in the general election.

Hammond's clear predilection has been for slow growth in the nation's largest and

wildest state. Similarly, Democratic upstart Chancy Croft, a state legislator who beat two lesser known rivals in a close primary, has been given high marks for his stance in environmental matters. By contrast, Hickel has been a staunch advocate of development, espousing something of a "manifest destiny" for Alaska.

Sen. Robert Packwood, R-Ore., has charged that the Carter administration's failure to request sufficient money to replant harvested timber lands "clearly violates both the letter and the spirit of the law." Packwood says Carter has only requested enough reforestation money to keep up with current cutting. A backlog of 1.66 million acres of forest lands has not

While all three candidates have opposed D-2 lands legislation, which would protect large tracts of federal land in Alaska, both Hammond and Croft are far more acceptable to environmentalists than Hickel. The differences between the two front runners is a mere matter of shadings, according to the Alaska Coalition, a conservation lobby.

Cutting stepped up; how about planting?

been replanted, he says. The 1976 Forest Management Act requires that these lands be replanted by 1984.

"Frankly, I find it difficult to understand how a timid approach to reforestation can be reconciled with a policy calling for accelerated timber harvests," says Pack-

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Indians use sun...

(continued from page 1)

ing nearby. The school is powered by a wind generator.

"The purpose of the school is to demonstrate that Navajos can build and control their own schools," Tom Ryan, project director says.

Funding for the project came from the National Center for Appropriate Technology, the U.S. Community Services Administration, Foothill College and others. Local people built the school, including the solar panels, and installed the wind system.

For decades, Birdsprings children, like Indian children on other reservations, have been sent to Bureau of Indian Affairs boarding schools, often hundreds of miles away.

"When we asked the BIA about a local school here, they said that we could never have a school because there was no electricity or natural gas here," Ryan says. "So we decided to do it on our own."

Ryan hopes that Birdsprings can provide a model of energy self-sufficiency for the 80 percent of Navajo communities without electricity or gas heat — and help preserve traditional family and community life.

But that's not all. Using the knowledge they have accumulated from building solar collectors, the community is manufacturing solar panels. The new business will create as many as 40 jobs for the 800-member Birdsprings community.

HEALTH THROUGH SOLAR ENERGY

In the Navajo village of Sweetwater—15 miles from the nearest electrical power source—six arrays of small, black photovoltaic cells were the object of a traditional Navajo blessing and dedication held last month. The solar cells will change sunlight to electricity for pumping drinking water to 50 homes. The project, the first of its kind in the entire country, is sponsored by the

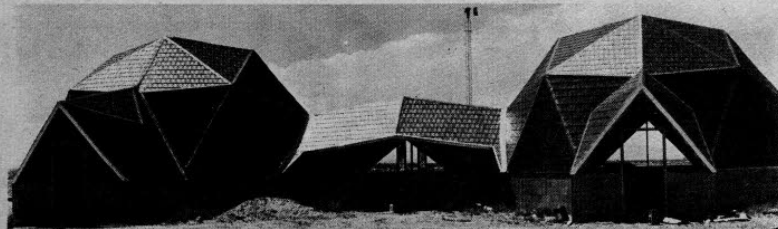


Photo by Dede Feldman

A SCHOOL CLOSE TO HOME. Because they have no electricity or natural gas, Navajos in Birdsprings, Ariz., have been sending their children to schools hundreds of

miles away. Now, the children can stay close to home in the wind-powered, solar-heated school shown above.

Indian Health Service as part of its drive for "Better Health Through Solar Energy."

"Usually Navajos haul their water in 55-gallon drums and leave it outside their homes, dipping into it whenever they need to. The result is often disease," says sanitary engineer Salvador Reyes.

According to Reyes, Sweetwater residents are fairly typical of the 40,000 people living on the reservation who enjoy abundant sunshine but have neither running water nor electricity. "Places like Sweetwater — where there is no other source of electricity — provide some of the only places where photovoltaics are cost-effective," Reyes says.

Another health service project is the new \$6.6 million Acoma-Laguna-Canoncito Hospital, near Acoma Pueblo in New Mexico. The hospital, with a sawtooth roof line that supports 1,500 square feet of flat plate collectors, is one of several Indian hospitals that use solar energy. The funding agency — the Department of Health Education and Welfare — has decided to "go solar" on all new Indian hospitals, according to James Harvey of the health service.

Local critics of the hospital say that it is ugly. Nicholas Redeye, service unit director for the hospital, says it is working well, however.

"We expect the solar system to provide between 85 to 90 percent of the hospital's heat and hot water next year."

The Birdsprings school will provide a model of energy self-sufficiency for the 80 percent of Navajo communities without electricity or gas heat — and help preserve traditional family and community life.

Other solar buildings on the Navajo and other Southwestern Indian reservations are not nearly as complex—or as expensive as the Acoma-Laguna-Canoncito Hospital.

A solar greenhouse attached to the Borego Pass school near Crownpoint, N.M., is a learning experience for Navajo stu-

dents as well as a low cost, non-mechanized means of obtaining heat. Similar structures have been added to buildings at Fort Defiance and Mariano Lake.

"Indian people want to grow but also remain the same," says Wilkenson. "Appropriate technology may provide a way to do this."

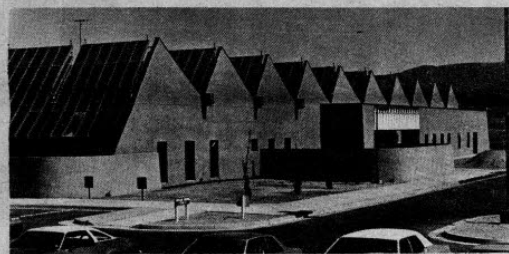
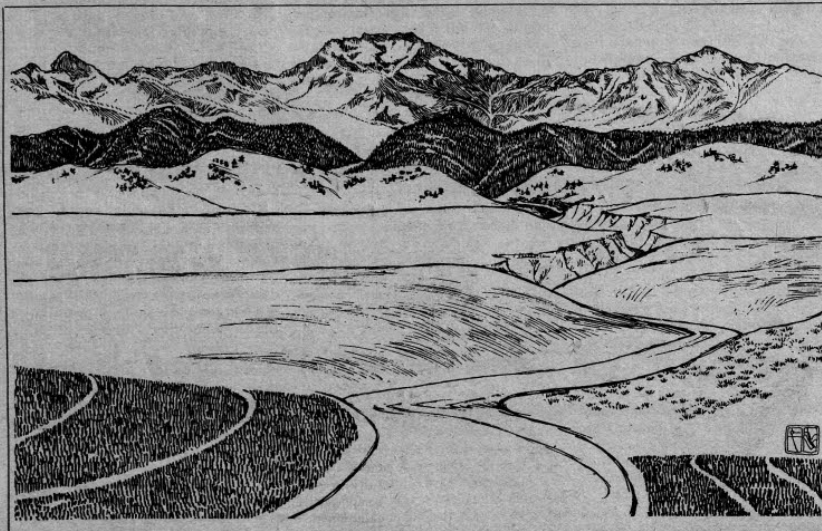


Photo by Dede Feldman

A SOLAR-HEATED HOSPITAL near Acoma Pueblo in New Mexico.



poetry of the earth

William Matthews teaches creative writing at the University of Colorado, Boulder.

Sunrise, Left Hand Canyon

Above the regular sparkles of Longmont, a grey horizon paling pink, then a dark layer like a heavy roof, sleep pressing down on a long happy night. We need rest from everything, glib light says.

Above the dark layer is a line of clouds so airy and strong it could be God's signature, good news without language, events without meaning. Above the news is the dark blue air the sun is pushing up, away for the day.

— William Matthews

Interior disagrees

Keep railroads out of coal mining, Justice Dept. says

Companies in the coal transportation business should be kept out of the coal mining business, says the Justice Department. The agency has advised preventing railroads from joining with energy companies to mine the vast coal reserves along their Western tracks.

In a little-noticed report issued early this summer, the department warns that railroads' participation in coal mining "may produce anticompetitive effects."

"Means that eliminate or diminish such effects and free railroad coal for production must be devised," the Justice Department report says.

Coal was granted to the Western railroads more than a century ago in sections interspersed with blocks retained by the government in checkerboard fashion along the railroads' right-of-way. Union Pacific owns about 10 billion tons of strippable coal within its checkerboard. Burlington Northern owns about 11 billion tons.

The government intended the railroads to use the coal in their engines' furnaces, a use that became obsolete with the advent of the diesel engine.

The Justice Department report comes more than a year after the Interstate Commerce Commission said it was concerned about the "potential for abuse" by railroad conglomerates involved in coal mining.

The Interior Department appears undeterred. The department is going forward with consideration of proposed joint ventures of railroads and mining companies at several sites in southwestern Wyoming.

One of the proposals — the Black Butte Mine about 25 miles east of Rock Springs — involves leasing of federal coal by a partnership involving Union Pacific Corp.

HAULING, LEASING FORBIDDEN

Railroads are prohibited by federal law from commercially hauling coal in which they ever had an interest, leasing federal coal reserves or acquiring longterm financing of their mining activities without first acquiring Interstate Commerce Commission approval.

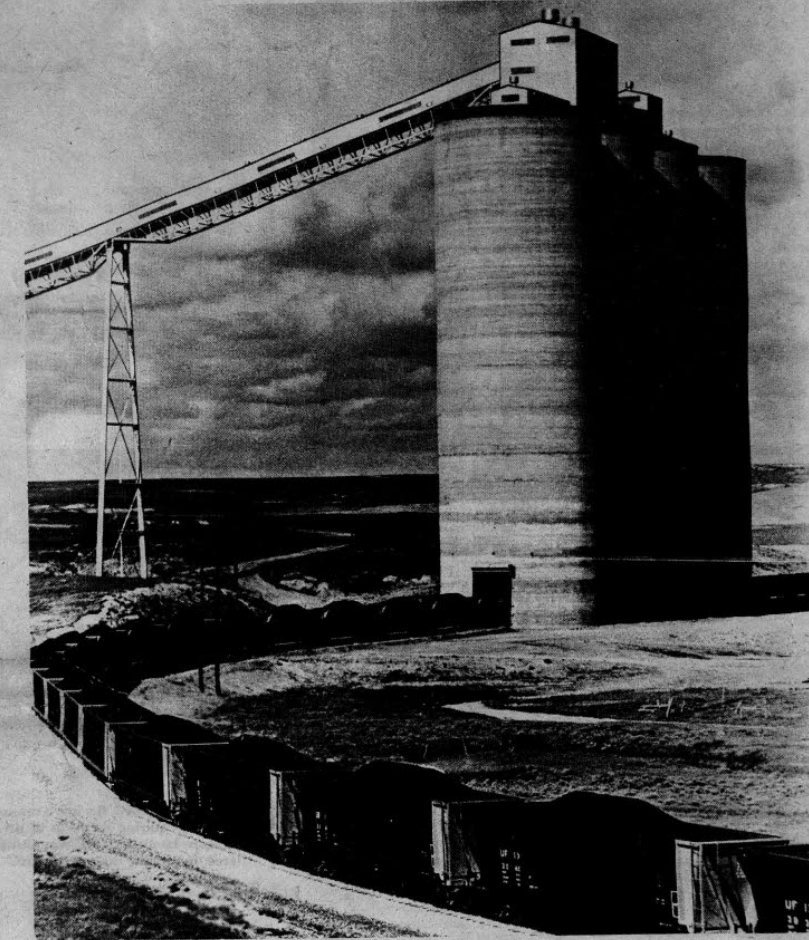
Union Pacific freely acknowledges that the purpose of its corporate reorganization seven years ago was to escape these federal restrictions so it could get at the coal reserves.

"They were just locked up and couldn't be developed under the constraints in those regulations," Union Pacific Corp. spokesman Bill Raines told the Associated Press earlier this year.

The railroad's directors created Union Pacific Corp. as a holding company making the railroad a subsidiary along with three other subsidiaries—Upland Industries Corp., Champlin Petroleum Co. and Rocky Mountain Energy Co.

The federal coal lease granted by the Ford administration to a partnership of Rocky Mountain Energy and Peter Kiewit Sons was the first lease ever granted by the Interior Department to a railroad conglomerate. The department granted the lease on the advice of its attorneys that the corporate reorganization had freed Rocky Mountain Energy from the railroad.

"Apparently no federal court has had to decide whether the Mineral Lands Leasing Act would permit a holding company exemption" allowing a railroad's parent holding company to obtain a federal coal lease, the Justice Department report says. "There is, however, reason to believe that it could not. In any event, the government



RAILROADS have found ways to get around federal regulations that would bar them from coal mining.

has not leased to either railroads or holding companies which control railroads."

The report fails to mention the Black Butte lease. It also expresses no opinion about whether a railroad holding company's mining subsidiary should be allowed to lease federal coal.

However the report expresses concern about joint ventures, even those in which an energy company leases a federal block and mines the federal coal with adjacent railroad coal while in partnership with a railroad.

"A system of joint ventures and lease agreements would create both commonalities of interest and a network for communication," the report says. "Thus, there would be an added incentive to behave anticompetitively and a means by which anticompetitive conduct would be coordinated."

"In these ways, current laws fail to achieve their competitive purpose," the report adds. "The Mineral Leasing Act should be perfected to prevent the development of a system of railroad lease and

joint venture agreements that could seriously threaten the competitive climate of the Western coal markets."

The report says one way to solve the problem would be for the government to condemn all the railroads' mineral rights within their checkerboards.

"Since all the railroads are entitled to is a competitive return for the coal in their lands, the appropriate level of compensation would be determined by reference to government lease sales of similar lands. The government could then lease out the lands currently in the checkerboard. The railroads would receive the fair value of their coal reserves but would not be given the option of attempting to reap monopoly profits, and the coal could be marketed."

The main problems with such an approach would be the financial impossibility of the government condemning all railroad coal lands at once, and the "complicated and cumbersome" process of determining fair market value, the report says.

ELIMINATE CHECKERBOARD

Another approach, the report says, would be for the government to trade some of its blocks in the checkerboard for the railroad's blocks. The railroad then would be allowed to develop areas large enough to mine economically without touching federal reserves and the government could lease economically minable blocks without involving railroad coal.

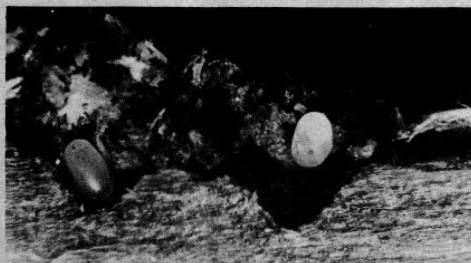
"The possible objection to this plan is that it succeeds in eliminating railroad control of all the sections contained in the checkerboard only at the cost of giving them the ability to mine and transport the coal from half of the sections in the checkerboard," the report cautions. "Unless this reduction of control would significantly reduce the incentive to restrict the supply of coal transportation services to any final market this plan would not offer any advantage over unchecked railroad participation in the coal industry."

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U.S. Forest Service photo

AN ADULT BEETLE in the runway or "gallery" it has made by chewing its way through the living layer of wood. After mating in the "parent gallery," the female deposits eggs in niches along the walls.



U.S. Forest Service photo

MID-SUMMER is the best season for an adult pine beetle to attack a tree because the eggs it lays will have time to hatch before winter. Below zero temperatures kill the eggs.



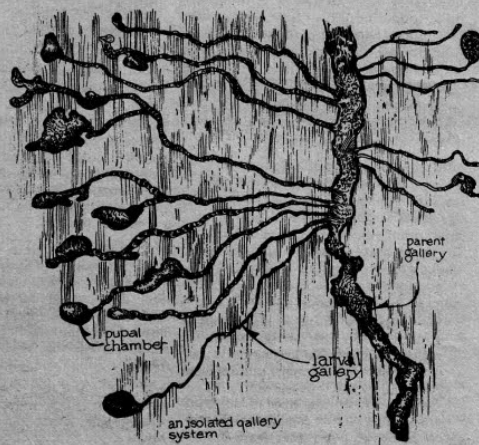
U.S. Forest Service photo

AN EGG HATCHES into a larva that begins mining its own pathway at right angles to the parent gallery. It will pass the winter in this stage.



U.S. Forest Service photo

IN THE SPRING, the larva makes an oval-shaped chamber and pupates, acquiring the form of an adult beetle. In mid-July the new mature beetle bores its way out through the bark and flies to a new tree, beginning the cycle again.

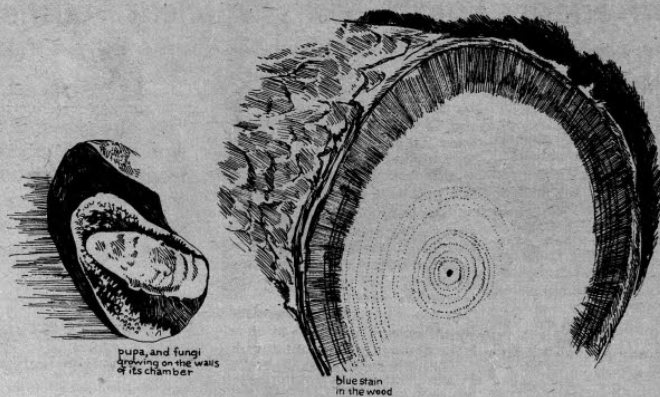


*The mountain pine
beetle plague — could
there be a silver lining?*



Photo courtesy of the Pacific Forest Research Center

A MOUNTAIN PINE BEETLE (actual size: 1/4 inch) and evidence of its work. Long before a grove of pines looks like this, you can find signs of a pine beetle attack. Boring dust accumulates at the base of beetle-infested trees. Pitch oozes from the entrance tunnels. One summer after the beetles attack the tree, its crown dies. The foliage changes from green to yellowish-brown and finally to reddish-brown.



PINE BARK BEETLES live beneficially with two types of fungi. Beetles carry spores of the fungi on their backs and in their mouths, infecting the tree as they mine their galleries. The fungi stain the wood blue and block the flow of sap in the tree, which kills it. Pine beetles cannot mature without eating the fruiting body of the fungi growing on the walls of the pupal chamber.

by Stephen S. Campbell

Is the infestation of Rocky Mountain forests by the mountain pine beetle an environmental disaster?

Nobody knows. However, David A. Kovacic, a Ph.D. candidate in ecology at Colorado State University, is trying to find out by testing the hypothesis that mountain pine beetle attacks may make forests more productive and diverse.

The beetles are major killers of lodgepole pine, ponderosa pine, Western white pine and white bark pine. They are at epidemic levels in forests in Montana, Idaho, Wyoming, and Colorado. In Colorado, for instance, beetles have killed 85 percent of the trees in some ponderosa pine forests on the Front Range. In all of these areas, people are concerned about loss of timber, loss of trees in home and resort areas, and potential forest fires during extremely dry periods.

But Kovacic sees another side to the infestation. The dead trees let more light and moisture hit the forest's floor. Pine resins, which may suppress plant growth, nitrogen bacteria and decomposers, are eliminated after trees are killed. These factors, along with less competition from pine trees, allow the grasses, leafy plants, sedges and shrubs to increase. Kovacic says this growth may provide increased forage for birds and mammals.

"Cyclic perturbations in an ecosystem may lead to increased stability of the ecosystem," Kovacic says.

Beetles have always been in Western pine forests, Kovacic says. Only when conditions are right (even-aged stands 50-100 years old with diameters of 8-12 inches) is the beetle able to cause infestations of epidemic proportion. Man's intervention with the forests in past logging and in present fire control is the major cause of these even-aged stands, Kovacic says.

The beetle has one brood of larvae per year. Beetles mature sometime in the middle of August when they leave infested

trees and fly to healthy ones. Females bore under the bark of the healthy pine and lay their eggs.

They carry a fungal disease known as "blue-stain," which clogs the flow of sap in the tree. "The dual action of the beetle and the fungus actually kills the tree, and not just the beetle itself," Kovacic says.

When beetles attack a tree, sap flows from the beetles' holes. Some trees can flush out beetles with their sap, and others can't. This ability to resist infestation seems to depend upon the time of year, as well as the age and health of the tree.

Kovacic says that the job of deciding whether or not to try to control the mountain pine beetle in future infestations is a difficult one.

"Entomologists can predict future epidemics before they start, but public concern at the onset is low since pine beetle problems are not apparent. Only after an epidemic is in full swing does the public get excited, and this is when the government is motivated to appropriate funding to control the epidemic. Nevertheless, once an epidemic is under way it is too late to control it."

Besides, the economics of beetle control can be staggering.

The U.S. Forest Service and Colorado Forest Service have been working on spraying insecticides. "Spraying has been very successful if done in time," Kovacic says. But over large areas such as national and state forests, "it is impossible and the cost is prohibitive." Trees have to be sprayed on the bark thus eliminating any large-scale aerial spraying.

A Canadian Forestry Service brochure points out two other limitations of spraying. "These insecticides must be handled with great care...because of the threat to other forms of life, and this method of combatting bark beetles does not yield any salvage."

In the later stages of beetle epidemics, natural predators, including insects and woodpeckers, may prove useful, Kovacic says.

pine
— could
ver lining?



10-High Country News — Sept. 22, 1978

Lc ins at Sandia

Soft-energy knight visits nuclear castle

by Dede Feldman

"You mean you want to leave the oil in the ground?" one scientist asked in disbelief.

"What kind of soft energy do I put in my gas tank?" asked another, sarcastically.

Amory Lovins, a British physicist who has shaken the foundations of U.S. energy policy, fielded these and other questions from a hostile audience last month at one of the nuclear capitals of the country — Sandia Labs in Albuquerque, N.M. Lovins says the U.S. should abandon the "hard," nuclear, fossil fuel energy path and commit itself to "soft" energy alternatives. By "soft," Lovins says he means "flexible, resilient, sustainable and benign" — not "vague, mushy, speculative or ephemeral."

"Big issues are not too technical for the little people to understand, but they may be too simple for the experts."

Technologies that fit Lovins' definition of "soft" include solar space heating and cooling, wind-powered electrical genera-

tion, and conversion of organic wastes to liquid fuel.

Sandia is the home of sophisticated research on nuclear waste and transportation, as well as a \$21 million solar power tower. Lovins told the wary scientists in the audience, "Big issues are not too technical for the little people to understand, but they may be too simple for the experts."

Using statistics and graphs, Lovins argued that the consequences of reliance on electricity generated by nuclear plants included an increase in joblessness, a growth of central authority, and mounting environmental side effects.

Lovins criticized hard technologies for their inefficiency.

"More than half of the energy generated by hard technologies is lost in conversion and transportation," Lovins said. Energy shortages resulting from such inefficiency require a central authority to ration energy, he said, and when that happens there's a danger that "we the experts will be substituted for we the people."

Lovins also said that a more efficient matching of energy to end use needs could be achieved through the use of soft technologies, and energy-conserving "technical fixes." This kind of shift in energy policy is already taking place, he said, because of

the tremendous costs of the hard alternative.

"By the year 2000 fission will be in the same league as firewood, and the desire for nuclear reactors will be viewed as a sign of immaturity."

"De-nuclearization is already being done by the market," Lovins said. "Soon governments will realize they cannot afford the tremendous subsidy to the industry. By the year 2000 fission will be in the same league as firewood, and the desire for nuclear reactors will be viewed as a sign of immaturity."

Along with his critique of the present means of energy production, Lovins offered the soft energy path as an alternative. According to Lovins, there is already broad support for soft energy, because of the variety of benefits it offers.

"For politicians, soft energy offers advantages to almost every constituency. It



Photo by Dede Feldman

ENERGY EXPERT Amory Lovins, under verbal fire at Sandia Lab in New Mexico.

offers jobs for the unemployed, capital for business people, savings for consumers, energy self-sufficiency for isolationists, states' rights for conservatives, environmental protection for environmentalists, and a chance to innovate for the adventurous," Lovins said.



energy news of the Rockies and Great Plains

SALVAGING SOLAR SLIP-UPS. A two-year-old California firm is specializing in correcting mistakes made by other companies in the installation of solar energy systems. Southwest Energy Management, Inc. says that its purpose is to "fight the fast buck artist every way we can." Faulty installation has been a major problem with the proper functioning of many solar systems. The firm's address is Dept. TMEN, 8290 Vickers St., Suite B, San Diego, Calif. 92111.

IDAHO NUCLEAR WASTE STORAGE. The federal government is building a \$116-million facility at the Idaho Na-

tional Engineering laboratory to store nuclear wastes and reprocess radioactive fuels. The Associated Press reports that the facility, to be known as the Fluorinel Dissolution Process and Fuel Storage Facility—or FAST—is safer than existing nuclear storage sites. Project manager Don Blade says that engineers have anticipated every possible calamity, including tornadoes, earthquakes, leaks, cargo accidents and personnel contamination. The facility will be built over the next five years. Two-thirds of it will be devoted to storing wastes, the remainder to converting spent fuel into usable reactor fuel.

COLORADO POWER PLANT. Citing concerns about air quality in the Craig, Colo., area, the Colorado-Ute Electric Company has announced that it will build a 400-megawatt power plant in "Montrose County or south of there" in southwestern Colorado. The original plant site proposal was near Craig. Colorado-Ute currently is building two 400-megawatt coal-fired units near Craig and a third is planned for completion by 1985, according to the Denver Post. The southwest Colorado unit—originally designed as a fourth Craig unit—will also be coal-fired and serve agricultural, residential and indus-

trial demand, including the developing oil shale and coal industries in the region.

PEOPLE'S GAS CLOSES SHOP. After a three-year battle with agricultural interests in Dunn County, N.D., the company that had proposed a coal gasification plant in the county has announced that it will close its offices in both Dunn Center and Dickinson. The company, People's Gas Co., says that it still has "long range plans" for a gasification complex in Dunn County, but that it is centering its efforts on completion of a smaller gasification plant in neighboring Mercer County. The Mercer County plant is a joint venture of People's Gas and ANG Coal Gasification Co.

ANTI-ANTI-NUKE APPEAL. A retired consulting engineer has convinced the Montana Supreme Court to rule on whether an anti-nuclear referendum should be allowed to appear on Montana's Nov. 7 ballot. William Wenzel, who is a member of a pro-nuclear power group, argues that the state has no authority to regulate radiation hazards because Congress has pre-empted the nuclear power area, according to the Associated Press. Proponents of Initiative 80, which would require a public vote on every nuclear facility

proposed for the state, called the move an "anti-democratic smokescreen" and charged that "the opposition is afraid of democracy." The Supreme Court hearing was scheduled for Sept. 22, with a decision expected some time later.

NEW COAL SLURRY ROADBLOCK. Wyoming's acting attorney general says pipelines are prohibited by state law from being constructed within highway rights-of-way. The decision presents yet another obstacle to the proposed slurry transport of Wyoming coal to eastern markets. While allowing telephone, telegraph and other electrical lines within highway rights-of-way, Wyoming law, by inference, prohibits other structures from such corridors, according to John Rooney, acting attorney general. Rooney was responding to a request for clarification of the law by John Niland, executive director of the state Department of Economic Planning and Development.

Are the beetles beating us?



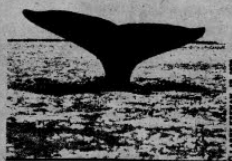
See page 8 to get the story.

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Legal foundation says

Oil interests unfairly blocked from public lands

"We want these decisions made by Congress — not the bureaucrats," says James G. Watt, president of Mountain States Legal Foundation, which is suing the Departments of Interior and Agriculture over their handling of oil and gas leases on national forests.

At issue is whether the agencies have the right to deny or place restrictions on oil and gas leasing on public lands under consideration for wilderness designation.

Mountain States Legal Foundation says that current Forest Service restrictions constitute a "withdrawal" of public lands from mineral activity, which must be reported to Congress.

Forest Service policy on each roadless tract has been to "exclude any activity which would depreciate its potential value as wilderness" until a study is complete and a management recommendation is made. The agency's second Roadless Area Review and Evaluation (RARE II), aimed at determining the fate of 62 million acres, is due to Congress Jan. 1.

In most cases, the Forest Service policy hasn't meant denying oil and gas leases. Often, however, it has meant "no surface occupancy" restrictions that make it more difficult to develop a lease.

The suit focuses on two areas in the RARE II inventory where leases have been denied, however: the Palisades back country in the Targhee National Forest in Idaho and Wyoming, and the Bear, Marshall, Scapegoat and Swan roadless area in five national forests in Montana. Both are in the Overthrust Belt, a geologic formation that the oil industry says is the best potential new find in the country. Both also are prized by wilderness advocates. The Montana tract includes the proposed Great Bear Wilderness and land surrounding the existing Bob Marshall and Scapegoat wildernesses.

In the Montana area, leases haven't been issued since 1971 — not because of RARE II — but because a Forest Service land management plan begun in 1971 isn't complete,

according to Buster Lamour of the Forest Service's Northern Region office. "We want to cover all the potential activities — including timber harvest, oil and gas development, mining and recreation — in one environmental statement. That way, it's a less time-consuming process."

Watt says the foundation does not want to stop RARE II — but to allow mineral activity to continue while RARE II and other studies are under way. The foundation's suit is based on a provision in the Federal Land Policy and Management Act of 1976 which requires that the Secretary of Interior report to Congress all withdrawals over 5,000 acres. The two areas mentioned in the suit are both over 100,000 acres, Watt says.

Watt says the suit, filed in District Court in Cheyenne, Wyo., Sept. 11, is aimed at opening roadless lands to people outside the oil and gas industry, too.

"We want to keep these lands open for public access for multiple use unless Congress has authorized single purpose management. The nation is losing the benefits of recreation, timber, minerals and oil and gas from these lands locked up without the congressional approval required by law," he says.

The foundation's board of directors includes former Colorado Rep. Wayne Aspinall, former Utah Gov. Calvin Rampton and brewery president Joe Coors. The group is interested in "issues relating to individual rights protected by the U.S. Constitution and individual freedoms, especially the freedom of economic choice," Watt says.

The government has 60 days to answer the complaint.



THE PUBLIC is being locked out of public lands, says a Denver law firm that has just taken the federal government to court over restrictions placed on oil and gas exploration.



The HCN Hot Line

energy news from across the country



COAL-FIRED POWER PLANTS would need sulfur dioxide scrubbers whether or not they burn low sulfur coal, under new rules proposed by the U.S. Environmental Protection Agency.

NEW SCRUBBER PROPOSAL. The U.S. Environmental Protection Agency has proposed new rules that would force electric utilities to install air pollution scrubbers on an estimated 200 coal-fired power plants expected to be built by 1990. The proposal could cost \$10 billion and raise household utility rates by two percent, according to the agency. Scrubbers filter sulfur dioxide (SO₂) and other pollutants from power plant emissions. Present standards have a sliding scale for SO₂ removal depending upon the sulfur content of the coal. The new proposed standards would require removal of 85 percent of the SO₂ regardless of the sulfur content of the coal. Bill Budd of the Wyoming Mining Association says the rules are "a thinly veiled attempt to price Western coal out of the market." Under the old rules some utilities have sought to use low sulfur Western coal instead of installing scrubbers and using locally available high sulfur coal. Distant

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low sulfur coal would no longer be attractive if scrubbers were required regardless of coal sulfur content. EPA is accepting comments on the proposed regulations.

NRDC V. HUGHES CHALLENGED. Utah Power and Light has appealed the Natural Resources Defense Council v. Hughes coal leasing court decision. UP&L says U.S. District Judge John Pratt erred when he included preference right leases in his court order that halted most federal coal leasing. UP&L also says there should have been public hearings on the court agreement, since it has become the backbone of the new federal leasing policy.

SOLAR STRATEGY. "Federal activities in solar energy are greater in magnitude and broader in scope than many people realize, but the existing programs have not been developed with a comprehensive strategy in mind," reports a cabinet-level federal task force on solar energy. The task force warns that the high cost and scant use of solar energy will continue unless a comprehensive program is launched to promote solar power. The Solar Lobby is critical of the task force report. Lobbyist Dick Munson says, "It reads like a bureaucratic policy for confusion rather than a blueprint for a solar society."

PETROLEUM SUBSTITUTE. The U.S. Department of Agriculture's Northern Regional Research Center has found nearly three dozen plants that can replace petroleum in the manufacturing of rubber and plastics. Milkweed, poinsettia, sow thistle and other common plants could be used, researchers claim. Substitution could cut the nation's oil and natural gas demand by seven percent — the equivalent of two million barrels of oil per day.

N.W. POWER BILL BLASTED. Western state governments, public utilities and conservationists have joined forces to oppose a new bill designed to help Pacific Northwest Utilities finance and build power plants. The bill, S. 3418, sponsored by Washington Democrats Sen. Henry Jackson and Rep. Lloyd Meeds, gives the Bonneville Power Administration the power to sell federal bonds to pay for new power projects. Montana Gov. Thomas Judge says the bill "would pre-empt the Montana Major Facility Siting Act" and make the BPA administrator a regional energy czar. David Alberswerth of the Northern Plains Resource Council asks, "Why should the federal government at this point in history provide a program of financial incentives to investor-owned utilities to build power plants?"

Guess Who's in Town

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

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

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

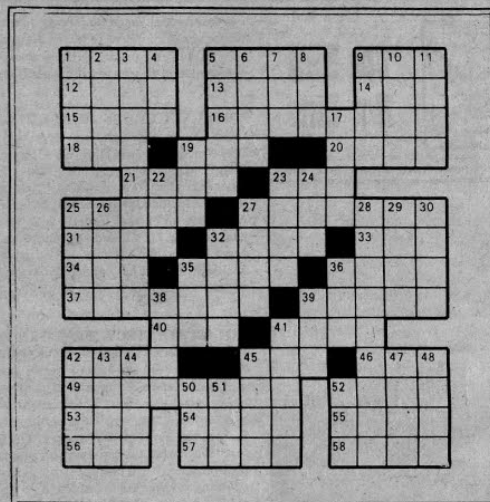
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Tim O'Brien, 1251-A. Verbena Street, Denver, Colo. 80220. (Biscuit City Records — BC 1317) HCN is sharing the profits on sales of this album.



Tim O'Brien — Eclectic fiddle

12-High Country News — Sept. 22, 1978



CONSERVATION CROSSWORD

JOHN O' MOUNTAINS

by Philip White

ACROSS

1. Gulleys
5. "cares will _____ off like autumn leaves"
9. "When California was wild, it was one sweet _____ garden throughout its entire length"
12. Single quantity
13. JM compared Yosemite Fall to "the loudest rush and _____ of storm winds and thunder"
14. "Perchance to dream: ay, there's the _____" Hamlet
15. _____ far as
16. "As if into this one mountain mansion Nature had gathered her choicest treasures."
18. Fabulous bird
19. Possessed
20. So be it
21. Latin poet
23. Children's game
25. "No one knows what Nature can do in the way of pine-burs until he has seen those of the Sugar Pine."
27. Railroad magnate who took JM to Alaska and facilitated the writing of "The Story of My Boyhood and Youth": E.H. H.
31. Ruskin's classic: "Unto This _____"
32. Criticize harshly
33. Mongolian desert: G_____
34. United Helminthologists Institute (abbr.)
35. Machine for interlacing yarns
36. JM's posthumous book: "A Thousand Mile Walk to the _____"
37. Colorado state bird: lark

39. Woman's name
40. Fit out
41. Tumultuous disorder
42. German-made car
45. Male bighorn
46. Period of existence
49. JM's best-loved story about a dog and a glacier
52. "the mountain _____, like the dew and rain, sunshine and snow, are bestowed with love on the forests."
53. JM's first botany lesson involved this plant family
54. An arm and _____
55. Burden

56. Ultimate source of fossil fuel and wind energy: old _____
57. _____ up the oxen
58. Being (L.)

DOWN

1. Subject of this puzzle
2. _____ Domini
3. JM's home from age 12 to 21
4. Weasel: _____ at
5. Wood nymph
6. Crucifix
7. Former Sen. McGee is U.S. ambassador to this group
8. _____ cambrian
9. "O'er night's _____, day boils at last" —R. Browning
10. Muse of music: _____ rpe
11. California condor expert: _____ MacMillan
17. Wisemen
19. Possessive pronoun
22. Experienced person
23. "I might have become a millionaire, but I chose to become a _____ p"
24. Appendix
25. JM founded the Sierra _____
26. Site of Waikiki
27. JM's accustomed wilderness chair (2 wds.)
28. JM's famous quote from a piece on Yellowstone Park: "Climb the _____ and get their good tidings"
29. Ready, willing and _____
30. Bowie k _____
32. "The ouzel, who could no more help exhaling sweet _____ than a rose sweet fragrance"
35. 52 in Caesar's Rome
36. Earth (comb. form)
38. Quickly: in a _____ e
39. Brink
41. JM called Sierra Nevada the _____ of Light
42. Vipers
43. Red-tailed and ferruginous are b _____ hawks
44. Sun _____
45. Exude
47. Antelopes
48. Famous flop: _____ l
50. Woman's name
51. End (comb. form): t _____
52. _____ is me



METHANE: Planning a digester

by Peter-John Meynell, Schocken Books 1978, 150 pages, paperback, \$4.95.

Review by Susan Schellenbach

Everyone and his brother wants a methane digester when they hear it can make natural gas out of wastes. But the technology requires that you be a good farmer, biologist, mechanic and engineer. Here is the first and only book I've read that gives you adequate information in readable form to design, build, start-up and operate your own digester.

After reading this, you're going to respect digesters. Anyone can put some manure in an airless, heated container and produce a burnable gas. The trick is to build a digester that handles the wastes of a particular farm, home or industry, operates successfully over a long period of time, and supplies a useful amount of fuel.

Meynell, a hydrobiologist, has brought together information from the fields of wastewater treatment and biology and from the work of digester pioneers such as Ram Bux Singh and John L. Fry. Filled with crisp, clear prose, tables, checklists and formulas, his book is a short but complete course in anaerobic digestion.

He supplies tables for estimating potential volumes of gas, calculating how much gas is consumed by various burners, and

computing fertilizer value. His discussion of the mechanics of digestion and how to size and design a system is complicated, but within reach of the diligent reader. If you understand the vocabulary (There is a glossary in the back.) and aren't afraid to walk through his instructions, this is all the book you need. Clearly, the next step is to build and operate a digester.

Most of the reference works and all of the projects mentioned in the book are in the British Commonwealth countries. For the reader familiar with projects in the United States, this seems short-sighted. On the other hand, there could be exciting new contacts here for Americans.

Meynell's writing cuts through complex biological and mathematical operations. He presents useful rules of thumb as well as sophisticated heat transfer formulas. He emphasizes safety. He has the foresight to design ahead for plugged pipes, auxiliary gas for the startup period, and ice in the condensate traps. He knows the difference between the musty smell of a healthy digester and the sour smell of disaster.

This technical information is set off by Meynell's concern for the environment and

Do you know the difference between the musty smell of a healthy digester and the sour smell of disaster?

his enthusiasm for anaerobic digestion. He speaks of an "unaccountable benefit," one on which a price tag cannot be placed, for the forerunners in this field. The rewards, as they usually are with conservation, are more than monetary.

Susan Schellenbach works as a communications specialist for Bio-Gas of Colorado Inc. in Arvada, Colo.

Judge stops Libby Dam project

U.S. District Judge W.D. Murray has ordered a halt to construction of a dam on the Kootenai River in western Montana. Three environmental groups — Wilderness Association, the Montana Wildlife Federation and the Libby Rod and Gun Club — sued the U.S. Army Corps of Engineers to halt the developments associated with Libby Dam.

Libby Dam now provides power for rural users throughout western Montana, industries in Great Falls and Anaconda, and for the Bonneville Power Administration.

The Corps' plan was to increase the dam's generating capacity by adding four generators to the existing four, and to build a reregulating dam downstream. The purpose of the new dam was to smooth out streamflow fluctuations that result from power generation at the upstream dam.

Murray said he could find no evidence that Congress had ever authorized the \$225 million project. He also ruled that not enough alternatives to the project were listed in the Corps' environmental impact statement.

The state of Montana has been highly critical of the Libby Dam project.

In papers prepared by state officials, the Corps' plans were called "irresponsible," "indefensible," "inadequate" and "simply preposterous." According to the state officials, the Corps failed to prove in its cost-benefit analysis that the four new

generators were the least costly way to improve the generating capacity of the area. The Corps was also accused of misleading the public regarding the fluctuation of the stream flow, and of not cooperating with the U.S. Fish and Wildlife Service, which is currently studying the area to be inundated by the new dam for its importance as bald eagle habitat.

Pollution may damage brains

Carbon monoxide may pose a "distinct threat" to the health of unborn babies, according to the report of a task force of physicians in Denver. The task force was appointed by Colorado Governor Dick Lamm to study the health effects of air pollution. Denver's air does not meet minimum federal ambient standards for carbon monoxide, nitrogen dioxide, particulates nor oxidants.

According to the Rocky Mountain News, the report says that mothers who smoke have a greater number of brain-damaged babies, and mothers may expose their infants to similar risk by constant exposure to high levels of carbon monoxide from car exhausts. In both cases, the infants are deprived of essential oxygen.

The task force ran no experiments of its own but surveyed hundreds of medical studies, according to the News.



Western Roundup



Sept. 22, 1978
-13

Utah officials hustle to blade jeep trails, shrink wilderness

Road construction is booming on public lands in Utah as counties attempt to disqualify areas from wilderness consideration, according to *Deseret News* environmental columnist Joseph Bauman. The U.S. Forest Service and the Bureau of Land Management do not disqualify areas with jeep trails that have never been upgraded. However, a 1978 act of the Utah legislature classifies any four-wheel-

vehicle route "that has been or is established by use" to be a state "Class D" road.

"The danger is that in its zeal to lay claim to many miles of Class D roads, or in an effort to block a wilderness designation, some county might declare that a jeep trail across federal land is a road, bulldoze it, and ruin a pristine wilderness," says Bauman.

Channel A project needs a Corps permit

U.S. District Court Judge Aubrey Robinson has halted construction on the Channel A flood control project in North Dakota. The National Wildlife Federation filed the suit, fearing that construction of the channel to link Dry Lake and Devils Lake would damage waterfowl habitat.

Any construction affecting a navigable waterway requires a permit from the Corps of Engineers. The plaintiffs argued that

Devils Lake is navigable and lacked the required permit.

Project proponents claim the channel is needed to alleviate flooding that occasionally prevents planting of crops on surrounding agricultural land. The project is about 70 percent complete.

North Dakota Assistant Attorney General Murray Sagsveen says that the state will appeal the decision.



Stouffer Productions Ltd. photo

A TIMBER WOLF, which is an endangered species in the lower 48 states, recently has been sighted by a biologist in Idaho.

First confirmation of Idaho wolf sighting

Timber wolf sightings have been reported in Idaho since 1962, but the state Department of Fish and Game finally has verified one such sighting. A senior wildlife biologist spotted the animal in a remote section of the North Fork of the Clearwater River drainage.

The biologist, Mike Schlegel, took several color photos of the wolf and made plaster casts of its tracks in an open, muddy

area.

The wolf is classified as an endangered species in the lower 48 states and is protected by federal law. The verification represents Idaho's first confirmed wolf sighting.

In the field, the timber wolf is impossible to distinguish from another sub-species, the Northern Rocky Mountain wolf. The latter is believed to be extinct, however.

Agriculture losing Colorado water battle

A four-part Colorado Water Study by the state Department of Natural Resources may prompt changes in the state's 100-year-old water laws, according to the *Denver Post*. The study says agriculture, the state's major water user, may lose future water contests to the large Front Range metropolitan areas and to the Western Slope energy development interests.

The study says that the present system is driven by the dollar. "It is apparent that only certain values and water uses can be taken into account," it says, and those uses may prevail at the expense of existing uses the market place doesn't value.

Front Range cities and West Slope energy companies have become "the

economic driving forces behind future changes in the distribution and use of water in Colorado. . . Only they have the economic ability to develop new water rights or acquire existing rights," the study says.

Concerns about minimum stream flows, open space preservation, protection of irrigated agriculture, and the relationship of water development to energy impact and balance in the state's economy aren't considered under the present water laws, according to the study.

No recommendations for changes in state laws are made in the study. Public comment on the study will be sought early next year.

The *Deseret News* quotes BLM Moab District Manager S. Gene Day as saying that there has been a "great upsurge of road maintenance on these roads that have never had a county blade on them before."

Class D roads in San Juan County around the BLM's Grand Gulch Primitive Area were bulldozed this summer, even though the area was a potential addition to the proposed Grand Gulch Wilderness Area. County Commissioner Calvin Black told the *Deseret News*, "Well, of course we're not in favor of any wilderness areas, and if a road is already there, then it is obviously not roadless."

A suit should be filed challenging the validity of the Class D Roads Act," says Bauman. "An infinitesimal minority of Americans, wherever they live, must not be allowed to pre-empt the rights of all."

A similar situation may arise in North Dakota as a result of the Forest Service's

second Roadless Area Review and Evaluation (RARE II) on the Little Missouri National Grasslands. The Forest Service is studying 12 roadless areas for possible addition to the National Wilderness Preservation System, but the assistant attorney general says such designation would be illegal because of county road rights-of-way in the areas. The official says the state was granted a road right-of-way along every section line in the state. If the Forest Service ignores these rights-of-way and recommends any of the 12 areas for wilderness a lawsuit will probably be filed by the state.

Range bill emerges

The Senate version of the range lands improvement act (H.R. 10587 and S. 2475) sailed through committee markup this week. The bill has already passed the House.

A provision that would have weakened the National Environmental Policy Act by exempting some range improvements from environmental impact statement review was dropped. In its place an amendment offered by the Carter administration was adopted that would subject all range improvements to environmental analysis reviews (EARs). Impact statements would only be prepared on those improvements judged to be significant by the EAR process. This is an affirmation of present NEPA policy.

The section of the bill that allowed transfer of title of adopted wild horses was dropped with the understanding that it would be brought up again and debated on the Senate floor.

The rancher-backed grazing fee formula that includes cost of production easily won approval. The administration has been pushing a fee based on fair market value.

Peaks bill passes

In a year when wilderness usually means controversy, the House passed a bill to create the Indian Peaks Wilderness and Arapaho National Recreation area in Colorado without substantial protest. The vote was 360 to 9. The area, along the Continental Divide south of Rocky Mountain National Park, contains no significant mineral or oil deposits and no easily harvestable timber, says Rep. Tim Wirth, D-Colo., one of the bill's sponsors. Theodore Roosevelt first suggested protection of the area, Wirth says.

Sen. Floyd Haskell, D-Colo., has introduced an identical bill in the Senate.

Fight pollution or forget sewer grant

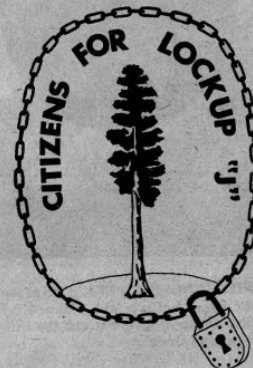
The U.S. Environmental Protection Agency has announced it will deny waste water treatment grants to communities in the Denver, Colo., area that don't adopt plans to combat air pollution and urban sprawl.

EPA says communities will have to attempt to limit air pollution to be eligible for sewer grants. Community efforts could include establishing bike paths, reducing street sanding, encouraging car pooling, and promoting mass transit.

EPA will also look more favorably on sewer grants from communities that promote "a denser settlement pattern" that would reduce urban sprawl.

Water conservation will also be encouraged by the new policy. Sewage treatment systems that employ land treatment will be eligible for 85 percent federal funding instead of the usual 75 percent. Land treatment involves putting treated sewage on surrounding farmland as a fertilizer instead of discharging it back into a stream. Land treatment reduces water and energy consumption and costs less, according to EPA.

The report also places special restrictions on grants to communities near the Rocky Flats nuclear weapons plant west of Denver. EPA won't fund any projects near Rocky Flats unless the local communities agree to notify new home buyers about the protective actions detailed in a state plan for coping with a possible nuclear radiation emergency.



RARE II HUMOR. Friends of the Earth in Seattle, Wash., is selling T-shirts emblazoned with the design shown above—"the perfect gift for your favorite Forest Super Hero," the group says. Alternative J, as outlined in the Forest Service's second Roadless Area Review and Evaluation (RARE II), would designate all roadless lands as wilderness. Despite the shirts' message, Friends of the Earth supports the more moderate Citizens' Wilderness Alternative proposed by a coalition of conservation groups in Washington.



HCN

Bulletin Board



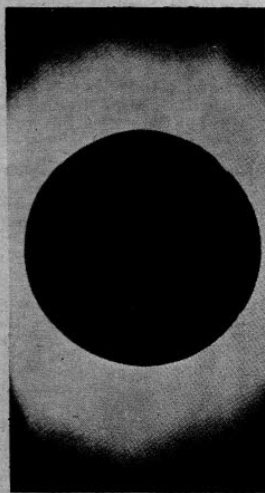
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SOLAR HOT WATER MANUAL

"Building A Solar Hot Water Heater" is a design manual for thermosiphon systems. It contains blueprints and material and tool lists. Copies are \$8.50 from San Luis Valley Solar Energy Association, P.O. Box 1284, Alamosa, Colo. 81101.

WILDERNESS ASTRONOMY

Two universities are taking reservations for "Moonshadow 1979" — a program of regional wilderness trips aimed at getting a good look at the total eclipse of the sun scheduled to be visible in the Northwest Feb. 26. Only those areas on the "path of totality" will experience the total eclipse. Outlying areas will witness a partial eclipse. Everything from one-day trips to month-long winter camping expeditions in the Idaho Primitive Area, the Eagle Cap Wilderness in Oregon and the Bob Marshall Wilderness in Montana are planned to celebrate the event. A total solar eclipse has not been visible in the United States or Canada for 38 years. For more information contact either Harrison Hilbert, Idaho State University Outdoor Program, Box 8118, Pocatello, Idaho 83209; or Gary Grimm, University of Oregon Outdoor Program, EMU Room 23, Eugene, Ore. 97403.



WILDERNESS EXPEDITIONS to see the solar eclipse are planned by Idaho State University and the University of Oregon.

DOE BOOM TOWN REPORT

The Department of Energy is adding to the proliferation of reports about coping with the effects of the energy boom in small communities. DOE's "Socioeconomic Impact Assessment: A Methodology Applied to Synthetic Fuels" helps government planners calculate population growth, income, employment, public facility costs and projected public revenues resulting from the siting of synthetic fuel plants. The report can be obtained from DOE's Division of Administrative Services, Distribution, B-437, Washington, D.C. 20461.

STATE NUCLEAR SITING

States are becoming increasingly aware of the environmental ramifications of nuclear power plant siting, but are not in agreement about exactly which factors should be considered in certifying siting proposals, according to a report prepared for the Nuclear Regulatory Commission. The report, by the Center for Natural Areas, concludes that "a consensus must be reached between the NRC and the states as to what criteria are relevant to a determination" so that states can more effectively plan their plant certifications. "Need for Power: Determinants in the State Decision-Making Process," is available for \$5.25 from the National Technical Information Center, Springfield, Va. 22161.

NEPA PROCEDURAL RULES

In an effort to reduce paperwork, shorten delays, and improve decision-making, the U.S. Council on Environmental Quality has proposed new procedural rules under the National Environmental Protection Act. Among the changes are: reducing the length of environmental impact statements to no more than 300 pages; emphasizing options among various alternatives going to the heart of the matter, rather than dealing in peripheral issues; writing in plain language; and reducing paperwork requirements. Copies of the proposed rules can be obtained from Nicholas Yost, General Counsel, CEQ, 722 Jackson Place NW, Washington D.C. 20006.

INTRODUCTION TO A.T.

A seven-page report designed to introduce the layman to the concept of appropriate technology has been prepared by the Citizens' Energy Project. The report describes some of the better-known appropriate technology projects, personalities, programs, and publications. For a copy send 55 cents to Citizens' Energy Project, 1413 K St., N.W., 8th floor, Washington, D.C. 20005.

SOLAR GREENHOUSE WORKSHOP

A workshop to teach people how to build a solar greenhouse that can be attached to the south side of a house will be held near Circle, Mont., Oct. 13-15. The attached solar greenhouse is designed to provide home heat and fresh vegetables. The workshop will start Friday, Oct. 13, at 7 p.m. On Saturday and Sunday participants will build a greenhouse. Cost is \$17.50 per person. Write John Brown, Windborn Farm, Box 216, Circle, Mont. 59215 or call (406) 485-2180. Deadline for registration is Oct. 2.

NEZ PERCE TRAIL STUDY

The U.S. Forest Service and the National Park Service are studying the Nez Perce Trail for potential inclusion in the National Trails System. The trail runs from Wallowa Lake in eastern Oregon through Idaho and Wyoming to the Bear Paw Mountains in north-central Montana. Groups or individuals interested in the study may send comments and suggestions to: USDA Forest Service, Recreation and Lands, P.O. Box 7669, Missoula, Mont. 59807.

WILDLIFE HABITAT SYMPOSIUM

A symposium on wildlife habitat in Colorado will be held Oct. 4-5 at the University of Northern Colorado in Greeley.

ADVENTURE NOTEBOOK

Carl Brown, a naturalist, artist and contributor to *High Country News*, is producing a monthly nature newsletter for children called *Adventure Notebook*. Each issue will explore an ecosystem, often in the wild country of Idaho but also in other parts of the country, from Florida to Hawaii. Brown hopes the publication will help youngsters "understand the beauty and complexity of Nature... a big step toward treating Nature with respect." The first issue is hand-lettered and full of lively illustrations. A subscription is \$12 per year to Carl Brown, Mother Nature's Public Relations Office, Box 634, Lakefork, Idaho 83635.



SELF-PORTRAIT: CARL BROWN

NUCLEAR FUEL STORAGE

National plans for storage of spent nuclear reactor fuel are outlined in a recent draft environmental impact statement issued by the Department of Energy. The statement does not address the problem of ultimate disposal of nuclear wastes. Copies of the draft are available from W. H. Pennington, Office of NEPA Affairs, Mail Station E-201, Department of Energy, Washington, D.C. 20545. Public comments are due Feb. 15.

COAL IMPACTS

In a new brochure the League of Women Voters offers an overview of the problems associated with coal boom town growth and a discussion of state and federal programs that are designed to deal with such growth. Based on information gleaned from two LWV conferences held in 1977, the author, Jane Weil, gives several suggestions for citizen action to help deal with boom town problems and offers a bibliography of relevant books, newspapers and reports. The six-page brochure can be ordered for \$4.40 from League of Women Voters, 1730 M St. N.W., Washington, D.C. 20036. Pub. No. 165.

WYOMING FILMS

The Wyoming Travel Commission has 16 millimeter films available for loan. Titles include: "Wyoming and Its Parks," "Four Seasons of Yellowstone," "Teton Trails," "The First Road West," "Rodeo Cowboy" and "An Old West Trail Adventure." Booking requests should be made three weeks before a showing. Contact the travel commission, Cheyenne, Wyo. 82002.

HEALTH WATCHERS

If you work in a nuclear facility, the Environmental Policy Institute would like to monitor your health to increase scientific knowledge about the effects of low-level radiation and contamination incidents. For more information, contact Kitty Tucker, "Health Followup" EPC, 317 Pennsylvania Ave. S.E., Washington, D.C. 20003.

ENDANGERED SPECIES

A symposium on the philosophical, managerial and biological considerations of endangered species will be presented Dec. 7 and 8, at Brigham Young University, Provo, Utah 84601. Registration is \$40.00. Interested persons should contact Vernon Tipton, Director, Center for Health and Environmental studies, at BYU.

HURDLING THE ENVIRONMENT

"In an effort to hurdle some of the environmental obstacles confronting the mineral industry" the Colorado School of Mines is offering a course entitled "Natural Laws, Environmental Regulation and Minerals Industry Management and Profits" taught by alpine ecologist Beatrice E. Willard. The course is designed to show how ecologic principles "can be used advantageously to achieve legal, financial and political benefits," Willard says. She says students will tour the AMAX Henderson molybdenum mine, "a \$500 million venture without an environmental impact statement nor a lawsuit." For more information contact the Industrial Ecology Institute, Colorado School of Mines, Golden, Colo. 80401.

WOMEN AND A.T.

Women and appropriate technology have much in common, according to the latest NCAT Brief, entitled "Something Old, Something New, Something Borrowed, Something Due." Feminist writer Judy Smith examines women's contribution to appropriate technology. The Brief also includes a directory to women concerned with appropriate technology development. It is available for 75 cents from the National Center for Appropriate Technology, Box 3838, Butte, Mont. 59701.

ENERGY BUSINESS ANALYSIS

Do the nation's energy problems look like business opportunities to you? The Institute for Local Self-Reliance in Washington, D.C., has published a booklet, *Starting Your Own Energy Business*, designed to aid in planning a community-based enterprise. The emphasis is on four industries: retrofit analysis, storm windows and doors, cellulose insulation and solar systems. The booklet is available from the institute at 1717 18th St. N.W., Washington, D.C. 20009.

GALAPAGOS ISLAND TORTOISE
DIAPYROMORPHID, SECTING**REPORT A POLLUTER**

The public will have a chance to report air and water polluters at a hearing Oct. 18 in Denver. General comments on air and water pollution are also welcome, as well as suggestions about practical pollution remedies. Pollution control officials will be present to answer questions about their enforcement programs. The meeting is sponsored by Colorado's Board of Health, Air Pollution Control Commission and Water Quality Control Commission. It will be from 1:30 p.m. to 6 p.m. at the Colorado Department of Health Building, 4210 East 11th Ave.

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Steve Peterzen, Dept. A, 924 1/2 East Fremont, Riverton, Wyoming, 82501, 307-856-7432 or Bob Peel, Dept. A, 209 East Monroe, Riverton, Wyo. 82501, 307-856-6498.

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by Myra Connell

To most people the Great Depression is a dim memory or a paragraph in a dull book, but to me, my late husband and our children the decade of the '30s was a grim reality, a fight to survive. To eke out an existence, we sharecropped a small irrigated farm in Central Wyoming. Its boundary was adjacent to dry foothills, used as rangeland.

A small acreage of wheat represented our hopes for a little cash in the fall — cash that meant staple groceries, winter clothes

for the kids, perhaps even tickets to a movie.

It was August. The wheat was developing beautifully. Heads had formed and were filling with precious grains. On a hot, dry afternoon my husband began irrigating for the last time before allowing the wheat to ripen.

Alas for those who count chickens before they hatch. Mormon crickets chose to migrate from the baked hills to the lush, irrigated valley, devouring every blade of vegetation in their path. The canal didn't stop them. Some drowned, but the vanguard of the main army marched into the edge of our wheat and began systematically mowing it down.

But only the part that was still dry. The crickets avoided the strip where Taylor already had water running.

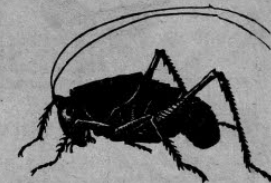
My observant husband noticed their preference. Working frantically with his shovel, he cut the canal bank in several places and got water running on the whole field. The horde disappeared; we never knew whose field got eaten next. Taylor's quick action saved our priceless wheat.

These insects were the same as those that plagued the first Mormon settlers in Salt Lake Valley. Sea gulls gorged themselves on the creatures and saved the crops that meant survival.

The term "cricket" is a misnomer. *Anabrus simplex* is classed with long-horned grasshoppers and katydids.

The eggs that the female lays in summer hatch the following spring. After the young are grown, mass migrations take place, but only when the air temperature is 65 to 75

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degrees, the soil is 75 to 125 degrees and the wind is blowing at 25 miles per hour, according to **Familiar Insects of America** by William Barker.

The same source states that the largest recorded outbreaks occurred in the 1930s when forage was destroyed on 13 million acres. There were rumors of auto accidents where masses of crickets created slicks.

Poison dusts and baits were used to combat them. Oil was spread in ditches and streams. Even so, Barker reports that it was 1949 before the infestation was controlled.

However, control was only temporary. In 1976 two counties in Idaho had bad infestations. R. C. Saunders, state entomologist of Idaho, said in the **Idaho Statesman**, "There are no predators or parasites known yet to control them." Numbers are kept down by insect parasites, small mammals and birds, however. I wonder how numerous these controlling creatures were during the severe drought of the '30s.

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Eavesdropper
environmental news from around the world

LOONEY LIMERICKS

by Zane E. Colony

What makes a forester cry?
And has fewer friends than a fly?
The mountain pine beetle.
Though cute and petite, he'll
Slay trees with his friends, the fungi.

CONGRESSIONAL OVERSIGHT. Environmental legislation often is a complex matter and better congressional oversight probably could simplify such legislation, says Sen. Gary Hart (D-Colo.). Hart has proposed that the Senate Environment and Public Works Committee review new environmental regulations before they go into effect. "Through this process, we can help prevent unnecessary, burdensome and illogical regulations from being imposed," Hart says.

EPA WATER RULE RELAXATION SOUGHT. To fight inflation, the federal government wants to fight water pollution a little less. Environmental Protection Administrator Douglas Costle, citing President Carter's war on inflation, has proposed relaxing water clean-up rules. The changes would save an estimated \$200 million for some industries and allow plants to discharge more non-toxic pollution after 1984 than current rules would permit. The present regulations, Costle said, would impose an "unreasonable" cleanup burden of \$500 million by 1984.

The new rules, if finally adopted, would apply only to non-toxic pollutants such as dirt, human waste, organic debris, acid or alkaline substances.

ENVIRONMENTAL GOALS LAG. The Council on Environmental Quality (CEQ) says that the nation's air and water are improving, but that the goals of making the water "fishable and swimmable" by 1983 probably cannot be achieved. In addition, some cities will probably be violating federal air standards in 1990, even though compliance is scheduled for 1987. CEQ Chairman Charles Warren says that the nation's environmental goals may be "a bit ambitious," but that it is necessary to set high goals to ensure progress, according to the **Wall Street Journal**.

ENDANGERED SPECIES. The Fish and Wildlife Service is recommending that 12 American species of wildlife on the International Endangered Species Convention lists be reclassified. The bald eagle in Alaska, the American alligator and the southern sea otter should be switched from the list of species threatened with extinction to the list of species potentially threatened with extinction by international trade, the service said. It said the reverse should happen with classification of the American crocodile. In addition, the service recommended that the northern elephant seal; the West Indian monk seal; the Mexican duck; the longjaw cisco; the blue pike; the yellow-blossom mussel; Sampson's pearly mussel; the American kestrel; and the greater prairie chicken be removed from the lists altogether.

16-High Country News—Sept. 22, 1978



Rocky Mountain National Park Hiking Trails

including Indian Peaks

by Kent and Donna Dannen, Fast & McMillan Publishers, Charlotte, N.C., 1978. \$8.95, paper, 288 pages. Maps and illustrations

Review by Peter Wild

From their picture in the book you'd think that Kent and Donna Dannen are two happy college kids out on a wilderness frolic. Actually, Kent is a contributing editor of *Backpacker* magazine, Donna a ranger for the National Park Service. For a combined total of 20 years they've led hikers over the amazing peaks and through the lush glens of Rocky Mountain National Park.

Many books on hiking manage to get the reader from point A to point B with a fair rate of success. As far as the quality of the writing goes, however, they often rank somewhere down there with the Yellow

Drawings by Donna Dannen, from ROCKY MOUNTAIN NATIONAL PARK HIKING TRAILS



Pages. In contrast, it would be difficult to praise this guide for day hikers and backpackers too liberally.

Kent and Donna have miraculous country for their subject matter, and they handle it with the sense of wonder and discovery that it deserves. I have not walked most of the trails discussed, but I found myself drawn straight through the 288 pages by the sheer excitement of the descriptions and the pleasure of shared enthusiasm. As far as hiking guides go, that's a first in recent memory, the best recommendation I can give.

Sixty-three years ago the local people grumbled when Enos Mills persuaded the government to set aside Rocky Mountain National Park. Now it is Colorado's most popular natural asset, each year attracting millions of visitors. About 600,000 of these get out of their "motorized wheelchairs," as Ed Abbey calls them, and spread out over the trails in their waffle stompers. The Dannens want "to help both novices and

experienced hikers to enjoy the backcountry more fully." Their book is full of suggestions on how to do this while avoiding the crowds and reducing one's own impact on the fragile alpine wilderness.

And so we get the essentials that any hiking guide should offer, a chapter on "What to Wear and Carry," a chapter warning about dangers—in this case lightning—and of course a series of clear trail descriptions, each accompanied by a map.

But the Dannens do more than lead us up mountain peaks. They suggest the best time of day to start, where to park, and what ledges are likely to harbor the surprise of rare mountain flowers. They tug at our sleeves to let us know when we might see beaver or Audubon's warblers, what ridges to scan for a glimpse of bighorn

sheep. Along the way they enlighten us on geology, drop historical tidbits, and explain the origins of place-names.

Their advice to photographers verges on the compulsive: "The best place from which to photograph the entire configuration of Arch Rocks is along, or in, the river a few hundred feet to the west. Afternoon sunshine, if available, is the best." These two park insiders have kept few secrets; they want us to arrive home dazzled by what we've seen.

All this is graced not only by Donna Dannen's exquisite drawings of wildlife but a sense of humor that plays right through to the end—more than enough reasons to add the eight ounces of this guide to the pack.

Orders, including 55 cents postage, may be sent to Eastwoods Press, Fast & McMillan Publishers, 6000 Kingstree Drive, Charlotte, N.C. 28210.



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Some 600,000 people a year get out of their "motorized wheelchairs" and spread out over Rocky Mountain National Park's trails in their waffle stompers.

Dear Friends

When you're facing a mountain stream in the spring with only a slippery log for a bridge, it sometimes helps to march across without hesitation. You avoid conjuring up a vision of failure, which can set your knees a-quiver, make your head light and your boots slick.

Concentrating on the task at hand and forgetting the surrounding circumstances is a valuable skill. Some of us at HCN have found the technique helps us keep our balance in dealing with the auto accident we've just endured. It allows us to forget what we cannot control and to efficiently, calmly tackle problems that are human-sized. When in doubt, sometimes it is best to put one foot in front of another.

Sometimes marching forward is foolish, however. The technique also can be used to avoid difficult situations that we could do something about if we had the confidence and the courage to break out of narrow thinking.

An article by Thomas Whiteside in the Sept. 4 *New Yorker* describes the town of Seveso, Italy, where an explosion at a chemical factory caused a cloud of highly toxic dust to settle over the city.

The plant was manufacturing a chemical called 2,4,5-trichlorophenol intended for use in the antibacterial agent, hexachlorophene. Unfortunately 2,4,5-T carries with it, as an inevitable contaminant,

dioxin or TCDD—one of the most poisonous substances known to man.

A 267-acre zone near the factory was evacuated to avoid spreading the poison and its deadly consequences. The Milan-Como highway, however, which crossed the most contaminated area, was not closed down because it was judged too important for commerce. Because of such compromises, the poison spread, and with it the suffering of the people of Seveso.

As their problems multiplied, the people grew weary and skeptical of warnings about dioxin. Most of them wanted more than anything to return to their old routines, even if it meant moving back into a house right next to the deadly factory.

The article quotes Dr. Laura Conti, who is head of the regional health and ecology commission:

"Just because they lived near the factory, they knew long before the explosion that chickens, rabbits, and other domestic animals were dying off right in their own back yards. And they would take the carcasses to the factory management and get ten thousand lire—about twelve dollars—for a dead chicken, provided that they promised not to report the death to Ghetti (the local health officer). Since the... explosion, these people have naturally found it difficult to face the thought that what they really sold was not a chicken here and

there but the health of their own children. They can't bear it. And so such people try to insist that what they hear about dioxin can't be true—that dioxin can't be so harmful."

What's practical concentration in one instance is foolhardy blindness in another. The head-in-the-sand posture is not peculiar to Italy, of course. In the U.S., scientists know the dangers, but the U.S. still doesn't protect the country from 2,4,5-T used as an herbicide. We chose blindness in many other dangerous areas, too. We continue to generate nuclear wastes. We drive our cars in polluted cities. We eat food that we suspect, in the long run, will make us sick.

It's part of human nature—one of our strengths and one of our weaknesses—that we are able to function normally and happily while enshrouded by disturbing realities. We need to differentiate between situations that call for cool, narrow concentration and those which call for broad-minded foresight and action. It would be folly, for instance, to march across the stream in a treacherous spot simply because we are too busy putting one foot in front of the other to see a solid bridge upstream.

It's the difficult job of environmentalists to muster the courage and the confidence to tackle some of the large, but still solvable, problems that we face.

—the editors

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