

# Stalemates spawn new breed: the eco-mediators

Some 75 Coloradoans, both wilderness foes and advocates, gathered to shape the future of the state's roadless areas on national forest land. Should the lands be protected as wilderness? Or developed for their timber, water, recreation and mineral values? The group was urged to talk about it peaceably — to stop what the governor's office described as "yelling" — and come to civilized agreement.

Although the stockmen, skiers, timber companies, jeepers, hikers, miners and environmentalists spent many hours together, they failed dismally. The group agreed on a classification for only three out of the state's 234 roadless areas — and only after groups like the Federal Timber Purchasers Association were barred from voting because of their unyielding stands.

With varying degrees of success, mediation has been substituted for been excitition.

ing because of their unyielding stands.

With varying degrees of success, mediation has been substituted for legal or political confrontation in a number of recent environmental battles. If the wilderness senions revealed some of mediation's pitfalls, the Foothills water treatment plant agreement displayed its strengths. Although the Foothills agreement was controversial among environmentalists, in this case mediation halted a dispute that had been raging for six years. Federal agencies had disagreed over the project, the public had been deeply divided, and few of the state's major politicians had dared take a stand. major politicians had dared take a stand. nmentalists had won little more than attention, huge attorneys' fees and delays. The public was growing weary of

(continued on page 4)



# Mechanical mule: harbinger of a new society?

### Machinery-saving innovation

by Wade Greene

I strapped my feet into the bicycle-like pedals and began pumping, turning a chain drive that slowly wound a thin steel cable onto a spool. About 50 feet down the field, a plowing attachment that was bolted to the end of the cable caught in the earth as the line tightened. Guided by another person, the plow inched toward me, wedging a neat furrow about half a foot deep into the sodded soil.

on the market this spring. It would be sur-prising if this pedal-powered plowing de-vice, which is to carry a price tag of \$300 or which is to early a price tag or \$300 or more, became a best seller. In fact, its manufacturer, Rodale Press, is only planning to make a couple hundred of the things to begin with. Yet Rodale has been immensely successful in other unconventional enterprises, including Organic Gardening magazine. The converse has Gardening magazine. The company has spent more than a year developing the Mechanical Mule; so perhaps they're on to something. The possibility inspired me to try out a pre-production prototype the other day in a friend's garden in upstate New York.

The Mechanical Mule is the device's Should the Mechanical Mule prove to be trademarked name, and it probably will go of at least symbolic significance, it will be

because it spitomizes an emerging counter technology, variously labelled soft technology, appropriate technology or simply AT. Envisioned as a fundamental alternative to much of modern industrial technology, AT devices and processes are prized by innocuous, small, more "human" scaled, and independent of centralized controls or energy sources. They also are invariably what economists and technologists call relatively "labor-intensive."

what economists and technologists call re-latively "labor-intensive."

That's a somewhat abstract way of saying that human attentions and exertions are a major ingredient in their operation, as compared to inanimate energy sources and compared to inanimate energy sources and powered machinery. As such, AT styles are

(continued on page 6)





#### TOO MUCH TIME IN CADRES

Dear HCN

I had a few thoughts on Stewart Brand's Coevolution Quarterly comments (see HCN, 1-26-79). In the first place, you out there probably don't suffer so much from the California disease. The disruptions you face are so major, your recourse so limited, and the stakes so high that I doubt anybody in Wyoming has time to give a goddamn about who holds an eggheads' carnival on public lands.

It seems most of the news that blows in from your way is about people trying to ke. o multinationals from shipping them to Te. is with your own water. So the difference, is scale is important.

ence is scale is important.

Bu: there are some lessons to learn from our dilemma. First, environmental groups have spent too much time in their cadres and not enough with their neighbors. Too often the emphasis has been on political and legislative solutions to problems. These problems could be better, if more slowly, resolved by increased public understanding resulting in changed habits at home and in the market. The resurgence in sales of exotic furs despite the import restrictions on rare species is an example of this

this. Your own efforts and those of groups like the Wyoming Outdoor Council or the Powder River Basin Resource Council to work with rather than manipulate broader local interests are examples of what we need more of If WOC's idea of cooperative river management programs — an idea that seems to build on common values of both conservationists and agricultural landowners — is a sample of their products, you are in much better shape there than we are in California.

in California.

Too often environmentalists have used their single issue political swak to run rural areas like conquered countries and public lands as organizational fiefs. Obviously, this is a malady that seems more contagious among realtors and the resource industries, but it is no less crippling when it lays out the Sierra Club.

The article I have never seen is headlined "Conservation Group Admits Error." The result is conflicts like Brand's. Golden Gate NRA as a widerness may be just as

The article I have never seen is headlined "Conservation Group Admits Error."
The result is conflicts like Brand's. Golden Gate NRA as a wilderness may be just as bad an investment as the Ten-Four canal and its beneficiaries just as limited. Conservationists should examine themselves carefully for the same symptoms we have fought so long to cure in the corporations and agencies we deal with.

Dan Ray Eureka, Calif.

#### RAILROAD NUISANCE Dear HCN:

Louisa Willcox's article (HCN 1-26-79) brings to the surface an issue that needs examining. Gillette, Wyo., is not alone with its growing railroad nuisance. The demands of a consuming society and interests of the railroads are about to run roughshod over many of us living in small Western towns. We're headed for a real clash between differing priorities and val-

In our town (pop. 2,500), the railroad (Denver and Rio Grande) stopped provid-



ing services to us sometime back. Its presence can only become a bigger headache as rail traffic mounts. The tracks go smack through the center of our business district, separating all of our schools and part of our residents from the fire and police departments, medical clinic and ambulance services.

vice.

To make matters worse, the town recently agreed to close one of our four vehicle crossings and grant an increase in train
speed in order to get automatic crossing
signals installed by the railroad. The noise
level is greater than we allow from any
other source in town, barring emergency
sirens. This aggravation and hazard would
be difficult to justify even if the railroad
was providing some service such as public
transportation or transport of recyclable
materials, which it isn't.

materials, which it isn't.
One lever small towns in our state have
is the power to control by ordinance the
speed limit of trains while within the town
boundaries. Unfortunately, our town government hasn't used it effectively. But
others may be able to.

Dick Scar Buena Vista, Colo

### CREAKING TRAINS Dear HCN,

Louisa Willcox's "Wyoming town severed by coal train traffic" (HCN, 1-26-79) states that coal-carrying trains are "roaring" through downtown Gillette. (I, too, pass through Gillette as quickly as possible). However, in the next sentence we learn that an average of 12 "roaring" trains block traffic for three hours each day or about 15 minutes per train. Now a train that blocks an intersection for 15 minutes does not roar. Rather, it gurgles, groans, and creaks.

does not roar. Rather, it gurgles, groans, and creaks.

Outbursts against coal-carrying rail-roads puzzle me. I, too, would rather that the coal not be mined, but since it he being mined and shipped to distant markets, railroads are the preferred mode of transportation: their infrastructure is already in place; they employ more people than the other modes; they are much more desirable than slurry pipelines; and they are more

energy efficient than truck transportation. The railroads make a profit hauling coal. This is fortunate for you Westerners because without those profits, you no doubt would be saddled with a "Conrail West" consuming millions (billions?) of our doublars. This is not to say there are no problems with the railroads — there are, and coal dust perhaps is the most severe.

Obviously, the coal trains inconvenience

Obviously, the coal trains inconvenience Gillette motorists. This seems somewhat ironic, for without the coal there would be no (or certainly less) Gillette. The trains would seem necessary for Gillette's coal-based prosperity and to continue its dubious title of the "Fastest Growing City in the

David H. Hickcox Geography-Geology Department Ohio Wesleyan University Delaware, Ohio

#### TUNNEL VISION

Dear HCN

The Bureau of Land Management story (HCN, 1-26-79) controversy is interesting. I agree with F.A. Barness of Moab—HCN should make no apology for environmental "bias" — surely the other side makes none and they are motivated by profit.

"bias" — surely the other side makes none and they are motivated by profit.

The letter from lady BLM er Nancy Gregory betrays typical tunnel vision — she still sees BLM as "Livestock-Mining" and protection of same. I hate to see what the cattle industry is doing to the high country — and I think the rest-rotation concept is awful. It's as though the cattle owned the mountains. Look what domestic stock has done in Africa, the Middle East (Iran) and Asia

Asia.

I am reading Of Wolves and Men by Barry Holstun Lopez, who links the extirpation of the wolf, fear and hatred of the wolf, with exactly the same feelings many have toward wilderness — a "meanness of spirit" that dictates the destruction of wild, free, clean things, that are steadily going down the drain.

America must kill her heroes — why can't we bear anything that is better than the worst of us?

M. Eads Sheridan, Wyo

#### ANOTHER ANGLE

Dear HCN.

This is in response to Thomas M. Jenkins' "Climbing the Unclimbable" in the Jan 26 HCN

For a year I've lived in the Wet Mountain Valley at the foot of the Sangre de Cristo Mountains, and I've had numerous opportunities to hike in the range and climb many of the peaks. Like Mr. Jenkins I am captivated by the spectacular beauty of the Sangres, but I feel another important angle should be added to his romantic view.

shound be added to his romanuc view.

The impact of motorized man is taking its toll on the range. Along the eastern side are three "jeep" roads that pierce the heart of the range. One, the Hermit Road, can be driven by ordinary pickup to 13,000 feet and roads! the same result will be a reader the same result of the same result in the same result is the same result is the same result in the same result is the

and nearly the range crest.

By far the most traveled "jeep" road is the South Colony Road that the jeeper and some intrepid non-jeepers take to within one mile of the base of the Crestones. One weekend last summer I counted 50 jeeps parked along that road, and I am sure there were more hidden in the trees. Fortunately the heavy traffic has kept the road deteriorating at a steady rate, and there is hope that a couple of heavy winters would make it impresseble.

make it impassable.

In addition to the jeep roads there is a trail that traverses the length of the main range between 9,000 feet and 10,000 feet that is open to trail bikes. At least four other trails exist to get the bikers up to the higher lakes.

higher lakes.
Generally the range is quiet in winter. With only a handful of cross-country skiers in the valley and large population centers 80 miles away, you can ski all day and see no one else. However, on the road to the Crestones, beware, for the sound of the snowmobile is frequent. With ease they can get to within one mile of the ideal base camp for a winter ascent of the Needle. Yes, the Sangres are spectacular, but their beauty is rapidly being trashed by modern man and his toys. Maybe with the help of the RARE II wilderness designa-

Yes, the Sangres are spectacular, but their beauty is rapidly being trashed by modern man and his toys. Maybe with the help of the RARE II wilderness designation, magazines like HCN, and people who demand that a few remote and quiet places remain, something from this one small area of our world can be saved for all to

Tom Strong Westcliffe, Colo.



#### CORRECTION

Badlands National Park in South Dakota has Class I air protection and not Class II as was reported in the March 9 HCN. Class I means that almost no degradation of air quality is allowed.

# 1973's fresh thinking has decayed

Notes on a prospective gasoline shortage

We have had more than five years since the Arab oil embargo to prepare for the next shortfall in gasoline supply. What have we accomplished as a result of our unhappy experience in 1973-74? Nothing.

Worse than nothing. We have been com-unding our problems, not solving them.

There has, of course, been the much-touted 55 mph limit. It is said to have been saving us 250,000 barrels of oil a day. One may be allowed to doubt such figures. Nonetheless, let us agree that the 55-mile limit has been saving us 250,000 barrels a day. It seems to be a very impressive sum until. . .

. .until you set it beside a shortfall pro jected for next summer of 800,000 to a million barrels a day. Then we begin to see what a pathetic state of mind we have been in these past five years as we clung to the illusion that our energy problems could be mastered by a speed limit and by turning down thermostats

We were in better shape to handle a were in better shape to handle a gasoline shortage five years ago than we are now. We were accepting the need, however grudgingly, to bring to a close the era of the automobile that uses far more gasoline than is needed to do the job of transporting us safely and comfortably.

We understood, thanks to Arab prodding, what a drain we had become on world petroleum supply. We began to contemp-late a life-style that would reduce our dependence upon energy without taking the pleasures and comforts out of life. That was a great moment, back there in 1973-74. We got off dead center for a while. We began to think imaginatively. There was a freshness in American thinking that hadn't been there for years.

Then we drew back. We resumed the old

folly.

Yes, the auto builders were offering with much enthusiasm (one auto company head bluntly said he wasn't interested in building small cars because they are less profitable than the big ones). Yes, Congress decreed that automobiles would have to meet gasoline consumption averages well above the cur-rent ones by 1980 (as if the world would stand still and wait for us).

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ibutions (manuscripts, photos, articlecomed with the understanding that not be held responsible for loss or es and letters will be published and scretion of the editor.

But we Americans, nudged along gleefully by those same vehicle builders, were getting into trucks and motorhomes and heavens-knows-what as if the Arabs had

heavens-knows-what as if the Arabs had never shut us off or, if they had, never would repeat themselves.

If we had been childish in our approach to energy prior to 1973, we have been goofy ever since. It is one thing to fail to see trouble coming; it is something else to pretend it never happened. The first is stupidity; the second is dementia.

Well, here we are again, facing a gasoline shortage beginning, it is predicted, in the summer.

dicted, in the summer.

Back in the winter of 1974 I wrote a column concerning the impact a gasoline shortage might have on tourism the follow-

Maybe it wouldn't be so bad.

Perhaps tourists wouldn't be dragging all sort of impediments behind them when they came to Wyoming, but perhaps that would be a blessing in disguise insofar as they might give more attention to Wyoming than to their playthings.

ing than to their playthings.

If gasoline were short, perhaps they would stay longer, rather than trying to surpass last year's coast-to-coast and

Because more of them would be coming in cars without trailers behind them, motels might find themselves doing a land office business. And campgrounds might not suffer too badly in the shift from trail-

rers to tents.

Perhaps I was trying to find a silver lining in what seemed like a very dark cloud

In any case, the crisis never materialized. Perhaps it would have been

now. We would have made the adjust-ments. We would have the know-how to

ments. We would have the know-how to meet the latest challenge.

I'd like to raise a point made in that col-umn which may take on fresh meaning today. Would it be possible for railroads to help on two fronts by bringing tourist as passengers and their cars on flatears to their regions of destination, thus saving energy and preserving tourism?

It is done, you know, to a limited extent, mostly down the Eastern Seaboard to Florida.

Obviously the tourist facilities in the in-tervening states would take a jaundiced view of such leapfrogging. Nonetheless, it is time to get the ideas churning again.

Reprinted from the Sheridan Press

Guest editorials do not necessarily reflect the opinions of the staff of High Coun-

### Kudos to the Bonnie Hills

We are glad to see that the bureaucracy figures from Hill to finally shift EPA's attention to people.

The Environmental Protection Agency's Alsea, Ore, to write a letter to EPA other Alsea.

action to temporarily ban the use of two herbicides, 2,4,5-T and Silvex, should en-courage lay people like Bonnie Hill, whose practical knowledge can be an invaluable complement to scientific research. Hill noticed an unusual number of miscar-riages in her area and did some research

noticed an unusual number of miscar-riages in her area and did some research that showed a correlation between the tim-ing of the miscarriages and of herbicide spraying on nearby federal lands. Earlier the Citizens Against Toxic Her-bicides had charged that the environmen-tal impact statement on one of the her-bicides, 2,4,5-T, didn't pay enough atten-tion to the effects on humans, but it took

Alsea, Ore, to write a letter to EPA, other people have started telling their stories. Harold Freedlund of Pittsville, Wis., suspects that his children's nosebleeds, his wife's three miscarriages and his farm animals' aborted offspring all are the fault of 0.45 m. of 2.4.5-T.

of 2,4,5-T.

Chemical companies don't like the free publicity. They have already expressed "shock and disappointment" at the ban and are trying to get it lifted.

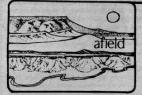
There is no question they have a lot to lose, but their arguments about lost timber and lost jobs are questionable. As a forester in Idaho points out, production won't be affected for some time, and by then, alternative methods of weed control might be developed. He mentioned using goats. developed. He mentioned using goats, sheep or manpower to clear forest under-

brush.

We hope the ban is upheld until there is irrefutable evidence that the herbicides have no serious effect on humans. Human meddling in the environment has already caused a myriad of problems that don't show up for decades. The cancer that may have been caused in Utah and Nevada by melest feeting and in Dearen hurada by nuclear testing and in Denver by sloppy disposal of radioactive wastes 30 years ago are good examples.

are good examples.

Any time we have evidence as strong as Bonnie Hill's — backed up by laboratory work and statistics — we should give it close scrutiny. If there's a good chance the herbicides are causing the miscarriages and other maladies, the companies' dollars arguments must be ignored. —MjA



by Hannah Hinchman

Against a backdrop of spring snov angs a white quilt with multicolore

flowers.

Saturday cumulus clouds wall the horizons. Since I associate them with the broad light and heat of summer, they look unreal. But by Sunday a full overcast has replaced them, the kind that lifts only occasionally to reveal a glimpse of foothills. Sticky snow falls in the night, clings to swelling buds so that a few small cottonwoods look like a blooming apple orchard. It's a snow with little conviction: by noon it has given way to mud. Still no break in the overcast, so rare in this sunny part of

given way to mud. Still no break in the overcast, so rare in this sunny part of Wyoming. I enjoy the subdued and sheltered feeling of these gray days.

The juncos have arrived at Bruce and Joan's feeder, bringing forth a thin trill that matches the thin spring light. We see male redwing blackbirds spaced like musical notes along the telephone wires over borrow nit sloughs. In wires over borrow pit sloughs. In Dubois Mary Back managed to get quite close to a trumpeter swan on Wind River by staying hidden in the willows. When it discovered her, she says it stretched out its neck and "whispered." Joe Back describes the sound as a "kind of snore" and Mary says it is a "small installment" of the swan's full-scale trumpet. She feels sure it is the same swan that nests every year on Trail Lake in the DuNoir Valley, biding its time on the river until the ice breaks up in the high country.

Barrow's goldeneye await breakup too, since they nest around the high lakes. Mary has observed a flock of about 20 all winter. Now the flock is growing and the females' bills have turned from a dull brown to orange yellow, just like the willow trees. A quickening of sap and blood both (there are only a few molecules of difference between those two substances). Skunk musk is in the air again.

### Eco-mediators.

(continued from page 1)

watching the price tag of what most considered an inevitability soar nearly out of

signt.
So the Foothills mediation, orchestrated
by Rep. Tim Wirth (D-Colo.), healed what
many Coloradoans saw as a festering wound. But the wilderness mediation ef-fort seemed only to heighten chaos and animosity. The question environmentalists — as well as their adversaries — are asking is when does it make sense to seek a mediated settlement? And when is it wiser to wage a more traditional political or legal

war?

Gerald Cormick of the Office of Environmental Mediation in Seattle is a key intellectual leader in mediation circles. Other mediators frequently quote from papers written by him and his associate, Leah Patton. From the looks of the wilderness meetings and other "mediated" disputes, they don't always practice what the Seattle team preaches, however.

#### A VOLUNTARY PROCESS

Cormick, a 36-year-old former labor mediator with a doctorate in business administration from the University of Michigan, defines mediation as:

A voluntary process in which those involved in a dispute jointly explore and reconcile their differences. The mediator has concile their differences. The mediator has no authority to impose a settlement. His or her strength lies in the ability to assist the parties in resolving their own differences. The mediated dispute is settled when the parties themselves reach what they consider to be a workable solution."

Cormick emphasizes that mediation should be voluntary — not something forced on one side or another by, for instance, a politician too eager to bring peace to his constituents.

to his constituents.

to his constituents.
"Conflict is a very, very constructive process," Cormick says. "If we eliminate it we
make sure we don't get any changes.
Groups need conflict to get issues recognized, to build their constituencies, to get

Conflicts can only be mediated between equals in power, Cormick says, because otherwise the mightier party won't be wil-ling to make concessions over the bargaintable.

On the other hand, if all the parties

On the other hand, if all the parties involved realize that they can't single-handedly achieve their objectives — mediation should be considered, he says. Perhaps stalemate has softened the sides enough to prepare them for mediation. Other requirements also must be met, Cormick says. The issues must allow room for flexibility. If two groups are deadlocked over a nuclear power plant that one side opposes no matter where it is, how it's cooled or what color it's painted; forget mediation. The concerns in this case are

cooled or what color it's painted; forget mediation. The concerns in this case are non-negotiable.

Another requirement, according to Cormick, is the assurance that the mediated solution will be implemented. Otherwise, "by engaging in discussions which move beyond previously held public positions, the parties may compromise their future stance before the ultimate decision-makers," Cormick warns.

Cormick is skeptical of meetings where traditional foes are invited to come and "reason together" — without the incentive of shaping policy. Such chatajeopardize the participants' credibility with their own organizations and sometimes only heighten

the antagonisms between the groups, he

says.

Cormick says his office turns down more requests to mediate than it accepts. "Often groups come to us saying they need a mediator when they need an organizer. The issues aren't on the table yet."

Not everyone in the field subscribes to Cormick's view that mediation is "totally diseased."

adversarial—the negotiation process with the assistance of a third party."

The mediators at Resolve, the

California-based group that directed the wilderness discussion in Colorado, say

wilderness discussion in Colorado, say they're promoting "the concept of non-adversarial dispute resolution."

Somewhere in between the two, and older than either of them, is the Rocky Mountain Center on the Environment in Denver. Headed by John Kennedy and Susan Carpenter, ROMCOE has chalked up most of its experience in forms of conflict resolution other than Cormick's strictly-defined mediation. For instance, through a technique it calls "conflict anticipation." technique it calls "conflict anticipation," the group tries to identify potential dis-putes in communities "before opposing sides are fully established and before social sides are fully established and before social and economic disruption occurs." It has used this technique since 1968 to help boom towns cope with impending growth, to help communities plan ahead to solve

#### "What's right is right and compromises aren't going to get you what's right."

energy problems, and most recently to help the Denver area solve its severe air pollution problem.

### MIXED REVIEWS

In the Rocky Mountain region, mediation efforts have drawn mixed reviews.

Resolve's wilderness effort, while it has not been widely publicized, was a major disappointment to the Forest Service an many of the participants. The agency had hoped the group would come to an agree-

ent about many of the areas in its second padless Area Review and Evaluation — RARE II.

Art Merriman, Forest Service contract review officer for the project, says that Resolve took on too large a task in too short a time. Then, by choosing a "non-directive"

ernor and the other groups were all behind the effort. Environmentalists decided to participate, partly out of a fear they would look unreasonable if they didn't, partly out of curiosity, and partly out of hope that some consensus would be reached.

Malcolm Murray of the governor's office

### If two groups are deadlocked over a nuclear power plant, forget mediation.

mediation style, he says it left the group to provide its own leadership. "It didn't work out very well," Merriman says. "But it gave us an idea of what you shouldn't do in mediation." Lloyd Stahl of the Federal Timber Pur-

chasers Association concludes from his ex-perience with Resolve that environmental

mediation is a lot of "hocus-pocus."
"It was just another Forest Service work-shop. They didn't have any special abilities or procedures." Besides, Stahl says, "What's right is right" and "compromises

among special interest groups aren't going to get you what's right."

Some of the participants echoed the theoretical warnings of Cormick.

Rose Kapolczynski of the Colorado Open Space Council Wilderness Workshop says that the issues were not clear enough to be ripe for mediation: "There were groups there that didn't know what a roadle

She also says that because Congress has final say in a wilderness designation, peo-ple weren't confident their decisions would be implemented. 'Groups thought, 'Why should we bargain now? We're going to have to go to Congress, and that's when we're going to do our bargaining,' " she

"We couldn't even reach a conwhen to have a meeting," Kapolczynski

says.

Neither did the groups participate strictly on what Cormick would define as a voluntary basis. Kapolczynski says she and other envionmentalists were hesitant about participating, but came because they were told that the Forest Service, the gov-

suggests that while the concept of the RARE II meetings was good, perhaps the wrong participants were invited.

On wilderness issues you need to get away from general philosophies and down to specifics, he says. "You need to talk to the local timber mill owner and not the lobbyist of the Federal Timber Purchasers Association, and instead of talking to the Association. And instead of talking to the executive director of the cattlemen's group, you need to talk to the cattleman who

you need to talk to the cattleman who needs access to a given valley."

On the whole, "the meetings resulted in a slight escalation of hostility" among the groups that had been previously warring over RARE II, said one environmentalist.

Another participant concluded wearily.



PIONEER CONSERVATIONISTS OF WESTERN AMERICA

BY PETER WILD

Absorbing essays on 15 farsighted pioneers in conservation. First printed in **High Country News**, they now are gathered into this book with an introduction by Ed-

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Fred English photo courtesy of Resc STOCKMEN, SKIERS, TIMBER COMPANY REPRESENTATIVES, jet res, hikers, miners and environmentalists spent many hours together in Resolve's wilderness mediation effort in Colorado. They were able to agree on the fate of only three out of the state's 234 roadless areas. The photo above shows a Resolve meeting in Glenwood Springs, Colo. "The adversary system seems to be work-

Richard Livermore, Resolve's project director, defends the group's effort in Colrector, defends the group's effort in Col-orado, its only mediation effort to date, as a success that ran short of time. "We were incredibly optimistic to try to do it in 90 days," he says. The non-directive media-tion process is sound, he says, "but it takes lots of talking space, moving space." Livermore emphasizes the pleasant at-mosphere that was created at the meet-

ings.
"We didn't have people at each other's
throats," he says. "The lack of a process
design forced participants to come up with
their own product. That created a lot of energy. They were able to get together on process. Due to time constraints, they were unable to implement that process, how-

"Had the group come to us and asked us to develop suggestions to direct them, we would have come forth, but we were never

asked," Livermore says.

Other recent mediation efforts in the Rockies have been more forcefully led.

Some environmentalists don't like the

solution that was reached in the Foothills Water Treatment plant con-troversy in Denver. The dam in Waterton Canyon that concerned environmentalists will be built

But National Wildlife Federation attor-But National Wildlife Federation attor-ney Bob Golten says that, in his estima-tion, mediation was the best alternative available to environmentalists at the time. While the U.S. Environmental Protection Agency remained opposed, Golten felt a lawauit his group filed in Washington, D.C., might have been able to stop or sig-nificantly change the project. But in De-cember, after negotiations with the Corps of Engineers and the Denver Water Board, EPA withdrew its objections. Then, Golten said, environmentalists' "litigation lever-age dissipated." age dissipated."
"If we had continued to litigate our case,

we could have won little more than further delay and increased project costs. We weren't doing the public any good," Golten says. So he, John Bermingham of the Col-orado Open Space Council and Bob Weaver of the Colorado Rivers Council agreed to negotiate.

The proceedings were directed by a

strong hand, Golten says. "Every tin



Photo courtesy of ROMCOE
JOHN KENNEDY: The biggest problem in this whole business is getting cople to go back and build an un-

threatened to bog down, Tim Wirth sent his fire-fighting equipment out (two persua-sive aides) to force us to keep talking," Golten savs.

Golten says that environmentalists and EPA won important concessions through the mediation process, which included a water conservation program for Denver, a citizen's advisory committee for the Denver Water Board, guarantees of minimum stream flows below the dam and dismissal of a lawsuit against them

#### GOSPEL HUMP

In Idaho environmentalists learned the hard way Cormick's lesson about needing assurances that a decision will be im-plemented. They also had doubts about whether, in their case, the issue was ripe

for mediation.
"I still wonder whether we rushed into negotiation too fast," says former Wile negotiation too tast, says former winter-ness Society Representative Dan Lechefsky, talking about the 1977 Gospel Hump Wilderness dispute in Idaho. "We could have spent more time and energy gaining public support for our position."

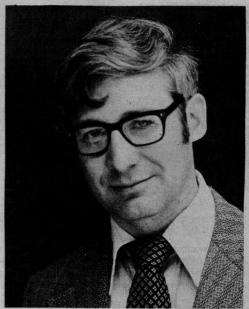
But environmentalists were at loggerheads with the Forest Service over the gerneaus with the rorest service over the area. "All of the area's land use plans had been appealed, and we weren't winning much on the appeals," Lechefsky says. When Sen. Frank Church (D-Idaho) asked the environmentalists to negotiate, "is seemed like the politic thing to do, Lechefsky says.

The compromise reached after a spring and summer of meetings included a com-mitment to add the proposed Gospel Hump Wilderness to the Endangered American Wilderness Act. The area was somewhat reduced in acreage from what environmen-

reduces in acreage from what environmentalists had originally proposed, however, to allow for more timber cutting.

Although controversy raged during the mediation process, people on both sides of the issue seemed generally pleased with the final results.

What drew the ire of environmentalists was Sen. Church's subsequent alteration of the wilderness-timber package created by the group. Church held a public meeting in



GERALD CORMICK, a 36-year old former labor mediator specializes in environmental disputes.

In February 1977 a Denver group called Consensus asked the Rocky Mountain Center on Environment to intervene in a dispute over a CF & I Corp. metal recycling plant. The proposed facility offended some local residents because it was supposed to be built directly across the road from a planned golf course and club house in a strip of open space the citizens hoped to maintain as a "greenbelt." After two meetings, some middle ground between CF & I and the citizens appeared. The group proposed that CF & I remove its plant from the greenbelt when the facility needed to be replaced in 10 years. This met Consensus's needs, spokesmen said, because the golf course was six years from completion and

Richfield Corp. Its RARE II effort drew about \$40,000 from the Forest Service and \$15,000 each from the Ford and Hewlett foundations. The Coal Policy Project, a national coal policy negotiation session among environmentalists, mining and utility interests, was backed by about \$410,000 from industry, foundations and government last year. The Ford Foundation invested in Cormick's ideas in 1972, after it had soured somewhat on its investments in public interest law groups.

Another reflection of the widespread interest in mediation are recent articles in Fortune, Environmental Action, the Electric Power Research Institute Journal, Science, Outside and

Journal, Science, Outside and Audubon. In their examinations of the technique, Environmental Action and Outside sounded skeptical, while Fortune and the EPRI Journal heralded mediation as the beginning of a new age of reasoned, cooperative problem-solving.

"Clearly, much of the motivation for industrialistic to participate even for in-

dustrialists to participate come from an awareness that industry has been kept on the defensive in the federal and state le latures and in the courts," says Luther Carter in a Science article about a private negotiation effort called the Coal Policy

If environmentalists are winning the battles, as Carter says, then why should they be interested in mediation? Some aren't. Those that are, however, cite the time and money required by lawsuits and lobbying for what sometimes have become insubstantial victories, only amounting to delays. While delays often work in environmentalists favor, environmentalists have been paying a price in terms of the public's impatience with this tactic.

Some environmentalists see an even more fundamental problem. They think that courtroom and lobbying battles may be blocking sensible solutions to the environmentalists are winning the

be blocking sensible solutions to the nation's environmental problems. Agencies, for instance, are sometimes per-versely proud of the fact that their propos-

### Mediation: "a voluntary process in which those involved in a dispute jointly explore and reconcile their differences."

the fall of 1977, which was well attended by off- oad vehicle and mining interests. Soon afterward, Church and Idaho's other senator, James McClure (R), made concessions. signs to development interests that weren't balanced by gains for the wilderness in-

terests, as they might have been at the negotiating table, environmentalists said. The changes, which included a snow-mobile corridor through the heart of the wilderness and extension of the deadline for mining claims from 1983 to 1988, were calmining claims from 1983 to 1988, were cal-led "emasculation on top of compromise for the sake of politics" by Morton Brigham of the Idaho Environmental Council. The senators went a "long way toward assuring that the Gospel Hump approach, using negotiating teams to settle controversial public lands issues, is never again used in Idaho." he said. Idaho," he said.

Sometimes dissension within an interest group foils a well-planned mediation effort.

tion.

Resolve was spawned a little over a year ago by a \$1 million gift from the Atlantic

other parts of the greenbelt were expected

other parts of the greennest were expected to take even longer.

But one member of Consensus disagreed with the majority's strategy, Without letting other members of the group know, he filed suit against the company. CF & I, following advice from its lawyers, withdraw from the mediating mayers. drew from the mediation process. The plaintiff lost the suit, and the plant was

"That's the biggest problem in this whole business," says John Kennedy of ROM-COE. "People rarely take the time to go back and build an understanding with their constituents. But you must go back and tell them what moves you've made and when."

why."

Despite the rocky record of mediation efficient areas in it runs high. Big Despite the rocky record or mediation er-forts, national interest in it runs high. Big money from foundations and industry has been attracted to "non-adversarial" methods of environmental conflict resolu-

### Mechanical mule.

bucking a strong historical tide: Technology in general has become less and less labor-intensive, more and more capital-and-energy-intensive. For centuries we have been substituting machines for men

For this reason, a device to harness human legpower might easily be dismissed as a quirky anachronism; much of AT thinking in general tends to be so regarded by the unconverted. Yet quite apart from AT theologies, the evidence of late has been Al theologies, the evidence of late has been accumulating to prove that greater labor-intensity — perhaps the most controversial and most historically deflant characteristic of appropriate technology — is actually being dictated by raw economic forces. The Mechanical Mule may not be anachronism so much as harbinger of technological styles to come

The economics are clearest and the movement toward greater labor-intensity

population of the U.S. Thus, by conventional economic reasoning, it makes sense to use more labor and less energy and machinery. As the publication World Development notes in an issue analyzing various possible ways of manufacturing a number of different products. The least cost technology is sometimes neares the

number of different products, The least cost technology is... sometimes nearer the labour-intensive than the capital-intensive end of the spectrum."

Partly because of such reckonings, a good deal of rethinking about technological advice and aid to developing countries has been going on in recent years, and it is expected that considerations of the role of labor intensive appropriate technology. labor-intensive appropriate technology approaches will be one of the storm-centers at the United Nations Conference on Science and Technology for Development, to be held this summer in Vienna.

Since the 1973 Arab oil boycott and the quadrupling of world petroleum prices, re-

While environmentalists have won many battles, stopped many destructive projects, they haven't made deep changes in a wasteful societv.

strongest in developing countries. Energy and capital resources are scarcest in these lands, and they enjoy, or suffer, abun-dances of labor. The International Labour Organization has estimated that the amount of unemployment in developing countries adds up to more than the entire

source constraints on technology have come abruptly home to developed countries as well. Energy costs, of course, have soared - reversing a constant downward course in such costs that dates from the dawn of the Industrial Revolution — and so, too, to a lesser degree have capital costs.

Labor costs have grown less rapidly and high unemployment has persisted or emerged in developed countries as a major social and political concern. Thus, a prospect that might a few years ago have been regarded as a virtual con-tradiction in terms in modern industrial countries can be put, forward quite

countries can be put forward quite matter-of-factly. Two agricultural economists, R. Delworth Gardner and Rulen D. Pope of the University of Califor-nia, note that the price of farm machinery has been climbing proportionately more in

#### "This smacks a little of a contest to see who can be more inefficient."

recent years than farm wages. "On the basis of this evidence," they wrote, "one might speculate that future innovations might be. . .machinery saving."

ight be. . .machinery saving."
Machinery-saving innovation? It still has an odd ring, but machinery-saving is the other side of the labor-intensity coin. And if regular economists are somewhat And it regular economists are somewhat cautious about foreseeing such an irregu-lar shift, some economic analysts outside their ranks are not. Hazel Henderson, au-thor of Creating Alternative Futures, which is subtitled "The End of Economics," which is subtuted the End of Economics, sees a very definite end to an economic pattern that we have all but taken for granted. "People are now plentiful and resources are scarce," she writes, "and as a consequence the capital-labor ratio has now shifted back toward increased labor in

now smitted back toward increased lator in varying degrees all over the planet."

The matter of labor-intensity, and the contention that technology may be becom-ing more rather than less labor-intensive, is not limited to discussions among

economists or their detractors, for that economists or their detractors, for that matter. Such concerns are at the center of what appears to be the major technological debate of our time. What sort of energy-producing technology—"soft" or "hard"—should be pursued as petroleum prices grow ever larger?

Part of the debate focuses on matters of constitute and equiversmental soft.

occupational and environmental safety, part on questions about centralized versus decentralized technology. But increas-ingly, the political heart of the debate is about labor: jobs.

"Hard" energy technology is defined in part by its capital-intensity. It takes a lot of equipment to generate power by hard methods. Large coal- and nuclear-fueled electricity plants are considered the har-dest of hard technology methods.

The argument of those in favor of expanding such technology has been focused in part on jobs; the argument was summarized at an atomic industry meeting two years ago by Arnold Safer, a vice president of the Irving Trust Company. "It will take an increasing amount of energy to sustain the same number of jobs in the economy," he said, "if these jobs are to generate a higher level of real income to working men and women.

This argument subdivides into three main parts: that more nuclear and coal power are essential if we are to increase the power are essential if we are to increase the overall energy is needed to fuel a growing economy and that a growing economy is needed to expand the number of jobs. The National Association for the Advancement of Colored People this year, to the discomfort of "soft" energy forces, endorsed this viewpoint, and the higher echelons of organized labor as well

(continued on page 7)

### Eco-mediators.

(continued from page 5)

als please none of the segments of the pub-lic they serve. In the face of controversy, they seem to end up doing what Solomon threatened; if both sides want a baby, they cut the baby in half.
Sierra Club Executive Director Michael

McCloskey, who has as much experience with confrontation as anyone around, has with confrontation as anyone around, nas-been experimenting with non-adversarial politics lately, through his place on the board of Resolve and through his participa-tion in the Coal Policy Project. "Confronta-tion politics leads to sweeping generaliza-tions rather than fine distinctions, he says, and both sides conceal their ultimate aims." Better decisions might be achieved if advocates took off their courtroom armor and played by what the Coal Policy Project calls "the rule of reason," he says. This means that "they will share all pertinent facts, they will not mislead each other with unfair tricks; they will not lightly impugn each others' motives; they will avoid dogmatism; they will simplify complex concepts so they can communicate to lay persons; they will identify and isolate subjective considerations, they will distinguish between facts and value judgments."

Some environmentalists remain wary of such disarmament, however. "If we begin as mediators, the final decision ends up somewhere between the mediated position and the negative position," says David Brower of Friends of the Earth. Brower is well known for an earlier statement that indicates the depth of his cynicism about the conciliatory approach: "Polite conservationists leave no marks except the scars if advocates took off their courtroom armon

on the landscape that could have been pre-

ented."

In an article in Outside, Bill Barich

Convironmentalists'other points out some of environmentalists' other fears about mediation: "They see increased mediation as a tactic whereby corporate strategists will be able to save time and money when planning new projects. A few hours at the negotiating table, and the opposition's hand is known. Mediation is

equally attractive to politicans, who will be able to fence-sit by forcing disputants to take their cases to mediatory organizations. No commitment to either side means no lost votes.

no lost votes. However, despite the skepticism, there remains a restlessness among many environmentalists — a feeling that while they've won many battles, stopped many destructive projects, they haven't made

ep changes in a wasteful society. They're looking for new solutions, and mediation, in some of its various forms, is likely to be among them.

(For the addresses of the mediation groups mentioned in this story, see "Dear Friends," page 16.)



CONFLICTS should only be mediated between equals in power, Gerald Cormick says. Otherwise the mightier mick (far right) is leading a conflict resolution workshop party won't be willing to make concessions. Here, Corsponsored by the Environmental Protection Agency.

THE MECHANICAL MULE, which operates with pedal power, is being manufactured by Rodale Press.

san politics in California's gubernatorial race. Foes of Governor Jerry Brown, who has associated himself with a statewide moratorium on nuclear plant construction, sought to brand this stand as recklessly endangering California's economy and job supply

Soft energy forces favor conservation Soft energy forces favor conservation and solar alternatives. Until recently they tended to be defensive about job-oriented assaults. But in the last year, they have marshalled analyses and economic studies of their own that lay claim to the job-creation banner; soft energy approaches, they now say, provide more jobs.

A group called Environmentalists for Full Employment has repeateded the

A group called Environmentalists for Full Employment has spearheaded the counterattack. In 1977, they issued a pam-phlet entitled **Jobs and Energy**. In it, the group cited evidence that economic growth did not depend on energy expansion. In fact, Amory Lovins, one of the foremost advocates of an energy "soft path," has cal-culated that new centralized energy production can actually lead to a net loss of

The nation's major energy-producing and energy-consuming industries, said the pamphlet, consumed one-third of the paniphet, consulted one-tenth of the energy supply, yet accounted for one-tenth of the jobs. "Since World War II, new jobs have been created overwhelmingly in the merchandising and service sectors of the economy....These jobs have required relatively low amounts of energy, capital and

The theme was enlarged upon by several witnesses in 1978 at congressional hearings titled "Creating Jobs Through Energy Policy" before the Joint Economic Committee's subcommittee on energy headed by Sen. Edward Kennedy (D-Mass.).

Among the witnesses was James Benson of the Council of Economic Priorities. Benson is completing a cost-benefit study of nuclear vs. alternative energy prospects in Long Island. The study finds, he caid, that Long island. The study finds, he ead, that two and a half times as many jobs would be created directly by conservation and solar installations and maintenance as would by ever greater outlays for nuclear construction and upkeep. What's more, Benson said, the study indicates that many billions

as much of the business community sub-scribe to it. would be spent for other, more It became the contentious stuff of parti-

products.

Kennedy himself apparently was impressed by such testimony — and has been scornful of the fact that Labor Department and Energy Department witnesses had lit-tle hard analysis to offer on the relations between different energy technologies and jobs. In September, he showed up at an anti-nuclear gathering in Washington and while carefully avoiding any attack on nuclear energy, declared that there was "over-powering evidence. ..that shows the area of conservation (offers) clearly the most important resources in this country,

deputy director of the Washington Bureau of the National Urban League, and Repub-lican Sen. James McClure of Idaho, a con-gressional friend of nuclear energy and a member of the subcommittee

Cooper: "If you were to examine, for excooper. If you were to examine, for example, a nuclear facility, you walk in and see absolutely no people. You see computers. ..What I see us doing is growing but using less and less manpower. We are becoming a technological society. What that means for our constituency is no jobs."

McClure: "Does that mean that? That may be the basic question we have to answer. But it may mean they don't have any

Two and a half times as many jobs would be created directly by conservation and solar installations and maintenance as would by ever greater outlays for nuclear construction and upkeep.

both in terms of what actually can be saved and in terms of...jobs and job skills..."

A few weeks ago, Kennedy addressed the New England Energy Congress and stres-sed the importance of linking energy policy to jobs. He concluded that "conservation is the best job creator of all, outperforming all other energy measures by a margin of 3 to 1, considering both direct and indirect em-ployment." A few weeks ago. Kennedy addressed the

"This smacks a little of a contest to see who can be more inefficient," said Carl Goldstein, a spokesman for the Atomic Industrial Forum, a nuclear promotion group, when I noted that soft energy forces seemed to be building a case that they could create more jobs. "I could solve the ration's upenployment problem expelled." could create more joss. I could solve the mation's unemployment problem overnight by putting every jobless man to work carry-ing coal from Appalachia to New York in bushel baskets, but I don't think that this would necessarily make coal the energy source of choice." source of choice.

A particularly telling exchange reflecting the widely divergent perspectives on technology and labor took place during Kennedy's energy subcommittee hearings. The protagonists were Maudine R. Cooper, jobs where the energy is produced but there

are jobs where it is consumed."

Cooper: "That is also questionable. We Cooper: That is also questionable. We can go into our manufacturing companies and we will see now assembly lines where there is little or no manpower. I know the argument has been well documented that we are becoming a technological society." McClure: "And you think that is bad?" McClure: "If it is bad if it means we will have only machines rather than people."

McClure: "If I understand it, you would go back to building the interstate hichway

go back to building the interstate highway by use of pick and shovel and wheelbarrows nstead of using tractors?" Cooper: "No. I think a balance sho

Cooper: "No. I think a balance should be struck between the technologies that are being advanced today and full employment as a national goal. . .does it make a lot of sense to have us spend \$45,000 a year to keep a person incarcerated when we could have given that person a job, cut back a little on technology, 5 or 10 years before he or she was arrested? Does it make sense for us to continue developing high technology when we should be putting those monies into the educational system to keep young, poor kids from dropping out in inordinate numbers? Nobody seems to be looking at this. We look at the cost-benefit analysis in

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terms of direct machine costs rather than the social cost or the long-range social

the social cost or the long-range social cost."

The economic arguments almost invariably spill over into more broadly social, even moral terrain. Most advocates of labor-intensive appropriate technology that I've met are quite happy to find and recite evidences that resource economics are shifting us away from conventional technology, but they feel that economic analysis itself and public policy based on this analysis has been too narrow all along in weighing the costs and benefits of labor-saving technology.

They feel that the social, psychological and environmental costs of much of our technology tend to be ignored because it is hard to put a price tag on them and that the benefits, in terms of gaining more goods and services for less work, are overestimated.

Many advicates of more labor, intensive

Many advocates of more labor-intensive technology say, for instance, small-scale food production is worthwhile, even if huge-scale farming using \$60,000 tractors and immense combine harvesters can provide food much more cheaply in pure mar-

ket terms.

Their calculus includes the ecological tolls of using the powerful chemical fertilizers and pesticides that accompany large-scale mechanized agriculture and the social and spiritual costs of destroying both livelihood and way of life for the millions of farmers and farm workers that the machinery has rendered dispensable.

machinery has rendered dispensable.

Does this mean that even something like Does this mean that even something like the pedal-powered plow can make sense these days? Or is it simply a quizzical anachronism, equivalent to the ladies of Versailles playing milkmaid, to use a deri-sive comparison that Herman Kahn has applied to middle-class shunners of modern technology.

technology.

I asked James Benson. He said, "All of
this gets down to values. We have to sift
through values that have been discussed
since the time of the Greeks. I mean what's
important to life, what is life all about? It important to ite, what is life all about? It really gets down to that. Imagine living in an ecologically oriented society where people were somewhat self-sufficient through the use of small-scale but technical devices and were raising their own food on either a community or individual basis.

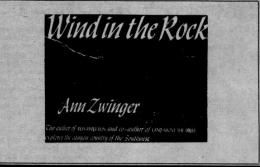
community or individual basis.

"What would people living in a society like that think of somebody who spent four hours a day sitting in an easy chair and drinking beer and watching television?

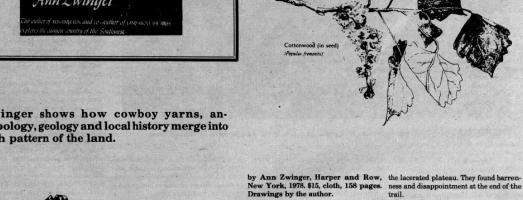
The point is the person raising food has a value set that says this is valuable to measure if a control of the course if a control of the course if a control of the course is a control of the control of the course is a control of the control of the control o value set that says this is valuable to me because it's exercise, because I'm raising nutritious food, because I'm helping the environment not be exploited and de-

stroyed by energy-intensive agriculture and also not being taken advantage of by agribusiness, and so on and so forth." A more ambivalent, and probably more prevalent, alternative that has at least im-plicitly faced society as a whole over recent plicitly faced society as a whole over recent decades, is between grueling manual labor and empty prideless lives on the dole or assembly line. But the point of Benson's polarization is still apt for an affluent society: Do we treasure accomplishments as producers as much as the rewards, in more leisure and cheaper products, of consumption? And for a society that is no longer so affluent in terms of one of the basic currencies, energy, the question may no longer be primarily a philosophical one, but one with major implications for technology and public policy technology for years, perhaps decades to come.

Reprinted from the Alicia Patterson



Zwinger shows how cowboy yarns, anthropology, geology and local history merge into a rich pattern of the land.





#### Review by Peter Wild

Kokopelli is his name. With a sack of trade goods thrown over his humped back he wanders through the Southwest, charming the curious mountain sheep with his flute. At night he stops in isolated villages. After the trading is done and the fires have burned low, he seduces innocent maidens with his glib talk. Now he stands before us, fill of the stops are aligned to the second or a life in large. full of good cheer, carved on a cliff in Upper Grand Gulch.

In her latest book, the author of Run, River, Run takes us backpacking through seven canyons in the Four Corners area of seven canyons in the Four Corners area of southeastern Utah. We are lucky to have Ann Zwinger as a guide through a land of wind and rock, space and silence. With her knowledge and intuition, she makes us intimate with the labyrinths of the Colorado

Not only can she tell us about Kokopelli Not only can she tell us about Kokopelli and his ancient friends whose rock houses, many of them still unexplored, haunt the cliff faces. She can pick up the carapace of a beetle and begin a tale of the insect's complex feeding and sexual habits, explaining how its life cycle is a series of precise adjustments to the arid environment.

Flicking through the note cards she carries with her into the bowels of the earth, she can tell us about the first Anglo settlers. Ordered by church leaders to colonize the area, in the freezing winter of

the area, in the freezing winter of 1879-1880 a party of Mormons chipped and blasted a way for their 83 wagons across

Zwinger's technique is similar to the Lowinger's technique is similar to the complicated weaving she describes in a remnant of prehistoric blanket found in a cave. She shows how cowboy yarns, anthropology, geology and local history merge into a rich pattern of the land that in merge into a rich pattern of the land that in 1861 Lieutenant Ives dismissed as "al-together valueless." Now, aided by Zwinger, Ed Abbey, et al., that largely un-inhabitated corner of the world is being rediscovered by an overpopulated nation often desperate to escape from smog, sonic tooms and other desperate hikers.

The author is at her best when etching delicate carness. She says a canyon breeze

The author is at her best when etching delicate cameos. She says a canyon breeze puffs by her "as if some small animal just walked through..., leaving wavering grass as the only trace of its passage."

However, unlike Edward Abbey, she has some difficulty when handling the powerful panoramas about her. Then, too, some readers may find a mite too much of Zwinger in these pages. She keeps monitoring the state of her health as she explores the canyons— as if the progress of a lingering old or the worsening condition of her aching feet were essential to the scenes. Others doubtlessly will accept the personal references as justifiable parts of the backpacker's milieu.

Whatever, the flaws—if flaws they be—are easily forgiven. Enriched with footnotes, index and Zwinger's own exquisite drawings, Wind in the Rock is a compendium of Southwest canyon lore and experience. This intense and valuable book

dium of Southwest canyon lore and experi-ence. This intense and valuable book should take its place in the literature as a rewarding window on the land.



# Wolverines — from a nightmarish fairy tale?

by Thomas M. Jenkins

Like something out of a nightmarish fairy tale, the wolverine is a threat to all fairy tale, the wolverine is a threat to all the creatures it meets. For its small size, it is one of the most powerful animals in the world. Although primarily a scavenger, its insatiable appetite drives it to attack any-thing that crosses its path, sometimes even deer, caribou, reindeer and, occasionally, ailing moose. The wolverine is said to at-tack forms and been such descriptor. tack fawns and bear cubs, dragging away carcasses several times its weight. Even though there are documented cases

Even though there are documented cases of wolverines in captivity that are docile, even-tempered and affectionate, the wild wolverine is known as an audacious nuisance and a fearless predator. The largest and flercest member of the weasel family, it not only will destroy food caches and rob traps to feed on the ensared victims, but also will hide the trap afterward.

The wolverine sneaks into the tents of hunters and backpackers, stealing almost anything it finds, including rifles, knives, dishes and blankets, which it carries away and buries. Such behavior has caused it to

and buries. Such behavior has caused it to be hated and consequently destroyed over much of its range; now it is rare except in the most remote areas. The wolverine's strange kleptomania, ceaseless searching for food and habit of tainting uneaten portions of its prey with an acrid secretion from its musk glands before burying them

combine to give it the name of glutton.

The wolverine prefers carrion but will eat almost anything. It normally feeds on lemmings, hares, birds and frogs. Some-times it lies along a branch or an overhanging rock to wait for prey. At other times, it will steal a larger animal's prey. Records show that two black bears gave up a cow carcass because a wolverine wanted to feed on it. Three coyotes in one instance and two

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mountain lions in another departed from their spoils when a wolverine approached. Biologist Adolph Murie wrote about a wolf bringing down a caribou and feasting until a wolverine came along. The wolf withdrew until the wolverine had eaten all he wanted. When he lumbered away, the wolf went back to his carcass. Ared fox had to be patient longer, for the wolf would not let the fox come to the carcass until he was through.

Found as far north as the arctic, the wolverine ranges through most of Canada to a few northern parts of the United States. Sightings have been reported in Yellows-tone Park in Wyoming and in northern California. It is considered endangered in

The wolverine is a solitary animal. After a brief courtship in February or March, the female is often left to rear three to five cubs alone. The young are fully furred when born and are weaned at two and a half months, but they remain with the mother until they are two years old. Then they are driven from the parents' large range. One male and three or four females may maintain control over as much as 635 square miles of territory.

The wolverine has a rich, dark brown fur over most of its body with cream or yel-

over most of its body with cream or yel-lowish stripes along its sides, joining over the tail. It is usually 3½ to 4 feet long, weighs 30 to 40 pounds and stands 15 in-ches at the shoulders. It resembles a small ches at the shoulders. It resembles a small bear in its build and bouncing gait, its back slightly arched and its bushy tail hanging down. Snow is its element. Its broad paws splay out like snow shoes enabling it to travel with relative ease through the snow, unlike the fox and the wolf. Although its gait looks clumsy, the best long distance skiers wouldn't be able to overtake it.

Although the wolverine is almost impos sible to trap because of its intelligence and skill, it is hunted in Montana, Alaska and Canada for its fur, which is valued espe-cially in the Far North for its protective quality. The long thick fur is coarse, durable and shiny and wont collect or hold moisture. It is prized above all others for overcoats, blankets and trim around the



opening of Eskimo clothing. At Canadian

auctions, a pelt brings as much as \$250.

This attribute has combined with its reputation as the "demon of the North" to drastically reduce the wolverine popula-

Thomas M. Jenkins is director of the division of communications and arts at the Red Rocks Campus of Community College of Denver.

NEW WESTERN ENERGY SHOW, a theatrical and technical troupe, is planning its fourth annual summer tour. This year the show will visit communities and national parks in Wyoming, Idaho, Colorado and Calgary, Canada. Actors and musicians with a knowledge of renewable energy canade. However, which was a summer of the control of the control

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### Wolverines reported in Colorado

While there has not been a positive sighting of a wolverine in Colorado since 1966, a search project by the Col-orado Division of Wildlife has resulted orado Division of Wildlife has resulted in 110 calls, 47 of which are possibly valid, according to Jim Halfpenny of the division. Most of the calls were in-spired by posters distributed last De-cember.

cember.

Unfortunately, the only positive identification has been of a wolverine that was killed last week near the Colorado-Utah border. Prosecution is being considered since the wolverine is an endangered species in Colorado.

Now the division hopes to locate wolverines by using hair snags — metal tubes lined with a piece of barbed wire to grab pieces of hair as an animal goes for bait. Wolverine hair is unmistakable, according to Halfpenny. If wolbe, according to Halfpenny.

for bait. Wolverine hair is unmistakable, according to Halfpenny. If wolverines are found, the division hopes to trap them and equip them with radio collars to determine such things as their home range and yearly cycles. Singer and actor John Denver released a pair of imported wolverines in Colorado last October. Denver is making a film on Colorado's endangered wildlife, which will be shown on television early in June. Denver, with the endorsement of the division, has imported and released in Colorado trumpeter swans, peregrine falcons, wolverines and river otters, all of which trumpeter swans, peregrine falcons, wolverines and river otters, all of which will be included in the film.



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### The Black Hills: an energy capital?

# S.D. landowners leery of TVA's uranium plans

by Arlen Crane

All 26 speakers criticized a draft environmental statement on uranium mining in the southern Black Hills at a public hearing in Edgemont, S.D., March 1. The statement discusses the Tennessee Valley Authority's plans for three underground

ines and one open pit mine.
Ranchers and other landowners in the Southern Hills Water Association called the statement "unreasonable and very

general."

TVA proposes to decrease water pressure in the local aquifer by sinking wells six months prior to mining. Leakage into the mine is still expected, at a maximum rate of 675 gallons per minute, for the 10-year life of the project. TVA proposes to pump the water into a local drainage that flows into the Cheyenne River, but the state questions whether this is a proper use of the water. At the hearing, questions were the water. At the hearing, questions were also raised about possible contamination of the water from the mine.

According to TVA geohydrologist Wil-liam McMaster, two pumping tests have been completed, but neither provided enough information to determine potential damage to the aquifers supplying the region. Computer predictions from this infor-mation indicate, however, "so much water is stored (in the Lakota and Fall River aquifers) that pumping can't take it all out. If we pumped 600 gallons per minute for 15 If we pumped 600 gainons per imitate to it years, we would remove 14,000 acre-feet of water, the aquifers contain more than 90 million acre-feet — it's like taking a drop out of a bucket," McMaster said.

Rancher Donald Spencer charged at the

hearing that during a two-week test in 1977, the flow from his well two miles from the mine site was cut in half, and it hasn't

1977, the flow from his went womans from the mine site was cut in half, and it hasn't returned to normal. Many of the wells in the area are free flowing — requiring no pumping — so depressuring the aquifer could affect them.

At a meeting in Dewey, S.D., the ranchers were assured that their water needs would be fulfilled. Make no mistake," said Dr. Thomas Donovan, TVA environmental supervisor, "if we're going to mess up your well, we're going to take care of it."

TVA says if water supplies are damaged, it could take several different mitigation measures, including providing pumps, drilling new wells, distributing water through pipelines or monetary compensation. TVA has no specific mitigation plan

yet, but John Hatch of the South Dakota Water Rights Commission says TVA ap-pears to be going "beyond what is legally required."
"Six months before dewatering begins, we'll have a plan for the impacted wells.

we'll have a plan for the impacted wells. And we'll continue to monitor the wells we're not sure of," Donovan concluded. Despite such reassurances, the ranchers are wary and want all plans presented to them as a group, not as individuals.

Several people have also expressed concern about the cumulative impacts of mining in the area. John Portland of the National Wildlife Federation called the TVA project 'the first domino in a series of many." He claimed the relatively undisturbed Black Hills could be converted into an energy capital. an energy capital.

Others said they fear the impact that

large-scale mining would have on tourism and recreation. TVA is the first of more than a dozen companies preparing to mine either uranium or taconite

Suggesting an environmental impact statement for the entire Black Hills region, James Fletcher of Deadwood said, "We need to look at the whole picture, not just this particular company. The Black Hills is a small area, 100 miles long and 40 miles wide."

Some speakers said the TVA milling Some speakers said the IVA milling facility appears to have a larger capacity than necessary for TVA's mines, which might encourage development of the uranium ore by other companies.

Portland and several other speakers said TVA's environmental statement should address both the role of uranium in the address both the role of uranium in the nuclear energy cycle and the disposal of wastes. Others were concerned about radi-ation and trasportation of the ore. They also want the environmental statement to discuss alternatives to uranium mining.

discuss atternatives to uramini mining.

Edgemont School Superintendent John
Iszler brought up social concerns at the
hearing. He predicts a 289 percent population increase by 1982, based on a study by
the Council of Local Governments. TVA's

Iszler said TVA isn't committed to mitigating the problems it causes for the schools and for other social services. The Black Hills are the second oldest geologic formation in North Dakota and

have been a sacred place of worship for Indians for centuries. The cultural and Indians for centuries. The cultural and spiritual value of the Black Hills and the threat that the mining proposals represent were explained at the hearing by Bill Means of the International Indian Treaty

Photos by Susan Braunstein





MORE THAN 250 PEOPLE attended the public hearing at Edg All 26 speakers criticized the environmental statement.



DR. THOMAS DONOVAN, TVA environmental assessment supervisor, assured ranchers: "If we're going to mess up your well, we're going to take care of it."



ED VINTON, director of the Southern Hills Water Association, said he was concerned about water and about property values declining.



JOHN PORTLAND of the National Wildlife Federation said the TVA mines may be the first domino of

#### BLACK HILLS STRATEGY MEETING

Because of proposed uranium and conite mining, the Black Hills Alliance is coordinating a planning and strategy conference with a national focus March 30, 31 and April 1.

Participation is expected from pro-fessionals in the fields of geology, radia-tion, law, research and others con-cerned with uranium mining and preservation of the Black Hills

The conference is scheduled for Rapid City, S.D. For more details, contact Bruce Ellison, Black Hills Alliance, P.O. Box 2508, Rapid City, S.D. 57701, (605) 348-9458.

### WILDERNESS ADVENTURE with an environmental twist

Friends of the Earth's Wyoming Representative, Howie Wolke, announces a new idea in wilderness travel: back packing mountaineering, and cross country ski trips featuring high quality country ski trips featuring high quality guiding and instruction in the use of safe, low impact wilderness travel techniques. Also, we offer two intensive field courses focusing on public lands and wilderness, designed for the environmental activist, but valuable for anyone who shares our concern about the management of our public lands.

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state & zip Or send them a seed copy — ask for a sample High Country News, Box K, Lander, WY, 82520. BILL MEANS of the International Indian Treaty Council defended the cultural and spiritual value of the

energy news of the Rockies and Great Plains

WYOMINGITES FAVOR TAX HIKE. A survey taken by the University of Wyoming indicates that the state's citizens, by more than a two-to-one margin, favor an increase in the mineral severance tax. When asked if they would favor a five percent of the respondents said that they would, 25 percent opposed it and 13 percent were undecided. Despite the apparent popular support for a severance tax increase, the legislature failed to approve any increase before it adjourned in February. An initiative petition is being circulated that would put the tax increase on the hallot in November 1980. Sponsors of the initiative claim that they already have half of the 24,000 signatures required to place the referendum before the voters.

IDAHO POWER MAY SCRAP COAL PLANT. Idaho Power Co. says that it would withdraw its application to build a coal-fired power plant in southern Idaho if the state Public Utility Commission approved the company's participation in a Nevada power plant. According to company president James Bruce, approval of the application to assist in financing the Valmy plant south of Winnemucca, Nev. could delay the need for a southern Idaho plant by at least two years. Environmental and consumer groups called the position a 'qualified victory,' according to the Idaho Statesman. Pat Ford of the Idaho Conservation League says that the company's position is "not the end of the coal-fired plant issue. If the demand keeps growing, Idaho Power will be back for a coal-fired or nuclear plant soon." The PUC is expected to rule on the Nevada plant issue by the end of the summer.

ARIZONA NUKE PLANT CRITICIZED. A report endorsed by Arizonans for Safe Energy concludes that the Arizona Public Service Co. has substantially underestimated the cost of building a nuclear power plant at Palo Verde. The report, Nuclear and Coal Power, says that the final cost for the five-reactor complex would probably be about \$13.51 billion instead of the \$5.4 billion estimated by APS. The report also says that APS overestimated the probable efficiency of the plant. APS estimates that the plant would run at 75 percent of its capacity. The report says that a more reasonable figure would be 48 percent or less. The report concludes that nuclear power would be 69 percent more expensive than coal-fired electricity by 1990. Copies of the report can be obtained by writing to Arizonans for Safe Energy, 7501 E. Hubbell, Scottsdale, Ariz. 85257.

SOLAR-HYDROELECTRIC STUDY BEGINS. Two federal agencies have agreed to study the technical and economic feasibility of operating solar-thermal electric plants to supplement hydroelectric production in the southwestern power grid. The Bureau of Reclamation will assess the feasibility of constructing a 100 to 300 megawatt solar-thermal power tower in the lower Colorado River area to produce electricity and process heat. The tower would be combined with existing hyd-



TAXES ON COAL MINING in Wyoming would be five percent higher if Wyoming citizens had their way, according to a University of Wyoming opinion survey. Photo of Big Horn mine near Sheridan, Wyo.

roelectric facilities in the region. Water that would normally fall through hydroturbines to produce electricity would be saved during the night and then used to produce electric power at night or when there is no sunshine. The solar-thermal plant would use a large number of moveable mirrors—or heliostats—to focus the sun's rays on a central receiver. The concentrated energy heats a liquid or gas to drive a turbine generator to produce electricity. The Department of Energy is also participating in the study.

SERI ASSESSED. The Denver Post reports that a special 10-member panel has been established to look into management problems at the Solar Energy Research Institute near Golden, Colo. SERI is a government funded research facility whose goal is development of solar energy technology. There have been reports of management problems and low morale at the Colorado facility, as well as complains that the 10-month-old center has done little toward achieving the solar energy goals established for it. The Department of Energy investigation was prompted by a series of articles about SERI in the Post.

ANG COALGAS PLANT IN LIMBO. An unusual cast of characters is combining to oppose financing for the ANG coal gasification plant in western North Dakota. The Michigan Public Service Commission is intervening on behalf of Michigan, protesting because of the method of financing proposed for the plant. ANG wants to have a surcharge so customers would pay for the plant their it is still being built. The PSC is urging deferred payments instead, which would allow costs to be recovered through depreciation and the rate structure after the plant is complete. Also entering the fray is General Motors Corp., which is located in Detroit, home base of ANG. GM also opposes having gas customers pay for the plant while it is still under construction. The objections have been filed with the Federal Energy Regulatory Commission in Washington, D.C. As the federal regulatory body for utilities, FERC must approve the financing arrangements before the plant can be built.



March 23, 1979 - High Country News-11



The HON Hot Line

energy news from across the country

\$2.5 BILLION SOLAR EXPENDITURE URGED. Energy Secretary James Schlesinger is urging the administration to support a \$2.5 billion outlay over five years for development of solar power. Schlesinger's memo says that the allocation could double U.S. use of solar power from the present 5.4 percent of national energy consumption to about 10.6 percent. A Solar Lobby spokesman, Bill Shastka says the proposal won't even support the lowest level of solar development recommended in the president's Domestic Policy Review, however.

NW POWER BILL PROSPECTS DIM. Northwestern congressmen say that the chances of Congress passing a comprehensive Northwest regional power bill this year are small — "zilch," in the words of Rep. Don Bonker (D-Wash.), according to a United Press International report. The legislation, which is supported by Northwestern utilities, will be introduced by Sen. Henry Jackson (D-Wash.). His bill would make lower-cost federal hydroelectric power available to residential and rural consumers of private utilities. Public utilities currently have first rights to the cheaper federal power.

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# Ute tribe threatens to withdraw from CUP

The Ute Indian Tribe in Utah has thrown a large wrench into the wo thrown a large wrench into the workings of the controversial Central Utah Project. The Utes are threatening to withdraw their support — and 471,000 acre-feet of Ute water rights — if the state does not authorize an Indian rights compact.

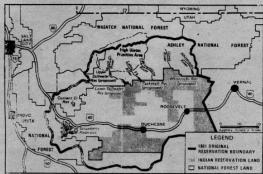
The Utes sent a tribal delegation to Washington, D.C., in early March to urge Interior Secretary Cecil Andrus to withdraw administration support for CUP. The tribe's action followed the Utah legislature's failure to pass an Indian legislature's failure to pass an Indian

tribes action followed the Utah legislature's failure to pass an Indian rights compact that would have given the Utes expanded hunting and fishing rights, authority to levy some taxes and recognition of tribal water rights on both present and former tribal lands.
Several legislators said that there was

not enough time to consider the rights pac-

kage adequately.
"We had to take some kind of a stand." says Ruby Black. Ute tribal chairperson.
"We originally came up with seven items that should be included in the rights compact. We had to back off on four of them. There were three left — fish and wildlife, taxation and water rights. We wanted recognition from the state of Utah, and we said we would not back down from these

there wasn't enough time. She says. The governor wasn't exercising any kind of leadership. I told him, You had a year and a half to look at it.



litigation.

UTE INDIAN RESERVATION

The Indian rights compact had been strongly opposed by non-Indian landowners near the reservation. The original Ute reservation, established in 1861, contain 4.2 million acres. Nearly three-quarters of that land is now owned by non-Indians. The tribe is asking the state to approve a compact covering all of the original ac-

emands."

Cernedhunting rights. The Utes asked for a five-month hunting season on the lands within the reservation's 1861 boundary, but the state Department of Natural Resources would allow only a two-month seaThe Utes have supported CUP for about 15 years. In 1965, the tribe agreed to defer development of their water and land and to support CUP. The state, in return, agreed recognize their water rights without

According to Stephen Boyden, a lawyer r the tribe, the state has not yet recognized the tribe's water rights, and the two CUP units that would benefit the tribe— Uintah and Upalco— are the last scheduled for construction. He says, "The tribe is saying that the state and the federal government haven't lived up to their part of the bargain. The tribe wants the parts of the project that benefit them to proceed along with those parts that benefit non-Indians."

CUP is a cc itroversial water project, opposed by most environmentalists as being too expensive, destructive and unnecessary. It consists of five separate units, each containing up to six dams and reservoirs. CUP will provide municipal and industrial er to the urbanized Wasatch Front as well as some irrigation water to Sevier County in central Utah.

The project was on President Jimmy Carter's original "hit list" of projects that should receive no further funding. How-ever, the administration has since reversed that stand and is recommending \$34 million in fiscal year 1979 and \$44 million in fiscal 1980 for CUP. The total cost of the project is estimated to be in excess of \$1 billion.

A lawyer for the Bureau of Reclamation,

the lead federal agency building CUP, says, "The withdrawal of the Utes could be a very serious thing. We're trying to get negotiations back on track." He admits, ever, that, if the withdrawal stands, "It

might affect the entire project."

According to Dan Beard, assistant Interior secretary for land and water, the federal government hasn't yet decided how serious the Ute's action is. "We're looking at the effects on the project right now. We still continue to support funding to continue the

Maggy Wilde, press secretary to Utah Gov. Scott Matheson, says "The governor is hopeful that negotiations (between Utah and the tribe) will resume, and some ag-reement can be reached. If one is reached, he intends to call a special session of the legislature to approve it."

All sides appear hopeful that negotia-tions can continue, but tribal lawyer Boyden says, "If it isn't settled in a month, we'll have to go back to Washington to op-pose further funding by Congress."

The Utah congressional delegation, which has pushed hard for CUP, is very concerned about the impact of the Utes' withdrawal. Curt Burnett, press secretary for Sen. Jake Garn (R-Utah), says, "Sen. Garn has said that withdrawal of the deferral agreement could signal the destruction of the project." Burnett says, however, "Garn sympathizes with the Utes' problems. There have been delays in the Uintah

Garn will not interfere in the dispute— yet. Burnett says, "He considers it a local dispute. Garn would rather see the issue resolved by the parties. However, he will not stand by and watch years of work go down the drain."

CUP opponents have adopted a "wait-and-see" attitude about the Utes' action. Beth Kaeding, co-chairperson of the Citi-zens for a Responsible Central Utah Pro-ject, says that her group has not taken any stand on the controversy, but she says, "We want to see the Utes get what they de

Kaeding's group believes that much of CUP is unnecessary and that water could be provided more cheaply and with less environmental damage by instituting water conservation practices and exploiting subsurface waters near the Wasatch

### Utah legislature 'hostile' to environment

describe the Utah legislature's attitude toward environmental concerns is "hos-tile." At the recently-completed session the legislature enacted relatively few laws dealing with the environment. Most of those that were passed simply brought the state's laws into compliance with existing with existing

One environmentalist, who asked not to be identified, says, "The legislators are generally hostile or even paranoid about environmental protection. Everything they passed was to take primacy away from the federal government — which they hate and give it to the state so they can be more lax in enforcement

This attitude was reflected in a success-ful resolution asking Congress to return all federal lands to the state. Salt Lake City nocratic Rep. Jeff Fox says, "We get one

of those every session."

To meet federal requirements, the legislature passed bills dealing with air quality, water quality and coal mine reclamation. If the state's standards are at least as stringent as federal standards, the state can take over enforcement of the laws, after receiving federal approval.

The legislature also passed a bill provident for each season.

The legislature also passed a bill providing for solar easements. The law establishes a "right to the sun" for solar energy uses. Another bill that would have allowed counties to consider solar energy in their zoning decisions was never acted upon. In another positive environmental step, the legislature removed the bobcat from the predator list. Once fair game any time of year, bobcats can now only be taken during a specified hunting season. However, the cats may still be killed out of season if they are menacing livestock.

The legislature also established a rdous waste monitoring authority in the Department of Health.

After midnight of the last day of the session, the legislature passed a resolution calling for a federal subsidy of \$3 per barrel for oil shale. However, since the resolution passed after the official closing of the legis-

lature, it was illegal.

One issue that did not pass, which had been a priority for environmentalists, concerns auto emissions. The state senate pas-sed, but the house failed to act on a bill requiring annual inspections of cars to as-sure that they meet auto emission stansure that they m

### Women's letter inspires herbicide ban

When eight women near Alsea, Ore., wrote a letter to the U.S. Environmental Protection Agency a year ago, they had no idea it would result in a nationwide ban on the use of two herbicides, according to a Los Angeles Times story. Their letter de-scribed 11 miscarriages that followed spraying of forest lands with one of the

EPA already had laboratory research that linked dioxin, a component of both 2,4,5-T and Silvex, to miscarriages in onkeys. It had not acted earlier because it had no evidence linking the poisons to human problems. However, hospital re-cords showed 130 human miscarriages per 1,003 in the Alsea area compared with 46 per 1,000 in an area that hadn't been

The emergency ban on 2,4,5-T and Silvex is temporary and affects only use on forest

lands, pastures and right-of-ways. A federal judge will hold further hearings in April on a request by several chemical companies to block the ban.

William Butler, general counsel and acting executive director of the Environmental Defense Fund in Washington, D.C., said the herbicides' use on rice grows and eattle. the herbicides' use on rice crops and cattle rangeland, which is still allowed, may be even more dangerous. However, he feels the EPA didn't want to take on three huge industry lobbies at once, according to an

industry lobbies at once, according to an Associated Press report.

Nationwide, the Agriculture Department predicts that eliminating the chemical's use would reduce timber growth over the next 50 years by an amount sufficient to build 9.3 million homes. However, in Idaho the ban is expected to have little effect. Norman Hesseldahl of the Forest Service in Sendonin Idaho event. Service in Sandpoint, Idaho, says the

agency has been studying alternative methods of weed control, using goats, sheep or people, according to the Idaho Statesman.

Statesman.

In Oregon and Washington, the timber industry has said that banning the use of the herbicide could reduce timber cutting by 936 million board feet.

The possible loss in timber jobs has

created some resentment in Alsea toward the eight women who wrote the letter. However, some of the same people say they have noticed less wildlife in the area and have seen deformed goats and chickens that

have been born since the spraying began. Silvex is used to control weeds on golf courses, athletic fields, parks, lawns and in bodies of water used for recreation. It is marketed under dozens of names, according to EPA, including Weed-B-Gon, Kuron and Sears Lawn Weed Killer.



# Western Roundup

### State funds could revive Narrows Dam

The Colorado Water Conservation Board hopes to revive the Narrows Dam project with state funds. The proposed dam, to be located near Ft. Morgan, was on President Carter's "hit list" last year. Since, Carter has called for voluntary state financing to aid federal authorities in prioritizing water projects. Conservation Board Director Felix Sparks told Rocky Mountain

### ARCO assaults roadless forest review

Atlantic Richfield Co., along with its subsidiary, the Anaconda Co., is launching a major assault on the Forest Service's RARE II proposals. ARCO has made what is believed to be the most detailed study of the RARE II lands by a private company, and has pinpointed areas of possible conflict with mineral development on RARE II lands in Colorado, Wyoming, Utah, New Mexico, Arizona, Montana and Idaho.

One of the states most affected by poten-

One of the states most affected by potential wilderness-mineral development conflict is Colorado, according to the ARCO

entation to Colorado Gov. Dick Lamm, ARCO representative Tom Bur-dette pointed out that "quantities of criti-cally needed energy and mineral resources may be present in Colorado." ARCO's main

goal is to convince Congress that mineral goal is to convince congress that mineral companies need more time to assess mineral resources in the RARE II areas, so that the public will have that knowledge when decisions are made concerning wilderness, according to the Denver Post.

Burdette claims that the most critical area in Colorado is the Elk Mountains-Collegiate Range area, running from Gunnison north to Glenwood Springs. He cites unknown quantities of molybdenum, a substitute for chrome in steel making, as a critical element present in this area.

ARCO says the Forest Service can attain its national wilderness goals by proposing 1.2 million to 6.2 million acres, rather than the 15 million acres recommended by the Forest Service.



ENVIRONMENTALISTS FEAR the Bureau of Land Management doesn't plan to adequately protect wilderness study areas from the effects of hardrock mining. The photo shows an AMAX molybdenum mine in Colorado.

### BLM rules not tough enough for NWF

Rifle, Colo., growing from shale boom

The National Wildlife Federation has expressed strong dissatisfaction with the Bureau of Land Management's proposed interim management guidelines for wilderness study areas. In a March 14 letter to demess study areas. In a March 14 letter to BLM Director Frank (Gregg, NWF Presi-dent Thomas Kimball expressed concern over the BLM proposed rules for hard rock mining in these areas. He wrote, "Unless they are significantly strengthened, BLM will be failing to provide even the minimum protection mandated by Section 603 (of FLPMA)." He also said that the

603 (of FLPMA)." He also said that the proposal set a poor example for the har-drock mining rulemaking on all BLM lands that is expected later this year. Attorney Peter Kirby's comments for the NWF accompanied Kimball's letter. They were both critical of a provision that allows mining to proceed if a proposed mining

plan does not receive review by the BLM after a certain length of time. The NWF thinks the permit should be denied.

The BLM proposals call for considering mining impacts as "not impairing" wilderness suitability if they can be restored within five years after wilderness designation. NWF says such impairments should be restored immediately.

The conservation group criticized BLM's reclamation stan lard, which requires that vegetation be "capable of self-generation and equal in permanence" to the initial cover, and demands an area must be returned to its original diverse vegetation. NWF also asked that grandfathered operations, if causing unnecessary degradation, must submit plans of operation to the BLM.

### Plant buys Japanese cleanup secrets

Officials at the Anaconda Aluminum Reduction Plant in Montana are relying on secret technology imported from Japan to bring the plant into compliance with state laws. The plant, located near Columbia Falls, has until the middle of 1979 to re-duce its flouride emissions to 864 pounds per day, as allowed by the 1974 Montana Clean Air Act. Emissions have been as high as 2,500 pounds per day, but, accord-ing to plant engineer Lee Smith, the figure has been falling significantly as new

equipment is installed.

The emissions control effort involves in-stalling stack extenders on the scrubber units. Most of the technology, however, in-volves internal changes, which are veiled

The new \$40 million system is also expected to cut down particulate and other visible emissions, reduce maintenance and repair expenses, and cut the plant's energy demand by about 12 to 15 percent.

### Idaho agency pleads for water for fish

The fish in Idaho's Silver Creek will be The fish in loans Sulver Creek will be guaranteed a minimum stream flow, if the 1980 Idaho legislature passes a proposal from the Idaho Department of Water Resources. The department was authorized in 1977 to apply for minimum flows in the public interest. Water Resources Director public interest. Water Resources Director Steve Allred says minimum flows are



cattle is needed on the range near Challis, Idaho, according to the Bureau of Land Management. Stockmen say such cuts will force them to subdivide.

necessary for "preservation of fish, wild-life, aquatic life, aesthetic beauty and water quality" of Silver Creek, one of the nation's blue-ribbon trout streams. His de-cision is supported by the Idaho Fish and Game Department. At a formal hearing in January, most of the residents near the creek testified in favor of the minimum flows.

Two applications for diversions of the creek for fish hatcheries are still pending.
These diversions would probably make the
minimum stream flow impossible.

Cows or subdivisions appears to be the choice facing Bureau of Land Management officials of the Challis Unit in Custer officials of the Challis Unit in Custer County, Idaho. The BLM is trying to re-habilitate the 350,000 acres of grazing lands in this unit and cut down on over-grazing. The 38 ranchers in the area, how-ever, say that if their leases are cut they will no longer be able to operate, and will sell to the highest bidder. Some have al-ready sold out. Chuck Kimball, a Califor-nia developer, her scartily behalf access? nia developer, has recently bought several

The town of Rifle, in northwestern Colorado, is booming as workers are attracted to jobs on the federal oil shale tract nearby. Retail sales for 1978 were up nearly 30 percent over those for 1977. Housing prices have increased by 70 percent in one year, and apartment rental has increased by about 140 percent. While the construction business booms, the darker side of boom

town development is expressing itself in ways familiar to other energy centers — an 86 percent increase in reported crime in 1978, a 71 percent increase in traffic acci-

About 250 workers are employed at the shale mine, over half of whom live in Rifle. This number is expected to nearly double by the end of 1979.



## Grazing cuts spawn Challis subdivisions?

ranches and sliced them into small parcels. Many of the lots have already been bought and sold several times, tripling in value.

Local BLM officials are reconsidering their proposed cuts, which were to have run about 40 percent. However, BLM area manager Don Smith says ranchers are vulnerable to development offers even without the grazing cuts. "With the high offers they're getting, it's pretty hard for them to turn down," he says.

### Schroeder dubs EPA Turkey of the Year'

Rep. Pat Schroeder (D-Colo.) has named the Environmental Protection Agency as her first "Turkey of the Year" award reciher first "Turkey of the Year" award reci-pient. Schroeder claims the agency took more than 15 months to decide to allow a small increase in introgen-oxide emissions on cars sold in high-altitude locations in order to increase their engine efficiency. An engine adjustment on these cars will improve gasoline mileage and reduce hyd-rocarbon and carbon monoxide emissions, Schroeder says. Now that the decision has been made, Schroeder says that the EPA has not made it clear when the new regula-tion can go into effect. tion can go into effect



# Bulletin Board



#### LOONEY LIMERICKS

by Zane E. Cology

A logger was ready to fight: This wilderness will drain of We must cut every tree If we are to be free! Did he know that just rocks filled the site?

#### CARBON BASIN COAL EIS

CARBON BASIN COAL EIS

A draft environmental impact statement
on a federal coal lease application in the
Carbon Basin area of southcentral Wyoming is available to the public. Edison Development Co., a subsidiary of Commonwealth Edison of Chicago, wants to open
an underground mine on 6,146 acres of
federal land. Public hearings will be held
on April 11 at the Jeffrey Center, Third and
Spruce, Rawlins, Wyo. at 1:30 and 7:30
p.m. Single copies of the EIS are availablefrom the state Director (920), Bureau of
Land Management, P.O. Box 1828, from the state Director 1920, Bureau or Land Management, P.O. Box 1828, Cheyenne, Wyo. 82001. Written comments will be accepted until April 16 and should be addressed to Edward Coy, Team Leader, BLM. Carbon Basin Coal EIS, P.O. Box 670, Rawlins, Wvo. 82301.

stampeding buffalo broke their legs in this

However, prairie dogs have a few re-deeming features. To my family on the Wyoming ranch, it wasn't the bluebird nor the groundhog but the prairie dog, creep-ing from his burrow on a mild February day, who was harbinger of eagerly awaited

spring.

Prairie dogs eat some things ranchers consider a nuisance, such as Russian thistle, pigweed and prickly pear cactus. They

the pigweed and prickly pear cactus. Intellegate formish food for raptors, rattlesnakes, coyotes, bobcats and badgers. Most important they are food for the nearly extinct black-footed ferret. It makes no sense at all, in my opinion, to destroy the food sup-

ply of raptors, ferrets and other species while we are trying to build up their num-

bets.

For these reasons I was upset by an article in the Wyoming Game and Fish publication Wyoming Wildlife (April 1975), by Frank R. Baner which describes in great detail how hunters can improve their marksmanship by practicing on prairie dogs with high-powered rifles. The hunter must draw a bead on the animals as they stand upright barking a warning to their fellows. The practice is justified since 'precise marksmanship will prevent many a big-game animal from escaping."

The article does not caution the hunter to watch carefully for a ferret that might be

#### MISSOURI BREAKS GRAZING

The Interior Department has released a draft environmental impact statement on grazing management for 2.2 million acres in the Missouri River Breaks in central in the Missouri River Breaks in central Montana. The proposed program would increase the amount of rangeland in 'excellent' condition by 270,000 acres and increase available livestock forage by eight percent by the year 2000. Copies of the statement may be obtained from the Montana state Bureau of Land Management Office. P.O. Bry 30157. Billings. Montana State Bureau of Land Management. office, P.O. Box 30157, Billings, Mont. 59107 and from BLM offices in the Mis-souri Breaks area. Comments will be acprease area. Comments will be accepted until April 30. Public meetings will be held on April 2 in Havre, Mont.; April 3 in Malta, Mont.; April 4 in Lewiston, Mont.; April 5 in Jordan, Mont.; and April 5 in Glasgow, Mont.

#### HAS ANYBODY SEEN THE HAMMER?

The Alternative Energy Resource Organization's Greenhouse Team will hold its first 1979 workshop on the construction of attached solar greenhouses in Deer Lodge, Mont. May 18 through 20. Particip-

by Myra Connell

It must be admitted that large populations of prairie dogs eat a great deal of expectation. It must be admitted that livestock can be injured by stepping in a burrow while running. A rider can be thrown from the saddle and hurt. (I wonder how many stampeding buffalo broke their legs in this

habitants thereof.

ants will construct a greenhouse, which will provide heat for the home. The cost is \$30 per person. Anyone wishing to participate should send his or her name, address and a \$10 deposit to Eleanor Gustafson, Rte. 1 South, Box 40, Deer Lodge, Mont. 59722 before May 7. For further information, contact Gustafson at (406) 846-2857 or Ann Wilsnack at (406) 485-2180.

#### NPRC MISSOULA FUNDRAISER

NPRC MISSOULA FUNDRAISER
The Northern Plains Resource Council, a
rancher-conservationist group in Montana, will hold its fifth annual Missoula
Fundraiser on March 31 at the St. Francis
Auditorium in Missoula. The event will
feature all the spaghetti you can eat, an
auction (which NPRC describes as "riotous") and a dance. It starts at 5:30 p.m., and
the cost is \$4.50. For more information,
contact Tom France in Missoula at (406)
721-5544 or the NPRC Billings office at 721-5544 or the NPRC Billings office at (406) 248-1154.

### IDAHO BLM WILDERNESS DECISIONS

The Bureau of Land Management in Idaho has issued a summary report that determines 69 percent of the BLM lands in Idaho are not suitable for wilderness designation and 31 percent, or 3,703,000 acres, should be intensively inventoried to determine their wilderness potential. A final decision will be made after a 90-day mai decision will be made after a 90-day public comment period, ending June 15. Copies of the report may be obtained from and comments should be sent to: State Di-rector, Idaho State Office, BLM, Federal Building, 550 W. Fort Street, Boise, Idaho 83724. A series of public meetings and workshops will be held throughout the state beginning on April 16 in Boise. For further information about the meetings and a schedule, contact the state director's

### NORTHERN TIER REPORT

NORTHERN TIER REPORT
Public hearings on the Department of
Energy's draft report "Petroleum Supply
Alternatives for the Northern Tier and Inland States through the year 2000" will be
held in April. The draft projects that there
would be a market for 350,000 barrels of oil
per day. The Northern Tier Pipeline Co.,
which plans a pipeline with an ultimate
capacity of 933,000 barrels, says the DOE
committed a major oversight in its calculations. The hearings will be April 3-4 in
Seattle, April 5 in Billings, April 6 in St.
Paul, April 10-11 in Chicago, and April 12
in Washington, D.C. For details, contact
DOE, Region X, 1992 Federal Bldg., 915
Second Ave., Seattle, Wash. 98174.

#### UTILITY RESEARCHERS

the country working on utility iss uses. The staff's expertise includes the topics of rate structures, power demands, fuel costs and nuclear power. If they already have the information you need, they won't charge. If they have to dig, the fee will be minimal.

#### WATER FOR FISH?

The most promising ways to keep some vater in Western streams for fish and wildlife are discussed in 13 recent reports from the U.S. Fish and Wildlife Service. Water projects "have caused major impact on fish and wildlife in the West, and competition for the limited remaining water is expected to be intense during the next 10 years, primarily because of increased demands from energy development and land recla-mation," says Lynn A. Greenwalt, director of the Fish and Wildlife Service. The agency's reports, which cover each of 13 Western states separately, include a guide Western states separately, include a guide for selecting and implementing the most effective strategy for reserving instream flow in a particular state. Copies of these reports are available from the Technical Information Officer, Western Energy and Land Use Team, U.S. Fish and Wildlife Service, 2625 Redwing Rd., Fort Collins, Colo. 30526. Specify which state's report you need

#### TEACHERS' ENERGY WORKSHOPS

The U.S. Department of Energy is sponsoring energy workshops for high school and college teachers this summer. The workshop locations include Colorado State University, the University of Colorado, Montana State University, the University of South Dakota and the University of Utah. Sessions are two to three weeks long. For more information, contact Scott Tyler, Office of Public Affairs, Department of Energy, P.O. 26247, Belmar Br., Lakewood, Colo. 80226, (303) 234-2420.

#### COAL POWER AND WILDLIFE

A Biologist's Manual for the Evalua-tion of Impacts of Coal-fired Power Plants on Fish, Wildlife, and Other Habitats is available from the Superin-tendent of Documents, U.S. Government Printing Office, Washington, D.C. (stock number 024-010-00480-1). The booklet number 024-010-00480-1). The booklet covers the impact on wildlife of coal slurry pipelines, coal cleaning and storage, limestone preparation (in plants where flue-gas desulfurization is used), particulate and gaseous power plant emissions, and desulfurization sludge. Mitigation measures are also discussed. The booklet is a condensation of another report published by the U.S. Department of the Interior: Impacts of Coal-Fired Powered Plants on Fish, Wildlife, and their Habitat (stock number 024-010-00458-4) which is available for \$4.50 from the Superintendent of Documents.

Could your group use a research arm in Washington, D.C.? The Environmental Action Foundation's Utility Project would like to extend its services to citizens around For more information, contact Claudia Comins, Utility Project, Environmental Action Foundation, 724 Dupont Circle Building, Washington, D.C. 20036.

The reader is told that "a prairie dog hunt in Wyoming treats the sportsman to solitude, serenity and a oneness with nature (emphasis mine)." A oneness with

The article angered me, and I wrote a scathing letter, signed by three other people, to the editor. We received no response, nor was the letter published.

Fortunately, however, despite intensive

persecution for many decades by poisoning, shooting and drowning, the black-tailed prairie dog is still common and is expected to remain a part of the Western scene.

nature to the sound of gunfire?

#### YELLOWSTONE SEMINARS

The Yellowstone Institute is offering eld seminars in Yellowstone National field seminars in Yellowstone National Park this summer for 885 per course, with discounts for multiple courses. Topics for the five to six day sessions include mammals, recreation, stream ecology, wildflowers, birds, geology, photography, watercolor painting and wilderness horse-packing. For more information contact Tim Clark, director, Yellowstone Institute, Box 515, Yellowstone National Park, Wyo. 82190.

#### PURPOSE OF PUBLIC NOTICE

THE PURPOSE OF THIS PUBLIC NOTICE IS TO STATE THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS UNDER THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972 (FWPCAA), P.L. 92-500 AND THE WYOMING ENVIRONMENTAL QUALITY ACT (35-11-101 et. seq., WYOMING STATUTES 1957, CUMULATIVE SUPPLEMENT 1973).

IT IS THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS TO (2) TWO INDUSTRIAL FACILITIES, TO RENEW (3) THREE INDUSTRIAL DISCHARGE PERMITS, AND TO MODIFY (1) ONE INDUSTRIAL DISCHARGE PERMIT WITHIN THE STATE OF WYOMING.

ATLANTIC RICHFIELD COMPANY (1) APPLICANT NAME: MAILING ADDRESS:

P.O. BOX 5300 DENVER, COLORADO 80217 COAL CREEK MINE FACILITY LOCATION: SECTION 17, T46N, R70W CAMPBELL COUNTY, WYOMING

#### APPLICATION NUMBER:

The Atlantic Richfield Company plans to construct an open pit coal mine, named the Coal Creek Mine, in southern Campbell County, Wyoming, Water encountered in this operation will originate from two sources: (I) Precipitation runoff from the plant area and equipment washdown water, discharge point 001; and 62 Precipitation runoff from the area aurrounding the mine pit and coal dewatering water, discharge point 002. The discharge from point 001 will flow approximately 3% miles in an unnamed dry gulch to the Belle Fourche River (Class II w. w. stream). The discharge from point 002 will flow approximately 1½ miles in an unnamed dry gulch to Coal Creek (Class IV stream).

point 002 will flow approximately 1% miles in an unamous of the stream.

The discharges must meet effluent limitations considered to be best practicable for coal mining facilities. In addition the permit sets a limit on Dowell M181 floculant which may be used to enhance total suspended solid removal at this facility.

Self-monitoring of both discharge points is required on a regular basis with reporting of results quarterly. The proposed permit also requires the control of runoff from disturbed areas.

The proposed expiration date for the permit is December 31, 1980, due to the uncertaintities concerning the EPA toxic substances effluent guidelines.

(2) APPLICANT NAME:

CENTURION NUCLEAR, INC.

MAILING ADDRESS:

3 PARK CENTRAL, SUITE 900 1515 ARAPAHOE DENVER, COLORADO 80202

FACILITY LOCATION:

DAY-LOMA URANIUM MINE SW4, SECTION 13, T32N, R91W FREMONT COUNTY, WYOMING

Wy-0028118

Centurion Nuclear, Inc. plans to re-open the abandoned Day-Loma Uranium Mine located in the Gas Hill District of eastern Fremont County. Before work in the mine can begin the Company must first pump-out two mine pits which have filled with water. The northeast pit has a very low plt of 3.6 to 4.2 units and, because of this, has unacceptably high levels of Various trace metals in solution. The south-east pit has a pH of 6.8-8.0 units and all trace metal concentrations are at normal background levels.

levels.

The proposed permit allows only the southeast pit to be pumped and discharged to Coyote Creek (Class IV Stream). The proposed method of treatment is to route the mine water through a Barium Chloride feed system for precipitation of Radium 226, and then route the water through two settling ponds prior to discharge. Effective immediately, the quality of the discharge must meet national best practicable treatment standards. In addition, runoff from disturbed areas must be controlled and the quantity and quality of the discharge must be monitored. Self-monitoring reports are to be submitted quarterly.

Because the Company does not plan to install the Barium Chloride system until Radium 226 concentrations reach unacceptable levels, the permit contains an additional set of conditions which requires the Company to meet the Radium 226 and uranium limitations prior to discharge to the settling ponds. The limitations and self-monitoring requirements on the water being discharged to the settling ponds will remain in effect only until the Barium Chloride feed system becomes operational.

Operational.

A short term permit with an expiration date of December 31, 1980, is proposed due to present uncertainties concerning EPA's future toxic substances requirements.

(3) PERMIT NAME:

ARCH MINERAL CORPORATION

MAILING ADDRESS:

P.O. BOX 490 HANNA, WYOMING 82327

FACILITY LOCATION:

SECTIONS 11, 14, and 24, T22N, R83W, CARBON COUNTY WYOMING

PERMIT NUMBER: FACILITY LOCATION:

SEMINOE NO. 2 MINE, SECTIONS 32 and 9, T23N, R81W, CARBON COUNTY, WYOMING Wy-0022926

PERMIT NUMBER

Arch Mineral Corporation operates two open pit coal mines near Hanna, Wyoming in Carbon County. The Company requested in their renewal letters for these facilities that two additional points of discharge be included in both discharge permits. Planned expansion of the mines will create the need to discharge mine water and surface runoff to Shanks Draw and Kelly Draw in addition to Coal Ditch for the Seminoe No. 1 Mine, and Palmer Draw and Arch Draw in addition to Big Ditch for the Seminoe No. 2 Mine (all Class IV Streams).

The proposed modifications will allow the additional points of discharge provided that the quality of the discharges meets best practicable treatment standards effective immediately. Regular self-monitoring of all discharge points is required with the reporting of results quarterly. The permits also require the control of runoff from disturbed areas. The proposed expiration dates are December 31, 1980, due to the present uncertainties concerning EPA toxic substances effluent guidelines

(4) PERMIT NAME

MAILING ADDRESS

PERMIT NUMBER:

FACILITY LOCATION:

ROSEBUD COAL SALES

P.O. BOX 780 HANNA, WYOMING 82327

SECTIONS 32, 27, 21, 16, 36, AND 31, T23N, R80 and 81W CARBON COUNTY, WYOMING

Rosebud Coal Sales Company operates an open pit coal mine near Hanna, Wyoming, in Carbon County, The Company requested in their renewal letter that two additional points of discharge be included in the new permit. Planned expansion of the mine will create the need to discharge mine water and surface runoff to Barrell Springs Draw and Como Lake via unnamed drainages in addition to Big Ditch, Pine Draw and Hanna Draw (all Class IV streams). The proposed modification will allow the two additional points of discharge provided that the quality of the discharges meets best practicable treatment standards effective immediately. The modification also eliminates discharge point 001, the original discharge point, since it has now been abandoned.

Regular self-monitoring of all discharge points is required with the reporting of results quarterly. The permit also requires the control of runoff from disturbed areas. The proposed expiration date is December 31, 1980, due to the present uncertainties concerning the EPA toxic substances effluent guidelines.

(5) PERMIT NAME:

MAILING ADDRESS:

AMAX COAL COMPANY P.O. BOX 3005 GILLETTE, WYOMING 82716

FACILITY LOCATION:

EAGLE BUTTE MINE SECTIONS 9, 16, and 21, T51N, R72W, CAMPBELL COUNTY, WYOMING

PERMIT NUMBER:

The Amax Coal Company was last issued a permit to discharge from its Eagle Butte Mine on December 4, 1978. Since that time the Company has requested that an additional discharge point (006) he added to the permit. This discharge would occur from a reservoir which receives water from the coal preparation facilities located in the NWs, SEVs, Section 21, 751N, R72W. This discharge along with the other five discharges will be to Little Rawhide Creek (Class IV Stream). The proposed modification would simply incorporate the sixth discharge point into the permit. Limitations on all of the parameters will remain unchanged and comply with national "best practicable" treatment standards. In addition the limitation on Dowell Milst floculant will remain in effect for all six discharge points. Periodic self-monitoring of the discharges is required with quarterly reporting to the regulatory agencies.

Because of uncertainties concerning pending EPA regulations on toxic substances associated with coal mining, a short term permit with an expiration date of December 31, 1980, is proposed.

STATE - EPA TENTATIVE DETERMINATIONS

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

### PUBLIC COMMENTS

Public comments are invited any time prior to April 23, 1979. Comments may be directed to the Wyoming Department of Environmental Quality, Water Quality Division, Permits Section, Hathaway Building, Cheyenne, Wyoming 80002, or the U.S. Environmental Protection Agency, Region VIII, Enforcement Division, Permits Administration and Compliance Branch, 1860 Lincoln Street, Denver, Colorado 80295. All comments received prior to April 23, 1979, will be considered in the formulation of final determinations to be imposed on the permits.

#### ADDITIONAL INFORMATION

Additional information may be obtained upon request by calling the State of Wyoming, (307) 777.7781, or EPA, (303) 327-3874, or by writing to the aforementioned addresses.

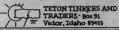
The complete applications, draft permits, and related documents are available for review and reproduction at the aforementioned addresses.

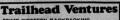
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# Stella Fritzell: hunting solutions in North Dakota

Stella Fritzell has found being one of the few consistent environmental advocates in the North Dakota Legislature a discourag-ing role. According to the 69-year-old Re-publican state senator, there is little sen-sitivity to environmental concerns in the

'A lot of the legislators are for develop-ment, particularly coal development," she says. These legislators "view environmen-talists as the enemies of development." Fritzell says most legislators see coal impact merely as a need for extra school

space, fire protection, etc. They ignore the social and environmental impacts. "Be-cause we have an air quality board in the Health Department, they assume it's taken care of," she says.

Fritzell also feels that most of the legis-

ritize also reels that most of the legis-lators lump everything that doesn't prom-ote coal development into the category environmental? and have an antipathy to it without understanding the consequences of disrupting the environment.

Her own concern for the environment has its roots in her childhood in Cando, a small town in North Dakota, and in summers spent on her grandmother's farm. She describes the wetlands on the farm as having a "myriad of life...but I didn't know

A high school boyfriend introduced her A high school boytriend introduced her to hunting, which increased her apprecia-tion of the outdoors. Fritzell attended the University of Minnesota, married and lived for several years in Minneapolis. After World War II, she and her husband

noved to Grand Forks, N.D. Both she and her husband were avid Both she and her husband were avid unters, and they spent a lot of time in North Dakota's North Woods. During this me she witnessed the destruction of the selands and other wildlife habitats by cater management programs and inten-sive farming. 'I saw it,' she says, 'But I didn't think consciously of what was hap-rening.''

pening."
However, through reading books such as
Aldo Leopold's Sand County Almanac,
she became aware of the complex interrelationships of life systems. She says, "Tve
always been interested in the outdoors, but
it wasn't a conscious interest." Leopold
changed that.
Fritzell is now a member of the Sierra

changed that.

Fritzell is now a member of the Sierra
Club and the Audubon Society, but she is
concerned about what she considers to be
an anti-hunting sentiment prevalent in
both organizations. She says, 'If it weren't
for the hunters, all the habitat would have

for the hunters, all the habitat would have been destroyed years ago."

She is still an avid hunter. "I am a good shot," she says, offering as evidence her State Women's Trap shooting Champion-ship, which she won at age 60.

Fritzell became interested in politics after the sudden death of her youngest daughter. Friends, seeking to redirect her

interest, persuaded her to run as a delegate to the North Dakota constitutional conven-

There she and now Lieutenant Gov Wayne Sanstead led the fight to include wayne sanstead led the fight to include environmental protection provisions in the new constitution. She vowed that if the constitution were not accepted, she would run for the legislature. The constitution was rejected, and in the fall of 1972 she was elected to the North Dakota Senate.

Fritzell says that there is a "personal kind of politics" in the state legislature be-cause the individual legislators are famil-iar with their small constituencies. However, in spite of this, most voters do not become interested in politics until their personal concerns are affected, she says. During her tenure in the senate, Fritzell has been irritated by special interest

groups such as those opposing abortion and the Equal Rights Amendment. She says that most politicians feel that they should give in to such pressure groups, but she disagrees. The majority of voters trust their legislator to do what he or she feels is right, she says, and legislators should vote that conversions.

their conscience.

Fritzell says that North Dakota legislators are freer than many other politicians to vote as their conscience dictates because they are citizen legislators who do not depend on politics for a living. Re-election is less important, so they need not compromise as much.

During her first team. Fritzell weeked.

promise as much.

During her first term, Fritzell worked hard to pass environmental legislation but with only moderate success. The legislature passed a weak environmental protection act but failed to approve other legislation that she favored.

As she continued to press for stiff en ronmental legislation, Fritzell says that her colleagues categorized her as an "environmentalist," which, she believes, crippled her effectiveness. "Once you get pegged as something like that, you cease to be effective," she says. "There is a point where irritation overrides any education I could

pushing, she would have lost completely her effectiveness on any issue, not just the environmental ones. To avoid that, she turned her attention to other areas. She is no longer on the natural resources commit-tee but instead has become the first woman



Photo by Jeff Blume SEN. STELLA FRITZELL has been a consistent environmental advocate in the North Dakota Legislature since 1972.

to serve on the powerful appropriations

committee.

There, Fritzell says, the senators listen to her opinions on health and financial matters because of her background as a dietician and a doctor's wife and because of

her 11 years experience as a stock broker. However, her interest in the environment has not waned. "I have my arguments ready and bring them out whenever possi-ble on a person-to-person basis rather than

Fritzell did sponsor one environmental Il this session, which would have repealed the requirement for county approval before land owners can sell their proval before land owners can sell their wetlands or grant easements to the U.S. Fish and Wildlife Service or the state game and fish department. The county approval requirement has effectively stopped the agencies from acquiring wetlands for the protection of wildlife habitat. However, her bill failed, and the requirement stands.

# Eavesdropper

The Audubon Society has announced that Russell Peterson, former head of the President's Council on Environmental Quality, will succeed Dr. Elvis Stahr as president of the group on April 1. Stahr, who has headed the society since 1968, anwho has headed the society since 1968, an-nounced last summer that he wanted to resign. Peterson is currently director of the Office of Technology Assessment, an agency of Congress. In addition to heading CEQ, Peterson served as governor of De-laware, winning nationwide attention for his tough program to protect that state's coastal zone. He was chairman of CEQ from 1973 to 1976. Since 1976 he has served as the president of New Directions, a citizens' lobbying organization focussing on global issues.

# Dear Friends.

Associate Editor Marjane Ambler is off for Toronto to bring back a whooping crane! Sound like an odd mission? High Country News has been selected for a special conservation award from the National Wildlife Federation. The prize is a whooper statuette.

We feel honored to be joining the

We feel honored to be joining the ranks of this year's 17 other winners, including President Jimmy Carter; who was named Conservationist of the Year. The other Western winners are Jim Goetz and William Madden, who received the "environmental defense" award. Goetz and Madden are partners in a law firm at Bozeman, Mont., who devote the major portion of their practice to environmental causes on a reduced fee and sometimes a no-fee basis.

International topics such as whales

International topics such as whales and Great Lakes pollution will be dis-

We're excited about the award and about the trip (although some people

think Marjane is crazy to be heading north when spring has finally hit Lander!).

If you're interested in contacting any of the mediation groups mentioned in the story on page 1, here are their ad-

Office of Environmental Mediation, (Gerald Cormick) Institute for Environmental Studies, Engineering Annex, FM-12, University of Washington, Seattle, Wash. 98195, (206) 543-6713.

543-6713.
Resolve, (Richard Livermore) Center for Conflict Resolution, 360 Bryant St., Palo Alto, Calif. 94301, (415) 329-1525.
Rocky Mountain Center on Environment, (John Kennedy) 1115
Grant St., Denver, Colo. 80203, (303) 861-1260.

# In News

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