High Country News

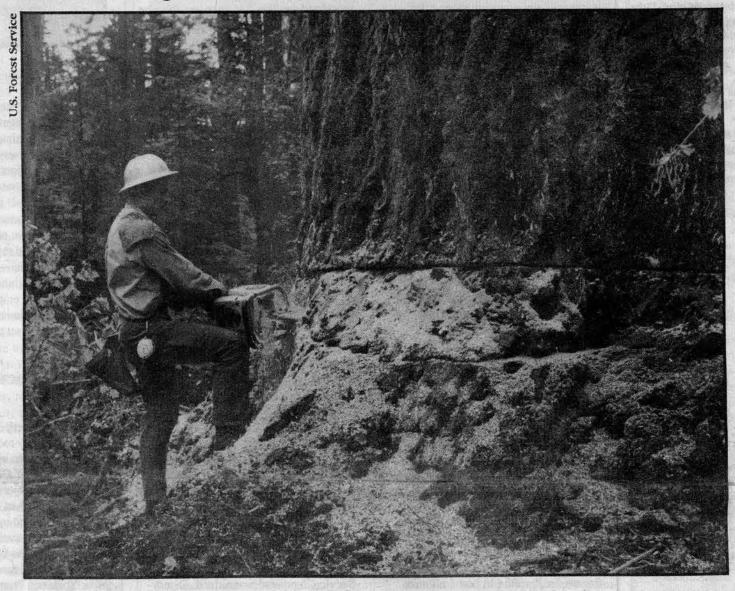
April 9, 1990

Vol. 22 No. 7

A Paper for People who Care about the West

One dollar

Ancient forest protection:



Logger at work on a giant Douglas-fir

Groups plot political strategies

_by Jim Stiak

s the effects of last year's congressional compromise trickle down to the ground and the ancient forests of the Northwest continue to fall as fast as ever, conservationists and politicians have been wrestling to draft new legislation that would save the remaining trees.

But as the days slip away during this legislative session, it's unclear whether Congress will pass a comprehensive measure, a stopgap solution or nothing at all.

There may be no permanent solution, cautions Oregon Sen. Bob Packwood, R, until "each side realizes it has more to lose than gain."

"Ultimately, I think a bill will pass," says Fran Hunt of the National Wildlife Federation. "It's just a matter of how much ancient forest will be protected."

"I see no chance for any bill to pass that's not bad for the environment," says Tim Hermach of the Oregon-based Native Forest Council. Last year, after court injunctions had halted much of the logging of the Northwest's remaining old growth, Sens. Mark Hatfield, R-Ore., and Brock Adams D-Wash., pushed through a bill aimed at keeping loggers working and mills running until a permanent solution could be found.

The Hatfield-Adams bill, officially known as Section 318 of the Senate Appropriations Bill, drew lukewarm support from both the timber industry and environmental groups, and was termed a compromise. Since then it has proven to be anything but.

To catch up on the logging that was delayed while the court injunctions were in effect, Section 318 directed the Forest Service and Bureau of Land Management to sell 7.7 billion board-feet of timber — about 70 percent higher than the average annual cut — in the year between September 1989 and September 1990. Although the bill created citizen advisory groups to help decide which areas to log, their power has been limited. Group members throughout the Northwest charge that old growth is being sacrificed to meet the quota.

"It's worse than business as usual,"

says Jeff DeBonis, who recently quit the Forest Service to devote full time to reforming it. "We're even taking old sales that had been shelved because of environmental problems and putting them back on the market."

The message that "came through the line," he adds, was to "get the cut out." Environmental considerations were secondary.

But if Hatfield-Adams turned out to be a dark cloud over the ancient forest, the silver lining is that it helped cast that forest into the national spotlight. Old growth now has a solid group of advocates in Congress, from states all over

"The Northwest delegation has realized this is a national issue," says an aide to Sen. Packwood. "We're going to have to deal with the entire Congress on this."

A jolt to environmentalists

he accelerated logging caused by Hatfield-Adams has also jolted the environmental movement, with

local activists chiding the national groups for supporting the bill. Meetings of the Ancient Forest Alliance, a group composed of both grassroots and national groups, have been contentious. Representatives from the national groups have been taken to task for their lack of urgency in saving a resource that's rapidly being eliminated.

"People have stood up and told the national groups that they're not doing enough," says Wendell Wood of the Oregon Natural Resources Council. "And the message has been heard. The grassroots groups have been the key to pushing the national ones."

In January, The Wilderness Society announced its ancient forest proposal. Among its main points:

Reduce USFS Region 6 (Washington and Oregon) timber cut to 2.3
 billion board feet a year (less than half the recent annual average);

• Stop logging on all spotted owl habitat, all old growth stands of 200 acres or more, and all low elevation stands; and, by 1993, create an ancient forest reserve system to "maintain in perpetuity" a viable ecosystem;

(Continued on page 10)

Dear friends,



HIGH COUNTRY NEWS

(ISSN/0191/5657) is published biweekly, except for one issue during July and one issue during January, by the High Country Foundation, 124 Grand Avenue, Paonia, Colorado 81428. Second-class postage paid at Paonia, Colorado.

POSTMASTER: Send address changes to HIGH COUNTRY NEWS, Box 1090, Paonia, CO 81428.

Subscriptions are \$24 per year for individuals and public libraries, \$34 per year for institutions. Single copies \$1.00 plus postage and handling. Special Issues \$3 each.

Tom Bell

Ed Marston

Betsy Marston

Linda Bacigalupi Development

Steve Hinchman

Florence Williams
Research/Reporting

Steve Ryder
Editorial Assistant

Peter Carrels
Pat Ford
Jim Stiak

C.L. Rawlins
Poetry Editor

Kay Henry Bartlett

Claire Moore-Murrill

Ann Ulrich

Becky Rumsey

Centerspreaas

Jane McGarry
Diane Sylvain
Proofreading/Production

Peggy Barnett Rob Bleiberg Mark Harvey Interns

Tom Bell, Lander WY
Lynn Dickey, Sheridan WY
Judy Donald, Washington, D.C.
Michael Ehlers, Boulder CO
Jeff Fereday, Boise ID
Bert Fingerhut, Aspen CO
Tom France, Missoula MT
Karil Frohboese, Park City UT
Sally Gordon, Kaycee WY
Bill Hedden, Moab UT
Dan Luecke, Boulder CO
Lynda S. Taylor, Abuquerque NM
Herman Warsh, Emigrant MT
Andy Wiessner, Denver CO
Susan A. Williams, Phoenix AZ
Board of Directors

Articles appearing in High Country News are indexed in Environmental Periodicals Bibliography, Environmental Studies Institute, 2074 Alameda Padre Serra, Santa Barbara, California 02102

All rights to publication of articles in this issue are reserved. Write for permission to print any articles or illustrations. Contributions (manuscripts, photos, artwork) will be welcomed with the understanding that the editors cannot be held responsible for loss or damage. Enclose a self-addressed stamped envelope with all unsolicited submissions to ensure return. Articles and letters will be published and edited at the discretion of the editors.

Advertising information is available upon request. To have a sample copy sent to a friend, send us his or her address. Write to Box 1090, Paonia, Colorado 81428. Call High Country News in Colorado at 303/527-4898.

An uncertain spring

If the rainy days of late March recur a few more times this spring, then summer's coming disaster may turn into just a drought. At higher elevations the rain fell as snow, pushing the snowline down a thousand feet or so. In the valley, the land was dry and absorbent enough to soak up almost every drop. Roads that usually turn into streams when it rains had little or no runoff to convey downhill

Although Saturday, Mar. 31, was warm and sunny enough to send the snowline on nearby Mount Lamborn scurrying back uphill, the valley remained moist and almost humid. Whatever the effects on the summer, rain will provide at least one good crop. It should be a good year for the wild asparagus that grows alongside irrigation ditches and in orchards.

We are amazed at the optimism and courage nature shows each spring. In late March, those qualities were displayed by the apricot trees, which bloom two weeks or so before other fruit trees, and as a result are almost always frozen out by a spring freeze. Because of that, they are not a commercial crop in this fruitgrowing valley. For most of the year, you don't even know apricot trees exist. But in late March, they were alone in flying the flag of blooms, and we were surprised to see how many apricot trees have survived their early 20th century plantings. Most of them are so-called 'weed" trees, which have taken root along irrigation ditches and, untended, provide a July crop to those who can figure out how to pitch a fruit-picke'rs ladder on a steep hillside.

Here and there, however, a fruit grower has allowed a small block of apricot trees to remain in the orchard. And behind the *High Country News* office lies one of this area's most favored apricot trees. The closeness of our building must provide some protection from freezes, for it seems to bear fruit more often than other trees. Right now, it has an incredibly heavy bloom, with scores of bees busily at work.

Some readers may have noticed that HCN made national network news the week of March 26, thanks to KMGH-TV, Channel 7, in Denver. The station's brief TV-cast about the paper was picked up by CNN and delivered, over and over again, to a waiting nation. One result was a call to our typesetter, Ann Ulrich, from her mother, who saw it in the Midwest. She asked Ann: "Is it safe for you to work for that paper?"



Camera shy: Peggy Barnett

The question was a natural because reporter Pat Woodard and cameraman Hank Bargine cast HCN and its staff as at war with the community we live in. They did it by interspersing shots of this valley's mining and agriculture with a text that made it appear HCN spent its time writing damaging stories about the North Fork Valley while surviving off free intern labor, cheap housing, our own journalistic bias and the gullibility of local residents.

High Country News is not exactly a good-news newspaper, so it is only fair that we experience, first hand, what it is like to be covered in a way we consider unfair and inaccurate. Now we can sympathize with Exxon and Captain Hazlewood and the like. And perhaps, in some dim future, we will get to do an in-depth profile on Pat Woodard.

Speaking of press coverage, we received a telephone call from Gordon Wishard in Indianapolis to say that he had seen a story on us in the latest *People* magazine and to subscribe. The story is in the April 9 issue, on newstands in most places on Monday, April 2. But Don's Market tells us their *Peoples* won't arrive until Wednesday.

Grazing issue gets reaction

Reaction to the grazing issue continues. Dave Schaal of Berthoud, Colo., took exception to Jim Fergus' sentence, "A new baler can cost from \$30,000 to \$60,000," and sent us an advertisement from the Strasbuurg Equipment Co. listing new John Deere balers for \$10,000 to \$18,000.

Tom Wolf, who wrote about Forest Service staffer Pete Tatschl, said we turned the 1825 death of New Mexico's last jaguar into 1925. He admits to turning the town of Bernal into Bernardo.

An anonymous reader sent us a slick brochere with the note: "You may be interested in this piece of garbage." The brochure was produced by the Public Lands Council (an organization of public land graziers), the BLM and the Forest Service. It presents a sanitized, Disneyland version of public land grazing:

"Livestock grazing produces food and fiber, along with many other environmental, economic and social benefits," is one of the more objective sentences.

To get your own copy, write to: The U.S.D.A., Forest Service Range Management Staff, P.O. 96090, Washington, D.C. 20090, and ask for Program Aid Number 1439, Sept. 1989. If you are in a hurry, call 703/235-8139.

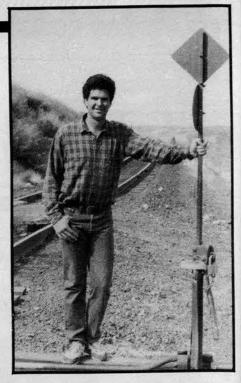
An agency in flux

As if to show us the old and new Forest Service in one day, the same mail brought a copy of a Feb. 27, 1990, letter Forest Service Regional Forester Gary E. Cargill wrote to agency employees in Colorado, Wyoming, South Dakota, Nebraska and Kansas about employee misconduct. It was blunt, to the point, and spoke well for the agency's efforts to change its culture:

"The year 1989 was not a good year regarding employee misconduct and the resulting impact on the Forest Service and the individuals involved."

After listing violations involving stealing from campground receipts and accepting favors from a ski area promoter, Cargill wrote:

"The violations discussed above involve a total of five employees; all GS-11 and above, over 100 years' total ser-



Mark Harvey

vice, two line officers, and all knew they were violating regulations.

"As we continue to ask our employees to seek new ways of doing business,
as we create partnerships and privately
funded projects, we may be giving the
impression that all the rules are off. Are
we sending the wrong message in our
efforts to be more efficient? The laws,
and the rules and regulations that are
based on those laws, have not changed...
It is the responsibility of managers to
insure that their employees work within
the prescribed limits, as well as to set the
standard and to set the example."

In other news

Hugh Kingery of the Colorado Bird Atlas stopped by recently while on a western Colorado visit to the Unaweep Seep and other places that attract birds. Hugh said he expects the atlas to be published no later than 1993. Meanwhile, the data collected by his far-flung army of volunteers is available in a data base maintained by the Colorado Division of Wildlife. So far, three states - Maine, New York and Vermont - have published bird atlases, with 20 or so atlases underway. If you would like more information or wish to volunteer, write: Hugh Kingery, c/o Zoology Dept., Denver Museum of Natural History, 2001 Colorado Blvd., Denver, CO 80205.

New York subscriber Del Owens, whose photos of the West at times illustrate HCN stories, exhibited 112 of his color prints at the Javits Federal Building Lobby on Broadway south of Worth Street in Manhattan during March.

A reader writes from Wyoming to say that either he and his wife will soon become parents or she will "become so extraordinarily large that soon she'll have her own personal gravitation field."

Staff writer Florenece Williams has been following up on a recent HCN controversy. Here is her report:

After this paper ran Bert Lindler's Nov. 6 review of *How to Shit in the Woods*, *HCN* caught some flack from readers. They were not the only ones offended by the Ten Speed Press publication. Two major outdoor retailers, REI and EMS, refused to carry the book in their outlets, even rejecting the watereddown version: *How to S— in the Woods*.

But that doesn't bother the Berkeley, Calif.-based publishing house. Sales manager Joanne Deck says, "We're real committed to freedom of speech. Someone has to take the chance." Even without REI and EMS, the book is selling briskly. Other popular Ten Speed titles

(Continued on page 9)

WESTERN ROUNDUP

Wyoming says no to Noah's Ark ranch

A man Forbes magazine ranks as the 107th richest American wants to stock his 17,000-acre ranch in Wyoming with both exotic and native big game species.

John Dorrance III says he'll buy animals from ranches in South Dakota, Colorado and Montana, and release them to fenced enclosures on his ranch just north of Devil's Tower National Monument. He says the animals will be raised for exhibit, meat, weed-control research and "controlled hunting."

Dorrance, one of the the heirs to the Campbell Soup fortune, has lived quietly in Wyoming for 16 years. But recently he launched a media blitz to gain support for his proposals. Since he submitted applications to the state in August 1989, it has not been easy sledding. The state denied him permits and Dorrance resubmitted his proposals three months ago.

"As soon as you try to do something different you're jumped on," he says.

On March 26, the state rebuffed Dorrance again, this time in a 900-page document. The rancher would not say whether he would appeal in federal court.

Dorrance had cut back his plan to raise up to 30 animals of each species and asked the state to permit four European boar, two Arctic wolves and six each of fallow deer, axis deer, blackbuck antelope, roe deer, red deer, sika deer, muntjac, chamois, aoudad, markhor, ibex, mouflon sheep and Marco Polo sheep.

No one is permitted by Wyoming law to own live big game or trophy animals, but the state's wildlife commission can permit possession for exhibit purposes. Dorrance applied for permission to exhibit six each of elk, moose, pronghorn and bighorn sheep.

He says he would establish a native wildlife exhibit next to Devil's Tower National Monument.

Dorrance also requested permission, although it is prohibited under Wyoming law, to breed, rear, sell for meat and hunt these native species. Since there is no move in the state legislature to change the law, Dorrance would have to challenge the statutes in court.

Critics say one problem with Dorrance's plan is the likelihood that animals will escape and interbreed with native species. They are also concerned that exotic species will out-compete native animals.

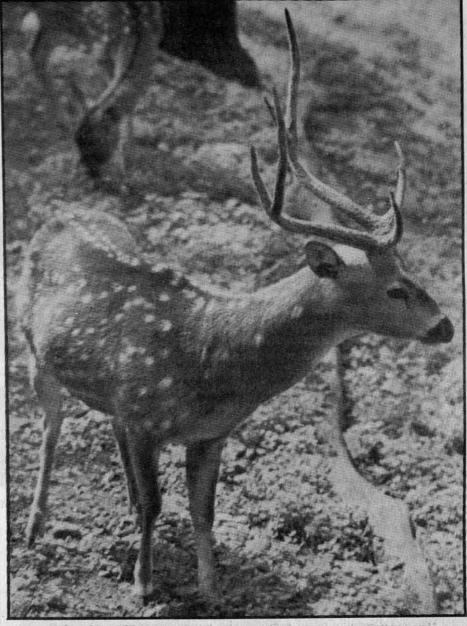
Francis Petera, director of the Wyoming Game and Fish Department, says Dorrance's game ranch could end up costing Wyoming money. Who will be responsible for management and capture of any escaped exotics? he asks.

Dorrance says he'll prevent escapes by creating separate enclosures within a 4,300-acre fenced area. "Fencing and fence management will be above reproach," he told commissioners. If any species does manage to escape, he adds, it will not survive a Wyoming winter.

Petera says another problem with exotics is the possibility of disease. Jim Orpet, a wildlife biologist in Laramie who is a consultant to Dorrance, disagrees.

He says testing for exotic "far exceeds anything anybody has to do for livestock." If there is such a problem, "why haven't we heard about it; where are all the large dieoffs?" he asks

Orpet says only isolated cases of disease transmission have occurred. One case in 1984 involved 85 bison herds in



Axis deer

20 states that were exposed to bovine tuberculosis, suspected to have originated from 200 purchased elk.

PERSONAL PROPERTY TORNE TEAT

Wildlife around Devil's Tower is known to carry a variety of diseases, and Dorrance charges that his animals would be at greater risk of contracting disease from native species than the other way around.

Mark Winland, a science teacher in Gillette and member of the Wyoming Wildlife Federation, has researched game ranching in other states. He says escape, interbreeding and habitat encroachment are all real problems.

Aoudad, Winland says, were brought to New Mexico in 1950, but hunting them has still not reduced their invasion of desert bighorn lands.

Aoudad have also spread to Colorado, he adds, where they are shot as pests. Arizonans now fear the prolific animals will spread into their state.

In Texas, Winland continues, 2,500 aoudads roam the Palo Duro Valley, preventing the possible reintroduction of desert bighorn to the area. Natives of Africa, the aoudads don't hybridize with bighorns but can prevent their breeding by out-competing bighorn rams for access to females. In 1986, New Mexico reversed its policy and now prohibits the importation of exotics.

In Colorado, Winland says the Division of Wildlife is trying to get rid of mouflon sheep that escaped into the Black Canyon of the Gunnison. State officials worry that this could take three years. In the meantime, Winland says, mouflon sheep could hybridize with big horn sheep that have been restored to the area.

Game ranching is a growing business. Colorado wildlife parks or ranches have grown from 14 to 170 in the last 20 years. In Alberta, Canada, game ranches

have swelled from 9 to 92 in just two and a half years, Winland says.

Dorrance has told the state that since it has allowed others to set up game ranches, it would be discriminatory to bar him from doing something similar

Other issues than disease and escape bother Valerius Giest, a professor of environmental design at the University of Calgary, Canada. He says privatiz-wildlife, which is now publicly owned, jeopardizes the acceptance of conservation and increases pressure for poaching, due to lucrative markets.

Orpet responds that privatizing is the issue since the animals would be bought and raised. "These aren't the state's animals," he says. Orpet says that Vermont encourages its citizens to start deer farms and that Texas provides low-interest loans for similar ventures.

To the Wyoming Wildlife Federation's Winland, that scenario is "against everything Wyoming and the people of Wyoming value about wildlife. We're talking native wildlife behind fences being shot as pigs in a poke."

For more information, write to the Wyoming Game and Fish Commission at 5400 Bishop Blvd., Cheyenne, WY 82006 (303/777-7632).

— Nancy FitzSimmons The writer is a graduate student in zoology at the University of Wyoming.

BARBS

That's true. In fact, without them we wouldn't need Earth Day.

Richard Seibert of the National Association of Manufacturers, says: "Corporations have done a lot [for the environment] and have every right to participate in Earth Day."

HOTLINE

Zunis win court battle

This land was once Indian land, a federal judge summed up in a lawsuit filed by the federal government and the Zuni tribe. So if a Zuni Indian needs to walk across a white man's ranch to reach his place of origin, then that must be permitted. Once every four years Zuni Indians make a pilgrimage to Kohlu/wala:wa, the center of their religious life and home of their dead. The 10,000-acre site is located 14 miles north of St. Johns, Ariz., and is congressionally mandated as a place for Zuni rites. The mandate also required the Interior Department to get permission from local landowners whose land the Zunis cross during their 110-mile trek. But in 1985, Apache County rancher Earl Platt said Native Americans trampled his land and cut fences, reports The Arizona Republic, and he wanted them out. Federal and tribal lawyers then sued for an easement to allow the pilgrimages, which predate the arrival of the Spaniards centuries ago. The easement will allow no more than 60 people on foot or on horseback to cross Platt's property for two days every four years.

From smokes to soups

Ski resorts should not hold races sponsored by the tobacco and alcohol industries, says Jackson Hole Ski Corp. President Paul McCollister. Jackson Hole decided in January to discontinue its Marlboro Ski Challenge, the nation's largest amateur race. Last month, the Aspen Ski Company followed suit. For McCollister, however, the fight has just begun. He told the Aspen Times he intends to promote a nationwide ski-area ban on all alcohol and tobacco sponsorships. "When you stop and think about it," he said, "it's ridiculous not to [end the link with drugs]." He said the Jackson Hole Ski Corp. is currently negotiating with the Campbell Soup Company to continue the race.

Anti-wilderness bill proposed

Utah Rep. James V. Hansen, D, has introduced a bill that would give Western states the power to force Congress to reconsider wilderness designations. States with 25 percent or more of federal land would be able to file a "notice of disapproval" within 90 days after Congress passes legislation setting aside new wilderness areas. To overcome a state's "disapproval," Congress would then have to pass a joint resolution reinstating a wilderness. Hansen said that the bill, which had 16 original co-sponsors, would give Western states greater say in land-use decisions that impact their economies. "Where a federal land decision is of minimal impact in smaller eastern states, such a decision can have a monumental and often devastating impact in the West," he said. Conservationists pointed out, however, that all Americans have an interest in wilderness areas. Bob Tafanelli, a New Mexico wilderness advocate, said Hansen would give states "a veto power over the property rights of everyone else in the country. If we do in fact recognize that federal land belongs to all of the people, then this kind of proposal is almost humorous." Hansen said his bill is about the right of people in a state to have a say in their destiny. They should not be subject to "the whims and fancies of a few wellheeled eco-extremists," Hansen said.

CUT spends money like there's no tomorrow

The post-nuclear vehicle of choice for affluent members of the Church Universal and Triumphant in rural Montana is the four-wheel-drive Isuzu Trooper. The reason: Its mechanical ignition and fuel systems can survive the effects of a nuclear bomb blast, while modern electronic systems would be disabled.

Many CUT members are retrofitting their cars with old-style ignition distributors. They want to be mobile after they come out of their fallout shelters, because, according to their leader Elizabeth Clare Prophet, they will inherit what's left of the earth.

Such mundane details as automotive survival are just one part of a complex plan into which Prophet's followers have poured millions of dollars for shelter construction, decontamination equipment, food supplies, survival gear, arms and ammunition.

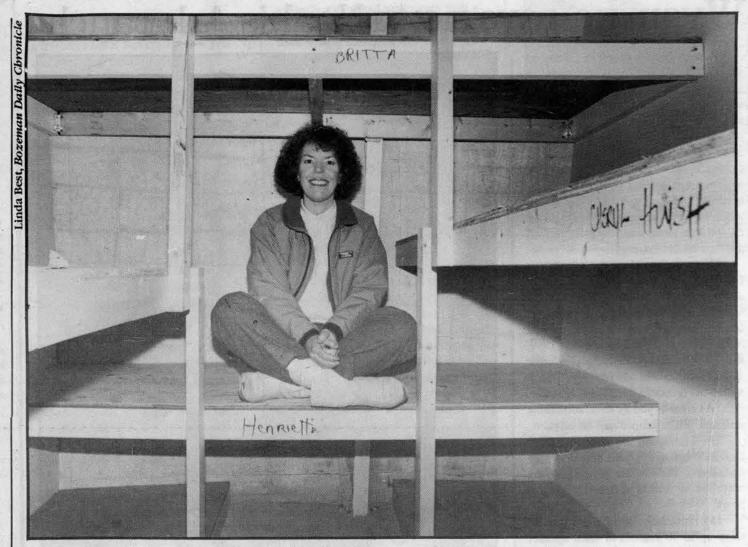
By March 16, many members had quit their jobs, sold many of their worldly possessions, liquidated their bank accounts and moved to or up Paradise Valley to await the word.

Prophet gave the word the night of March 15, but it turned out to be only a surprise drill which lasted from midnight until dawn. Besides the huge CUT staff shelter near Corwin Springs, there are about 45 other shelters of varying capacity located on the two CUT-owned subdivisions called Glastonbury, near Emigrant

CUT's presence in Montana's Park County since early March has at least doubled, according to most estimates. Some 2,000 extra members have flocked in from all over the United States, Canada, Europe, South America and Australia. A flurry of activity hit Bozeman, Livingston and Gardiner leading up to the weekend of March 17.

Members were told they needed to to have shelters built, or space reserved and paid for; two 50-gallon plastic garbage bags each of belongings moved in, and all dental and medical work completed.

For several weeks, CUT's unofficial tabloid newspaper in the Livingston-Bozeman area ran ads catering to the coming apocalyse. Shelter builders made their pitches with the elan of condo salesmen. Full-page ads offered deluxe shelter space in euphemistically named developments like "Chalice Well," "Hel-



CUT member Kathleen Boyle sits in one of the sleeping areas of a bomb shelter in Glastonbury

met of Salvation," and "The Liberty Project - Spacious Private Family Rooms 7X12 feet - \$12,800."

Some classified ads from less affluent CUT members pleaded for loans or donations of shelter space. Other ads offered emergency foods, firearms, stunguns, radiation antidote tablets, radiation suits and autos without electronic ingitions

A Feb. 22 CUT memo quoted a representative of Guru Ma telling one shelter group meeting, "We come to communicate Mother's sense of urgency... You must do nothing but eat, sleep, minimal decrees (chanting) and work at least 12 hours a day until the shelters are completed."

Prophet has denied that she issued a worldwide call to CUT members to flock to Montana to dig in for the outbreak of nuclear war.

But in an interview last summer, she said, "Civil defense and war is a tempo-

rary intrusion upon life. Neither one is going to go on forever. But life is going to go on forever. And the concept of being in Montana was that there'll be a place where people of like mind can be neighbors, have a community, can have their schools, have their functions. It's like Methodists, Baptists, or any other people who are together because they have a common interest. So, I'm not telling people, per se, to go to Glastonbury and survive nuclear war. People are obviously doing that. By their choice. That's their free-will and that's their perception."

The recent surge of migration to the area has upset Park County residents, many of whom had been tolerant of the church when it arrived in the early 1980s.

"We in Park County have been invaded," said State Rep. Bob Raney of Livingston. "We're occupied by an armed force of people with an intense allegiance to one person."

Raney said he and other residents have been frustrated by antiquated rural Montana zoning laws and governmental inaction that allowed such a massive development on ranch land in the first place. The sentiment built up to a protest rally in front of the courthouse in Livingston March 29.

Park County commissioners refused to support Raney's request that the governor declare a state of emergency in the county. They have been content to inspect various fallout shelters for sanitation violations; several were found to have violated waste water disposal standards.

On March 12, county sanitarian Ken Anderson inspected CUT's largest shelter for the church staff, which can hold 756 people plus livestock, and ruled it could not be occupied until permitted.

That shelter, excavated in a creek drainage on the old Malcolm Forbes ranch bordering Yellowstone National Park, has been blamed by Park Service biologists for disrupting crucial grizzly bear habitat.

On March 16, people were still working on some underground shelters

scattered around the hills in the subdivision of Glastonbury.

The terrain at the subdivisions is bare, semi-arid foothills formerly grazed by cattle. That day, it was snowy and muddy, and a cold wind blew.

There is a dramatic view from the area of the cloud-topped peaks of the Absaroka Range, but for someone newly arrived from an urban area or foreign country or seacoast, the place must seem like the end of the earth. It is bleak, stark, snowy and far from anywhere.

Houses sprawled throughout the subdivisions vary widely in design, size and expense. Flimsy trailer houses and modular homes are next to southwesternstyle adobe ranchettes. A Swiss-style chalet is next to a large log home, and so on, thanks to the lack of county zoning.

Guru Ma's youngest daughter, Moira Lewis, who split from the church and her family last year, said recent activities prompted by CUT leaders are are drastic but not out of character.

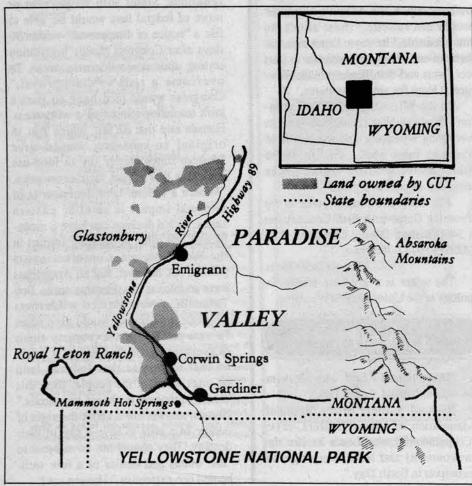
"It kind of hit me," she said, " that this is what they've been planning for since the inception of that religion. We've known that something was going to happen (and) we'd have to survive.

"We might not have normal offspring and grandchildren because we were somehow going to be the spiritual heroes of this time, and either die doing it, or save the world. They've always known that, and I was all ready to give my life for that when I was there, without even thinking about it."

She added, "This is the farthest they've ever gone and this is the most money they've spent. And my mother doesn't spend money lightly. She's usually a pretty wise investor. But she spent a lot of money right here. And she shut down her whole operation; she's never done anything like that before — that's what makes it different."

Livingston writer Tim Cahill, who reported on the 1978 Jonestown cult mass suicide for *Rolling Stone* magazine, said recent CUT activities seemed more like a suicide of the institution, not violence to individuals.

"Here's a large, multi-million-dollar



Residents are frustrated by antiquated zoning laws that allowed a massive development on ranch land in the first place

organization committing suicide in front of you. I can't figure it out. That's what's scary."

Cahill said CUT's announced plans and intentions have always been contradicted by later actions, and that wins them few friends in the community. "People are tired of being lied to," he said.

Park County residents remain uneasy as they wait to see what happens next with the 3,000 or so followers out on the 3,000 acres controlled by Eliza-

beth Clare Prophet. They wonder if she will order them all underground at some point during this "dangerous time" leading up to April 23, which she calls a critical date.

What if no bomb falls? What will happen to all the followers who have given up their jobs and homes elsewhere and moved to Montana? Will they stay and be counted for the 1990 Census?

In the meantime, tons of grain, dried foods, water, fuel and supplies are now buried beneath the rugged Montana



A construction worker leaves a metal tower over a large bomb shelter. It has since been reinforced with concrete and is dubbed an "evil tower" by neighbor Pete Story.

landscape. Driving around Glastonbury and looking at all the preparations, one can't help but speculate on what a puzzling discovery this could prove for future archaelogists.

-Pat Dawson

Pat Dawson is a freelance writer in Bozeman, Montana.

Gravel mines cut cottonwoods off at the knees

There are no longer many cottonwoods left in Cottonwood, Ariz. The Verde River, loaded with sediment, cut away the banks supporting the trees.

But before the central Arizona town gets ready to change its name, residents hope the gravel mining companies that caused the damage will plant new trees.

Under a recent order issued by the Environmental Protection Agency, the companies will have to do just that. The federal agency found that four sand and gravel mining operations along the Verde had been illegally discharging fill for at least 10 years.

Valley Concrete and Materials, Inc., D & M Materials, Superior Co. and Tanner Co. "grossly" violated section 404 of the Clean Water Act, which regulates discharge and fill in waters of the United States, according to Vicky Reynolds of the EPA.

At five sites along the river, which flows south of Flagstaff, the mining companies leveled gravel bars, uprooted bed materials from the stream, and created huge gravel piles that effectively diverted the path of the river.

Damage caused by the operations destroyed wetlands, eroded banks and their vegetation, increased the siltiness of the river to the detriment of fish, and undermined waterfowl habitat, the EPA found.

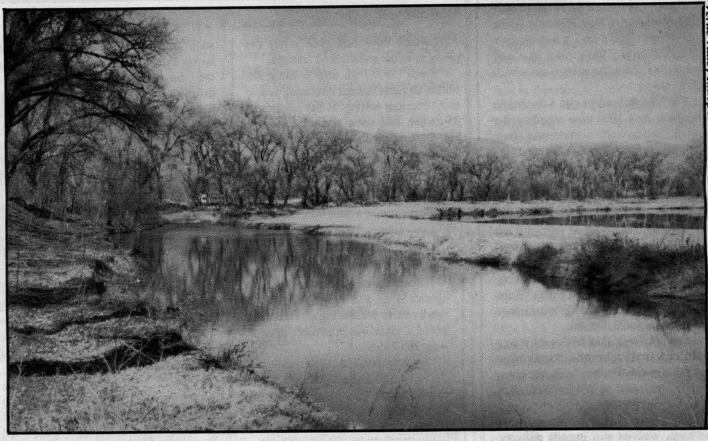
After the companies mined the sand and gravel, they returned the leftover debris to the river, but in such a way that more material was churned up, increasing erosion, said Reynolds.

"Under section 404, you don't have to import fill. The moment you take fill and move it, it becomes a discharge. A shovelful taken out of a river is a discharge," she said.

For years the companies operated without the required permits from the U.S. Army Corps of Engineers. Tanner Co. contacted the corps, but failed to explain the nature of its operation and thus did not receive the correct permit, said Reynolds. The other companies neglected to contact the corps at all.

Cottonwood, population 5,000, and the town of Verde Camp, population 1,500, have a long-standing history of complaints about the gravel companies.

Said riverside resident Susan Cham-



Many cottonwood trees along the Verde River have been swept away as its banks erode

pion: "It's been an ongoing conflict. We've lived through their trucks rattling our windows and the destruction of our beaches, the piles of gravel and the holes along the river."

About eight years ago employees from Valley Concrete fired gunshots at a landowner who was trying to collect samples for a lawsuit, said Champion.

"The state was not really helpful until recently," she said. "The mining industry is such a big lobby in the state,"

The EPA investigation began one year ago following complaints from the state Department of Environmental Quality, the U.S. Fish and Wildlife Service and numerous private citizens.

Ed Swanson of Arizona's Department of Environmental Quality said it took a long time to acquire documentation proving the illegality of the mining operations. Because their discharging practices were only "intermittent," it was difficult to collect water samples, he said.

The Corps of Engineers was also at fault, said Swanson. "The principal caus-

es of inadequate Clean Water Act permitting are the narrow focus and the inadequate level of effort by the Corps in performing their section 404 duties."

All the companies except Valley Concrete complied with the EPA order in December and submitted draft cleanup and alternative operation plans. The proposals, however, did not meet EPA requirements, said agency spokeswoman Lois Grunwald. The companies are currently drafting new plans.

The EPA order could put at least one company out of business, said Phil Gagle of the Arizona Rock Products Association, a lobbying group.

"It takes a lot of money to meet the EPA restrictions, and for all intents and purposes, those companies don't have an income while they are working on adjusting their operations." Gagle said each of the companies has laid off about 50 percent of its employees.

Arizona is one of the nation's largest suppliers of sand and gravel, used mostly for road construction. The state's high rank is largely due to a bill written by former Gov. Evan Mecham in 1987,

which relinquished state ownership of all streambeds, allowing their purchase by private interests for \$25 an acre. Since that time, gravel producers have jumped 90 percent, estimates environmental activist Jerry Van Gasse.

But few of the 3,000 gravel sites in the state hold the necessary permits, said the state's Swanson. He attributed this to a lack of knowledge about Clean Water Act permitting requirements.

The Arizona Center for Law in the Public Interest is currently challenging the streambed law, alleging that it unconstitutionally gives away state resources worth hundreds of millions of dollars, is illegal special interest legislation, and violates the state's duty to preserve rivers for wildlife and recreation.

The suit is pending in the Arizona Court of Appeals.

For more information, contact the Arizona Center for Law in the Public Interest, 3208 East Fort Lowell, Suite 106, Tucson, AZ 85715, 602/327-9547.

-Florence Williams and Susan Bridges

Wolf advocates hope to force reintroduction

Mexican wolves, the small gray predators that once roamed freely through the arid lands of the American Southwest, have been severely abused by humans for over a century.

From the 1870s until the 1930s, they were hunted zealously. Though they were officially deemed "endangered" in 1976, surviving Mexican wolves have been cooped up in zoos.

Dan Moore, an Albuquerque resident who speaks for the Wolf Action Group, blames the U.S. Fish and Wildlife Service for the wolf's current predicament.

Moore says, "Fish and Wildlife is supposed to return the wolf to the wilds and they haven't." To force the agency to act, the Wolf Action Group, along with five other organizations, including the Audubon Society and Sierra Club, filed in federal court a 60-day notice of intent to sue the agency.

The plaintiffs plan to use the Endangered Species Act as their legal tool. The act obliges Fish and Wildlife to preserve all "endangered" species, and, says Moore, the agency "has said itself that the wolf can only survive if it's reintroduced into the wild."

Wolf advocates like Moore want to see 20 wolves — 10 males and 10 females — released onto the desert plains of southern New Mexico's White Sands Missile Base. Its 2.4 million acres contain mountain lions, mule deer and pronghorns, and the rabbits on which wolves prev

Wildlife defenders cite a favorable precedent: In a 1984 case regarding the eastern timber wolf, a Minnesota court ruled that Fish and Wildlife has "an affirmative duty" to enact recovery plans for endangered wolves.

The problem is that Fish and Wildlife doesn't want to reintroduce the wolves now. "We want to wait until we can reintroduce the wolves into a friendly environment, until they can roam the wilds without being in danger of being killed by humans," explains Tom Smylie, Fish and Wildlife's assistant southwest regional director.

Smylie says that his agency has stalled on wolf reintroduction in New Mexico because Thomas Jones, the commanding general at White Sands, has refused to cooperate.

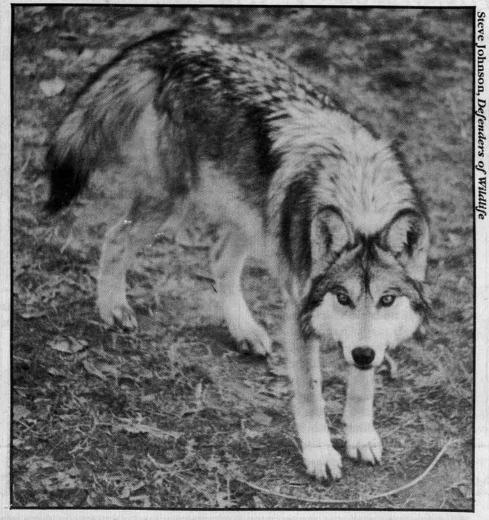
Jones fears that by wandering about the base, wolves will impede military operations.

Smylie says that patience is the answer to the wolf problem and that patience has paid off in a similar wolf scenario.

In North Carolina during the late 1970s and most of the 1980s, Fish and Wildlife kept endangered red wolves penned in zoos as it educated state residents about these creatures and shattered the myth that wolves are ferocious and man-eating. When the animals were finally reintroduced, says Smylie, they were welcomed rather than shot at.

Wolf Action Group and its co-plaintiffs don't think that the White Sands military will ever accept wolves. "We're going to court," says Moore, "because we're sick of waiting."

Fish and Wildlife has been talking about wolf reintroduction since 1982. That year the agency issued a recovery plan indicating that it would find a home for wolves by 1984. It didn't begin searching for such a site, however, until 1986, and the agency allowed the states of New Mexico, Arizona and Texas to reject the wolves. Critics say this may have violated the Endangered Species



Mexican wolf

Act, which does not give states the power to refuse endangered animals.

Since 1987, Fish and Wildlife has shifted its focus toward educating people about Mexican wolves. It has produced a 25-minute slide show about the animals but, charges Smylie, the agency has done nothing else in defense of wolves.

Meanwhile, Mexican wolves' populations are dwindling. There are now 35

such animals left, and these have been living in eight zoos scattered throughout the United States and Mexico, subsisting on dog food. Albuquerque biologist Susan Larsen says that these captive animals are not hardy.

"The wolves in zoos," says Larsen, "are not hunting, and their snouts and hind legs are far weaker than those of wolves in the wild." These muscle deficiencies have not yet affected the wolves' genes, says Larsen. But the biggest problem for the wolves, she says, is that newborn pups are less likely to learn how to travel the wilds in packs and how to sniff out prey. "Their parents aren't doing this, which means that there is no one to teach them these skills."

Captive wolves, Larsen adds, are also at risk of catching a fatal disease called parvo. An intestinal virus common among dogs, parvo is endemic in cities. It recently caused the death of a litter of wolf pups at Albuquerque's Rio Grande Zoo

If the wolves were released soon at White Sands, that would be a near-perfect habitat, Larsen says. Along with its wildlife, it has grassland, desert scrub and wooded piedmont areas through which the animals can roam. The military base is also isolated. Civilians are not allowed on it, and livestock do not graze near its boundaries.

But freedom is a long way off for the Mexican wolves. The plaintiffs in the wolf case plan to file their suit in Albuquerque during the week of April 23, Earth Day, and will then scramble to raise funds for legal fees. They expect to wage a legal fight which may not be resolved until 1991.

Burnett says, "With the lawsuit, we're trying to get people to start acting as guardians, rather than as exploiters, of wolves before it's too late."

For more information, call Tom Smylie at the U.S. Fish and Wildlife Service, 505/766-3940, or Dan Moore at the Wolf Action Group, 505/255-4089.

- Bill Donahue

Rare fish could dam water project

Recent discoveries of two rare fish species in the San Juan River could be deadly news for the controversial Animas-La Plata water project in southwestern Colorado.

In February, U.S. Fish and Wildlife Service officials began a formal study of whether the dam should be killed or altered to protect small downstream populations of endangered Colorado squawfish and rare razorback suckers. Federal biologists say they are concerned that the \$580 million project would deplete critical river flows and sediment loads, and alter warm temperatures needed by the two fish.

Over the last two decades, only one squawfish had been found in the San Juan, leading biologists to assume that no suitable habitat or viable populations existed. In 1979, the U.S. Fish and Wildlife Service issued a "no jeopardy" opinion on the massive water project.

Then came surveys over the past two years by federal, Utah and New Mexico biologists who found 27 Colorado squawfish — eight adults and 18 young — and 13 razorback suckers in the San Juan River in New Mexico and Utah,

Bob Jacobsen, assistant director for U.S. Fish and Wildlife Region 6, says because the Colorado squawfish is listed under the Endangered Species Act, and the razorback sucker is currently proposed for listing, the new information required his agency to reevaluate the effects of the proposed

water project.

Animas-La Plata would divert water from the Animas and La Plata Rivers, both tributaries of the San Juan River, into a network of two reservoirs, three pumping stations and 157 miles of canals. The water would irrigate 68,000 acres in southwestern Colorado and northwestern New Mexico, provide drinking water to Durango, Colo., and settle a long running water-rights battle between two Ute Indian tribes and the states of Colorado and New Mexico. Groundbreaking for the project was set for May 5, 1990.

Jacobsen says his agency will try to complete the study before then, producing a draft biological opinion by early April and a final opinion by May 1. However, that timetable has alarmed a number of environmental groups participating in the Colorado River Endangered Fish Recovery Program.

"To do a Section 7 (of the Endangered Species Act) consultation and biological opinion for Animas-La Plata in two months is a highly unusual and fast-tracked schedule," says Bob Weaver, an environmental consultant who sits on the recovery program's management committee. "The Flaming Gorge Dam study (in Utah) took several years and still is not finished."

"A lot of folks are watching very carefully," Weaver adds, predicting that the final resolution could take some time and might go to court if construction on the project begins prematurely.

Jacobsen says the agency already

has compiled data from three years in the field and now has to make its decisions based on what information it has on hand. "In this case we are very fortunate because we have some pretty damned good information," he says.

Under the Endangered Species Act, Fish and Wildlife has the power to kill the project. But it seems to be leaning towards requiring changes in operation plans.

"There appears to be enough flexibility in the San Juan River system available to offset the impacts of the project," says Jacobsen. He notes that options include changes at Navajo Dam on the San Juan near Shiprock N.M., controlling the timing and degree of Animas-La Plata's diversions, and releasing water from Animas-La Plata's dams for fish habitat.

However, several engineers studying the project say the numbers don't add up. Bob Standard, an engineer with San Juan Engineering in Farmington, N.M., told the Albuquerque Journal that "based on an arithmetic analysis of the Bureau of Reclamation's numbers, my conclusion is the Animas will be dry several months a year."

Matthew Symonds, an engineer with the city of Farmington, says that would force the fish to rely on cold clear waters from Navajo Dam, when what they need is warm silty water.

--- Steve Hinchman

Paiute clan is close to tribal status

HIDDEN SPRINGS, Ariz. — The nation's newest soon-to-be federally recognized Indian tribe is the San Juan Southern Paiutes of northern Arizona and southern Utah.

After a five-year-long review, the Interior Department is expected this spring to grant full federal recognition to the 240-member tribe. The Paiutes will become Arizona's 22nd tribe.

The Paiutes received their final determination of acknowledgement as a tribe in December, leaving it one step away in an arduous process toward federal recognition, said Bob Peregoy, an attorney with the Native American Rights Fund in Boulder, Colo.

Paiute spokeswoman Evelyn James said she and her people were both pleased and proud to achieve what their elders told them to seek more than 20 years ago.

"It means it's going to be the beginning of all the services we never got," she said.

James said the tribe will soon be able to apply for needed federal health,

housing and economic benefits on an equal footing with other tribes. She said the small settlement here, about 70 miles north of Flagstaff, Ariz., has no running water, electricity or jobs.

Opposing the tiny tribe's recognition is the huge, 210,000-member Nava-jo Tribe. In legal papers filed in response to the Paiutes' petition for acknowledgement, the Navajos said the Paiutes had been absorbed by the larger tribe, and that 119 Paiutes were included in the Navajo census.

The Paiutes hold that the Navajos' adoption of the 1940 federal census as its tribal roll did not transform Paiutes into Navajos, Peregoy said.

Navajo tribal spokesman Duane Beyal said a Navajo request for reconsideration of the Paiutes' acknowledgement was filed in January with the Interior Board of Indian Appeals. The appeal is pending.

Today, the Paiutes live in two separate areas on what is now Navajo Reservation land. In addition to their settlement at Hidden Springs, they also have tribal members living some 90 miles northeast at Navajo Mountain and Paiute Canyon.

Several families also live at Cow Springs, a spread-out settlement midway between Tuba City and Kayenta, Ariz.

Because the small tribe was permitted to intervene in a seven-million-acre land claim case between the Navajos and Hopis, it could gain its own land base. Peregoy said evidence that the Paiutes' lived in the area before the Navajos was not contested in the trial, which ended in February.

In its determination of recognition, the BIA found that the Paiutes had not been fundamentally influenced by the Navajos, nor participated in Navajo politics

James said that although the two tribal groups lived side by side for more than 150 years, the Paiutes held onto their language, culture and beliefs. "They talk different and they have their own separate ways," she said of her Navajo neighbors.

— George Hardeen

HOTLINE

Vetoed again

The Environmental Protection Agency drove another spike into the heart of Colorado's proposed Two Forks Dam. After a year of study, Lee DeHihns, the EPA's temporary regional administrator, recommended that his agency take the strongest possible legal stand against the proposed \$1 billion project, or any other dam on the scenic South Platte River. "My recommendation is to prohibit that site," DeHihns told the Denver Post. In a 150-page analysis, the EPA said that by using conservation and a variety of alternatives, Denver and its suburbs could obtain 50 percent more water without Two Forks' massive environmental impacts, which would span three states.



Snowbasin expansion curtailed

Despite powerful political backing, a mega-development plan for Utah's Snowbasin ski area is not likely to progress beyond its planning stage. The Forest Service rejected a proposed 1,320-acre land swap that the Sun Valley Co. said was essentially expansion. The company requested the swap in order to expand seasonal ski operations at Snowbasin into a yearround resort (HCN 2/12/90). Wasatch-Cache National Forest Supervisor Dale Bosworth explained that his decision was based on interaction with citizens, elected officials and resource management specialists who helped draft the environmental impact statement. The Forest Service did grant 220 acres of public lands for "core development" but kept back 550 acres that Sun Valley's master plan described as "open space." Ogden Chamber of Commerce and Weber County officials said they would appeal the decision on Sun Valley Co.'s behalf. The 220-acre allotment left developer Earl Holding feeling "disappointed" and Rep. James Hansen, R-Utah, "outraged," reports The Salt Lake Tribune. But Utah environmentalists and many Ogden residents praised the Forest Service's decision, even though it will allow some development.

South Dakota loses ETSI case

A U.S. Supreme Court ruling involving the failed ETSI coal-slurry pipeline has proven expensive for South Dakota. The court denied South Dakota's effort to reinstate an award of \$600 million to the state, reports AP. South Dakota filed an antitrust case against Kansas City Southern Railway in 1983, claiming the company conspired to stop a coal-slurry pipeline because it would compete with railways (HCN, 4/28/86). The state said it stood to collect \$1.4 billion over 50 years for selling Missouri River water to ETSI, the acronym for Energy Transportation Systems Inc. ETSI wanted the water to transport Wyoming coal to southern states. In April 1988, a federal judge awarded South Dakota \$600 million, but an appeals court threw out the jury verdict, prompting the South Dakota appeal. To ETSI, the suit is irrelevant: The company decided to cancel construction of the pipeline in 1984.

Forest Service trails sink into the mud

Why does the Forest Service allow trails for hiking, biking and horseback riding to decay, erode or disappear? A recent Government Accounting Office report, compiled in response to congressional concern, finds that the Forest Service doesn't have enough money or people to fix up battered trails.

Of the 106,750 miles of trails within national forests, more than 75 percent are in the West. Many were originally broken by Native Americans, prospectors and herders for use as trade and travel routes. During the late 18th century, these paths became the major access for Forest Service rangers.

In the 1930s, under the direction of President Franklin Roosevelt, the Civilian Conservation Corps built additional Forest Service trails. By the mid-1940s, trail mileage reached its peak of 144,000 miles.

These trails were well maintained until World War II, but during the war years recreational trail-use declined and rangers relied more on newly built roads and airstrips. From the 1940s, almost no new trails were built and few were maintained.

Since the 1960s, recreational trail use has increased while unmaintained trails continue to decay. Reports from ninety percent of the nation's forests



Washed out bridge in Wyoming

show that the trail maintenance and reconstruction backlog includes 59,000 miles of trails. Five thousand miles of trail have deteriorated to the point that they are unusable or hazardous.

Western trails account for more than one-third of the maintenance and reconstruction backlog, reports the GAO. Trails in the worst shape are found in

Montana and Idaho. Montana's Flathead, Stanislaus and Deer Lodge forests need over \$21.4 million in repairs, while Idaho's Panhandle, Nez-perce and Clearwater forest trails continue to rot because of a \$36 million backlog.

In southern Colorado, the Rio Grande National Forest has one of the nation's worst maintenance problems, with \$7.8 million needed for repairs.

The GAO gathered data for its study by sending questionnaires to Forest Service staff. The agency also visited 15 national forests that contain varied trail types and conditions — 10 of these forests were in the West — and interviewed representatives from the American Hiking Society, Appalachian Mountain Club and American Trails.

Most Forest Service officials agreed with GAO's recommendations for reform. Over the next five years, the Forest Service said it plans to reconstruct some routes and build 8,400 miles of trails. Eighty-five percent of these new trail miles are slated for Western states.

Maintenance and Reconstruction Backlog on National Forest Trails is available from the General Accounting Office, Washington, DC 20548 (202/275-6241).

— Mara Rabin

Group wants to keep Wilderness wild

With \$20 in the bank, a law student, a seasonal ranger and a Forest Service retiree started the national group, Wilderness Watch, last spring, and already they are making waves on the Western conservation scene.

"The Forest Service views us as a radical organization since we are working in an area that hasn't been touched before," says co-founder Jim Dayton, a ranger in the Selway-Bitterroot Wilderness that straddles Montana and Idaho. Dayton, an environmentalist, wants to make sure the area is administered by his employer, the Forest Service, in keeping with the 1964 Wilderness Act.

Although the organization is young, Dayton says Wilderness Watch has already forced defense agencies in Minnesota and New York to initiate environmental impact statements. The Minnesota battle involved testimony from the group's president, Bill Worf, in a lawsuit to prevent mock combat flights over the Boundary Waters Canoe Area. After the state's national guard completed an environmental analysis, it agreed to cancel flights under 18,000 feet this year, and all flights next year.

In New York, another lawsuit required the U.S. Air Force to conduct environmental impact statements for proposed low-level flights of B-52s and F-111s over the Adirondack State Park.

"The Air Force, during the trial, said that the noise level of an F-111 at 5,000 feet was the same as a vacuum cleaner at three feet," says Worf. "So we are glad that they will be stopping low-level flights at 400 feet."

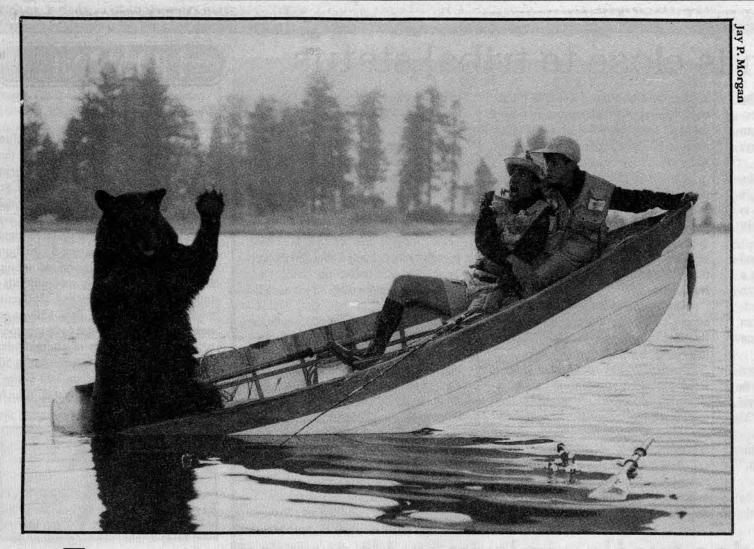
Now the group is fighting an outfitter who wants to develop storage-caches in the Frank Church River of No Return Wilderness along the Salmon River in Idaho. Wilderness Watch is also appealing a resort permit at Smith Gulch on the Salmon River, also within a wilderness area. The resort plans include a permanent septic tank, log buildings and electricity.

"We'd like to see an environmental buy-out," says co-founder Bobby Hoe, "with the Forest Service reimbursing the outfitter and then tearing the camp down."

"We are not interested in ecotage or radical action, only the letter of the law," says ranger Dayton. Adds Hoe: "We are in the middle of the road politically, but not ecologically."

For more information, contact Wilderness Watch, Box 127, Milltown, MT 59802 (406/258-6644).

— Mark Rutledge, Florence Williams



Ihank you, Research Fund givers, for helping to keep High Country News afloat

PUBLISHER'S CIRCLE

Robert Hutchins Fruita, Colorado

The Rex Foundation San Anselmo, California

ASSOCIATE

Mary Stranahan and Mary Bradshaw Dixon, Montana

Maryanne Mott and Herman Warsh Santa Barbara, California

SPONSOR

H.J. Grinnell Broomfield, Colorado

Patricia Reynolds and Peter Kirsch Bethesda, Maryland

Glenn Nelson Whitefish, Montana

PATRON

Leo Eisel and Nina Churchman Denver, Colorado

Richard C. McLean Boulder, Colorado

Jerry Cox Durango, Colorado

Philip and Marlys Robertson Manhattan Beach, California

Murray Whitaker Glendive, Montana

Diane Madigan Elko, Nevada

Robert and Debra McGimsey Eagle River, Alaska

Will B. and Margaret M. Betchart Cupertino, California

Ellen Manchester and Robert Dawson San Francisco, California

Morgan Hite Princeton, New Jersey

John Gless Philadelphia, Pennsylvania

Carl H. Cole Prescott, Arizona

Betsy Wolf and David Ream Salt Lake City, Utah

Russ Harvey Tempe, Arizona

Franz and Pat Jahoda

Rob Leutheuser Lakewood, Colorado

Elise Lufkin

Ketchum, Idaho Nelle Tobias

McCall, Idaho Randall Webb Aspen, Colorado

Theodore Wright New York, New York

FRIEND

Madeleine Von Laue Palo Alto, California

Norma McCallan Santa Fe, New Mexico

Phillips Seeding, Inc. Lafayette, Colorado

Roxanne Brickell Montrose, Colorado

Carol Cochran Tucson, Arizona

Louise Hinkson Salt Lake City, Utah

James and Carol O'Dowd Snowmass Village, Colorado

Robert Richards Denver, Colorado

Lee and Mary Jo Gribovicz Lander, Wyoming

Mark Pearson Palisade, Colorado

Robert B. Smythe

Chevy Chase, Maryland Patricia Hudson Colorado Springs, Colorado

John Freeman

Laramie, Wyoming Darlene Batatian

Pocatello, Idaho

Richard Reynolds and Mary McQuiston

Stephen and Wendy Lloyd-Davies

Alburquerque, New Mexico

Ted and Margherita Brich Hotchkiss, Colorado

Mally Kemp Ribe Seattle, Washington

Ann Baird Humphrey Kelly, Wyoming

W. Scott Donaldson Phoenix, Arizona

R.D. and Marie Working Golden, Colorado

Wilderness Office Earlham College Richmond, Indiana

Dorothy Riley Newhall, California

Jim and Mary MacInnes Rapid City, South Dakota

Robert Benson Missoula, Montana

Peter Thomas White Santa Fe, New Mexico Winter Park, Colorado

Greg Johnson Denver, Colorado

Jim Cheney

Paonia, Colorado

Edward F. Roskowski Grand Junction, Colorado

Cox and Hvoslef Silverthorne, Colorado

Kathryn Rupp

Elgin, Illinois

John Mitchell San Francisco, California

Salt Lake City, Utah

Elinor Willis West Haven, Connecticut

Dammar Bhadur Nepal

Dr. John R. Gustafson Rancho Cordova, California

Monte Dolack Missoula, Montana

Arthur H. Holmgren

Logan, Utah Sas Swigert

Belgrade, Montana

Harris L. Vowles Phoenix, Arizona

Samuel and Helen Klebanoff Richmond, California

Eric Gosney Aspen, Colorado

Janice Wayland West Chester, Pennsylvania

Michael Oliver

Susannah Lusk

Adrienne and Oliver Lowry St. Louis, Missouri

Stuart W. Olbrich Mountain Home, Idaho

Thomas Dwyer Pecos, New Mexico

David L. Pifer Reynoldsville, Pennsylvania

Sid Parker Buffalo, Wyoming

Christine and Raymond Arthun Franktown, Colorado

Emily Tracy Canon City, Colorado

Kenneth Conk Masonville, Colorado

Hugh and Diane Harper Boise, Idaho

Mike Robinson Bishop, California

George Gless Boulder, Colorado

Elizabeth Schaefer Elsah, Illinois

Edwin and Alison Inkley Seattle, Washington

Francis Hall Lone Pine, California

Shirley and James Sullivan Denver, Colorado

Jennifer Russell Washington, D.C.

David and Bette Seeland Denver, Colorado

Noel and Marg Poe Woodland Park, Colorado

Peter Miller Scottsdale, Arizona

Janet R. Huebner Sierra Vista, Arizona

Pacific Grove, California Holly Hunter Moose, Wyoming

Joe Oliver

Objectives: minimitim topido Keystone, Colorado

George F. Coen

Albuquerque, New Mexico Curtis Neilson

Twin Falls, Idaho

Jean Peters Flagstaff, Arizona

David Johnston and Rita Murphy Paonia, Colorado

Douglas Spencer Evergreen, Colorado

Andy Teetzel Healdsburg, California

Don and Mary Detmer Charlottesville, Virginia

Barbara M. Rumsey Santa Barbara, California

Amy Brunvand Durango, Colorado

Heather Campbell and Donald DeLaHunt Jensen, Utah

Jeff Hardesty Earleton, Florida

John Wiener Boulder, Colorado

Lorraine Higbie Denver, Colorado

W.A. Blood Kalispell, Montana

Earl Fisk Naches, Washington

Tommy and Cielette Williams

Albuquerque, New Mexico

E.J. Butler Missoula, Montana

Catherine Ciarlo Berkeley, California

Anne Dahl

Condon, Montana

LETTERS

THE STRAIGHT POOP

Dear HCN,

It's good to see folks concerned about solid human waste in the back-country. However, your review of *How to Shit in the Woods* by Kathleen Meyer and James Dryer's follow-up letter, "The Scoop on Western Poop," advise one method for all situations. It's not so simple.

There are two reasons why we all should be concerned about human waste in the backcountry: disease and disgust. No one likes to see human excrement in the woods; it's a rude and unmistakable sign that someone has been there before. But beyond esthetics, waste can be dangerous - pathogens use feces to spread from one human to another. The most common transmissions are direct contact with feces, contact with a contaminated insect, or ingestion of contaminated water. Most of us learned how to avoid the first two in childhood; it's the last water contamination - where we fail miserably.

But is this even a problem in most remote areas? In one of several studies, researchers from the University of California investigated the water quality of one of the most popular lake basins in the Sierra Nevada. They found bacterial levels in the water were usually low enough for safe drinking.

Not so fast; pathogenic bacteria aren't the only problem. The recent rise in the painful and debilitating disease giardiasis — spread entirely through water — is excuse enough to clean up our act. Thus, the best method of solid body waste disposal should serve these objectives: minimize the chance of water pollution, minimize the chance of anyone finding the waste, and maximize the rate of decomposition.

Common sense says burying feces covers the bases, but research indicates otherwise. Montana State's Ken Temple tested this theory by burying feces inoculated with pathogens underground for a year. Results were disappointing. Substantial numbers of pathogens survived

the entire year buried in the most organic part of the soil. Furthermore, numbers scarcely varied with either depth of burial or the type of site. Quite simply, the idea that burial renders feces harmless in a short period is plainly wrong; buried feces can remain a health hazard for years in our Rocky Mountain environment.

What to do?

In remote areas where human use is extremely low, the chance of discovery is small, and the distance from water is at least 200 feet or more, no significant health hazard should result from surface disposal. Choose a dry, open exposure that's not likely to be visited by others. Scattering and smearing feces with a rock or stick maximizes exposure to the sun and air, and decomposition will be more rapid than when buried.

In popular backcountry, it's better to bury waste in shallow catholes well away from water sources. Although decomposition is slower than at the surface, it's more important to decrease the likelihood of visual contact with others. When traveling in a group, the main objective is to disperse everyone's waste, not concentrate it; thus latrines are illadvised. Choose a level spot and dig a hole several inches deep in the organic layer of soil where microorganisms are most abundant. When you're done, burn all of your toilet paper (if you must use it), and after your fire is dead out, use a stick to mix soil with your feces for quicker decomposition. Then cover your cathole with an inch or two of topsoil. Finally, camouflage the surface.

In popular desert areas with little soil organic matter, burial is still best, but not exactly as Dryer recommends. Avoid trees and vegetation that obviously indicate water drainages, and placing rocks over your cathole only disturbs sensitive natural microenvironments. Although excavation by animals can occur, it is relatively rare compared to potential water contamination. Deep burial preserves solid waste since the sterilizing effect of the sun's heat is unavailable, microorganisms are low in number, and aeration is reduced because of the compact nature of many desert soils. Shallow burial, on the other hand, minimizes visual contact by others and high summer temperatures near the surface destroy pathogens in a relatively short time.

Bruce Hampton Lander, Wyoming

The writer works for the National Outdoor Leadership School in Lander, Wyoming, and wrote with Dr. David Cole the book, Soft Paths — How to enjoy the wilderness without harming it.

DIFFERS WITH HATHAWAY

Dear HCN,

I'm writing in response to the letter from former Wyoming Gov. Stan Hathaway that was printed in your Jan. 1, 1990 issue. I can't argue with his Wyoming history (as a Coloradan, what do I know, anyway?!), but must take issue with his final paragraph, in which he trots out an overworked — and totally bogus — justification for development at any price.

Mr. Hathaway states that "... our young people have a right to make a living here" while implying that, without development, they do not. Now, unless the commies have sneaked into Wyoming in the dead of night and rescinded the Bill of Rights, I think they do have that right. Every American has the right to try to make a living anywhere they please; the issue Mr. Hathaway is trying to address is whether or not society has an obligation to provide people with a job, whether or not they've earned it, and whether or not they want it

It sounds impressive to say that 50 percent of the high school graduates in Wyoming cannot find an economic opportunity in the state. This cleverly ignores, however, the likelihood that 50 percent of the graduates aren't interested in remaining in the state. Most of Wyoming, as with most of the Rocky Mountain states, including Colorado, is rural. As one who grew up in a small town in New York, as the parent of a child who just left a small town in western Colorado, and as an observer of life, I can assure Mr. Hathaway that the graduation dreams of a large percentage of high schoolers in our rural areas do not include staying home, regardless of the economic opportunities available. This does not imply that there is anything wrong with the area in question; these environments just don't appeal to many 18-year-olds. By the time they're 30, they may well want to come back, or "return" to a small town environment elsewhere; if that's something they really want, they'll find a way to do it.

The comment that 90 percent of the University of Wyoming graduates have to go out of state is similarly misleading. You can bet that a lot of them came from out of state in the first place, drawn by such things as academics and/or the lure of a beautiful Western environment. Does Wyoming owe these people a job, or is it good enough that they can compete in the job market with everyone else? The latter, I say.

The concept that destructive forms of development can be encouraged because they provide jobs for our children just doesn't make a whole lot of sense. A large percentage of kids aren't interested in the first place; those that did stay would find less reason to hang around as the effects of the development became evident. As with burning the siding to keep the house warm, screwing up the environment to provide jobs is a lesson in the law of diminishing returns.

I think Wyoming is a great place,

and I think that those who want to live and work there will find ways to do it. Once they have, they will contribute much more to a vibrant and productive society than one who is handed a job he may or may not want.

Finally, I have been an elected official since 1984; most of the citizens I represent are here by choice, rather than having been handed a job. They know, as do I, that the future of our region will rely on the preservation and conservation of our unique environment. This future will be served by making development responsive to society's needs; in some cases, this will require that we "just say no."

Bill Gray Carbondale, Colorado

The writer is the mayor of Carbon-dale.

"IRRESPONSIBLE JOURNALISM"

Dear HCN,

Your recent article on "Poachers: driving wild things to extinction" contains a table showing prices for North American wildlife based on U.S. Fish and Wildlife Service figures.

It is irresponsible journalism to publish figures which indicate that a particular wildlife species is a walking "gold mine." It only encourages those who may be thinking of breaking the law further.

The fact that some of the figures are inaccurate only compounds the issue. The prices quoted by the USF&WS for the peregrine and gyrfalcon are purely fictitious. No one has ever paid \$120,000 for a gyrfalcon and the \$10,000 figure for a peregrine is not accurate. The figures are based on what an informant thought he could get during Operation Falcon for the birds overseas. In fact, during that operation the highest prices that the sting agents received for any falcons were \$5,000 for a gyrfalcon and six peregrines went for \$10,000. The current black market prices for gyrfalcons are between \$10,000-\$30,000 (see Harrowsmith [Canada version] No. 86, Nov./Dec. 1987) and a peregrine can be bought today from falconers for \$500.

> Timothy Osborne Galena, Alaska

Dear friends,

(Continued from page 2)

include, The Roadkill Cookbook, Flattened Fauna (a guide to roadkills), and Whitetrash Cooking.

Thanks to HCN reader Karen Zuko of Jamestown, Colo., who alerted us to the retailers' reaction.

Development Director Linda Bacigalupi says readers should soon receive a brief communication from *HCN*. It contains the results of last year's survey and also has a few new questions we hope you will answer for us.

New interns

Mark Harvey is HCN's first travelling intern. He will spend half his time in the office, and half his time on the road. His first trip, to Green River, Wyo., was in pursuit of a story about a proposed medical waste incincerator.

Travel is nothing new to Mark.
Until he was 20, the Aspen native competed on the national ski racing circuit.
After retiring from that, he turned to college, graduating from the University of Washington in 1988 with a degree in International Studies, and with a special-

ty in Latin America, where he has spent a great deal of time.

Mark has worked as a carptenter and ranch hand and will be teaching for the National Outdoor Leadership School this summer. An avid bicyclist, he waffles on the issue of mountain bike access to public lands.

Peggy Barnett is the first HCN intern to arrive in Paonia with her own house, a small travel trailer. She has a mobile background, having grown up on a farm in Indiana, but moving with her family to Virginia, Alaska and Utah before coming to Colorado. While in Utah, she earned her master's degree in anthropology at the University of Utah and worked for several years as an archaeologist.

Peggy then returned to college for a second undergraduate degree; she is now a senior at Mesa State College in Grand Junction, Colo., majoring in mass communications and working on the college newspaper. She lives on a farm near Palisade, Colo. In addition to cats and chickens, she is attempting to improve the farm so that it also becomes home to more wildlife.

-Ed Marston for the staff

VICTORIAN AGE

Dear HCN,

Harvey Lance may be dumbfounded, but his letter (12/18/89) left me astounded — finer sensibilities indeed. He must be living in the Victorian Age. The subject of Ms. Meyer's book is probably the most basic issue in terms of wilderness travel etiquette and prevention of disease.

Many people do *not* know "how to shit in the backwoods" and the result has been more and more illness and the annoying need to drink terrible-tasting treated water or to carry cumbersome filtering equipment. If the book and Bert Lindler's hilarious review get the point across that there are better ways than what one currently views around some otherwise pristine alpine campsites, it's worth offending a few "finer sensibilities."

Barbara Brown Idaho Falls, Idaho The County Line April 0 200 4 1



The Big River Old Growth Preserve is surrounded by private land

Ancient forests: another issue to divide the West

Even from a distance the difference is obvious. The tree tops are bent and broken, the branches ragged and uneven. These trees show their age.

Up close, it's a junkyard of rotting logs scattered about, blocking the deer trails I try to follow. Ferns and vine maple grab at my ankles. The air is

moist and still. The ground is a sponge, littered with twigs, branches, cones, needles and leaves. Massive firs rise from it, along with thin, straight-barked cedars and moss-covered maples. Young firs with sparse needles show the strain of fighting for sunlight in their parents' shadows.

For years, this has been known as old growth, although recently those who would protect it have given it a more poetic appellation: the ancient forest.

It once stretched in an unbroken sea from Alaska to San Francisco. Today, what remains are mostly isolated pockets that dot wilderness areas and national forests. Gone are the 20-foot diameter monsters, cut by timber companies that came in early, took the rich, low-elevation prizes, and left the dregs to the public agencies. Today, the remnants of those dregs are hard to find.

To get to this spot, the "Big River Old Growth Preserve," which is surrounded by private land, I had to drive 50 miles from Eugene, Ore., then circumvent Weyerhaeuser's locked gate with its "no trespassing" sign, cross a wide clearcut where splinters and trunks have been left to bleach in the sun, climb up steep steps cut by elk hooves, slosh through several marshes, and struggle over and under fat logs, fighting vines

Ancient forests ...

(Continued from page 1)

• Increase "alternative forestry practices," including buffer zones around old growth, and corridors between stands;

 Close loopholes on raw log exports from federal lands and "encourage the states" to tax log exports from public lands (the federal government cannot impose export taxes);

 Provide tax breaks and technical assistance to improve management of private forests and to retool mills for second growth.

The Audubon Society responded with a similar proposal, and in February the Sierra Club presented a plan with the same framework. It also included a call for federal support of economic diversification and "environmentally sound public works projects to provide jobs during the transition" of the Northwest economy.

By March, the three groups had joined with the National Wildlife Federation and Oregon Natural Resources Council to produce a bill they could all support. The final product, says Rindy O'Brien, director of government affairs for The Wilderness Society, will deal only with protection of the forest, not with log exports or economic diversification. It will not, adds Fran Hunt of the National Wildlife Federation, call for a specific cut level, but instead will "set up a process for protecting ancient forests."

Bolder bill proposed

But the bill, which is likely to be introduced in April, will not go far

enough to please everyone. A bolder proposal is being offered by the one-year-old Eugene-based Native Forest Council, whose chairman is Harry Lonsdale. Lonsdale, an Oregon businessman, is the Democratic challenger to Mark Hatfield in his bid for a fifth straight term in the U.S. Senate.

Although he faces an uphill battle against the powerful Republican, Lonsdale is trying to tap a widespread public sentiment with his slogan "Oregon timber for Oregon jobs," as well an Oregon tradition to vote out popular incumbents after four terms.

The bill from Lonsdale's group, called "The Native Forest Protection Act," would:

• Immediately stop the logging of "all remaining virgin, native and ancient forestlands," and turn them into wilderness areas, national parks, forest preserves or research areas;

 Prohibit export of all logs, minimally processed logs, chips and pulp from both public and private lands;

Close and revegetate non-essential forest roads;

• End all below-cost timber sales;

 Transfer all BLM timberlands to the Forest Service.
 The bill's co-author, Tim Hermach,

says it will be introduced in April or May, although he admits its chances of passing are slim.

"I think it's equally impossible to get either bill, in good form, through the drug-induced fiction called Congress," says Hermach, who quit as editor of a Sierra Club newsletter to help start the Native Forest Council. "We haven't done our job of educating the public yet.

"The national groups' bill will protect some of the ancient forest in the

Northwest, but not in the rest of the country. It will save some, maybe half, of the ancient forest, but will release the other half to the chainsaws," he says.

The national groups only partially agree. Congress "isn't ready yet" for the council's measures, concurs Melanie Rowlands of The Wilderness Society, although "in the long term we support those kinds of moves." Politically, she says, "we think ours is a better way to go."

Before it reaches either the House or Senate, any bill will have to clear their respective agriculture committees, which are busy working on a major rewrite of the Farm Bill. With less than 60 days left in a body not famous for speed, this legislative session may only give the ancient forest protection bill what one observer called "a rolling start for next year."

"It's getting late in the game for a long-term solution to the old growth controversy," says an aide to Oregon Rep. Peter DeFazio, D. "A variety of people are saying there's going to be another short-term solution, a 'Son of 318.'

A wild card in the game is the U.S. Fish and Wildlife Service's pending decision whether to declare the spotted owl a "threatened" species, a move that could make much old growth off-limits to logging. The agency is scheduled to decide by June, although it could delay the decision for another six months.

A related wild card is a soon-to-bereleased federal inter-agency committee's report on protecting the spotted owl.

After a briefing on a draft of the report, Forest Service Chief F. Dale

Robertson said that his agency "is going to have to provide some additional protection over and above our existing spotted owl plan. But how much? That's still to be worked out."

But, said Robertson, in light of the report, the U.S. Fish and Wildlife Service decision, and Northwest national forest plans that call for an overall 20 percent reduction in timber-cut levels, no new legislation is needed this year to "carry forward in the management of these forests."

Nonetheless, Congress is expected to act, if only to perform its annual function of setting the total level of timber cuts on national forests. Congress is also likely to vote on a bill, or bills, concerning log exports from public lands. Sponsors in the Senate are Packwood and Hatfield; in the House, DeFazio.

One bill would allow states to ban exports from their lands. Oregon voters, by a 9-to-1 margin, have already indicated they want to do this, and the Washington state legislature has been considering similar action.

Another bill would make permanent the ban on raw log exports from federal lands and close loopholes in the existing law. The sponsors are currently working up their versions.

As deals continue to be cut in the halls of our nation's capitol, however, centuries-old trees are also falling in the hills of the Northwest.

Jim Stiak lives in Eugene, Oregon, and reports frequently from the Northwest for *High Country News*. This and other related stories were paid for by the High Country News Research Fund.

down low and cobwebs up high.

I hike up to the base of a tree older than Newton's First Law of Motion. It's a Douglas-fir, the predominant species west of the Cascades, although equally impressive cedars can be found.

It's wider than I am tall, with a gnarly bark of deep cracks that are homes for some of the hundreds of species of insects that inhabit the ancient forest. The trunk shoots straight up, ending in a ceiling of green hundreds of dizzying feet above. Rodents called voles live there who may never touch the earth. Branches don't start until twothirds of the way up. The lower ones, shaded by the higher limbs, have long since fallen to become part of the humus below.

It's the rotting humus that led timber fellers to call this forest "decadent." They've long argued that they do the earth a favor by removing trees that have stood since Columbus got off at the wrong stop. That clears away decaying timber for new growth, new trees, new raw materials.

So, for the past century and a half, lumber companies have cleared the slopes like giant Gillettes over hairy chins. But the days are gone when a hard-hatted crew could fell a grove with no more noise than their chain saws.

At a logging site now, they're likely to find people singing, stretched across the road, chained to the trees, and hanging from the branches. Before they lower their buzzing blades, they must look for 40-penny nails driven deep into the trunks.

Douglas-firs taller than Hiltons are still being dropped, dragged, trucked, and shipped to Asia or chipped into particle board, but some people are going to great lengths - and heights - to save them.

Four people lived in the Millennia Grove, on plywood platforms 100 feet up, for a week. Thirty were arrested at the North Roaring Devil timber sale in Oregon's Cascades, 20 at nearby Devil's Ridge. Hundreds of others have been arrested in the Kalmiopsis of southern Oregon, the redwoods of northern California and White Salmon of Washington.

To the increasing protests, the timber companies have responded with speed. Large crews are gathered to "harvest" the biggest trees quickly. If some protestors lurk in the branches, they just wait for a cherry-picker and the sheriff to come and pluck 'em like cones.

To some, it's a matter of dollars and sense. There are children to feed, homes to maintain, Blazer payments to make. Logging is a good living, if more than a tad dangerous. The pay is adequate, the views incomparable, the work satisfying.

But to others, it's like cutting off your nose to feed your face. These people, who generally don't depend on timber to pay the rent, see the trees as more valuable standing.

The thick soil of this forest absorbs the abundant rains, controlling floods and producing the water that beer commercials brag about. Snags and fallen trunks in the ancient forest provide refuge for dozens of animals. And the church-like calm attracts another species that some see as crucial to the economic future of this region - fisherman, hunter, hiker or just plain money-spending tourist.

That's why Big River, these 40 steep acres of silent giants I wander amongst, was made into a park by the Lane County Commissioners. It was one of Peter DeFazio's last acts before he was elected to Congress.

It was not a consensus decision. Four of the five commissioners wanted to log the county-owned land, and there was no money appropriated for trails or an easement through Weyerhaeuser's land. But for now, these elder evergreens have been spared the axe.

The Forest Service and BLM, guardians of industrial profits that they've become, don't operate that way. When Lane County Commissioners wanted to turn an old-growth mecca called Bunker Hill into a park, the Bureau of Land Management stalled until the trees were cut and the point was moot.

About the only trees the Forest Service is willing to save are those close to concrete. The agency maintains visual corridors of trees that line the highways, so that tourists in campers won't see beyond the foliage.

But drive up almost any of the hundreds of Forest Service roads that snake through the land, and you can gaze down upon the naked truth. Squares of shaved hillsides, tall firs and replanted slopes form a haphazard checkerboard of browns and greens as far as you can see over the rolling ridges.

No one knows just how much of the ancient forest is left. The Forest Service, The Wilderness Society and the other players can only guess and disagree. Ten percent is often quoted for the roughly 60 million acres that once blanketed the Northwest.

No consensus exists on what "old growth" is. Over 100 years old? Over 200? The only sure thing is that the logging of ancient trees eventually will stop.

At current rates, all the old growth that's legally harvestable will be gone in anywhere from five to 50 years, depending on whose estimate you use. Conservationists now discuss the forest's future with phrases like "the last buffalo hunt."

So forget Lebanon and Salvador, here is the war that's divided the Northwest, even if the names of the battlegrounds - Bald Mountain, Opal Creek, Sentinel Stand - are not etched into the national conscience like Gettysburg and Guadalcanal.

Pick up a local paper, turn to the letters to the editor, and you can catch the flak. "About 95 percent of these socalled environmentalists are nothing but a bunch of hippies." "Anyone have a recipe for spotted owl? Food stamps won't go far after I've lost my job." "Cutting the last of the old growth is just another example of the rich getting richer while the workers kiss the foot that kicks them out the door."

These giants may eventually fall,



Clearcutting on steep slopes in southern Oregon

but for now they create their own space, an immense chamber of solitude. Nature's own mall. The sun streaks through the high canopy in sharp lines of light and shadow.

The tree tops sway and hiss with the wind, but down in the belly of the cathedral it's silent. It's been this way for 500

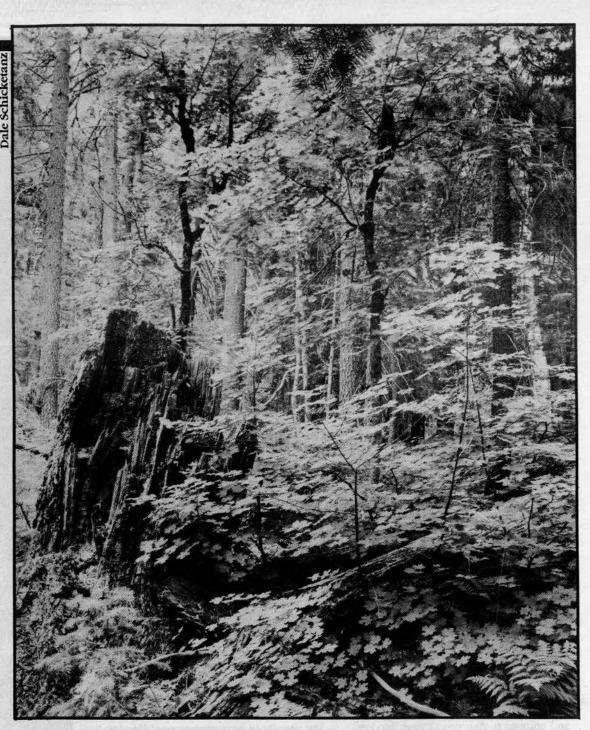
years. Today, the only sounds are the chatters and coos of goshawks and warblers, the hum of insects, and, somewhere far in the distance, but edging ever closer, the downhill whine of a loaded log truck.

- Jim Stiak



Neighbors: This clearcut is adjacent to the Big River Old Growth Preserve

The most complex ecosystems on earth



he forest was born in fire.

Mona Lisa had barely cracked a smile when a lightning bolt ignited flames that left a landscape of dead snags and charred logs. The logs held the soil in place through the winter rains, fertilizing it as they slowly decomposed.

Grasses sprouted, fixing nitrogen in the soil for shrubs, which in turn prepared the ground for firs and cedars that grew to be among the largest of nature's creations, until five centuries later, they are at the center of controversy.

The old-growth Douglas fir forests of the Pacific Northwest have long been considered "decadent," biological deserts where wood rots faster than it can grow. Logged steadily over the past 150 years, only 5-20 percent of the original forest between northern California and Canada remains. The U.S. Forest Service, which in 1981 published a report predicting that the last of their unprotected old growth could be gone within 50 years, has now begun to seriously study its dwindling resource.

In stands around the Pacific Northwest, researchers are weighing debris from the forest floor, measuring water flows in streams, capturing insect communities on microscope slides and working on studies designed to last into the 22nd century. They've discovered that old-growth forests, far from being decadent, are among the most complex ecosystems on earth, habitat for dozens of animals that might not be able to survive anywhere else.

They contain twice as much organic material per acre as tropical rainforests, and hold enough water to protect against fires and floods. They produce some of the world's purest water and most abundant fisheries, supply much of the nutrient material in estuaries, and are a source of life as far away as Hawaii. They may also hold secrets vital to forests throughout the world's temperate regions.

"It's the only blueprint of the

ancient forest that we have, the entire genetic code with all its parts functioning," says Chris Maser. "There are more pieces in one acre than in the entire NASA space program, and if we lose it, we may never ben able to put it back together."

A former federal Bureau of Land Management research scientists who now works as a private forestry consultant, Maser is one of the most passionate protectors of the remaining old growth. As evidence mounts that forest productivity is declining worldwide, he says, old growth is insurance against the future.

"Nature designed the forest," he says, "man can only simulate it. If tree farms fail, we'll need old growth to learn from."

As an example of what the forest can teach us, Maser points to a fungusfir-furry animal cycle that's still poorly understood, but appears to be essential for healthy forests.

Fungi that wrap themselves around the tips of tree roots give water and minerals to the trees and, in return, receive carbohydrates made through photosynthesis. Where the fungi pop up through the soil, they form truffles, the pungent mushrooms that are a favorite food of the vole and the dormouse. After dining on the truffles, the animals spread the spores by excreting them around the forest floor.

In 1981, Maser contributed to a pioneering study that defined the ecological characteristics of the old-growth Douglas fir forest which stretches from California to Canada, from the Pacific coast to the high Cascades. Under the chairmanship of Jerry Franklin, a Forest Service plant ecologist who's considered the dean of old-growth researchers, a team of scientists concluded that Douglas fir forests achieve old-growth status after 175-250 years and can live up to 1,400 years. Because of fires and other disturbances, however, there are few stands over 750 years.

But what gives the old-growth forest its ecological trademark is not the age of the trees. It's their size. Douglas firs can grow to be more than 30 feet around and 300 feet tall. A single tree can have 60 million needles, with enough surface areas to cover a football field. These conditions, Franklin's team found, are the "optimum habitat" for animals such as the northern flying squirrel, the red tree vole, and the forest's most famous resident, the northern spotted owl.

Because it's at the top of the food chain, and so unintimidated by humans that it's easily studied, the spotted owl is used by the U.S. Forest Service as an "indicator" species — the canary in the coal mine — by which to gauge the health of the forests. The prognosis has not been good.

After biologists studied the owls' wide-ranging flights, and population geneticists computer-analyzed the data with logging rates, they concluded that the northern spotted owl faces extinction. Since then, the owl has been used in court battles to halt the logging of its habitat, and the U.S. Fish and Wildlife Service is deciding whether to formally list it as a "threatened species" under the Endangered Species Act.

The Forest Service has been asked to also consider "threatened" status for the marbled murrelet, a robin-sized bird that spends most of its time at sea, but lays its eggs in the mossy branches of large conifers. Other birds, such as goshawk, Vaux's swift, pileated woodpecker, Townsend's warbler and Hammond's flycatcher, may also depend on old growth to maintain viable populations. Of all the world's forests, says Jerry Franklin, old growth "probably has the biggest resident bird population."

Deer and elk depend on the oldgrowth forest for shade in the summer and forage in the winter. In summer, the forest floor can be 50 degrees cooler than on nearby clearcuts. In winter, the ground will often be clear when snow and frost blankets younger forests. More than 100 species of mosses and lichens occupy the forest — up to 66 pounds per tree — providing a high quality food when snow covers other plants.

Old growth also contains more than 1,500 species of insects and spiders. Many of them, predators of insect pests, act as barriers to the spread of region-wide pest outbreaks, and are a potential source of biological control of destructive insects.

Several plants also find their best habitat in old growth, including some that hold promise as medicines. The bark of the Pacific yew, for example, is being experimentally used to combat certain cancers.

"Old growth is a very rich source of biological diversity," says Franklin. "And the more organisms you have, the more options you have for the future."

At the Andrews Experimental Forest, outside Eugene, Ore., more than 160 old-growth research projects are now investigating what old growth holds for the future. One of the more far-sighted projects studies how decomposing logs release their carbon and nitrogen.

More than 500 logs have been placed around the forest, and slices, called cookies, are cut off and examined every few years. The study is designed to last 200 years.

"We have a companion program in cryogenics," jokes ecologist Arthur McKee, "so the principal investigator can be around for the conclusion."

McKee, who is site director at the Andrews, says that old-growth forests contain 1,000 metric tons of carbon per acre, twice that of tropical rainforests. This carbon "sink" may be a slight hedge against global warming.

Old growth's fat trunks are also storehouses of soil nutrients. The decomposition study has shown that logs, as they become saturated by rain, drip water that's rich in nitrogen. Since nitrogen is the limiting nutrient in forest productivity in the Northwest, downed logs, which can take five centuries to decom-

pose, and remain intact even through fires, may be critical for healthy soils.

Other studies have shown that a single trunk can hold 2,000 gallons of water, and an acre up to 264,000 gallons, or one and one-quarter inch of rain. This acts as a reservoir to protect against the forest's number one summer enemy, fire. Fires that destroy young forests often do minor damage to old growth.

In dry weather, the reservoir transpires through the trees' needles, producing a cooler, moister local climate. When it rains, it fills again, like a lake behind a dam, becoming a buffer against floods.

This flood resistance helps produce some of the world's most plentiful fish runs. Logs falling across streams also help, creating pools of trapped sediment and gravel in which salmon spawn and hide from predators

Logs that float downstream to estuaries are quickly invaded by tiny wood-boring gribbles, which grind the wood into a powder that supplies much of the nutrient of the estuary bottom. The fallen trees, their massive root systems caked with clay, create shelter underwater for sturgeon, starry flounder and salmon, and perches above for bald eagles, herons, egrets, cormorants and brown pelicans.

Logs in the open sea are colonized by shipworms and barnacles, and attract schools of small fish, which in turn attract predators like tuna. Whole ecological communities follow these floating forms, sometimes for tremendous distances.

Explorers and missionaries in Hawaii in the early 1800s described the double canoes that local chiefs would make from huge Douglas fir logs. More recently, scientists combing beaches there discovered that most of the driftwood came from North America.

Waterlogged wood that sinks to the bottom adds carbon to the ocean ecosystem. "Half the material on the mid-continental shelf is lignin from old growth," says Chris Maser.

As the richness and complexity of old-growth forests has become known, Franklin and others have championed what's being called the "new forestry." Logging now is usually done in clearcuts, where all the trees are felled, with the marketable ones trucked to mills and the others pushed into "slash piles" and burned.

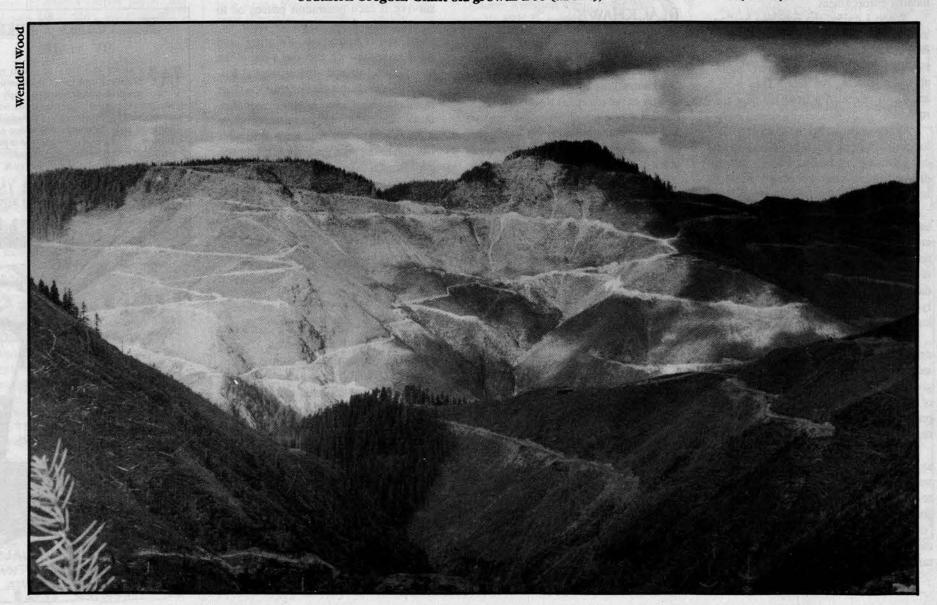
The new forestry, calls for leaving a selection of standing trees and downed logs to maintain habitat for wildlife and to return nutrients to the soil.

In that way, the basic structure of the forest will be preserved, and the secrets of the ancient forest can be protected for future researchers to discover.

— Jim Stiak



Southern Oregon: Giant old-growth tree (above), and massive clearcut (below)



GUEST ESSAY

Forestry Newspeak prevents us from seeing the ecosystem

_by George Wuerthner

For a long time I used to say girls when referring to women. Use of the word girl in reference to a woman infuriated my wife, who continually reminded me that the term girl had a host of values attached to it, including a subliminal message of immaturity when used to describe an adult female and thus the inference that the individual was perhaps less capable. Certainly that was not my intent; however, my wife, quite correctly, pointed out that the word girl is a value-laden term that has many other subtle meanings attached to its usage.

Similarly, we have many words we use in describing natural resources which have implied values attached to their usage. For example, foresters often refer to trees past the age of maximum wood production as "overmature." To many people, including most foresters, the word overmature has many other connotations, including that such a forest is declining in health. An overmature forest is one skidding towards "decadence" — another favorite term of foresters.

Both overmature and decadence are more economic descriptions than biological values. Nevertheless, intended or not, these terms carry a whole host of implied values which, biologically speaking, are inaccurate.

Recent research by forest scientists has shown that the time when a tree is alive represents only a small fraction of its ecological "life" and, as a consequence, its total biological value. Some scientists are even beginning to suggest that a dead tree is more valuable — from an ecological perspective — than a live one. In terms of the forest ecosystem, there is no such thing as a "decadent" forest. To an ecologist, a

"healthy" forest is one that has dead and dying trees. A timber stand "cleaned up by foresters" is a "sick" forest.

For instance, a stand of dead and dying trees performs many ecological functions that are not produced by a younger stand. The abundance of snags found in older tree stands are important homes for cavity-nesting birds, many of which feed on insects. Studies have shown that predation by birds can reduce insect populations by 72 percent in one summer. By removing dead trees, we potentially increase insect populations and we get what we may inaccurately call an "epidemic."

However, in a natural forest, this would have a self-regulating influence, since more dead trees would result in more insect-eating birds, which would in turn help to regulate insect numbers. However, when we log a stand with an abundance of dead or dying trees on the assumption that we are protecting the forest, we may be in fact removing some of the forest's own defenses.

Similarly, we almost universally speak about fires "destroying" the forest. Headlines proclaim so many acres "destroyed" or "damaged" by fires. Most people use these pejorative terms unconsciously, even though they have very strong negative connotations.

Most ecologists would dispute the idea that wildfires destroy a forest. They might talk about how a fire has "created" age-class diversity or new habitat for wildlife. However, even these terms are valueladen, showing how inadequate our language may be for describing such ecological events. It's almost impossible to avoid saying fires "destroyed" so many acres — even if you are conscious of the values hidden in that terminology.

Terminology has a big influence on our way of

thinking and the way we perceive issues. It also affects the way we allot funds for public lands. Since we view dying trees as a disaster, we spend a great deal of money to keep forests free of disease, insects, fires and other natural agents which our language and foresters tell us are "destroying" the forest. Not only do we frequently spend more protecting the trees than they are ultimately worth as timber, but we often destroy the ecological processes that ultimately preserve the forest ecosystem. It is not the forest which is destroyed by fire, blowdown, insects or disease, only the trees' value for timber production.

We need to purge value-laden terms from our vocabulary or at least use them in a more accurate fashion. Foresters know a little — a very little at that — about how to grow trees for timber production, and they — and the rest of us, myself included — know almost nothing about how a forest grows. A forest is more than trees. A forest should more precisely include the interrelationships between trees, soils, water, insects, fungi, fire, wildlife and a host of other influences most of us don't even know exist, much less understand.

It is not the forest that is "overmature" and "decadent," but rather it is the underlying assumptions and values that are engendered by such words. Given what we already know about the complexity of our forest ecosystems, such value-laden words should be "clearcut" from our vocabulary.

Perhaps as more women choose careers as foresters they will begin to change the way the "boys" who have dominated forestry think about language and its influence upon the way we view forests.

The writer is a freelancer and naturalist in Livingston, Montana.

LETTERS

SOME POACHING IS EXCUSED

Dear HCN,

The wildlife poaching problem cited in your Dec. 18, 1989, issue is due in part to wildlife agencies that propagate excess game populations out of bureaucratic self-interest at the expense of funding enforcement.

When I called the poaching hotline in Arizona to report two men in camouflage spotlighting meadows from a slow-moving Jeep, I was told they were "probably just looking for deer." They were, and dawn revealed a fresh kill near the road.

When once I tried the Colorado hotline an answering machine advised me to call back during business hours. When did poachers start keeping business hours?

Because most poachers are lazy and hunt from motor vehicles (as well as most of the licensed hunters in my neighborhood), we should keep roads out of roadless areas, close more back roads during critical winter seasons, and greatly increase the penalties for carrying a loaded weapon inside a motor vehicle.

And since there are more rural deputies than game officers, why not increase their training in wildlife law and give their agencies incentives in the form of wildlife enforcement funds in direct proportion to the previous year's successful prosecution record?

Finally, we need an educated public to be the eyes and ears of the same game warden. I've heard too many law-abiding neighbors excuse poaching as long as it's done by "locals" rather than the dreaded "outsiders" like "city people." Would they feel as kindly if a local stole their car?

The non-hunting public could

become more involved if they weren't locked out of the decision-making process of game boards and commissions. Proportional representation would heighten involvement, awareness and participation. Whose wildlife is it anyway?

John Walker Coaldale, Colorado

MONEY TALKS AT BLACKHAWK

Dear HCN,

I am writing to update you and your readers on the efforts of Rocky Mountain Land Stewards, Unlimited, to acquire and preserve the property on Blackhawk Mountain which Joanna Sampson wrote about in HCN, 10/9/89. Our experience reflects on the underlying competition between short-term economic interests and the long-term interests of the environment and our species.

When I wrote before, soliciting contributions for this undertaking, I had spoken with Mrs. Sampson a couple of times on the telephone. I thought we had agreed on the principles that Land Stewards would pay her taxes for her (about \$5,000) to relieve her from pressure to sell quickly, if she would give us a year to raise more money and to negotiate a reduced purchase price that was in keeping with her desire that the property never be "developed". But when it came to setting that agreement down in writing, and accountants and lawyers and real estate agents got involved, the rules changed. We were asked to put down seven times the annual tax rate, in two weeks, as a non-refundable deposit, and the final price for the property was not reduced one cent from the \$219,000 originally set when Mrs. Sampson was planning to sell for development.

I am not implying that these conditions were unreasonable. But they were beyond our means, and beyond the help we saw coming from your readers and others we contacted. Once again, the deciding factor in the competition for land use was money. So long as this is the case, land will be bought by those who have money and land will be used by them to make more money.

The laws of evolution do work. No individual survives for long, but species survive if each generation passes on to its descendants the means for their survival and reproduction. Keeping land wild is a way we can pass on clean water, clear air and environmental balance. If enough people decide that these assets are crucial to the survival of their descendants, they will make the economic sacrifices necessary to keep land wild. But when our own generation's immediate interests take precedence, wilderness will lose.

Conrad Lindes Middleburg Heights, Ohio

MORE ON BLACKHAWK

Dear HCN,

We would like to make a correction to a letter from Conrad Lindes, director of Rocky Mountain Land Stewards Inc. (HCN, 12/18/89).

The letter was soliciting funds to purchase the Blackhawk Mountain wilderness which we own and which was featured in a guest essay in HCN Oct. 9, 1989. Rocky Mountain Land Stewards Inc. did not have an option to buy at the time the letter was written, and have since decided not to take an option on the Blackhawk Mountain property. We regret that no agreement could be reached for the purchase of the land by a nonprofit group.

Our Blackhawk Mountain property

is, and has been, listed for many months with Walnut Realty in Boulder, Colo. We would like your readers (many of whom got in touch with us after my article appeared) to be aware that funds should not be sent to Rocky Mountain Land Stewards Inc. for the purchase of our Blackhawk Mountain wilderness.

Joanna Sampson Boulder, Colorado

RECYCLED PAPER BY MAIL

products, note cards, stationery, gift wrap, and many printing, copy, and computer papers. Compared to virgin paper, producing one ton of recycled paper uses half the energy and water, saves 17 trees, results in less air and water pollution, and saves landfill space. Send for our 32-page color catalog today and try it.

EARTH CARE PAPER INC. Box 3335, Dept. 24, Madison WI 53704 (608) 256-5522



BULLETIN BOARD

COLORADO WATER LAW

Lawyers, conservationists and federal representatives will meet at the University of Colorado in Boulder, April 21, to talk about Colorado's water laws. The symposium, called "Water for Instream Needs: Is Colorado Law Adequate?" includes Larry MacDonnell, director of the University of Colorado Law School's Natural Resources Law Center; Robert Wigington, an attorney for The Nature Conservancy; Greg Hobbs, attorney with Davis, Graham and Stubbs; Margot Zallen, from the Department of the Interior and Leo Eisel of Wright Water Engineers. For more information, call coordinator Kathy Taylor at 303/492-1288.



FLOATING TOWARDS ECONOMIC CHANGE

The problem with most conferences on wilderness is that the surroundings usually consist of fluorescent lighting and acoustictiled ceilings. One that is different features freelance writers Craig Bigler and Ray Wheeler, who will host a "wilderness colloquium" in Utah's Desolation and Gray canyons from May 21-26. Conference members will float the Green River by day and discuss innovative ways to transform and revitalize southern Utah by night. Trip fees for the six-day workshop run between \$550 and \$695, with 10 percent of gross receipts donated to the Utah Wilderness Coalition. For more information contact Tag-A-Long Expeditions, 452 N. Main, Moab, UT 84532 (1-800/453-3292; in Utah 1-259-8946).

A REMARKABLE FOREST

Our Forests: Where Nature Celebrates Itself is the 16-page newspaper-style record of a four-day "Ancient Forests Get-Together" held by the Carson National Forest in Taos, N.M., last August. As the title suggests, the Carson Forest takes the view that humans are part of the forest, not masters of it. That view suggests some changes are in order from traditional Forest Service management. As recently transferred Forest Supervisor John Bedell put it: The agency's concept of sustained yield "isn't good enough anymore. We've got to create a sustainable forest." To help them make that change, the Carson forest asked all interested people to meet and share their thoughts and feelings about the subject. The record of this remarkable meeting includes contributions from scientists, loggers and community activists, and they sometimes clash. But as George Duda, a timber industry worker writes, "The symposium brought together opposites. The more these opposites understand each other, the more the forest will benefit." Partly as a result of the conference, Carson officials resolved to maintain genetic diversity, ecological diversity and soil productivity, and to harvest trees in a way that mimics processes in an unmanaged landscape. Copies of the tabloid are available from the Carson National Forest, PO Box 558, Taos, NM 87571. The report was prepared in cooperation with the Taos News.

Example of the Colorest

OFF-ROAD GEOLOGY IN UTAH

To take in the buttes, hoodoos and mesas along Interstate 70 in Utah, bring along Halka Chronic's Roadside Geology of Utah. The latest in a series of off-road guides, Chronic's straightforward text, maps, photos and diagrams tell the story of Utah's spectacular rock formations. Anecdotes enliven the book, and a final chapter covers the state's national parks and monuments and includes guides to roads and trails.

Mountain Press Publishing Co., P.O. Box 2399, Missoula, MT 59806. Paper: \$12.95. 326 pages. Includes glossary of geological terms, drawings, black and white photos.

EXPLORE THE FOUR CORNERS

You can examine prehistoric rock art or hike through canyons with Navajo guides in the Four Corners area, thanks to the White Mesa Institute for Cultural Studies in Blanding, Utah, and the Utah Museum of Natural History. They are sponsoring programs that will take groups into "the most magnificent landscape anywhere," led by archaeologists, botanists and astronomers, among others. Expeditions include Utah's Grand Gulch to explore rock art; Chaco Canyon to visit Chacoan outlier ruins; and the unexplored Mesa Verde-Ute Mountain Tribal Park. For more information, call the White Mesa Institute at 801/678-2201 or the Utah Museum at 801/581-4887.

LOOKING FOR A WINNER

The High Desert Museum in Bend, Ore., is calling for nominations for its seventh annual Earle A. Chiles Award in resource management. The \$10,000 award was established in 1983 to recognize individuals whose accomplishments have led either to the thoughtful management of the resources of the High Desert region, or to resolution of conflicts involving these resources. Earle A. Chiles, a businessman, was interested in the preservation and understanding of the Northwest's natural resources. The High Desert region is bounded on the west by the Cascade and Sierra Nevada mountains and on the east by the Rocky Mountains; it reaches north to the Columbia Plateau and south to the Great Basin. The award is managed by a committee of community leaders. Nominations must be submitted to the museum by April 16. For more information, write to The High Desert Museum, 59800 S. Highway 97, Bend, OR 97702; or call Jack Cooper at 503/382-4754.

WAGONS, HO

Two hundred wagons and about 1,000 riders on horseback plan to re-enact an historic wagon train this summer to help celebrate Wyoming's centennial. The trip will cover 260 miles along the Jim Bridger Trail beginning June 2 at Fort Casper and ending July 2 in Cody. The event is being arranged and coordinated by Wyoming Centennial Wagon Train, Inc., a nonprofit organization that says proceeds from the event will go toward restoration and preservation of Wyoming's historic trails. To keep the wagon train as authentic as possible, no motorized vehicles will be allowed when the wagon train is rolling or camped. For more information, call Wyoming Centennial Wagon Train, Inc., at 307/527-6443, or write to P.O. Box 1990, Cody, WY 82414.

OUT ON A LIMB

World Watch magazine for March/April 1990 has gone out on a limb, with authors Lester Brown, Christopher Flavin and Sandra Postel describing the "sustainable" society they say must come by 2030. Unless the world's population reaches sustainability in 40 years, they say, we will enter a death spiral, in which environmental deterioration and economic decline feed on each other. The article talks of transitions to energy efficiency and renewables, true sustained-yield forests, recycling and - most important the transformation of values away from materialism and toward less consumptive lifestyles. The article manages to sound both wildly optimistic and absolutely inevitable.

A single copy is \$5. A one-year, six-issue subscription is \$15 from World Watch, 1776 Massachusetts Ave. NW, Washington, DC 20036



ACCESS

HIGH COUNTRY NEWS classified ads are 30 cents a word, \$5 minimum prepaid. Display ads are \$10 a column-inch, camera-ready. Please write to HCN, Box 1090, Paonia, CO 81428 for a rate card.

WANTED: COOK, ASSISTANT COOK, and assistant ranch manager for 10-week summer season at Audubon Camp in the West, Wind River Mountains area of northwest Wyoming. Head cook position requires previous experience cooking for large groups, ordering food, supervising other kitchen personnel, handling budget. Assistant manager requires experience with light maintenance work; plumbing, electric and carpentry skills, supervision of youth maintenance staff. Request further information or apply (in writing): Director, Audubon Camp in the West, c/o Carolin, 8925 Homewood Dr., Flagstaff, AZ 86004. Three references and contact phone number requested. (1x7f)

WANTED: GEOLOGY INSTRUCTOR for summer (mid June-mid August), adult education programs, National Audubon Society. Scenic ranch location in Wind River Mountains near Dubois. Instructors should be knowledgeable of geologic processes, enthusiastic teachers, willing to participate in recreational and other non-teaching events, and in good physical health. Please supply three references. Starting salary: \$1,500.00 plus room and board. Note: (room and board can include families). Please submit application or request for more information to: Director, Audubon Camp in the West, c/o Carolin, 8925 Homewood Dr., Flagstaff, AZ

474 ACRES NEAR CORTEZ overlooking Hovenweep Canyon complete with an ancient Anasazi tower with significant petroglyphs. A beautiful place to own and an important archaeological site to preserve. \$192,000. Treece Land, 303/243-4170. (3x5B)

RURAL SOUTHWESTERN COLORADO. Small but classy solar house with 10 irrigated acres. 12 miles from Cortez, 4 miles from McPhee Lake, Dolores River. Great views and wildlife. \$81,000. By owner. 303/882-4022. (1x7p)

THE WOLF IN YELLOWSTONE. Join our three-day llama trek to learn about the wolf's reintroduction and role in the Greater Yellowstone ecosystem, July 8-10. Led by a wolf specialist with the National Wildlife Federation plus our experienced mountain guides. Our seventh summer of leading gourmet llama treks in the Northern Rockies. For color brochure and information packet write Yellowstone Llamas, Box 5042-H, Bozeman, MT 59717. Phone (406) 586-6872. Fax 406/586-9612. (3x6p)



PUBLIC INTEREST SCIENTISTS — The Natural Resources Defense Council seeks two scientists with master's degrees for our San Francisco staff. Excellent written and verbal skills are essential, as is the ability to work well under pressure, both independently and in a team. Previous public advocacy experience and/or economics background is highly desirable. Responsibilities include research, litigation support, legislative testimony and public advocacy. Excellent benefits. Minorities and women are strongly encouraged to apply. Send resume, writing sample and references by May 11 to the person indicated below. Please do not phone. Staff scientists for western water project: Minimum 2 years professional experience in water resources, wildlife or fisheries biology, hydrology or related fields; will work on western water issues including pricing, allocation, use efficiency, quality and federal policy; salary upper twenties DOE; write Gail de Rita, NRDC, 90 New Montgomery, San Francisco, CA 94105. Science associate in forestry and water programs: 0-2 years professional experience in forestry, wildlife or fisheries biology, hydrology, water resources or related fields; will split time between forestry issues (e.g., national forest planning, ancient forest protection, forest practices reform, wildlife and water quality) and western water project (see above description); salary mid- to upper twenties DOE; write Gary Reichelderfer, same address. (1x7 B)

HELP SUPPORT EARTH DAY in Colorado. For every \$20 donation you will receive a beautiful full-color poster by John Fielder or a Colorado Earth Day t-shirt. Write Earth Day Colorado, 601 S. Broadway, Suite Q, Denver, CO 80209 (309/722-4100).

CARETAKER WANTED for remote property in northern California. Free rent and small monthly stipend in exchange for work. References required. Inquire c/o Fuller, 2139 Yale, Palo Alto, CA 94306. (3x6p)

SOLAR ELECTRICITY
Complete water pumping & remote home power systems. Gas refrigerators, wind generators, etc.
Design & local installation available. \$2 catalog
YELLOW JACKET SOLAR
Box 253, Yellow Jacket, CO
81335. PH (303)-562-4884





"For the environmentallyminded in Montana's wildest."

> 6410 Lone Pine Road Helena, Montana 59601 (406) 443-4406

REPORTER'S NOTEBOOK

Blood and emotions run at a Montana bison shoot

GALLATIN NATIONAL FOREST, Mont. — A late winter dawn comes to Yellowstone country, where for thousands of years, bison have roamed. I am about four miles west of the national park, and a herd of bison are peacefully feeding. Their black tongues flicker as they stuff their faces with sedge.

It is open country here, a snow-covered meadow dotted with lodgepole pine. When the snows pile up in Yellowstone National Park, home to a herd of 2,600 bison, some of them move down this drainage to lower elevations in search of forage.

I don't want to disturb these gentle creatures, a tragically small remnant of the vast herds that once covered the West. Their combination of docility and vast bulk is unsettling. But I edge closer. I know that for three of these beasts it is the last breakfast.

There are about 11 "hunt-saboteurs" on the scene this March 13. They are members of Fund for Animals and Earth First!. Their goal is to halt the hunt and some say they are willing to get arrested while trying to stop the killing.

In order to get around they drive three yellow rented snowmobiles or are on cross-country skis or snowshoes.

In the cold light of mid-morning, more snowmobiles arrive a mile west of the saboteur group. They bring officials from Montana's Department of Fish, Wildlife and Parks and three hunters who won the lottery.

Under a joint management-plan, Yellowstone National Park relinquishes control of bison as they move out of the park and into Montana. Hunters can apply for a bison tag. Since the number of applications exceeds the number of bison that lumber into the kill zone, the state holds a lottery.

If you win, the state drives you to the bison and points out which one to shoot. Montana residents pay \$200; outof-state hunters pay \$1,000. This hunt is a sure thing: The animals don't try to escape.

State officials and hunt opponents meet and begin to talk. The state's Bud Hubbard says three bison will be killed to drive the rest back to the park. "I recommend you don't get out in front of a high-powered rifle," he says. Out of his pocket he pulls a round, a .30.06 with an expanding tip by the looks of things.

The conversation heats up. A protester says, "It's a slaughter, not a hunt. Why not go shoot cows?"

John Lilburn, later arrested and charged with interfering with a legal

hunt under the state's hunter harassment law, said, "You are not managing game. You are just acting as lackeys of the cattle industry."

The debate intensifies, but I can't hear it all because game warden David Etzwiler is furious.

"What you writers say is bullshit," he says. "If you write something I want to see it."

I say, "Okay, send me your address and I'll make sure that you get copies of whatever I write. I have no problem with that."

"No. I want to see it before you send it out," Etzwiler says. "Otherwise whatever you say is bullshit."

I turn away in disgust.

I approach another of the state wildlife people, one of the young ones. "Hello, my name is Greg Bechle..."

"Date of birth?" he asks.

"I gave you my name as a common courtesy, and you want to turn it into a law enforcement issue? I'm out here working for a living," I say, and I walk away.

The bison move east into a clump of trees near a hill. State officials and the hunters are on top of that hill. Some protesters whoop and holler to drive the bison west, away from danger.

I am about 100 feet away when I hear a pop and see a wisp of smoke. A bison lies on the ground, her legs scrambling in the air. The rest of the herd is a swirling mass of terrified confusion. People are screaming. It takes me about 10 seconds to realize someone has shot a bison.

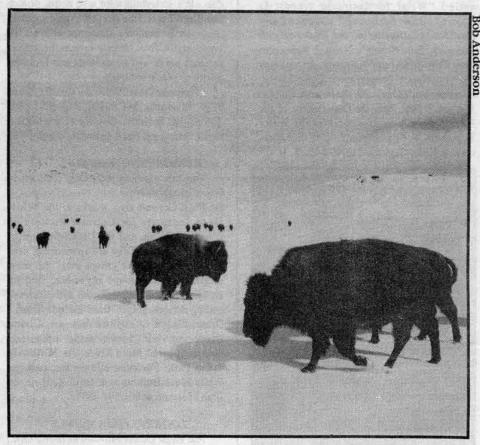
Near the dying bison is a 30-foot trail of red. As the bison spews blood, Lee Dessaux, a Californian from Santa Cruz, yells at the hunter: "Hey, that was great! A lot of women here are wondering about your penis size! Oh, you've got a big rifle and a shotgun, too!"

A woman named Greta, is screaming at the hunter. "Look, she isn't dead. Put her out of her misery!"

Dessaux and the hunter are close;
Dessaux keeps yelling. Later that night
the news will carry images of a man poking a hunter with a ski pole. Dessaux
was charged with two counts of misde-

The hunter walks over to the bison, swings his rifle in an arc in the direction of the woman, myself and Dessaux, before placing it on the bison's skull and pulling the trigger. The bison's eyeball explodes into a gelatinous mass. State officials are nowhere in sight.

A film crew comes staggering up



Bison

the hill towards a second dead bison. One of the men says, "I'm gonna lose it."

The second bison is as dead as a rock. A woman protester is clutching the animal, sobbing. The hunter stands nearby, smoking a cigarette.

Etzwiler makes fun of the sobbing woman and the dead bison. "Oh, the poor dead bison," he says. Another woman says to the hunter, "Hey, I grew up in Wyoming and I've hunted deer and elk there. I bet you wouldn't hunt with me because you would be afraid a woman would outhunt you."

Etzwiler falls down on the bison and pretends he's dead. A woman named Mary yells at him, "You think making fun of a crying woman is funny, don't you? You're the kind of man who enjoyed watching babies burn in Vietnam."

When I got to the third bison they were about to cut it up. I couldn't stay to watch. I needed to walk through the silent woods.

On the day of the hunt, Montana Republican Rep. Ron Marlenee was testifying in front of the House in support of his bill, "The Hunter Protection Act H.R. 3768." This bill would establish civil penalties for interfering with hunting on federal land. Marlenee said, "The tactics used by animal rights activists to

stop law-abiding citizens from engaging in lawful hunts defies the imagination." Marlenee said attempts to sabotage hunts are "a terrorist attack on hunting in America."

I was disturbed by the role of Montana's Fish, Wildlife and Parks Department in the bison hunt, and I called the governor's office to express my complaint. He did not call back. Then I heard Gov. Stan Stephens, R, on the radio. He said, "I was very distressed by the interference that occurred here a week ago by so-called animal rights activists, and I note today that county attorney Salvani from Gallatin County has filed charges in connection with those incidents down there. I commend our people in Fish, Wildlife and Parks for their poise and temperament in handling that situation."

On the first day of spring I was walking down the street and the images of dying bison swirled into my head. I started to cry. Last night I had a dream. In this dream I have a suburban house. In the driveway a bison is staggering, coughing up a trail of blood in the white

- Greg Bechle

The writer is a conservationist, freelance writer, member of a rock group called the Velcro Sheep, and poet in Stevensville, Montana.

LETTERS

NO HOLES IN HOLISTIC MANAGEMENT

Dear HCN,

I write to correct a serious and potentially damaging mistake in your lead article in the March 12, 1990, edition of HCN. In this, when referring to holistic resource management, you state, as though quoting me, "Even he says, that at best, only 1 percent of those who follow his advice fully succeed." What I have said on many occasions is that few ranchers actually follow what I am advising — probably 1 percent or even less. This is true. That

is different from many following what I advise and only 1 percent succeeding. So far, from those farmers and ranchers who follow what I am advocating and actually practice holistic management, we have a 100 percent success rate. We have not yet experienced a single failure. In fact, if we were to get one failure they would all be likely to fail, hence the need for drastic rethinking should we actually experience a failure. A failure by any group of people practicing holistic management would blow the entire concept.

In some of our more advanced courses we have groups of people — academics, ranchers, government professional resource managers, etc. — actually work at trying to find ways in which holistic management could fail. So far all groups have only come up

with two possibilities. One is that there may yet be undiscovered factors that could cause a breakdown, much like those discoveries that made the development of holistic management possible. So far nothing has come up, but we warn all practitioners to be ever wary and openminded. The second way it could fail is for people to stop practicing it for some reason. In such cases, it strictly speaking would not have failed.

We would be grateful if you would correct this serious flaw and misinformation. At the same time, in all seriousness, we appeal to you to please let us know immediately if ever you come across a failure. We would immediately notify all our members. We, as a center, are under an obligation to let everyone involved know if any flaw or mistake is found.

Allan Savory Albuquerque, New Mexico

The writer is founding director of the Center for Holistic Resource Management.

