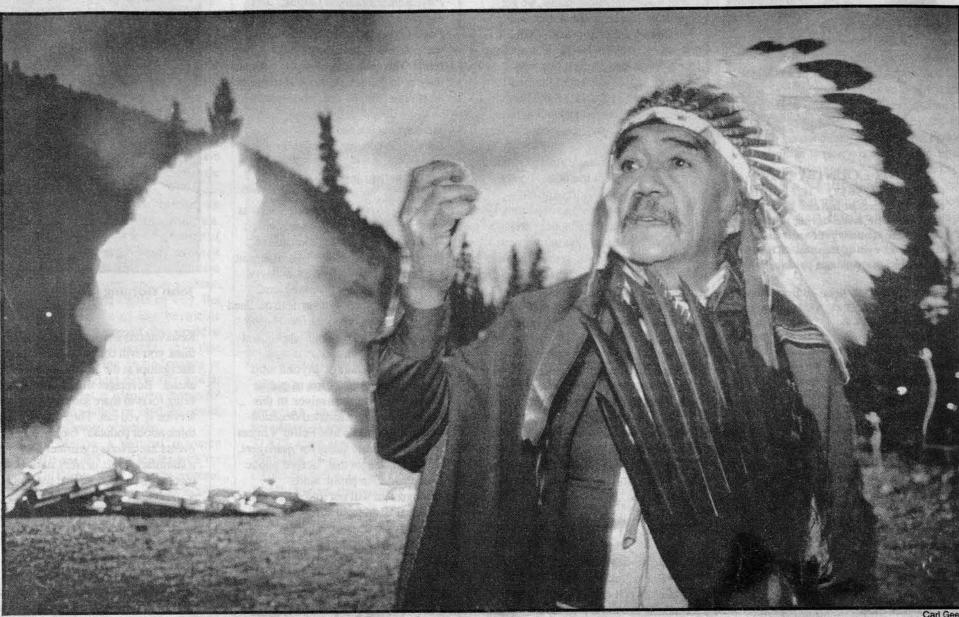
High Country News

December 17, 1990

Vol. 22 No. 24

A Paper for People who Care about the West

one dollar



Carl Geers

A bonfire fueled by skis burns as Eddie Box Sr., a Southern Ute Tribe spiritual leader, performs a ceremony to stop the drought and bring snow

Animas-La Plata: still flawed

_by Lisa Jones

n the Ute Mountain Ute Reservation in southwestern Colorado there is a small patch of green ground. The tribe grows alfalfa there with water bought from the local water district. The rest of the 560,000acre reservation is a brown, stubbly plain that climbs the piñon-and-junipercovered flanks of Ute Mountain. The snowy San Juan peaks form a jagged horizon to the north, but they have historically given only aesthetic relief to the reservation's 1,600 residents. Drinking water was piped into the reservation for the first time only last spring.

Fishing in troubled waters

Proponents of the controversial Animas-La Plata project are scrambling to free the stalled water scheme from an impasse with the endangered Colorado squawfish. The project was put on hold in May when the U.S. Fish and Wildlife Service said

that it would threaten the fish, which lives downstream in the San Juan River.

The be-

leaguered squawfish — the world's largest minnow and a voracious predator that grows up to five feet in length — has never generated much affection. Before its numbers were slashed by the proliferation of dams on the Colorado River and its tributaries, it was often used by farmers as fertilizer. In the 1960s, it was poisoned in parts of the San Juan River to create trout habitat. Listed as an endangered species in 1967, it wasn't believed to

poponents of the controversial nimas-La Plata project are abling to free the stalled water biologists found 27 of the fish.

The Fish and Wildlife Service released a draft biological opinion that the project would threaten the squawfish and the rare razorback

sucker on May 8, the day before construction on the \$590 million project was scheduled to start. Water

depletions had contributed to the neardemise of the squawfish in the San Juan River, so further flow reductions in the river would likely jeopardize the fish. The announcement froze all water development in the San Juan River Basin and outraged project proponents. Sen. William Armstrong, R-Colo., said the agency had "taken leave of their senses" (HCN, 5/21/90).

> Project proponents have tried to Continued on page 10

The land's dryness accents the poverty of the tribe in this isolated comer of Colorado. Cut off from the rest of the state by the San Juans, the region is the only part of Colorado with a sizable Native American population. Yet the Ute Mountain Utes and their neighbors, the Southern Utes, are not entirely without resources. They claim water rights dating back to the creation of their original reservation in 1868. If they were to realize their water claims in court, they could dry up much of the livelihood of the area's non-Indian farmers and ranchers.

That possibility, however, faded in 1986 when the tribes settled their water rights in the San Juan Basin and were promised water from two Bureau of Reclamation water projects — the Dolores, now being built, and the long-proposed Animas-La Plata. This project, first authorized in 1968, had been shelved because of budgetary restraints and growing environmental criticism.

But the \$590 million Animas-La Plata project Congress reauthorized in 1988 continues to generate controversy. Last May the U.S. Fish and Wildlife Service stopped the project a day before work was to begin, saying the project would harm the endangered Colorado squawfish (see story at left). That issue is due to be resolved early next year. In the meantime, other critics both off and on the reservation have renewed their arguments about why Animas-La Plata should not be built at all.

Environmentalists maintain that the

project's massive use of energy still makes it too inefficient and uneconomic. They also point out that although the settlement of the Indians' water rights breathed new life into the paralyzed water project, Anglos will receive far more project water than the Utes.

"The project isn't for our benefit," argues Ray Frost, a Southern Ute and an outspoken critic of both the Animas-La Plata project and the tribal leadership that supports it. "The Anglos are just riding our shoulders."

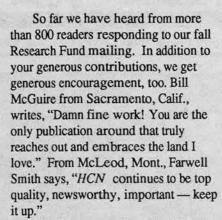
The project's critics further argue that the Utes' needs could be met with a far smaller, less expensive project. "At most what we have is a \$15 million problem of Indian water rights," says Jeanne Englert, a founding member of Taxpayers for the Animas River, a Durango, Colo., group that opposes the project. "Unfortunately, [this project] proposes a \$600 million solution."

The Ute tribal leadership supported the proposed project as a way to get real water, not the "paper water" that costly litigation might provide. The Southerr Utes also will get \$20 million in "development funds;" the Ute Mountain Utes \$40.5 million. But just how much the project will benefit the Utes whose participation made it possible is still hotly debated.

"I don't think the project would have succeeded for a minute if it wasn' the vehicle for an Indian water right settlement," says Scott McElroy, wate

Continued on page 10

will fit it is recombinational and returned international about



We received one Research Fund response card with the note: "Last year we gifted \$50 by credit card, but were listed as a friend [instead of patron]. I will assume that is because of credit charges? Anyway, I wasn't impressed." The card was sent anonymously so we have no way to respond except through "Dear Friends."

There is no deduction for credit charges; a \$50 gift by credit card is the same to us as a \$50 gift by cash or check. We also try to list every contributor's name in our Research Fund thank-you pages, spelled correctly and in the appropriate category — unless you specifically request otherwise. Sometimes we do make mistakes. If we discover them ourselves, or if you let us know about them, we will correct them on the next Research Fund thank-you

Plan ahead

we want to remind teachers and professors that High Country News is available to classes free or at reduced rates. A set of sample copies will be sent free just by calling and letting us know you would like them. If you want to use HCN as a supplementary text, we can send term-long subscriptions to all or part of your class for \$6 a person. Call Kay Bartlett at 303/527-4898 for more information. We also offer full-year subscriptions to students at the

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Chlorination

introductory rate of \$18.

Jeff Marti would like to correct an

error in his story on Page 22 of our Nov. 19 ancient forest issue.

"I wrote that chlorinating streams was one of the methods the Forest Service uses to combat the spread of the Phytophthora lateralis fungus," Jeff explained in a letter. "Actually, what the Forest Service does is chlorinate the water it uses to keep the dust down along roads. This is done to kill spores which may be in the water tanks and to prevent dispersion. The FS does not introduce chlorine directly into streams." Jeff thanks Mel Greenup of the Forest Service for spotting the mistake.

Stress on the range

Joe Feller's HCN article that was recently reprinted in Thunderbear, a National Park Service "alternative" publication, was not really a blueprint for adding stress to BLM managers' lives, as last issue's "Dear Friends" may have implied. The article outlined a step-by-step procedure for participating in BLM's planning and management. Feller says it was intended to encourage anyone who cares about the condition of public lands to involve themselves in this congressionally mandated decisionmaking process. While Feller's intent was not to create stress for managers, he acknowledges that "active public participation in public lands management will not make life easier for local BLM managers, but it will help them to do a better job."

A January meeting in Arizona

The January meeting of the High Country Foundation, High Country News's board of directors, will be in Phoenix, Ariz., on Saturday, Jan. 26, 1991. The first meeting of the year always centers on budget matters, but also on the agenda will be the election of new board members and staff updates on circulation and editorial coverage.

Subscribers in and around Phoenix will receive invitations to the potluck dinner Saturday night at 5:30 p.m. at Bumble Bee Ranch north of Phoenix. This is an invitation to any other readers who may find themselves on the warm and sunny side of the West in January.



Beth Jacob

Reservations aren't necessary, but if you think you will come, a call to Linda Bacigalupi at the office will help us plan ahead. Beverages will be provided, but bring food to share and your own table service if you can. Forget what you may think about potlucks. These thrice-yearly events are always a gourmet delight and a stimulating mix of HCN staff, board members, free-lancers and readers.

New intern

John Homing, a graduate of Colorado College, is the first of our winter interns to arrive. Although originally from Washington, D.C., John has no plans to spend any extended time east of the hundredth meridian. (Speaking of the hundredth meridian, he cites the work of Wallace Stegner as a primary influence in his life.) After college John spent eight months biking around the United States. His most recent job, as a wilderness ranger in the Gore Range of Colorado, reminded him how much there is to see and learn in the interior West.

> -Larry Mosher and Mary Jarrett for the staff

HIGH COUNTRY NEWS

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Uranium glut shuts down last U.S. producer

Because of a worldwide uranium glut, the last major domestic producer of the radioactive material will shut down, virtually ending uranium mining in the United States. Energy Fuels Corp. of Denver and other U.S. producers are suffering from the arrival of cheap uranium from the stockpiles of the Soviet Union and China. According to The Denver Post, Energy Fuels has closed its large Kanab North mine near the Grand Canyon in northern Arizona, and won't resume drilling until demand and prices rise. Energy Fuels' mining activities near the Grand Canyon have generated controversy during the past six years because the Havasupai Indian tribe claims the mine encroaches on its sacred grounds. U.S. consumption of uranium, which is used primarily as a fuel in nuclear power plants, has remained relatively constant since 1983, while the quantity imported has increased dramatically. Most mining companies have responded by curtailing their uranium production and focusing on other minerals such as coal.

Wolf fund may ease ranchers' economic woes

Proponents of wolf reintroduction have put their money where their mouths are. Defenders of Wildlife, a national organization promoting wolf reintroduction in Yellowstone National Park, has raised over \$100,000 to pay ranchers for livestock lost to wolves. Congress passed a bill last October that calls for development of a wolf restoration and management plan for the Yellowstone region. The plan is expected to be presented to Congress by May 15, 1991. The compensation fund will take the economic burden off individual ranchers and distribute it among wolf supporters across the country. According to Hank Fischer, Northern Rockies representative for Defenders of Wildlife, the sale of more than 7,000 posters of howling wolves in Yellowstone made up the largest chunk of compensation funds. The remainder of the money came from donations and a benefit concert by James Taylor. More than \$10,000 has already been given to six northwestern Montana ranchers who have lost livestock to wolves. Roger Viets, executive director of the Teton County Heritage Society, doubts that the fund is sufficient to help the ranchers. Fischer, however, believes that \$100,000 is enough to cover all wolf-depredation costs in Wyoming, Idaho and Montana for the life of the reintroduction effort.

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WESTERN ROUNDUP

BLM may spray more rangeland with deadly herbicides

In a move that several environmental groups claim is primarily for the benefit of the livestock industry, the Bureau of Land Management has proposed a plan that would allow it to significantly increase the amount of Western public land that it sprays with herbicides. The agency is considering the use of many herbicides that, it admits, pose high risks to the health of the public and of workers who would carry out the plan. Representatives of the Sierra Club and The Wilderness Society fear that many of these chemicals have the potential to contaminate groundwater.

The BLM applies herbicides on many types of land under its jurisdiction. It sprays to promote the growth of timber species on public-domain forest land, to remove flammable vegetation from oil and gas sites, and to maintain recreation areas and rights of way. But almost 90 percent of the herbicide treatments in the proposed plan would be on rangeland. Officials say that rangeland spraying is necessary to maintain biological diversity and to ensure that there is adequate forage for livestock and wildlife on land threatened by the rapid spread of weeds.

Jim Melton, a natural resource specialist and EIS team leader with the bureau in Casper, Wyo., says the proposed increase in spraying is partially attributable to growth in the number of recreation areas and oil and gas sites on BLM land. Much of the rest of the increase, he said, is because BLM officials see a need to begin spraying herbicides to control "noxious weeds" in eight states where the agency currently is not allowed to spray for that purpose — Arizona, Colorado, Nevada, North and South Dakota, Oklahoma, Utah and Wyoming.

"Noxious weeds" typically are plants that can make livestock ill or that quickly crowd out other plants. Leafy spurge, Russian knapweed and musk thistle are prime examples. BLM officials say that such factors as overgrazing and the increased use of public lands have encouraged the rapid spread of these plants in recent years. Leafy spurge has spread to about 3 million acres since it was first sighted in the United States in 1827, according to George Beck, assistant professor of weed science at Colorado State University.

The spraying plan appears in a draft Environmental Impact Statement released in March. The draft EIS is currently being revised to respond to public comment, and its final version should be out by early 1991. The document also analyzes the other methods the bureau uses to control vegetation, which include using fire to burn it, grazing animals such as sheep to eat it, bulldozers to rip it out and tools to remove it manually.

The EIS covers 13 states: Idaho, Montana, Washington, Wyoming and western Oregon, as well as the eight states listed above. The total amount of



Wyoming State Office, BLM

Wildlife biologist Bob Tigner sets fire to sagebrush during a prescribed burn

spraying in the region would be permitted to increase from the current 37,475 acres annually to 141,515 acres annually — a 275-percent increase. Officials believe, however, that the BLM's budget will probably not support all of that spraying.

One criticism of the plan is that there has been inadequate analysis of its impacts. Although the impacts of the herbicide treatments will be studied in site-by-site Environmental Assessments (EAs), the BLM plans no attempt to put all of the pieces together and analyze the cumulative impact of all of its treatments across the West. Jim Catlin of the Utah Sierra Club says this method neglects the whole picture and violates the National Environmental Policy Act.

Melton argues, however, that the process is a good way of ensuring that local BLM officials develop treatment plans that address local issues and do not damage area resources and wildlife. He emphasizes that comment from all interested parties is actively sought, that many treatment plans have been improved by that input and that an EA may lead local officials to reject treatment for a site entirely. Furthermore, if enough cause is shown, any EA can be upgraded to become a full Environmental Impact Statement.

Some environmentalists say they have been caught in a Catch-22. They predict that local BLM officials will try to deflect people's concerns about local treatments by saying that the issues have been already dealt with in the national EIS. Catlin contends that officials are evading difficult questions about this EIS by saying that those issues will be dealt with in the local EAs.

BLM officials maintain that that will not happen. But Norma Grier, executive director of the Northwest Coalition for Alternatives to Pesticides (NCAP), says, "I've seen that time and time again in dealing with herbicide EISes."

The draft EIS studies 19 herbicides for possible use. Six of those are defined in the document as possible or probable carcinogens; there is insufficient data on five others to determine their likelihood of causing cancer.

Melton, who is in charge of revising the EIS, says there will be "some restrictions put on some chemicals, possibly some eliminations." He said there is a "very good possibility" that one herbicide, amitrole, will be dropped. The EIS anticipates a high cancer risk for people who touch vegetation from an area recently sprayed with this herbicide, or who eat fish from water contaminated by drifting amitrole spray. Amitrole is one of two chemicals the agency proposes to use that the Forest Service does not use because of health concerns.

Many categories of workers who carry out chemical treatments may risk their health. The agency says that "significant reproductive risks are present for pilots" from the use of atrazine, 2,4-D, dicamba and tebuthiuron. Pilots may face the greatest danger, since over 80 percent of the spraying in the proposed program is to be done by air. Workers on the ground also face high reproductive and cancer risks from the use of a number of chemicals.

The agency concedes that field tests show that two of the herbicides proposed for use, hexazinone and picloram, may leach into groundwater. Picloram is assumed to be carcinogenic in the EIS.

Eight herbicides, almost half of those that the BLM is considering for use, are designated as having high leaching potential by the Environmental Protection Agency, The Wilderness Society says. The group notes that all but three of the states covered by the program get more than half of their drinking water from groundwater.

Lewis Waters, a pest management specialist in the bureau's Washington, D.C., office, says the BLM currently uses four herbicides on rangeland: glyphosate, dicamba, picloram and 2,4-D. Serious concerns have been raised about the use of all of these chemicals. One, glyphosate, is assumed by the EIS to be carcinogenic, although no data on its human toxicity is "available in the current literature." The Wilderness Society reports that another two, dicamba and picloram, are on the EPA's list of chemicals with high leaching potential. The fourth, 2,4-D, is used only as a last resort by the Forest Service because of fears that it may harm human

Ken Rait of the Southern Utah Wilderness Alliance argues that the BLM wants to implement this program "for the benefit of the already heavily subsidized livestock industry." Rait developed a cost-benefit analysis of the EIS and estimated that with the increase in treatment, the agency would generate almost \$45,000 a year in additional grazing fees, at a cost of over \$14 million.

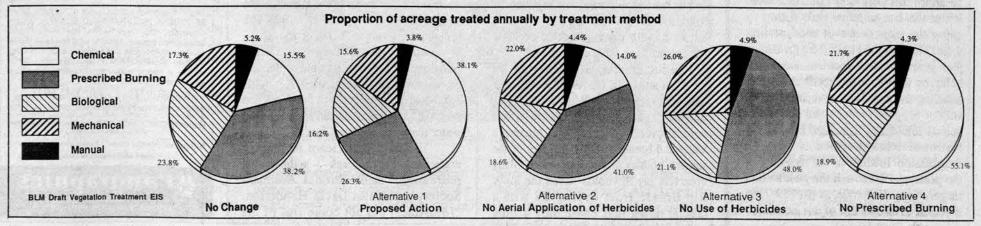
BLM officials deny that the program is designed solely for the benefit of ranchers. Melton argues that there are very few instances where the agency has granted additional grazing permits to ranchers because of herbicide treatment. He says that the benefits of treatment are seen in terms of an improved range and "maintenance level for wildlife and soil and watershed protection." The livestock operator, in Melton's view, "just gets better forage for his existing use."

The BLM's critics may appeal the final EIS to the Interior Board of Land Appeals, which could take months, if not years, to reach a final decision. Meanwhile, the battle between environmentalists and the BLM is likely to continue.

Both agency officials and their critics look forward to the increased use of integrated pest management and other techniques to reduce the use of herbicides, but many environmentalists continue to question the agency's commitment to the long-term health of the land. NCAP's Norma Grier accuses the agency of asking the public to "write them a blank check for whatever they want to do."

— Julius Dahne

Julius Dahne is a freelance writer in Boulder, Colorado. Although the comment period for the draft has ended, requests for copies of the final EIS, "Vegetation Treatment on BLM Lands in Thirteen Western States," may-be sent to the Bureau of Land Management, Jim Melton, Team Leader, 1701 East "E" St., Casper, WY 82601.



HOTLINE

Mining company fined for bird killings

One of North America's largest gold and silver mining companies has agreed to pay \$500,000 after killing migratory birds in a Nevada tailings pond. Between June 1989, and July 1990, 909 sandpipers, hawks, ducks and other birds died after drinking cyanidecontaminated water from an Echo Bay Mineral Co. tailings pond near Battle Mountain. The fine of \$250,000 is the largest fine ever levied under the 76year-old U.S. Migratory Bird Treaty Act. Echo Bay will donate another \$250,000 to The Nature Conservancy to go toward preserving migratory birds and habitat in Nevada. To solve the poisoning problem, Echo Bay has spent \$7.2 million to neutralize cyanide before it enters the 363-acre pond. The U.S. Fish and Wildlife Service says the case should put industries on notice that wildlife deaths from mining ponds will not be tolerated.

White paper may be bazardous to your bealth

Northwestern paper and pulp mills put more cancer-causing chemicals into the air and water than any other industry, reports an Environmental Protection Agency study of Washington, Oregon, Idaho and Alaska. In the spring of 1989, the EPA found 104 mills nationwide in violation of the Clean Water Air and set 1992 as the deadline for compliance. Chloroform and chlorine, used to bleach paper white, form dioxins that are suspected of causing cancer. According to U.S. Fish and Wildlife field supervisor Russell Peterson, dioxins accumulate in the food chain and can be detrimental to the reproduction and survival of bald eagles, blue heron and salmon. The EPA has found fish in the Columbia River with dioxin levels of eight parts per trillion, enough to increase the cancer risks of people eating the fish (HCN, 2/12/90). A chlorine-free method of bleaching that does not produce dioxins is now used in Canada and Wisconsin. Also, consumer use of unbleached and recycled paper decreases the demand for chlorinebleached paper.



Anasazi bowls stolen

Three broken Anasazi bowls were stolen early in November from a remote cultural site in the back country of Canyonlands National Park. According to park spokesperson Larry Frederick, the ceramic bowls, which are thought to be approximately 800 years old, were left at the site to allow park visitors to enjoy the experience of encountering them. The pots had been there for almost five years without incident. Frederick believes that a recent technical report detailing the results of an archaeological survey may have provided clues that helped thieves to locate the bowls. The National Park Service is seeking information leading to the recovery of the pottery. Please call the park's chief ranger, Tony Schetzsle, at 801/259-7164 if you have knowledge of this incident.

Pentagon orders about-face on land grabs

In what appears to be a major policy reversal, the Pentagon has ordered a moratorium on large military land acquisitions that halts 12 proposed land withdrawals in the West (HCN, 2/12/90). Deputy Defense Secretary Donald Atwood's September 1990 memorandum applies to all proposed acquisitions involving more than 1,000 acres or with a value of more than \$1 million. It does not cover the renewals of existing withdrawals or leases.

However, the Rural Alliance for Military Accountability calls the moratorium a hoax because it contains a clause that allows the secretary of any military department to request an exemption "for urgent military requirements or when application of the moratorium would have an adverse effect on the [Pentagon's] ability to perform its mission."

"It's a loophole large enough to drive a tank through," a member of Preserve Rural America, a Kansas-based organization opposed to the expansion of Fort Riley, told *Skyguard*, the quarterly publication of the alliance. "As we see it, the main reason for the memorandum is to make people think they've won and to put them to sleep."

A member of Idaho's Snake River Alliance said, "For a military base to drop its plans because of this order would be an admission that the military didn't really need the land in the first place."

So far, one exemption has been granted. The Army's Yakima Firing Center in central Washington may now proceed with its expansion proposal, which would add 63,000 acres to its domain. It would cost taxpayers \$20 million to purchase plus \$750,000 annually to mitigate the environmental



U.S. Army

Open-air detonation at Dugway Proving Ground, Utah

damage caused by military activities.

Currently, the Mississippi National Guard has the only other exemption request on file.

Other proposed acquisitions in the West that were halted by the moratorium include the China Lake/Chocolate Mountains and the El Centro Parachute Test Range proposals in California and the Fort Carson/Pinon Canyon proposal in Colorado. Several other withdrawals were stopped before the moratorium was issued because of lack of funding, citizen opposition or encroachments on

endangered species. They are: the Saylor Creek bombing range in Idaho; the Montana Training Center; the Hawthorne Maneuvers Area; the Fallon Master Land Withdrawal and the Electronic Combat Transition Course in Nevada; and the Fort Irwin National Training Center in California.

The Pentagon has 25 million acres in landholdings. According to a spokesman at *Skyguard*, roughly 70 to 75 percent of that acreage is west of the Rocky Mountains.

— Diane Grauer

A successor for New Mexico's 'water buffalo'

New Mexico's new water chief is a man most people outside the world of water politics have never heard of. But Eluid Martinez worked 19 years for legendary state water czar Steve Reynolds, and that is a a key reason he has become Reynolds' replacement.

Reynolds, who died last April at age 73, was one of the West's most powerful public officials during his 35 years as state engineer. He stood up to governors, faced off against city governments and took on farmers, developers and environmentalists — and won far more than he lost.

Martinez, 46, was Reynolds' chief water hearing officer and head of the state engineer's technical division. After a national search. Gov.-elect Bruce King, D, picked Martinez in late November because he is a native New Mexican, reared in the 250-year-old northern New Mexico village of Cordova, and because of his experience.

"He undoubtedly was the wisest choice," said Richard Simms, Reynolds' former chief counsel and now a private Santa Fe water lawyer. "He has headed the engineer's office's principal division and he has had to participate regularly in litigation over water rights. He has a better handle on the needs of New Mexico than any other candidate."

He also has a tough act to follow. In 1989, an article in *Governing* magazine called Reynolds "the West's last water buffalo," because of his iron-fisted control over who gets New Mexico's water and because of his mastery of the science, politics and law of water. Many observers say Reynolds saved the lower Rio Grande from drying up with a crucial ruling that came only a little

more than a year after he took office. The 1956 ruling required Albuquerque to either import outside water supplies, buy someone else's water rights or take some other step to prevent its groundwater pumping from lowering the river. Without that ruling, some experts have speculated, the door would have been open for the same kind of massive groundwater pumping in central New Mexico that is slowly drying up Arizona.

Reynolds also kept the city of El Paso from siphoning groundwater from an aquifer outside Las Cruces, although El Paso is now in court challenging Reynolds' 1987 ruling denying the city's efforts to get water pumping rights there. According to water experts such as Albuquerque groundwater scientist Kelly Summers and veteran New Mexican water historian Ira Clark, fending off Texas' seemingly endless efforts to get water from New Mexico is likely to be one of Martinez's and future New Mexico state engineers' big challenges.

But Reynolds also angered environmentalists by pushing hard for numerous big water projects and by opposing "in-stream flow." That legal doctrine allows owners of water rights to keep their water in a river to protect fish rather than having to "use it or lose it."

Shortly after being appointed, Martinez promised to pay more heed to environmental concerns than Reynolds did. Most environmentalists, however, had preferred another candidate, former Idaho water resources director Kenneth Dunn.

"The state has to learn to manage water for other concerns — wildlife and recreation," said National Audubon Society spokesman David Henderson. "[Martinez] did not come out of his

interviews as being progressive, as seeing New Mexico as being in changing times. It was a status-quo choice."

Spokesmen for mining and farming interests greeted Martinez's appointment more favorably, although some planners and lobbyists for farming and urban interests said they had met him only once or twice and know little about him.

But in 1955, few New Mexicans knew much about Steve Reynolds, either.

— Tony Davis



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The boreal owl does not threaten timber jobs, but ...

Call your local Forest Service office and ask what anyone there knows about the boreal owl. After the sound of a deep breath being taken, this is what you're likely to hear. "Well, it's not a spotted owl."

Not long ago, that would have been a crazy answer, like asking for a description of a collie and being told it's not a poodle. But now "spotted owl" has become shorthand for a rare species whose protection threatens timber jobs.

The boreal owl is a five-ounce ball of feathers with mustard-colored eyes that lives in inland Western forests, from Canada to northern New Mexico. Unlike its spotted coastal cousin, it does not require old-growth stands or 3,000 acres for each nesting pair. Logging needn't be banned in huge areas to protect it.

But the boreal owl needs mature trees for nesting, and it can't find food in clearcuts. With demand for logs soaring, the need for costly studies on the boreal owl and its habitat has taken on increased importance, as it has with many other animals and plants the Forest Service labels "sensitive."

A species is considered sensitive when its numbers are dwindling or when not enough is known about it to say whether that's the case. In the last few years, the Forest Service has begun scrambling to identify and monitor such species in order to keep them off the threatened and endangered list.

It's been 14 years since Congress directed the agency to maintain each forest's native species. Conservationists contend that research efforts are both overdue and underfinanced, and most Forest Service biologists agree. With rare exceptions — grizzly bear research is one — Congress provides no specific funds for monitoring animal or plant populations. Most research is done with money earmarked for the planning of timber sales, so that logging will not harm sensitive, threatened or endangered species.

On northern Idaho's Bonners Ferry Ranger District, biologist Sandy Jacobson has \$5,000 for monitoring all rare species this year. "There is no way, no way, no way that you can come even close with that," she said. "Monitoring wildlife is a very expensive proposition."

Jacobson pointed for an example to 300 boreal owl nesting boxes that have been monitored for the last two years. They weren't checked at all this year. Jacobson canceled the research planned by the University of Idaho's Greg Hayward, an acknowledged boreal owl expert, so that she could fund studies of two other rare birds, the goshawk and the harlequin duck. Biologists suffer a lot of stress from having to choose which species get attention, she added.

The Bonners Ferry District is planning a timber sale in the West Moyie area, which includes a high-altitude island of spruce and fir trees where the boreals nest. In deciding how best to protect the owls during harvest, biologist Paul Sieracki relied on Hayward's advice. But Hayward's recommendations were based largely on his studies in central Idaho's River of No Return Wilderness, where the forests are drier and the prey less abundant than in the state's panhandle. Sieracki said he wished he had more information specific to his district.

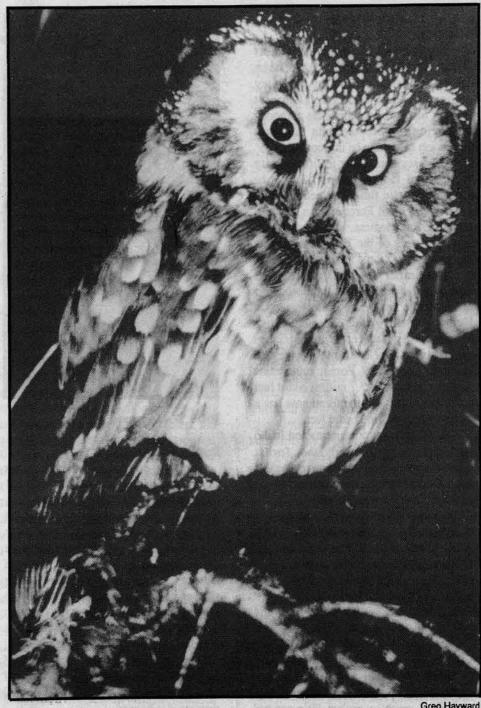
Sieracki believes it might be acceptable to clearcut in the Moyie timber sale boreal habitat because the owls would simply move to another area. "But," he said, "we don't know that, so we're being real cautious."

Hayward affirms that research sometimes proves that an animal population can survive logging. Yet he is uncomfortable with his own lack of knowledge about the boreal owl, and hopes the spotted owl hubbub will shake loose more federal dollars for sensitive-species research.

Hayward did compliment the Forest Service for funding his boreal studies in 1983, "at a time when the wildlife groups we approached didn't take any interest in the species." The foresters were aware of the growing spotted owl controversy, he explained, and wanted to know if they would face a similar crisis because of the boreal owl.

Biologists outside the Forest Service hesitate to be too critical of the agency, which is a major source of research dollars, despite what they consider its shortcomings. The Idaho Heritage Program, for example, operates on a tiny budget within the state Fish and Game Department to track rare species. Forest Service contracts have been the mainstay of its research into such animals as harlequin ducks, wolverines and Coeur d'Alene salamanders.

A lot has been learned about those species, said state biologist Craig Groves, but there are other species about which almost nothing is known. Among



Greg Hayward

The diminutive boreal owl

them is the flammulated owl, which nests in low-elevation ponderosa pine and Douglas-fir and is under greater threat from logging than the boreal owl.

Biologist Dan Davis of the Clearwater National Forest noted other animal populations that need study. "We don't know anything about the bobcat and lynx," he said. "We do know some things about the fisher, but we'd like to study them a little more, especially now that the trappers want to trap them." Then there's the western big-eared bat. The only thing Davis knows about it is that it lives in caves.

For all their frustration, Forest Service biologists say these are heady times for them. "I've been here 20 years," said Davis. "I'm this guy they put back in the corner, here only because the law required me to be. Now I see where Fish and Wildlife can become a full-fledged team member, and not just sit on the bench. The spotted owl is taking us there."

— Julie Titone

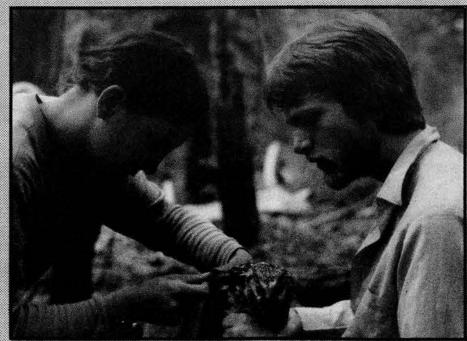
Julie Titone is a natural resources reporter for the Spokane Spokesman-Review.

The elusive boreal owl is turning up in more places

McCALL, Idaho — Biologist Pat Hayward dug in her spurs and inched her climbing belt farther up the towering spruce in central Idaho. She had been checking nest boxes for an hour and coming up empty, not an unusual occurrence in the search for the rare boreal owl. But this time, 25 feet up, she found her prize: a boreal whose fiercely curved beak contrasted with its soft feathers and wise eyes.

She put the bird in a weighing bag and gently lowered it to the ground. Then she called down to her husband and research colleague, Greg Hayward, to describe what she found under the mother boreal: "Four eggs, a shrew, a pocket gopher and some yellow feathers."

The Haywards worked last summer in the Payette National Forest, checking some of its 450 boreal nesting boxes—lidded birdhouses that imitate tree cavities. The researchers have learned that boreal owls need about 3,000 acres of habitat per nesting pair, but those ranges can overlap, allowing several



Biologists Pat and Greg Hayward with a boreal owl

pairs to share the same space. Boreals move around more frequently than the larger spotted owls. They are more difficult to locate; unlike spotted owls, which hoot year-round and during the day, the boreals sound off mainly in the late-winter mating season, almost always at night, Greg Hayward said.

Delicate radio transmitters harnessed onto boreal owls have shown that a female usually abandons the nest after her young are three weeks old. Greg Hayward said that the males deliver food to the nest site eight to 12 times a night, traveling two or three kilometers each way to forage.

Boreals are impressive hunters, diving at their prey at great speed in the dark. The red-backed vole, a stout little rodent, makes up half the birds' diet. Female boreals, which are larger than males, sometimes snatch a flying squirrel.

Since Greg Hayward first discovered their nests in Idaho in 1980, boreals are being found in more and more places, as far south as New Mexico. That's good news for the nation's bird watchers, because the boreal and the great gray owl are the two most coveted finds in northern North America.

— J.Т.

Timber cuts raised in northern Rockies

_by Bert Lindler

Supervisors of many national forests in the northern Rockies have been ordered to cut more timber than they recommended. The internal Forest Service action undermines the authority of Regional Forester John Mumma, whose job may now be in jeopardy.

"Forests should set as first priority the needed timber support levels to accomplish the timber targets," wrote Deputy Regional Forester John Hughes, speaking for Mumma, in a Nov. 6 letter to supervisors of the 10 national forests in Montana and three in northern Idaho.

The timber target is the amount of timber each forest would be expected to offer for sale next year. The targets set in Hughes' letter often exceeded those proposed by the forest supervisors themselves. For example, where the Kootenai National Forest supervisor proposed selling 125.7 million board feet of timber next year, the forest now has a target of 175 million board feet.

Other targets for Montana and Idaho national forests, with the forest supervisors' proposals in parentheses, are: Beaverhead 15 million (10.6 million); Bitterroot 27 million (26.7); Clearwater 150 million (122.3); Custer 4 million (4.5); Deerlodge 35 million (21.1); Flathead 87 million (71.7); Gallatin 13 million (13.1); Helena 26 million (12.3); Idaho Panhandle 240 million (210); Lewis and Clark 28 million (28); Lolo 100 million (87); and Nez Perce 100 million (80).

A year ago, the region's forest supervisors wrote the chief of the Forest Service saying they felt the agency was focusing too much on commodity resources, such as timber. "We are not meeting the quality land management expectations of our public and our employees," the supervisors wrote.

But the timber industry and some congressional leaders are upset that the region's national forests sold only 70 percent of the timber budgeted by Congress last year. Four national forests in Montana sold less than half the targeted amount. They are: Bitterroot (21 percent), Gallatin (27 percent), Helena (27 percent) and Deerlodge (47 percent).

Pressure from Congress

When Sen. Conrad Burns, R-Mont., wrote to the chief of the Forest Service about the Forest Service's inability to meet timber targets, he cited the Gallatin National Forest as an example.

"During our meeting on April 26 you assured Sen. McClure [James McClure, R-Idaho] and me that the Forest Service is doing everything in its power to meet the ASQ [allowable sale quantity] on individual forests," Burns wrote Chief F. Dale Robertson on Sept. 10. "Frankly, though, I'm quite concerned that you are just giving us lip service."

Burns asked for a detailed explanation of what actions the Gallatin National Forest would take to produce the timber allowed by the forest plan during the decade that it is in effect. "A full explanation of the Gallatin's planned timber program for the remainder of the planning period would also be most helpful," Burns wrote.

Environmentalists contend that the timber targets are based on forest management plans that set unrealistically high levels of logging. Michael Scott, regional director for The Wilderness Society in Bozeman, Mont., said that logging had been ratcheted upward at the behest of political appointees during the



U.S. Forest Service

John W. Mumma

Reagan Administration.

For the coming year, the forest supervisors proposed to offer only 814 million board feet of timber for sale, although the congressional budget directs the region to offer 980 million board feet. Now, the region's tentative timber target is 1 billion board feet, said Dave Colclough, who works on the timber sale preparation staff in the Missoula regional office.

The region wasn't able to meet last year's 1.12 billion-board-feet target, offering only 786 million board feet of timber for sale. One million board feet of timber is enough to build about 90 average-size houses.

The shortfall may have placed Regional Forester John Mumma's job in jeopardy. Jay Hair, president of the National Wildlife Federation in Washington, D.C., wrote Chief Robertson in July, expressing concern about a visit the Forest Service's associate chief made to Missoula.

"As we understand it, this is an unprecedented performance review which may result in Mr. Mumma being dismissed from his position," Hair wrote. "As I say, I very much hope that Regional Forester Mumma's job is not in

any jeopardy, and that the Forest Service remains committed to subordinating timber goals to good forest management." Mumma was the first wildlife biologist to become a regional forester when he took the job three and one-half years ago.

Oddly enough, when Associate Chief George Leonard was in Missoula, he was quoted as saying that timber harvests on national forests in western Montana will "drift downward" over the next five years as foresters attempt to better protect threatened and endangered species, water quality and fisheries. He assured forest supervisors then that land management standards take precedence over allowable timber sale quantities.

In a telephone interview, Mumma said he was not at liberty to discuss his personal performance rating. But Leonard later confirmed that Mumma "received a fully satisfactory performance rating this year."

Why targets are unmet

Several factors have prevented the region's national forests from meeting the timber target, Mumma said. They include the failure of Montana and Idaho to pass wilderness bills. About one-fourth of the region's timber has to come from roadless lands subject to the long-standing wilderness controversy, Mumma continued. On lands that already have roads, the forests have sold the amount of timber established by forest plans, he said.

But the roadless lands controversy has left the region's national forests preparing 44 Environmental Impact Statements for timber sales — 12 more than in all remaining Forest Service regions put together, Mumma said. During the last five or six years, the cost of environmental analysis has risen from 20 percent to 70 percent of the cost of timber sale preparation, according to the region's assistant director of timber management.

Management of adjacent lands also affects the Forest Service's ability to sell timber, Mumma said. In some cases timber companies have logged their own lands so heavily that the Forest Service can't meet environmental standards if it cuts its lands in the same area.

"We're going to perform that land stewardship responsibility that we've been charged by the Congress with," Mumma said.

Timber is only one of about a dozen targets set for the region's national forests. Others include timber stand improvement, mineral leases and permits, reforestation, Forest Service boundary location, and fish and wildlife habitat improvement. The region exceeded some of those targets and fell slightly short in others.

"Shortfalls in any targets are offset by over-achievements in others," says Mumma's performance plan.

"There's one thing in the forest plan that is not a goal, but is an absolute and that's production of timber," said The Wilderness Society's Scott. "It all seems to come down to timber driving everything the forest does."

Orville Daniels, supervisor of the Lolo National Forest, told the Montana Wilderness Association he was surprised environmentalists were shocked to learn of Mumma's situation.

"Don't be naive," said Daniels. "It's not the first time. It won't be the last time." In recent years regional foresters have been placed in the Senior Executive Service rather than the Civil Service. That means they have less job protection, he said. "Two weeks and they're gone."

Daniels was asked if forest supervisors could turn back some of the money Congress budgets for logging. "When we take the money to do a target, we've kind of taken the bait," Daniels acknowledged. He said any move to turn money back would have to come at the Washington level.

In the meantime, the region's forest supervisors are among 30 top Forest Service officials in Montana and northern Idaho who have signed a "vision statement" pledging to implement forest management plans. The statement, dated Oct. 26, sets out four principles:

 The intent of the National Environmental Policy Act will be followed to ensure that the public is involved, a range of options is considered and the environmental consequences are understood.

· Environmental documents will be



Jack Tiholsh

Snowfall along the Bitterroot divide, Lolo Pass, Montana/Idaho

prepared two years in advance and be legally supportable. Environmental Impact Statements will be prepared where roadless values are significantly affected.

· Budget requests and project schedules implementing the plans will be balanced and realistic.

· Plans will be monitored, with annual evaluations pointing out the differences between what was called for in the plan and what was achieved. The implications of such differences will be explained and used as the basis for

"The R-1 regional leadership team fully intends to implement forest plans as directed by the Executive branch and Congress," the statement says. "We expect to meet forest plan management direction and care for the long-term values of the land. All budgeted targets will be accomplished in an efficient and quality manner.

"We recognize there will be changes. Forest plans must be dynamic. Over time, as we experience change through new opportunities, resource impacts, management direction and budget or executive direction, we will amend the plans."

Jim Riley, executive vice president of the Intermountain Forest Industry Association in Coeur d'Alene, Idaho, said he had been concerned for some time about the "dismal performance of the Forest Service in Montana and Idaho in carrying out their forest plans." He said the Helena National Forest offered only 5.4 million board feet of timber for sale last year, despite a target of 20 million board feet.

"I think it's the Forest Service's obligation to stand behind their plans and try to deliver on them," Riley said. "On the Helena they seem to have set them on the shelf and let the environmental complainers exercise veto power over any proposed timber sale."

How sales will go up

Helena National Forest Supervisor Ernie Nunn, who proposed offering 12.3 million board feet of timber for sale, faces a 26-million-board-foot target. Jerry Adelblue, the forest's appeals coordinator, says the target can be met by offering 5.9 million board feet of timber salvage sales this year that have been held up by appeals, 10.1 million determine that," Hughes said. "We assume that Congress speaks for the people."

Meanwhile, the Forest Service won't violate the environmental standards and guidelines in the forest plans, Hughes said. Some forests may sell more timber in the coming year than the annual average set by forest plans. However, the plans set the maximum level for a decade with changes expected from one year to the next, he said.

"The Forest Service tries to do what the public wants, but sometimes it's hard to determine that. We assume that Congress speaks for the people."

— Deputy Regional Forester John Hughes

board feet of timber sales already scheduled for this year, and another 7.7 million board feet of timber in sales prepared in 1982, 1985 and 1987 but held up pending resolution of the roadless lands dispute.

"That should leave us short about 2.3 million," Adelblue said. "That we're going to scrape for."

Montana's Lewis and Clark National Forest plans to sell 28 million board feet of timber in the coming year, more than twice the annual 12.1-millionboard-foot average established by the forest's management plan.

The additional timber will make up for timber that wasn't sold in previous years because of appeals, said Dale Gorman, forest supervisor. Last year, the Lewis and Clark National Forest sold 8.4 million board feet of timber.

Deputy Regional Forester Hughes said the Forest Service tries to do what the public wants. "Sometimes it's hard to

Forest plans set the region's annual average level, or allowable sale quantity, at 1.12 billion board feet, with 561.3 million to come from Idaho and 559.3 to come from Montana. For each forest, the annual allowable sale quantity is: Beaverhead 17.3 million board feet; Bitterroot 33.4; Idaho Panhandle 280; Clearwater 173.3; Custer 3.5; Deerlodge 23; Flathead 100; Gallatin 21; Helena 15; Kootenai 227; Lewis and Clark 12.1; Lolo 107; and Nez

Some forest supervisors think those figures are too high. Fred Trevey, supervisor of the Clearwater National Forest in Idaho, wrote Mumma last February to tell him so. Trevey wrote that the forest had finished specific project analyses on 20 percent of its timber base.

"NFMA [National Management Act] legislation and appeal decisions make it clear that ASQ [allowable sale quantity] is only a ceiling and that our actual timber capabilities are to be determined through the sitespecific project by project analyses completed within the framework of a forest plan," he wrote.

"From these site-specific analyses we currently project that the Clearwater's resource capability is about 1,200 million board feet for the decade in comparison to the forest plan's ASQ of 1,730 million board feet. Although I can't say with any certainty that we will achieve even this level until the site-specific analyses are complete for the rest of the suitable timber base, I believe it provides a much better planning level for the timber industry than the 1,730 level."

Trevey said the Clearwater couldn't produce as much timber as projected by the forest plans because:

· Watersheds haven't recovered from previous logging.

· Unroaded areas yield less timber than expected.

The "front country" is exhausted.

 Logging on adjacent private land limits the Forest Service's ability to log its own land without damaging water quality.

· Proposals that meet environmental standards may not be economical.

Tom Kovalicky, supervisor of Idaho's Nez Perce National Forest, said in a telephone interview that his forest's management plan might have projected more timber than the forest actually produces. In another year he will have enough data to know whether the plan needs to be changed, he said. However, he doesn't feel under any pressure to violate environmental standards and guidelines to meet timber targets.

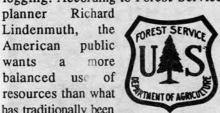
"Yeah, they're there," Kovalicky said of the targets. "They're real. They're wish-book targets a lot of the time. But I'm hired to be a professional land manager. They're not going to get a political ASQ. I'm not paid for that."

HOTLINE

New direction for the Forest Service?

A new U.S. Forest Service plan increases emphasis on wildlife and recreational values while maintaining livestock grazing and slightly reducing logging. According to Forest Service

Lindenmuth, the American public wants a more balanced use of has traditionally been



provided. The Rocky Mountain Region is amending the current Regional Guide that directs the management of 19.9 million acres in Colorado, Kansas, Nebraska, South Dakota and southern Wyoming. The vast majority of that acreage is in Colorado. The proposal calls for increased maintenance and reconstruction of picnic areas and campgrounds over the next 10 years, and for adding 403 miles of new and rebuilt trails each year. Managers hope to reduce the number of overgrazed acres without cutting grazing permits. The agency also has set a goal to end most, if not all, belowcost timber sales within the next decade. Annual logging road construction in the region would be cut from 130 miles in 1995 to 120 miles in 2000, and timber sales would decrease by 4.6 percent in 10 years. Oil and gas leasing on national grasslands is projected to increase. The Forest Service welcomes public comments through Feb. 28, 1991. Write to Gary Cargill, Regional Forester, Rocky Mountain Region, 11177 W. 8th Ave., Lakewood, CO 80225, or call 303/236-9427.

Two Western landfills shelved

Two proposed landfills, one in South Dakota and one in Colorado, will not be constructed, at least for a while. South Dakotans approved an initiative that shifts permit decision-making for large landfills from a governor-appointed board to the state's Legislature. This will force South Dakota Disposal Systems, a Coloradobased company that planned to construct a large commercial landfill near Edgemont, S.D., to seek a new permit from the South Dakota Legislature. The company previously had been granted a permit by the board, but the new law is retroactive to July 1989, two months before the permit was approved. The company intends to challenge the constitutionality of the measure's retroactivity. In addition, the plug was pulled on a "megadump" project designed to revive southeastern Colorado's farm economy with trainloads of garbage from the East. County Commissioner Roy Brinkley told The Denver Post "something happened with the partnership" between Diamond Waste and Southern States Landfills, and that "they were no longer interested." Gov. Roy Romer expressed relief, saying there are ways to help Colorado's rural counties without opening state borders to Eastern garbage.

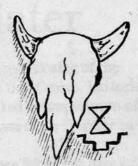
ORVs admitted to proposed Idabo wilderness area

Sawtooth National Forest has released a draft travel map whose purpose is to keep the proposed Boulder-White Cloud Wilderness Area open to motorized traffic. The travel map shows the trails where off-

road vehicles are allowed. Environmental Assessment that will be completed this month will not be open to public comment. This constitutes a victory for the Blue Ribbon Coalition, a group in favor of offroad-vehicle (ORV) use, based in Idaho Falls, Idaho (HCN, 3/28/88). The Idaho Wildlands Coalition, a group representing several environmental groups, will appeal the forthcoming EA on the grounds that ORVs are destroying portions of the proposed wilderness area. The Idaho Wildlands Coalition also is calling for an Environmental Impact Statement by the Forest Service on the effect of vehicles in the area. A final decision is expected by the Forest Service early next year.

Green light for Jeep safari

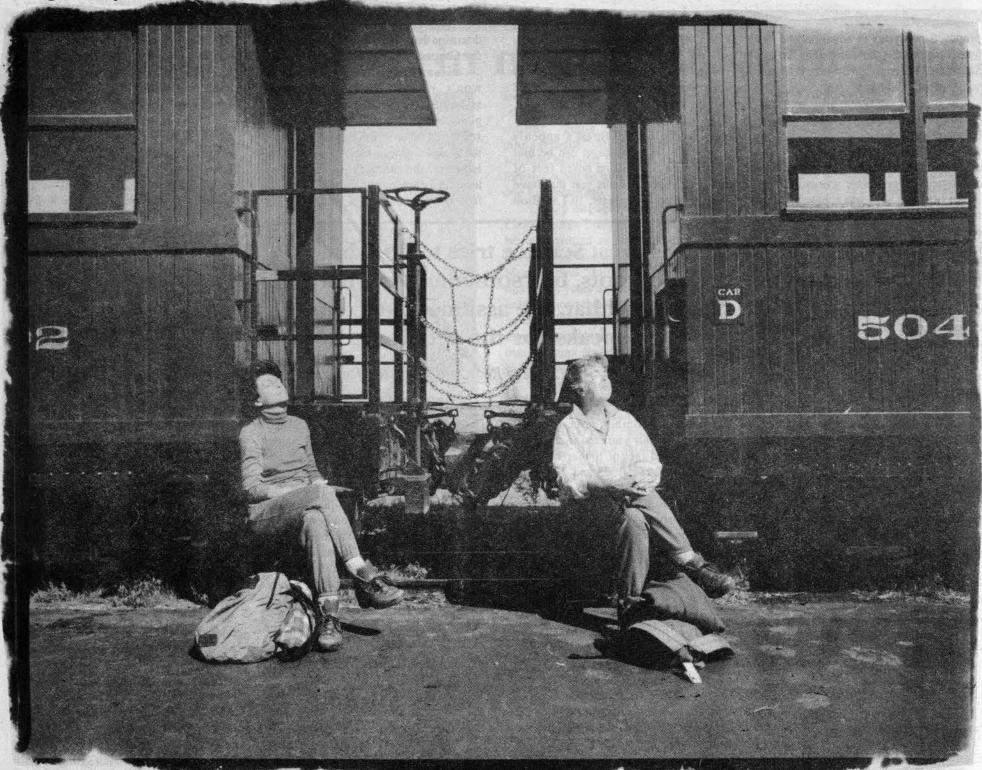
The Bureau of Land Management has approved the five-year permit for the Annual Easter Jeep Safari in Moab, Utah. The permit requested by the event's sponsors, the Red Rock Four Wheelers, was granted with few significant changes, even after the BLM completed an Environmental Assessment addressing the potential ill effects of the event. Gene Nodine, BLM's Moab district manager, told the Moab Times-Independent, "Our analysis indicates that the event can be permitted with no significant impact to the environment." Brant Hawkin, executive director of the Southern Utah Wilderness Alliance, believes the permit's approval was based on insufficient study, and would like to see the BLM complete an Environmental Impact Statement. He says the alliance plans to appeal the BLM's decision and will request a stay on the event itself. The alliance fears that the 1,200 expected vehicles will damage riparian areas and disturb the region's bighorn sheep population.



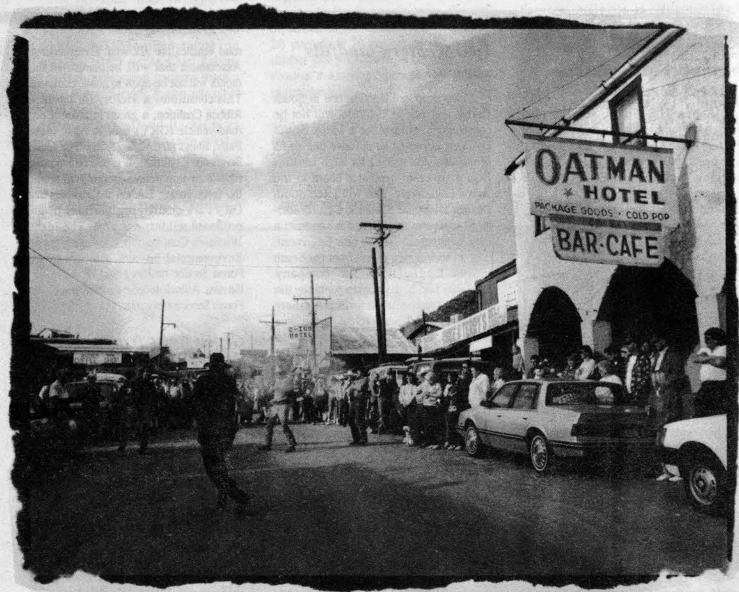
Bison bunt balted

The Department of the Interior and the U.S. Fish and Wildlife Service agreed to a moratorium on bison hunting last week when they settled a lawsuit filed by Legal Action for Animals, a New York-based group of about 100 attorneys. The group opposed a bison-reduction hunt on the National Elk Refuge outside Jackson, Wyo., claiming it would put the herd's genetic health at risk. The group's attorney, Jolene Marion, told the Casper Star-Tribune that it is subject to inbreeding. In the settlement, the federal agencies agreed to complete a scientific review of a study of the genetics of the Jackson Hole bison herd and an Enivormental Assessment of the reduction hunt before deciding whether to continue the hunt. Before the suit was filed, two bison had already been shot; the goal in this year's hunt was to shoot a total of a dozen bison to keep the population under 110. The agencies are fearful that the bison, many of which are infected with brucellosis, could transmit the disease to cattle.

8 — High Country News — December 17, 1990



"Two Women Waiting," depot, Cumbres and Toltec Scenic Railroad, Antonito, Colorado



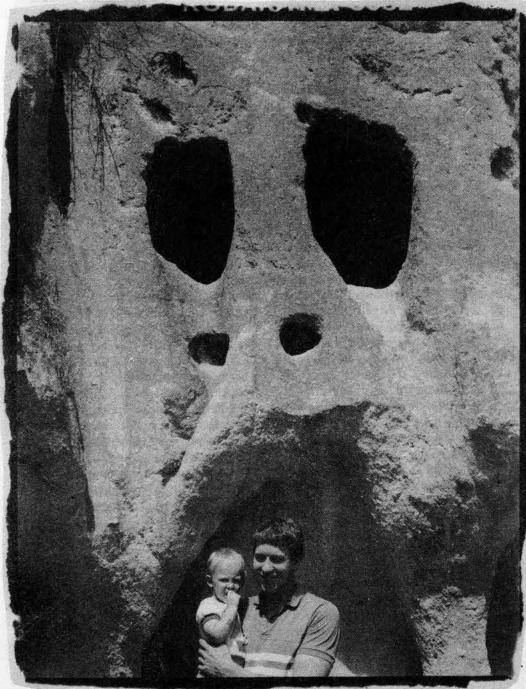
"Gunfight," Main Street, Oatman, Arizona

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makes and realizable (see the last feeting only)



"Ascension," tourists on the trail, Pecos National Monument, New Mexico



"Father and Son," Bandelier National Monument, Bandelier, New Mexico

The closing of the American Frontier: 100 years later

The year 1890 marked the "official" closing of the American frontier, according to the U.S. Census. Historian Frederick Jackson Turner later marked the importance of its passing in his essay "The Significance of the Frontier in American History."

Photographer and writer Courtney White has roamed the West on the centennial of its settlement, exploring its modern frontiers and chronicling what he calls "human-land relationships."

What has changed and what has remained the same over the past 100 years? Who works, plays and travels across the contemporary West? How does the Western landscape touch the lives of archeologists, campground hosts, tour guides, Park Service rangers, naturalists and environmentalists? These are some of the questions he's attempting to answer with his photographs.

Photos by Courtney White

Animas-La Plata ...

(Continued from page 1)

counsel to the Southern Utes. Indeed, the unresolved question of the two tribes' water rights had posed a formidable barrier to the region's dream of capturing the flows of the Animas and La Plata rivers for its farms, towns and reservations. The Indians could have claimed much of the water.

Now some Utes wonder if they can afford the water, or if they will ever get their share. The reason is how the construction of the Animas-La Plata project is staged and financed.

The Animas-La Plata project will divert water from the two rivers it is named after to a mammoth network of pumping plants and transportation conduits anchored by two reservoirs. The network, in turn, will supply the Ute tribes, the Navajo Nation, Anglo irrigators, and the towns of Durango, Colo., and Farmington, Aztec and Bloomfield, N.M. The project may change in response to its current impasse with the squawfish.

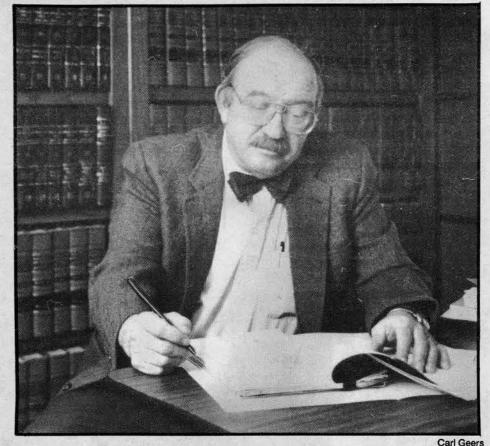
As currently planned, about onethird of the water in the 195,400-acrefoot water scheme is assigned to the Utes.

The project has been divided into Phase I — half of which will be paid for with revenues from federal hydroelectric dams on the Colorado River — and Phase II, which will be paid for entirely by the water users.

All of the Utes' water will be stored in Ridges Basin Reservoir, which is the centerpiece of Phase I. Yet nearly all of the farmland slated to be irrigated with water delivered with Phase I facilities belongs to Anglos. Of some 65,700 acrefect of irrigation water to be delivered to surrounding farmland, only 2,600 acrefect of water will reach the Southern Ute reservation. Phase II would give the tribes 27,100 acre-fect for irrigation.

Although some Utes are not happy with the project, the ones in power are satisfied.

The Ute Mountain Utes are slated to receive water from the nearby Dolores River project in 1994. Water from Phase II of the Animas-La Plata will complete their agricultural plans, which include



Water lawyer Sam Maynes

building the "largest farming and ranching operation in the county," said Mike Preston, agricultural development coordinator for the tribe.

Southern Ute Tribal Chairman Leonard Burch calls the project "a darn good deal." He says Phase I will deliver water to the arid, thinly populated west side of the reservation, opening it up for settlement by an increasingly populous tribe. Water rights on streams in the eastern part of the reservation will be secured. And the municipal and industrial water, which constitutes most of the tribe's allocation, will eventually help develop the reservation's huge coal reserves.

"The primary thing is to keep it right here for our own people to develop our land and the resources that we have," Burch said. "Maybe it will let the people now living off the reservation come home, because this is their reservation."

A study commissioned by the Southern Utes and completed by the Washington, D.C., firm of Sonosky, Chambers & Sachs concluded this summer that the project would benefit the tribe. "I think, with proper planning, proper management, we can afford the project," says Burch.

Others on the reservation disagree. "We're going to be saddled with a project that's going to cost us a lot of money," says Ray Frost. "A lot of people are going to come back one day and say 'Why have you allowed this to happen to us?'"

The Southern Utes will pay from \$190 to \$200 per acre-foot of water annually for 50 years for their 26,500 acre-foot allotment for municipal and industrial use, when and if they begin to get it. The Washington, D.C.-based Environmental Policy Institute, which completed a study of the project in 1987, calculated that water payments would amount to about \$5,000 per year per tribal member, a cost that would deeply cut into any profits the tribe would earn from development of the reservation's coal reserves.

Frost says he backed the project when it left open the possibility of the Indians' selling water downstream to cities in Arizona and California. That allowance was curtailed, primarily at the hands of the California delegation, as the Colorado Ute Water Settlement bill made its way through Congress.

"I was in favor of it back then because of the financial value," he said. "But now there's no direction." He would like the project to be "halted, redesigned or re-evaluated to something that meets our needs."

Controversy over the project was a factor in the first recall election in the history of the Southern Ute Tribe last spring, when Frost and a group called the Committee to Improve Tribal Government nearly unseated Burch and several council members. They consider Burch beholden to the 'Anglos, particularly tribal attorney Sam Maynes, and criticize Burch for not keeping them informed about the project and other tribal issues.

"They were forgetting their human resources, listening to their attorney and not to their own people," said Annabelle Eagle, another member of the committee. In regular elections this fall, however, Burch resoundingly beat Frost in a race for tribal chairman on a platform supporting Animas-La Plata.

urango, Colo., is split physically and politically by the Animas River. It roars through town in a brown torrent in the spring, and slides from blue-green pool to pool in the fall. Descendants of the miners and farmers who settled the area rub shoulders with Fort Lewis College undergraduates and other relative newcomers, many of them drawn to the area by its proximity to the mountains, the desert and the river.

A stone's throw from the river is Sam Maynes' office. Its walls are covered with the trophies of 30 years of practicing water law: photographs of Ute leaders, a picture of former Gov. Richard Lamm signing the Colorado Ute Indian Water Rights Settlement, and a framed Durango Herald story proclaiming, "It's Yes to Animas-La Plata."

The garrulous attorney works for both Indians and Anglos involved with the Animas-La Plata project. While he doesn't represent the Southern Utes in water issues, he is their general counsel. He also represents the Southwestern Water Conservation District, an umbrella organization that assists local water conservancy districts, including the Animas-La Plata Water Conservancy District, which plans to get water from the project.

"Periodically people like to accuse me of having conflicts of interest," he says, adding that a court action taken against him by opponents of the project

Fishing ...

(Continued from page 1)

find a way for the huge water scheme and the fish to coexist, but the Fish and Wildlife Service must decide whether there is a "reasonable and prudent alternative" to scrapping the project. The agency plans to release another draft biological opinion next month; its final opinion is expected in April.

Secretary of Interior Manuel Lujan has suggested that a smaller project might ease the conflict between Animas-La Plata and the fish.

Meanwhile, the Bureau of Reclamation and water users are currently working on a proposal to build part of the first phase of the project near Durango, Colo. — Ridges Basin Reservoir, the Durango pumping station, and a pipeline connecting the two. This would divert 60,300 acre-feet of water a year from the Animas River for municipal and industrial use, but not for irrigation. Water from the Navajo Dam in New Mexico would be released to mimic natural flows for the fish.

Construction of the rest of the first phase of the project, which would divert a total of 154,000 acre-feet from the river, would depend on further study of the needs of the fish and the implementation of a recovery program.

"One of the big problems is that no one, including the Fish and Wildlife Service, knows what the Colorado squawfish requires in order not to be in jeopardy of extirpation," says Rick Gold, the bureau's assistant regional director in Salt Lake City.

Opponents say the part-way proposal still constitutes an institutional commitment to build the whole project, while proponents say the compromise could leave irrigators high and dry if the project were never finished.

"It still leaves a lot of risk," says Scott McElroy, water counsel to the Southern Ute tribe, which has signed up to receive 3,300 acre-feet of irrigation water. "We tried to get ourselves a settlement that everybody could live with, and part of that settlement is irrigation water for the tribes. We need some commitment that people are still going to stick by the settlement. I'd like a real loud commitment."

"Half a loaf is still not acceptable, but it's a great improvement," says Durango attorney Sam Maynes. "There seems to be a consensus of biologists that there's at least 50,000 acre-feet of water in the system that would enable us to go ahead with the Animas-La Plata project."

This is precisely what worries environmentalists.

"Any kind of approval creates great momentum to building the entire project," said Lori Potter of the Sierra Club Legal Defense Fund. "Once the federal government begins to invest in the project through yearly appropriations, there will be extreme pressure on it to finish its investment."

It's likely that several environmental groups represented by the defense fund would file a lawsuit if the Fish and Wildlife Service adopts the current proposal as a "reasonable and prudent alternative," she said.

"For the Fish and Wildlife Service to sign off on construction before the endangered-fish studies are final would be illegal," she said. "I think the Fish and Wildlife Service is under intense pressure to find some way, legal or not, to sign off on this project."

The current proposal calls for releasing water from Navajo Dam to mimic a variety of flows. Releases as high as 300,000 to 500,000 acre-feet per year have been mentioned. Environmentalists wonder why this

water wasn't identified before.

"It was only after the squawfish that the Bureau of Reclamation divulged they had a veritable sea available upstream from the New Mexico cities," said Dave Conrad of the National Wildlife Federation. "The New Mexico public was never informed of that while they were being asked to mortgage their children's future for the Animas-La Plata project. ... Why build a big dam and reservoir on top of a mountain for that?"

Bureau of Reclamation officials counter that the water isn't intended to replace depletions by the Animas-La Plata project, but to supply flows during the research period. "It's short term," says Gold. "Most of that water is allocated, although it hasn't been developed yet."

And if biologists find that the fish need all the water released from the dam? That will have to be dealt with at that time, says Bureau of Reclamation spokesperson Lilas Lindell. "By the same token, until you do the research project you don't know anything about what they need."

was dismissed by the Colorado Supreme Court.

He doesn't like to talk about the criticism leveled at the project by opponents, who charge that it would become an economic and environmental disaster. Instead, he points out the series of hurdles the project has cleared, from local voters' accepting a cost-sharing agreement to congressional passage of the Colorado Ute Water Settlement Act, which reauthorized the project.

"We won. They lost," he says. "The fact of the matter is we came up with a plan, and that plan has been accepted by the U.S. Congress, the president of the United States, the voters of La Plata County, the voters of San Juan County and the Indian tribes."

Maynes argues that Animas-La Plata will prevent another Wind River, a reference to the valley in Wyoming where the Shoshone and Arapaho Indians successfully litigated their claims to over half the water in the basin, which is now affecting the water supply of Anglo farmers (HCN, 8/27/90).

"The alternative is years and years of litigation," he said. "The alternative is that if the Indians won we'd have another situation like the Wind River on the Mancos River, on the La Plata River, on a lot of the other streams crossing this reservation. They [the Anglos] would lose all their water; they would lose their farms, their ranches, three or four generations of living."

Others say, however, that the issue of Indian water rights is a massive bluff by the Indians and their lawyers. Englert of Taxpayers for the Animas River challenged the Utes' claim of an 1868 date for their water rights in testifying against the Colorado Ute Water Settlement bill in 1987. Citing the complicated history of the Ute reservation and focusing on a 1950 settlement in which they were awarded \$32 million for much of the land that had been taken from them, she suggested the Utes aren't entitled to the amount of water that project proponents claim.

"I don't know if I'd want to get into a poker game with Sam [Maynes] and Leonard [Burch]," she said during a telephone interview. "It's quite a bluff to parlay poor water rights into a \$600 million project."

The report by Sonosky, Chambers & Sachs lends some support to Englert's claim. "A major risk for the tribe would have been proving an 1868 priority for some of its water," it stated.

A lthough it still only exists on the drawing board, the Animas-La Plata project has been part of life in the Durango area for decades.

"It was in 1961 or 1962 and my wife and I were talking about marriage and I said, 'Things will be all right. We'll have the Animas-La Plata and we can make a living and settle down here,'" said Sheldon Slade, a dairy farmer in nearby Redmesa and a board member of the Animas-La Plata Conservancy District. "We've got six grandkids now and we still don't have an Animas-La Plata."

Area residents first asked the Bureau of Reclamation to look into the possibility of a water project on the Animas in 1904. In the decades since, dozens of versions of the project have been contemplated and the existing project has become so complicated that one critic contends that few people, even at the Bureau of Reclamation, understand it.

"If you make an issue so complex that it boils down to being for or against water, the bureau is going to win," says Evert Oldham, former head of Our Lands, a New Mexico group that opposes the project. "The bureau has a

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strategy of information overload."

The 1968 Colorado River Basin Act authorized construction of an earlier incarnation of the project — a reservoir on the Animas River near Silverton, and 48 miles of canals and tunnels to take the water to Durango. That project, which one observer said "would have caused a great deal of environmental damage," ran head-on into the National Environmental Policy Act of 1969, and the Animas-La Plata project then metamorphosed into its present form.

Critics say the project's current stalemate with the squawfish is just one of its inherent problems. Some predict the cost will escalate to \$1.5 billion. They point out that the project would increase the salt load of the Colorado River Basin, flood prime deer and elk habitat, use water that has flowed over a uranium tailings site, stymie a burgeoning rafting industry, and alter the habitat of the Animas, which has been called "the best riparian habitat in New Mexico, bar none." The Environmental Policy Institute called it "one of the most ill-conceived reclamation projects in the nation's history."

Perhaps its most criticized feature, however, is the amount of power it would consume. Ridges Basin Reservoir, the 280,000 acre-foot centerpiece for the first phase of the project, lies some 500 feet above the Animas River, where water will be diverted and pumped uphill to fill it. This will consume an estimated 165 million kilowatts of energy per year — the same amount used by a city of about 26,000 people.

Even Bureau of Reclamation project team leader Ken Beck calls the pumping requirement "horrendous." "It's a contravention of every conservation philosophy there is," said Oldham. "I think we ought to be going about resolving some of the problems we have in this nation, not compounding them."

Opponents also say much of the land slated for irrigation by the project is poor farmland, and point to the government's current policy of crop retirement. In La Plata County, Colo., the 1985 Farm Bill's conservation reserve program has taken 10,500 acres of land — almost none of it irrigated — out of production, primarily to control erosion.

"Forty-five million acres of the nation's farmland are being taken out of production for 10 years, yet here we are funding a project that will bring 50,000 acres of new farmland into production," says Oldham. "In my opinion, that's a subversion of national security."

But Keith Dossey of the Department of Agriculture's soil conservation district in La Plata County said the project will irrigate non-Indian land that is currently farmed without irrigation, rather than bring new land into production. "It'll really help this area of the state," he said. "The farmers will respond to the project by diversifying and raising the crops that they're short of."

For Slade, the project means being able to raise more feed for his dairy cows. "In the past three years we've had a terrible drought," he said. "This past year I raised 1,000 bales of hay. Usually I can raise 1,500 or 2,000."

For the Ute Mountain Utes, it could mean anything from developing a feedlot to raising organic carrots on land that has never been farmed before. Three weather stations are collecting data on the reservation to see which crops will thrive, says Mike Preston, the tribe's agricultural development coordinator. Because it hasn't been farmed with chemicals, the land could produce organic foods.

"We've had people from wineries

saying, 'How'd you like to grow grapes here?'" says Preston. Other plans include using the crops as the basis for industries like a fruit juice plant or a feedlot.

"The beauty of this settlement is it allows them to have an agricultural base, which is the key to this whole region," says Preston. "The non-Indian community has had the benefit of water and agricultural development over the last century. It's really the tribes' turn to have that opportunity."

Whether the Indian tribes will ever realize all their water entitlement, however, is another matter. Although the settlement of the Ute water claims was primarily responsible for reviving the Animas-La Plata project, the fruits of its first phase will go mostly to non-Indians. Anglo farmers will get 96 percent of the water diverted for irrigation.

Furthermore, whether the \$590million cure is worse than the disease is challenged from Durango to Washington, D.C.

"It's a solution in search of a problem," said a congressional observer. "They're trying to build a 1950s water project in 1990 and it can't be done."

Whether the squawfish will prevent Animas-La Plata from being built remains to be seen. The project has developed formidable momentum, with millions of taxpayer dollars already allocated. Many proponents see the entanglement with the squawfish as the last in a series of hurdles the project has cleared. But the project's opponents are optimistic that the fish has bought time for the project's true colors to be seen.

"Time is on our side," said Oldham, who points to the project's defects. "As the public becomes better informed, we'll be better equipped to beat Animas-La Plata."

How to remedy overgrazing

by Karl Hess

Few would disagree — at least among those with open eyes and open minds - that livestock grazing has diminished the pristine beauty and natural bounty of much of the West. But this reader, for one, does not agree with HCN's analysis of why overgrazing has occurred and the proper course for resolving its tragic environmental legacy.

Contributors to your grazing issues correctly noted that politics sour grazing management (Marston), that pristine places are few and far between (Williams), that public participation and alternative public values often take second billing to grazing needs (Feller and Wheeler), and that grazing strategies do exist that can heal rather than rape fragile arid rangelands (Fergus, Ford and Wolf). Yet all of these writers overlook what I believe to be a crucial factor in the overgrazing of desert lands and in the making of today's public-land predicament.

The fact is, public-land grazing is designed to bring out the worst in people. Laws and policies which set the rules for livestock use on public lands encourage anything but a caring, innovative attitude.

To begin with, the permit system gives no elbow room to individuals who see in the landscapes of the Western range something other than forage for cattle, sheep and horses. The grazing permit tells the publicland users that upland grasslands and bottom riparian areas have only one redeeming value: consumption by four-legged meat factories. Ranchers and the environmentally minded public who might wish to use or acquire grazing permits for alternative uses — such as making a sustainable living from recreation and wildlife, or securing conservation easements over critical riparian areas and ecologically sensitive habitats — simply cannot. They must satisfy themselves either with grazing livestock or with playing politics in the arena of public-land meetings.

For the 30,000 permittees who have no alternative but to graze public lands or go out of business, there are enormous barriers to stewardship and the evolution of a

land ethic. First, the majority of public-land ranchers have grazing allotments that are too small to provide a sustainable existence for the ranchers, not to mention a sustainable environment for the plants and animals that dwell on their lands. Their allotments are so small that overgrazing is a price many of them pay to stay in business. And for ranchers on the smallest of allotments, of which there are thousands, there is little incentive to invest time and money on lands incidental to outside jobs and secondary in importance to family life. Moreover, thousands of allotments are communally grazed. On many of them, Garret Hardin's "tragedy of the commons" is played out every day, resulting in overgrazing as profound as that which occurred when the Western range was open to one and all.

Larger allotments do not fare much better. Permittees with good intentions and adequate land to achieve a sustainable lifestyle face numerous obstacles. Layers of bureaucracy and bureaucratic intransigence curtail their willingness and ability to invest of themselves in the improvement and protection of their leased lands. Indeed, public-land law and agency policy discourage ranchers with financial means from spending their dollars on public lands. This happens either because ranchers are given no assurance that they can share in the benefits of their stewardship or because land agencies discourage or disallow excessive private investment — a habit nurtured by the reasonable fear that private expenditures might endow ranchers with the power that comes with vested interest. Unfortunately, without some modicum of vested interest, it is hard to imagine people caring for the land as much as they might otherwise.

The worst feature of public-land management is the subsidies provided to ranchers. Yet it is not the old bugaboo of low grazing fees that represents the most pernicious subsidy. Time and again, the federal government has handed out millions of rangeimprovement dollars to rescue communities of ranchers who have misused their lands. From Vale, Ore., to the Rio Puerco in New Mexico, the government has subsidized the worst of ranchers and, more often than not, ignored and



discouraged the best of them. The lesson given by agencies to ranchers has been that it pays to overgraze public rangelands; it pays in terms of federal handouts. With such a twisted incentive, is it any wonder that so many ranchers fall short of sustainability?

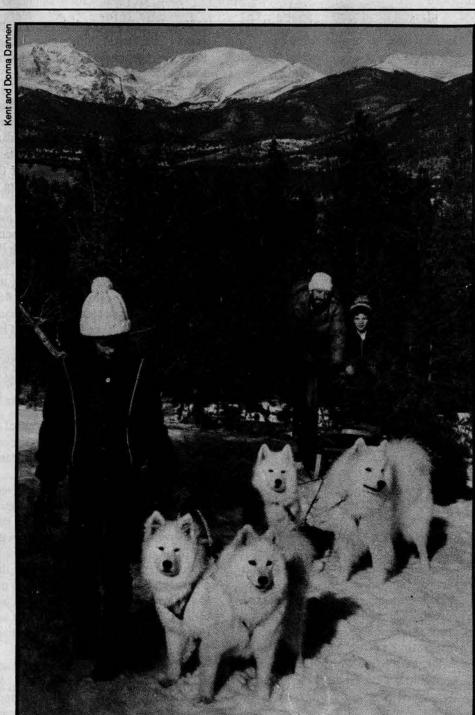
What is the solution? To begin with, subsidies must end. Ranchers must pay the costs of their operations and be held responsible for their failures, even if it means going out of business. More importantly, ranchers must be given the opportunity to profit from their successes. Stewardship that benefits both the public and the Western landscape should be encouraged, even if it means more livestock in some areas

Yet much more is needed. The public lands must be truly opened; they must be democratized in a way that is more meaningful than public meetings and user-friendly bureaucracies. Ways must be found whereby all citizens have the opportunity to apply their personal visions to lands that have historically been the domain of ranchers, loggers, miners and bureaucrats.

As Aldo Leopold noted in a 1942 Audubon article, Land-Use and Democracy, "One of the curious evidences that conservation programs are losing their grip is that they have seldom resorted to selfgovernment as a cure for land abuse."

A sustainable solution lies along a different path, and that solution, I believe, requires fundamental reform of public land. It is time to give grassroots democracy a chance. It is time to explore alternatives, to seek ways in which environmental organizations, local communities, caring ranchers and visionary individuals can find a responsible and secure niche on the infinitely diverse landscapes of the Western range.

Karl Hess has a Ph.D. in range ecology and has just completed a book on grazing on public land. He lives in Las Cruces, N.M.



A Samoyed sled team near Estes Park, Colorado

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LETTERS



Pamphlet distributed to Japanese tourists

DAISHOWA IN THE PARKS

Dear HCN,

Lawrence Mosher's article on Daishowa's involvement in a hydro dam licensing dispute in Washington (HCN, 8/27/90) was a bit startling to me. Can it be that Daishowa has a corporate affinity for national parks?

Here in Canada, Daishowa has recently purchased rights to timber being clearcut in the heart of Wood Buffalo National Park, in northern Alberta. In fact, Daishowa now controls more than 40,000 square kilometers of northern Alberta and will clearcut the area to feed a bleached-kraft pulp mill on the Peace River. Neither the pulp mill nor the forestry operations were subjected to environmental impact assessment, since both deals were done behind closed doors by Daishowa and the Alberta government. There are now three court cases under way as conservationists challenge the project on various grounds, but Canadian law offers fewer substantial lines of legal attack for concerned citizens than American law.

I wish the Friends of the Earth a total and resonating success in their efforts to restore the Elwha River and protect it from commercial greed. It is about time that Japanese corporations begin to treat the world with the same restraint and dignity that they are obliged to use in Japan.

If you manage to save the Elwha, it may help assuage a little of the frustration felt by us Canadians as we watch the Peace River contaminated by Daishowa's dioxins, furans and other organochlorines and its watershed destroyed by Daishowa's clearcutting.

Kevin Van Tighem Field, British Columbia

WHY SACRIFICE MORE LAND?

Dear HCN,

It's funny how individuals or groups with their own special interest believe that changes have to be made to support their special interest. I'm referring to Peter Shelton's guest editorial, "Whose mountain is it, anyway?" in the 10/8/90 issue. As he points out, the editors of the skiing magazines mentioned that the result of the poll of local residents "takes from the American public its right to enjoy and use its public lands."

Who do they think the American public is, anyway? Why does enjoying the public lands always mean, to those types, that it has to be developed in some way? Which also means that it will be changed so that others won't enjoy it in their own way. Let's just leave it alone!

I do have a suggestion for the Forest Service. Maybe before any more public land is sacrificed for ski areas, it should investigate whether the current capacity of all ski areas on public land is being utilized. If not, why build more? If so, can the current areas be expanded so as not to sacrifice any more quality wilderness to the tramplings of thousands of "city dwellers"?

Ronnie Rogers League City, Texas

ANOTHER GOOD BOOK

Dear HCN,

After writing the book review which appeared in the recent special edition on ancient forests, I came across another account which deserves mention for HCN readers pursuing the subject further. In his new book, The Practice of the Wild (North Point Press, 1990), Gary Snyder has an excellent chapter titled "Ancient Forests of the Far West."

This 20 pages is the best short piece I have read on the subject of Northwest ancient forests. Snyder grew up near Puget Sound on a farm that not long before was ancient forest, and he worked in the Northwest woods as a chokersetter, as a young man. He uses that personal experience to reach the heart of the issue quickly and precisely. Had I known about this piece earlier, I would have tried mightily to get it into the special edition.

This particular chapter also happens to be embedded in a very thoughtful and inspiring book, for any Westerner, on wildness and wilderness, man and nature, idea and practice.

Pat Ford Boise, Idaho

"MANAGED MORTALITY"

Dear HCN,

I am a graduate of the University of California, Berkeley, in forestry. I went to work from school for Weyerhaeuser Company. My work in forestry for Weyerhaeuser was as part of a six-man team that put together what became known as High Yield Forestry.

Because my training was aimed at treating trees like a crop, I have always believed that a tree should be harvested. The only question that always had to be answered was "How often?" The answer to the question is equally simple: It depends on the cost of ownership. Herein lies the divergence of opinion between environmentalists and the timber industry.

To approach the factors that affect cutting trees, we must begin with the consumer. No trees would be cut if no one had a need for the products that we get from trees. One controlling factor in cutting trees is the limit nature sets for the replacement of the trees that are cut. Fortunately, we have not reached that limit. We are still in the pioneering stage of world development which requires continued clearing of land. Where the balance point is, nobody knows. The subject has to be addressed on a country-by-country basis.

I feel that in the United States we should be concerned with a sustainable rotation for the now existent forest land. Its principal owners are the U.S. Forest Service, the Bureau of Land Management, states, counties, and the major private landowners. These owners most likely hold 90 percent of the land available for planned forest use.

It is immediately apparent that the cost of ownership is vastly different for the public and the private sectors. The public sectors acquired their ownerships at no dollar cost. The private sector, on the other hand, has had to purchase its ownership, has continuing cost paying taxes, and must pay assessments to rural fire districts for fire protection. The private sector, therefore, must return income more frequently than the public sector. Conversely, the public sector must be the provider of the recreational needs of the public. The recreation cost has not been adequately developed; the public has not yet had to pay the real cost of recreation, which has largely been paid by the private cutting of the public forests. This money is managed by Congress and is most assuredly inefficiently spent.

Biologically all trees must die, with the exception of the redwoods, bristlecone pine, olive, grape and bracken ferns. If we can accept the death concept, then the premise that all trees should be harvested is valid. How old a tree should become can be defined by some economic value. It is obvious that the private sector cannot economically maintain rotations in the 100-to-500-year area. The public sector can more readily plan to manage these kinds of rotations (Germany has already done this). Under this concept, which I call Managed Mortality, these longer-aged stands of trees can also become a solution to the environmental value of maintaining old growth.

Managed Mortality has other benefits. One is holding some stands longer to produce finer and clearergrained woods. In the process, the trees become usable for long-period requirements such as hiking, camping and nature studies — and with less revenue from logging, it will become necessary for recreational users to pay more user fees. Another use that could be made of the longer-rotation stands would be to create heteroculture forests.

To preserve is of very little value to humanity if it is overdone. It is my contention that we have already preserved several millions of acres beyond what is reasonable and prudent. That is not to say that none should be preserved. We just have done too much and without proper planning.

Ronald O. Crouse Coos Bay, Oregon

SOVIET SCIENTIST "STUNNED" BY SCALE OF NORTHWEST LOGGING

Editor's Note: Readers in Colorado and Washington sent in the following item from the U.S. Forest Service's agency-wide electronic mail system.

Seven Soviet scientists came to Eugene, Oregon as part of an environmental exchange this fall (October 1990). Their focus of study is Lake Baikal, in southern Siberia. Vladimir Molozhnikov is an ecologist and botanist. He had these words to say after spending two weekends in and above PUBLIC and PRIVATE forest lands in the Western Cascade mountains. Admittedly this reaction might have something to do with the widely disparate management strategies of Crater Lake National Park and Weyerhaeuser lands.

"DON'T CUT DOWN THE LIMB...

I am a forest ecologist with 30 years of experience in the forests of Siberia. Not long ago I was able to visit the forests of Oregon. I went to different spots in the forest and saw the forest from the air, and I was stunned by the scale of logging.

Earlier I had to refer to the literature describing the way forests in the U.S. are managed. In these sources a bright picture is painted. We in the U.S.S.R. were often taken by the American approach. You were an example of a progressive country capable of intelligently using your forests. Your example was even used to cool the heads of our aggressive forest industrialists.

And now I'm in the U.S. It's time to have a look at the way forestry should be done. But what I've seen in Oregon, in my deep conviction, won't make it possible to use your forest techniques as an example. If one of my friends had seen and told me of such, I would have never believed him. But it is not someone else who has seen it: I have seen it with my own eyes: a multitude of bare, forestless cliffs, slopes ribboned with roads, intensive erosion of soils, silting of rivers and reservoirs, loss of animal habitat, the disappearance of recreational areas.

So what to do? What can future generations expect after us? It's often said now that the earth is now our common home. But if it's our home, then let's by our common efforts put it in order.

I don't want to be misunderstood. I'm not trying to lecture Americans. All I care to do is in a friendly way warn you: don't repeat our mistakes! Tremendous natural resource use and planned transformations of nature has led our system to the point of ecological crisis. The crisis is apparent even in Siberia. And with this crisis, as undeniable consequences, have come economic crises as well.

So in closing I want to give the American people a little advice: don't cut down the limb on which rests the well being of the people, or else your fall will be even more frightful than ours. After all, you still have something to lose."

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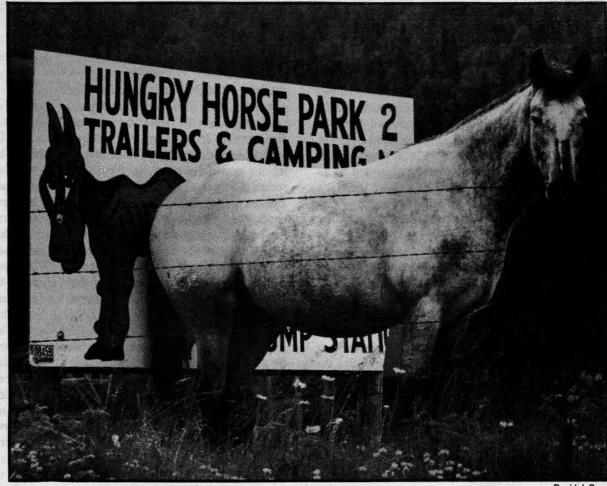
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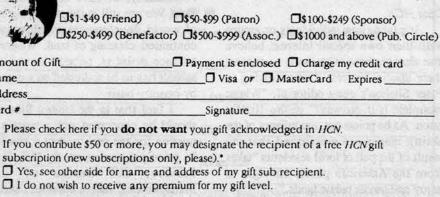
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BULLETIN BOARD



INTERNATIONAL PROTEST OF NUCLEAR TESTING

Activists from around the globe will meet Jan. 4 and 5 in Nevada to push for an end to nuclear testing. Greenpeace and American Peace Test are hosting the event, called "Uniting Nations for a Nuclear Test Ban." On Jan. 4 participants will meet in Las Vegas to exchange ideas on forming an international anti-nuclear movement. Environmental degradation, effects on health, and direct action will be discussed. The next day the action will move to the actual testing site 60 miles northwest of Las Vegas. The event has been timed to influence the decisions of a United Nations conference that begins Jan. 7 in New York. The conference will focus on amending the Partial Test Ban Treaty of 1963 into a more comprehensive test ban. According to Sue Navy, a Colorado-based organizer, now is the time to rally and let the government know where we stand on nuclear testing. For more information contact American Peace Test at 702/386-9834, or Greenpeace at 303/786-8805.

"THE END OF NATURE"

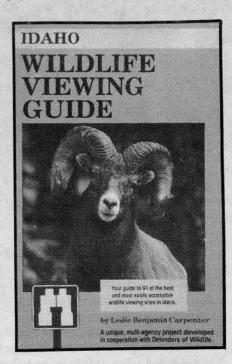
The University of Utah's winter lecture series, "The End of Nature," will focus on the negative impacts of 20th-century technology, especially on decreasing biological diversity. The six-part lecture series is intended to inspire creative solutions to global problems. Highlighting the panel of six speakers will be Bill McKibben, author of The End of Nature, who will speak on the philosophical and physical perils of our ecological crisis. Other speakers, including Terry Tempest Williams, naturalist and author on canyon country, will focus on threats to flora, fauna and local cultures throughout the world. The series begins Jan. 7; tickets cost \$3 for each lecture. For more information, contact Claudia Batey, Utah Museum of Natural History, Salt Lake City, UT 84112; 801/581-6927.



THE COMPLETE CLIMBER

If you don't know a carabiner from a copperhead, Layne Gerrard's Rock Gear may be the book for you. Designed for the beginning climber, this guidebook contains chapters on falling, equipment maintenance and selection, and climbing techniques as well as a list of equipment manufacturers. Diagrams show how knots are tied and equipment is used. A visual table of contents helps novices refer to a piece of equipment even if they can't recall its name. Gerrard's book also includes sections on mental and physical conditioning and the history of climbing equipment.

Ten Speed Press, P.O. Box 7123, Berkeley, CA 94707. Paper: \$17.95. 369 pages, illustrated with many sketches.



WILDLIFE VIEWING IN IDAHO

It is rare that a book appeals to both backcountry trekkers and recreational-vehicle fans. But the Idaho Wildlife Viewing Guide, a project of Defenders of Wildlife and various federal, state and private groups, will appeal to a broad spectrum of nature lovers. Citing its low population and the largest wilderness in the lower 48 states, the author, Leslie Carpenter, judges Idaho one of the finest states for wildlife viewing. The guide includes tips for finding the elusive mountain lion in densely forested areas as well as hints for viewing pronghorn antelope from highway rest stops. The book, which includes maps, photos and directions to 94 sites, aims to promote and enhance wildlife watching, which generates more than \$90 million annually in Idaho's economy. This is the fourth in a series of state wildlife viewing guides, following Oregon, Montana and Utah.

The Falcon Press, P.O. Box 279, Billings, MT 59103. Paper: \$5.95. 104 pages.

PLANETHOOD: THE PATH TO PEACE

A new book by Benjamin Ferencz, a chief prosecutor at the Nuremburg war crimes trials, and Ken Keyes Jr., titled Planethood: The Key to Your Future, says that neither one of the twin threats of war and ecocide can be solved by a single nation. Although textbook-like in appearance and occasionally pedantic, the book is replete with information on world peace efforts. Recognizing our collective interdependence, the authors call for a global peacekeeping body on the scale of the United Nations to seek and enforce peaceful solutions to global conflicts. Undoubtedly the U.N., presently sanctioning a war against Iraq, could benefit from the authors' 14-point reform program, which calls for the creation of an international disarmament organization as well as an improvement in the U.N.'s disputesettlement process. The authors' emphasis on international law as our primary recourse does not diminish their call for individual action. The book lists organizations and other sources to enable the public to aid the cause of peace throughout the world.

Love Line Books, 700 Commercial Ave., Coos Bay, OR 97420. Paper: \$7.95. 181 pages.

SAVE OUR STREAMS

The Izaak Walton League of America offers a 28-minute video about its "Save Our Streams" program, which helps citizens solve water-pollution problems by becoming stream monitors. The video teaches simple scientific techniques for detecting and testing for pollution. These techniques are currently being used by thousands of volunteers to keep watch on the nation's waters. The Izaak Walton League of America is a national, nonprofit organization that focuses on a variety of conservation issues, including clean air, clean water, wetlands protection and public lands restoration. The video costs \$15. To order a copy of the video, or to obtain a free video brochure, write to SOS Video, Izaak Walton League of America, 1401 Wilson Blvd., Level B, Arlington, VA 22209.

COLORADO SCENIC GUIDES

For those who like to sightsee by car, Johnson Books has revised its Colorado Scenic Guides, which are available in two editions: northern and southern Colorado. Geared primarily toward automotive travel, these expanded and updated editions provide motorists with information about more than 100 passes, mountains, lakes and towns. Each chapter contains background on history, geology and natural history as well as maps, suggestions for the best times to visit, the time required, facilities and elevation. These comprehensive guides are a useful tool for exploring Colorado.

Johnson Books, 1880 South 57th Ct., Boulder, CO 80301 (303/443-1576). Paper: \$10.95 each. Approximately 200 pages, illustrated with maps and photographs.



LIFE ON THE COLORADO PLATEAU

Photographs by Norm Shrewsbury, many of them portraits of people at home, are on display at the Dan O'Lauri Museum in Moab, Utah, through Dec. 31. The show, called "Friends and the Far Country," illustrates Shrewsbury's connection to the people and landscapes of the Colorado Plateau. "This land has had a tremendous effect on all who venture here. I try to capture that power in my images," says Shrewsbury, who has lived in Moab for the past nine years. Museum hours are 3-5 p.m. and 7-9 p.m. Monday through Thursdays, and 1-5 p.m. and 7-9 p.m. on Friday and Saturday.

SEARCHING FOR SUCCESS

Renew America, a nonprofit organization that promotes solutions to environmental problems, has begun its second annual "Searching for Success" program. "Searching for Success" identifies successful environmental programs nationwide to be used as models for programs in other communities. Each year the most outstanding programs in each of 20 categories - such as air pollution reduction, forest protection, wildlife conservation and recycling - are chosen for national recognition by the National Environmental Awards Council. Individuals, community groups, schools, businesses, religious organizations and government agencies are encouraged to nominate their environmental programs for consideration. For an application, write to Renew America, 1400 16th St. NW, Suite 710, Washington, DC 20036, or call 202/232-



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HIGH COUNTRY NEWS classified ads cost 30 cents per word, \$5 minimum. Display ads 4 column inches or less are \$10/col inch if camera-ready; \$15/col. inch if we make up. Larger display ads are \$30 or \$35/col. inch. We reserve the right to screen all ads. Send your ad with payment to: HCN, Box 1090, Paonia, CO 81428 or call 303/527-4898 for more information.

STRING BAGS — Large string bags knit in USA using seine twine. Cotton webbing handles — long enough to fit over your shoulder. Take shopping, on boat cruises, or use to separate things in your pack. Lightweight enough to be shoved in your pocket. Very strong when filled. \$12 includes shipping. Send orders to: 117 E. Louisa Street #140, Seattle, WA 98102. (4x21p)

INDIVIDUAL SOLICITS note/phone number from person/organization with information/experience opposing open pit gold mining and cyanide heap leach processing. Pris Meiser, Box 238, Cerrillos, NM 87010. (3x24b)

"OUTDOOR PEOPLE" lists 50-word descriptions of active, outdoor-oriented Singles and Trip companions nationwide. \$2/copy, \$10/ad. OUTDOOR PEOPLE-HCN, PO Box 600, Gaston, SC 29053. (6x15pd)

"WALK SOFTLY IN A DANCING MANNER." We are looking for people who are interested in living in an ecologically sound village! Your involvement in this venture can make a difference in our Planet's future. EARTH VILLAGE is a laboratory designed for ecological studies and the expression of sociological and spiritual ideals. Near Crested Butte, Colo., on 300 acres of land, you now have an opportunity to be a part. Call 303/349-7156 or write: Earth Village Institute, Box 221, Crested Butte, CO 81224. (2x24b)

MEET OUTDOOR SINGLES, ages 19 to 90, bi-monthly newsletter lists active outdoor-oriented singles nationwide, 1-year subscription \$15, trial issue \$3, place ad \$15, no hidden charges, free information and ad form for self-addressed stamped envelope, OUTDOOR SINGLES NETWORK-HCN, 1611 Cooper #7, Glenwood Springs, CO 81601. (6x20p)

160 ACRE WESTERN COLORADO HISTORIC DUDE RANCH up high in national forest, aspen, spruce, meadows, 4 trout lakes (6 pounders), 8 rustic, modern cabins, charming lodge with commercial kitchen, furnishings, fully equipped, all utilities. Everything in top shape. A perfect small retreat ready to move into. \$960,000. Treece Land, 303/243-4170. (3x24b)

EARTH SCIENCES/ENVIRONMENTAL STUDIES: The Center for High-Elevation Studies at Montana State University seeks Assistant/Associate Professor of Earth Sciences starting August 1991. Ph.D. in Geography, Earth Sciences or closely related field required. Responsibilities include teaching undergraduate and graduate courses in physical geography and/or human-world regional geography, and development of an externally funded, innovative, interdisciplinary research program with the Center for High-Elevation Studies (a multidisciplinary research and graduate training initiative). Expertise in mountain studies, field methods, quantitative methods, and/or remote sensing, and ability to teach introductory geology courses is preferred. Specializations might include humanenvironment relationships, conservation and sustainable development, biogeography and/or resource geography, particularly as related to mountainous regions. Send application letter stating research experience and/or interests, curriculum vitae, transcripts, and three letters of reference to: Chair, Search Committee, Department of Earth Sciences, Montana State University, Bozeman, MT 59717-0348. Deadline January 18, 1991. Vets Pref. AA/EO Employer. (2x24b)

DEVELOPMENT DIRECTOR. Regional conservation organization seeks an energetic and experienced development director. Duties: fund raising, planning, organizational development. Min. Qualifications: B.A. or B.S., 3 yrs. exp. in conservation organizations or professional fundraising, strong environmental ethic. 1/2 time, \$8.5-10K/yr. DOE. Contact Peter Nielsen, Director, Clark Fork Coalition, P.O. Box 7593, Missoula, MT 59807. Closing Jan. 2, 1991. (1x24p)

CREW LEADER. The Student Conservation Association needs youth leaders to supervise high school volunteers on trail construction/maintenance projects in national parks and forests. Month-long summer projects require supervisors with significant wilderness travel experience and first aid skills/certificate. Construction experience and skills helpful. Training available. For application and 1603/826-4301 or write SCA, P.O. Box 550, Charlestown, NH 03603.

NEW WATER PUBLICATION: An Introduction to Water Rights and Conflicts with emphasis on Colorado. For information please write: Network Marketing, 8370 Warhawk Rd., Dept. HC, Conifer, CO 80433, or call 303/674-7105. (12x16p)

BOOK NOTES

Those marvelous women of the Colorado Rockies

The Magnificent Mountain Women: Adventures in the Colorado Rockies, by Janet Robertson, 1990, University of Nebraska Press, 220 pp., \$21.95

____review by Liz Caile

As she studied the place names in the Colorado mountains, Janet Robertson realized that women — on the map, at least — were as good as nonexistent. She guessed that at least a few women had made contributions to Western history equal to those of the immortalized men. But she had to search the records, and there she found more examples of noteworthy women than she expected.

Robertson, who lives in Boulder, Colo., has written about more than 30 of these women in *The Magnificent Mountain Women: Adventures in the Colorado Rockies.* Some came West for a lifetime, others for a short visit, some for research purposes, and others to prove their athletic mettle. The women's activities fell primarily between the years 1850 and 1950, although a few are active today and form a continuum with the adventurous pioneers of the 19th century.

What all had in common was their spirit, enthusiasm and Anglo backgrounds. Most were well educated, and all "sought out the Colorado mountains in their own right, not just as the wives and daughters of men," writes Robertson.

Julia Archibald Holmes trained herself to walk long stretches with a wagon train across the prairies in the 1850s. She recorded that her costume, including bloomers and Indian



Colorado Historical Society

Skiers pose for this circa 1880 photo in Breckenridge, Colorado

moccasins, offended the other women, who stuck to the wagons. She climbed Pikes Peak in 1858 with a small party of men and was the first woman on record to have climbed anything in Colorado.

Marjorie Perry, who came to Denver in 1887, became an avid skier and helped to launch the sport in Steamboat Springs. Eleanor Davis was one of the first female technical climbers in the state, making a first ascent of Crestone Peak and Crestone Needle with Albert Ellingwood in 1916. Colorado peaks of 14,000 feet were her playground; she was the first woman climber from Colorado to become a member of the American Alpine Club.

Many women added to her record of achievement on rock, including Jean Ruwitch, Louise Shepherd and Coral Bowman. Bowman, who ran a climbing school, helped to prove that women had the stamina of males and were capable of equal achievement. These days all-female climbing teams are commonplace.

Women made significant contributions to the Colorado mountains in other ways. In 1882, Virginia Donaghe was the first non-Indian woman to visit the cliff dwellings in southern Colorado. Then she organized her woman's club to lobby for their protection. Lucy Peabody saw the project through in 1906, when Congress created Mesa Verde National Park, nicknamed "the women's park." In 1914, Harriet Vaille traveled to a Wyoming reservation to bring Arapaho Indian elders back to the Estes Park area to help name features such as peaks and lakes in what was to be another new park, Rocky Mountain National Park.

Botanists Alice Eastwood, Hazel Schmoll and Katherine Bell are included, along with Ruth Ashton Nelson, whose field guides to flowers in Colorado and Zion National Park, Utah, are still popular.

Katherine Garetson was one of many women who sought a refuge in the mountains. Escaping a life of relative poverty in St. Louis, she filed a homestead claim on land near Estes Park in 1914. She left a lengthy and enjoyable written account of her experiences, which included solitary winters, clearing land by hand and fighting opposition to prove up on her claim.

Robertson's writing is honest and straightforward. Like much mountaineering literature, it may owe its clarity to the exigencies of a harsh environment where words must say what they mean.

Liz Caile is a free-lance writer in Nederland, Colorado.

afield A

Why storytelling is still an art in Rangely

_by Janice L. Friddle

It's another Saturday night in Rangely, Colorado. There is no movie theater or bowling alley. Most of the residents have sampled the modest local cuisine so many times that it has begun to taste as familiar as their own cooking. The bars hold some attraction to those looking for a cold one and a dusty place to dance, but the real action is taking place somewhere off Main Street. All across town people are gathered in groups large and small, and without knowing it, they are reviving a lost American art — the art of storytelling.

There are stories about the weather, hunting, skunks, road kill and a little critter that in most other communities is acknowledged only with the swat of a hand, the gnat.

Why these topics? Is it because they're bored? Maybe, but more likely it's because these things actually matter to the people of Rangely.

Rangely, Colorado, is located in the northwest corner of the state, just 20 miles from the Utah border. Rangely's economy is focused on oil, coal and other energy development. It is home to Colorado Northwestern Community College and dozens of small businesses.

To many, life in Rangely means constant travel to nearby Vernal, Utah, for groceries and an occasional McDonald's Happy Meal. It means regular trips over harrowing Douglas Pass to Grand Junction, Colorado, in search of the shopping mall experience and a little anonymity. It means dodging deer, antelope, rabbits, prairie dogs and an occasional cow in order to go anywhere. It is knowing that adding antifreeze for forty below is not sufficient protection.

The weather in Rangely is always extreme, and always a good topic for conversation. In winter it is bitter cold. The freeze begins in late November and lasts well into March. Wood smoke clouds the air, and the streets become narrow, frozen paths bounded by huge, icy snow-plowed medians.

Last winter there was an annoying bump in the

middle of Main Street. It wasn't a clump of snow. It didn't give way under the weight of the many vehicles that were jarred by it each day. As the bump became an established hazard to alignments all through town, curiosity increased. Finally the sun made enough impact on the frozen road to reveal that the bump was an unfortunate Rangely cat, a cat who lay entombed on Main until there was sufficient slush to plow him away.

Summers are just as harsh in Rangely. The air is hot and dry, so dry that the night skies are almost always lit orange from the dozens of brush fires. And there are the bugs, the gnats that move in swarms across town devouring human ears and eyelids, leaving swollen welts and wishes for an early frost.

There are a lot of opinions in Rangely about how to repel the gnats. One favorite remedy among the oilfield hands is to slather on some Skin So Soft, a flowery-smelling bath oil made by Avon. Many Rangely folks have found it very successful in repelling the gnats, though no one has ever determined whether it's the scent that drives them away or the fact that the gnats are apt to drown trying to swim through the thick oily stuff to get a decent bite.

The gnats are not the only bugs that haunt the Rangely area. There are also the crickets, the Mormon crickets. They're brown. They're ugly, and in the summer they arrive in enormous herds. People new to Rangely often make trips out to see them. The crickets move in wide rivers of brown across the roads. Sometimes they are so great in number that the roads appear to sway, and as traffic moves through them they pop and click as they are ground into the asphalt. At times cricket slicks pose a real hazard to motorists speeding through the area.

There are no low-mileage vehicles in Rangely. Sixty miles over to Vemal, Utah, is just a quick trip to the store. Children who make this trip often pass the time watching for wildlife and contemplating the road kill. At times the numbers go so high that they exceed the Sesame Street training of the average preschooler.

Road kill is a part of life in the Rangely area. The

prairie dogs seem to go down in the greatest numbers, but it's hard to feel sorry for an animal that gets run over trying to eat its fallen relation. The real problem is how to avoid the deer

Northwest Colorado is home to the largest herd of mule deer in the United States. They're beautiful, graceful and a wonder to observe in such large numbers, but after several hours of watching them spring across the highway they become less attractive. At night, travelers' anxious eyes scan the roadsides. The deer blend so well with their surroundings that after a while every tree or shrub of similar size is cause to slam on the brakes.

But there is no Bambi in Rangely. Folks here prefer to think of the deer as the Governor's pets. They are the only "pets" in the state that can tear up a car and not have someone held responsible.

A lot of people in the area see the deer as a main course. Hunting is a favorite activity in these parts. During hunting season fluorescent orange is the fashion. It's also a good safeguard against being shot by the overzealous hunter with limited vision. Almost everyone hunts. Conversations at the beauty parlor, the sewing circle and everywhere else revolve around great shots and near misses.

Despite the number of hunters drawn to Rangely each year, it is doubtful that Rangely will ever make the top-100 list for great vacation spots. The terrain is beautiful in a rustic way, but there's no amusement park or fabulous beach, no five-star accommodations.

Most people usually pass through Rangely without even braking, unless of course they're slowed up for the only stop light in the county. That's OK with the folks who live here. They know they're sitting on a gold mine of entertainment. For a good time in Rangely, just bring a sense of humor and a good ear. Sit back, relax and listen. This wonder of a place will do the rest.

Janice Friddle writes and teaches in Colorado Springs, Colo. She lived in Rangely for a year and a half and says she misses it very much.