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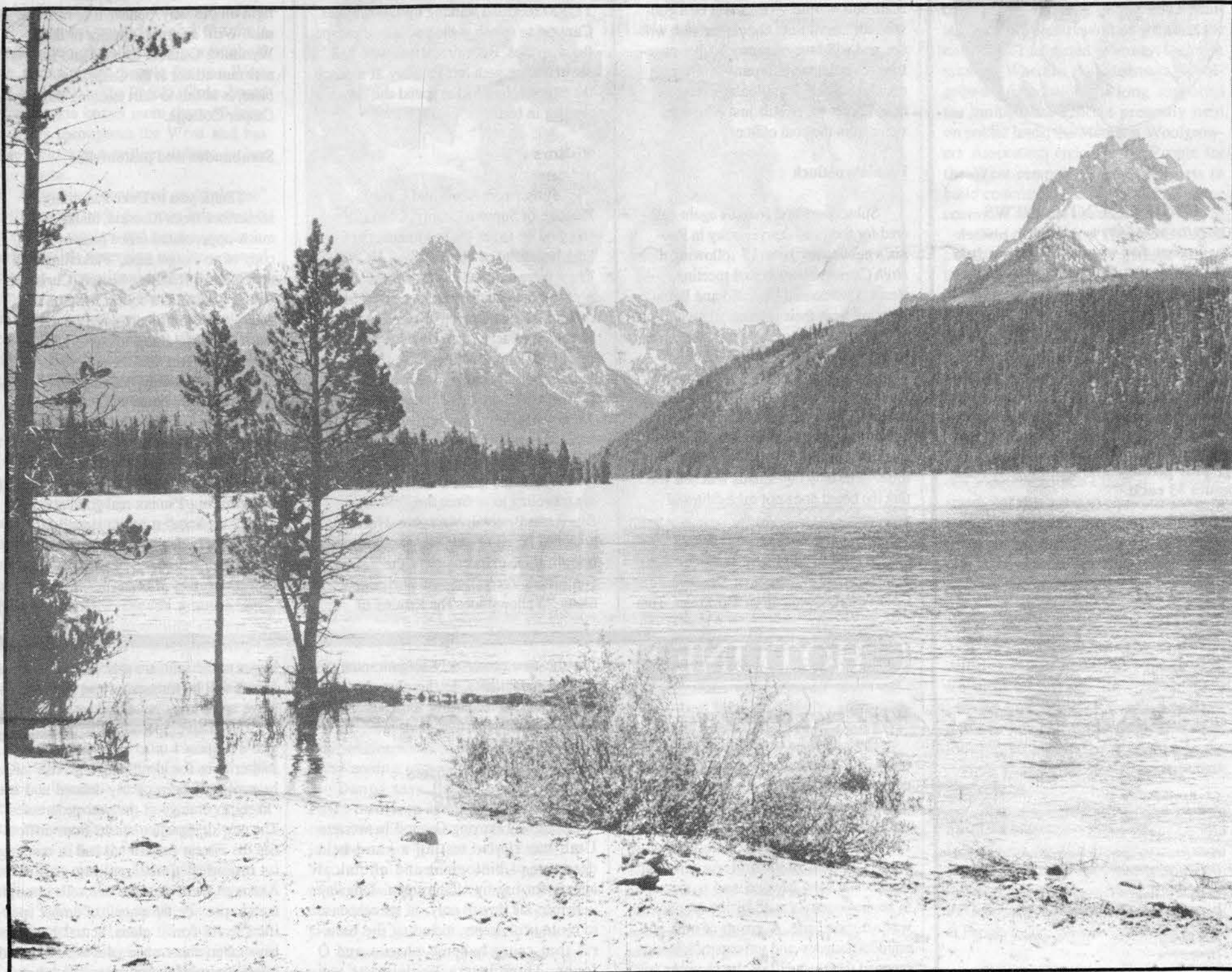
High Country News

July 1, 1991

Vol. 23 No. 12

A Paper for People who Care about the West

One dollar



Ernie Day

When this photo of Redfish Lake was taken 20 years ago, sockeye salmon still spawned in large numbers on shoals along the shore

A personal call to act

The Snake's imperiled salmon

by Pat Ford



want to tell you about a fish, a place named for it, and a recent weekend there that I will not forget.

Saturday, May 18, 1991, in the heart of Idaho, the Sawtooth Valley. Before 100 people, I am moderating a panel on the accumulating tragedy of Snake River salmon — disappearing fish, the Endangered Species Act, political sound and fury, the immense inertia of dams and institutions. Ed Chaney, with somber flair, is telling us how bad it is. He is depressing us, angering us, stirring us to want to act.

I am looking behind the audience at Redfish Lake, looking out through the long front window of Redfish

Lake Lodge. Others turn at times to look, too.

We are sharing thoughts. This place means so much to us. We mean so much to one another. Within these log walls, on the shore of this lake ringed by mountains, we have met on similar weekends for eight years now. For us, the place and event signify our part of Idaho conservation, and our community within it and with the land that inspires it.

This place is also the last place on earth for the fish we are discussing. Snake River sockeye once spawned in other lakes nearby, but Redfish has been their final outpost for years now. Or perhaps was their final outpost, because they may be extinct. We don't know.

If Snake River sockeye do still exist, they are out

under that thinning ice.

Gary Gadwa, the local Fish and Game conservation officer, is back near the window. In 1989 he saw a sockeye redd — a nest — in the lake. He saw no fish, but since two adult sockeye passed Lower Granite Dam that year — the last of eight dams they must pass coming back from the ocean to Idaho — the redd may have been active.

We don't know. If it was active, now is the time any young salmon born from it and still alive are leaving Redfish for an 850-mile trip to the Pacific Ocean.

No adult sockeye reached Redfish Lake last year, because none reached Lower Granite Dam. So we know that next year, when we are here again, no young sockeye will be.

Questions come fast when the panelists finish. On April 2 the National Marine Fisheries Service proposed to list Snake River sockeye as an endangered species. Proposed to list? When only 22 adults returned in 1988, two in 1989, none in 1990? Why just proposed to list, when two years ago the same agency declared immediate emergency listing for a California salmon stock that had plummeted to 550 fish?

Chaney's answer is to state the law. Emergency

Last April 22 High Country News dedicated a special issue to the Northwest's disappearing salmon. We return to the subject in this issue because action is needed now if Idaho's salmon are to be saved. Beginning on this page Pat Ford tells a heartbreaking story of witnessing the death rattle of one species, and possibly more. The author invites readers to join him in calling for action now to redress the basic problem —

eight huge hydroelectric dams. On page 11 Rocky Barker reports on the anemic action taken by the National Marine Fisheries Service last month, and how the Army Corps of Engineers and the Bonneville Power Administration are stonewalling Idaho Gov. Cecil Andrus' plan to help restore the salmon to their watershed. There is still time to act, but not much.

— Ed.

Continued on page 10



HIGH COUNTRY NEWS

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Dear friends,

Fax, at last!

Thanks to longtime readers Marc and Marnie Gaede, owners of the Chaco Press in La Cañada, Calif., the office now has a fax machine. Marc is a photographer whose work has often appeared in these pages, including the centerspread of this issue. Thank you, Marc and Marnie — this will be a god-send for last-minute check-ins with writers, and will save us many \$1-per-page trips to the phone company's office down the block. But please, everyone, don't forget we're still just across the street from the post office!

Paonia's potluck

Subscribers and friends again gathered for food and conviviality in Paonia's public park June 15 following the *High Country News* board meeting. Readers welcomed back Ed and Betsy Marston from their sabbatical at Stanford University. They will resume the leadership of the paper following the July 9 printing of Vol. 23, No. 13. The board authorized the start of renovations for the new HCN office and discussed at length the editorial in the June 3, 1991 issue, "Colorado's 'Good' Compromise." The only consensus reached was that the board does not take editorial positions.

Board members present were Michael Ehlers and Dan Luecke of Boulder, and Andy Wiessner of Denver, Colo.; Emily Swanson of Bozeman, Tom

France of Missoula and Herman Warsh of Emigrant, Mont.; Jeff Fereday of Boise, Idaho; Judy Donald of Washington, D.C.; Karil Frohboese of Park City, Utah; Sally Gordon of Buffalo, Wyo.; Jim Ruch of Flagstaff, Ariz.; and Lynda Taylor of Albuquerque, N.M. On Sunday a few stalwarts chose between ascending Mount Lamborn, elevation 11,300 feet, and walking up Dominguez Canyon to splash in the pools and escape the deerflies. But two staffers who had shaken a leg with Jeff Fereday at a dance the night before had to spend the day resting in bed.

Visitors

Subscribers Kevin and Cindy Roache of Summit County, Colo., stopped by to see the headquarters of "the heartland of the West" — HCN! They were tempted to stay for the potluck but decided to take a river trip down Cataract Canyon of the Colorado River, in eastern Utah. Kevin works as a pilot for Continental Airlines, flying — lucky duck — routes to Hawaii. Marion Stewart, a reporter and columnist for the *Sheboygan (Wis.) Press*, made Paonia an oasis stop on her long drive west to visit her mother in Fresno, Calif.

We caught glimpses of several readers traveling to or from the Telluride Bluegrass Festival. Mary Ann Hartigan, with her husband and their two sons, bought three extra copies of the issue containing Terry Tempest Williams's essay "Yellowstone: The Erotics of

Place." Jim Birchfield described the trauma of his recent transplantation from Manhattan to Boulder; his friend and fellow Boulderite Bobby Troup told us about "E-Town," the new environment-and-music public radio show he's working on. "Avid reader" Will Robinson was driving all the way from Casper, Wyo., to hear the banjo pickers. "This is right on the way, believe it or not," he said. Will, a former director of the Wyoming Outdoor Council and former assistant editor at the Casper *Star-Tribune*, is about to start teaching biology at Casper College.

Sarabandes and pastourelles

Thank you to Duke Parkening, a subscriber from Kooskia, Idaho, for a much-appreciated office present — a copy of an Angel tape, "Parkening and the Guitar," featuring his son, Chris. "Chris played as a soloist with the Los Angeles Philharmonic when he was 14," Duke wrote in a note to our Gretchen Nicholoff. "But, like the environment, nothing comes easy. This April he played to a full house in Carnegie Hall, New York — five tiers of balconies. He is awfully good with a fly rod and last year won the Gold Cup Tarpon Florida Keys five-day event. ... Sorry to be such a braggart, but I'm not real good at anything," the modest parent signed off.

— Larry Mosher and Mary Jarrett
for the staff

HOTLINE

WIPP may collapse

The walls of a prospective waste disposal site may buckle years before the completion of tests to determine its adequacy, scientists told a Senate subcommittee in June. The Waste Isolation Pilot Plant, an \$800 million government project, is located in an underground salt chamber in New Mexico and is intended to be the country's state-of-the-art nuclear waste disposal site. A group of nine government, industry and university scientists reported that the walls of the chamber will probably begin to collapse in two to three years, well before the 10-year testing period is over, according to the *Los Angeles Times*. While the salt walls are designed to collapse around stored radioactive waste, premature rockfall has begun to signal the start of the natural sealing process and four rooms have already collapsed. The new report threatens to add further costs and delays to the beleaguered project as well as to cleanup efforts that rely on WIPP as a disposal site.

Bill would allow states to fine DOE

A bill that would allow states to fine the Department of Energy for violations of hazardous-waste laws passed a House committee overwhelmingly on June 5. The bill, co-sponsored by Colorado Rep. Dan Schaefer, R, is of special interest to states with DOE sites like Colorado's Rocky Flats plant and Washington's Hanford nuclear reactor. The DOE so far has been immune to the state fines levied against private contractors that violate environmental laws. The bill would allow fines of up to \$25,000 for each day a federal facility failed to comply with the Resource Conservation and Recovery Act. David Eck, Schaefer's legislative director, said he does not expect heavy fines to be levied as a result of the bill. He believes states would

use the new power only to guarantee the safety of facilities. In the past, he said, states "had no recourse if the DOE didn't meet its deadlines."

Dugway resumes defense testing

Dugway Proving Ground in western Utah has started testing a hand-held detector of biological and chemical agents for use by infantrymen. Dugway will rate the device only on its response to biological agents, including the bacteria that cause bubonic plague and Q fever. Three layers insulate the test chamber from the environment. Lyman Condie, a scientist at the lab, told the Salt Lake City *Tribune* that the risk of accident is less than the risk of being struck by lightning. The bio-detector will also be tested outdoors using two bacterial strains that occur naturally in Utah.

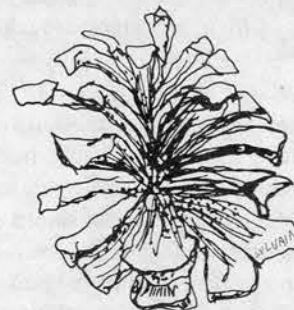
Tribes accept water pact

The Shoshone-Bannock Tribes on Idaho's Fort Hall Reservation have accepted "the largest water-rights adjudication ever in the West," according to the Idaho Falls *Post Register*. The tribes voted in May to accept a water agreement with the state of Idaho and the federal government. The out-of-court settlement, reached in June 1990 (HCN, 8/27/90), has been awaiting ratification by Congress, the state Legislature and the tribes. All three parties have now accepted the agreement, which guarantees the tribes 581,000 acre-feet of Snake River water per year and allocates \$22 million in federal funds for the development of a water management program.

USFS to label sales 'high-risk'

The U.S. Forest Service has announced a plan to designate timber sales "high-risk" when environmental chal-

lenges to the sales are anticipated. Potential buyers will be forewarned that sales in sensitive areas may be stalled by appeals or lawsuits. Dave Spores, of the Forest Service's Region 1 office in Missoula, Mont., said criteria for identifying high-risk sales have not yet been clearly defined and are "likely to change as the year progresses." The new designation results from difficulties the Forest Service has had in meeting its intended timber-cutting volumes. Although the Forest Service sells enough trees to provide the amount of timber specified in its forest plans, actual harvests have fallen short when sales were blocked by environmental challenges. "We're committed to meeting funded targets," Spores said, "but it's only fair to notify industry of potential obstacles." He said he did not expect the designation to dissuade potential bidders or to discourage cuts in sensitive areas, but he speculated that sales tagged high-risk would receive lower bids. When cuts are blocked by litigation, buyers will either have their bond returned or be given a time extension until court cases can be resolved.



BARBS

Look out for the caaaaavve ...

The Colorado Mined Land Reclamation Division held a contest among fourth-graders last March for the best Abandoned Mine Safety and Awareness Poster and Slogan. The winning slogan, which won its creator an ounce of gold, was: "There's a whole world out there to explore ... don't spend time in abandoned mines."

WESTERN ROUNDUP

People for the West fronts for the mining industry

Two bills before Congress this year will re-examine the 1872 General Mining Act. While environmentalists have been eagerly storing ammunition to reform certain laissez-faire provisions of the law, the mining industry has built a sophisticated defense to keep it intact.

The most powerful, and the most subtle, wing of the industry's stronghold is a group called People for the West (HCN, 6/3/91). The Pueblo, Colo.-based organization boasts more than 40 local chapters throughout the West and has raised close to a million dollars in just over a year.

Preaching "continued multiple use" on the public lands, the group has struck a chord with ranchers and loggers in a backlash against emerging environmental reforms. Promotional literature for the campaign reads: "An elite group of environmental leaders have abandoned all reason.... Their goal is simple: They want to stop production of all natural resources on public lands in the United States."

The rhetoric works. Over a quarter of a million people have signed the group's anti-environmentalist petition, and hundreds have attended meetings, gone to rallies and written to members of Congress.

Although the generic "multiple use" campaign has attracted a broad range of supporters, the group's game plan is a transparent attempt by industry leaders to defeat legislation aimed at reforming the 1872 Mining Law. The law grants a vested property right to mining claims on public land, effectively giving primacy to miners above all other users. A hardrock miner pays no royalties to the federal government and is rarely subject to inspection by environmental regulators.

"Our primary focus right now is keeping the 1872 Mining Law," says Barbara Grannell, People for the West's director of operations. But it is an agenda that remains fuzzy to many supporters.

"I'm not real versed with the 1872 law," says member Demetrio Valdez, a fifth-generation rancher from Antonito, Colo., who recently started a seven-person chapter in his area. "But it's worked real good for a lot of years. And they say if we don't protect our rights we could lose everything."

Mega-bucks or people power?

The campaign enjoys the recognition it has received as a broad-based movement. The group's June newsletter goes so far as to say that, unlike national environmental groups, People for the West is "fueled not by mega-bucks, but by grassroots people power."

Yet the organization's own figures belie such claims. Over 200 major corporations have contributed a total of about \$800,000 to the People for the West campaign, according to communications director Joe Snyder. Fully 96 percent of the group's donations have come from such corporate donors.

Even more revealing is the composition of the group's board of directors: Twelve of 13 are mining industry executives. Each represents a company or association that has contributed at least \$15,000 to the campaign. The board-level companies include Homestake Mining Co., Energy Fuels Corp., Band Gold Corp., Hecla Mining Co., Pegasus Mining Co., Cyprus Minerals, Nerco Minerals and Chevron. Also sitting on the board are the industry lobbyists Northwest Mining Association and the American Mining Congress.

Companies such as Homestake also



Philip M. Hocker/Mineral Policy Center
Bob Reveles, vice president of Homestake Mining Co. and board member of People for the West, addresses a Reno rally

contribute "in-kind" services to the campaign, says Joe Danni, the company's regional manager of government affairs in Denver. "We try to help the organization in the operational end, in the scope of helping with planning, strategy, goal-setting."

Danni says Homestake provided buses and free lunches for company employees to attend "grassroots" rallies in cities where Rep. Nick Joe Rahall, D-W. Va., held hearings on his proposed mining law reform bill. Similarly, Placerdome Mining Co. transported employees to a rally in Helena, Mont. in early June.

Homestake vice president and campaign board member Bob Reveles took microphone in hand to rouse crowds (including his employees) at anti-reform rallies in Reno and Denver. Homestake mines precious metals that fall under the hardrock provisions of the 1872 law. Homestake, says Danni, disbanded its own political action committee several years ago but still contributes to mining lobbies and to People for the West.

Although People for the West describes itself in newsletters and bumper stickers as "a grassroots campaign in support of Western communities," it is registered with the IRS as a 501(c)(6) "business or trade" organization. People for the West is licensed to lobby, and donations to it are not tax-deductible.

"For them to call themselves grassroots is absolutely fraudulent," charges Jim Jensen, director of the Montana Environmental Information Center.

William Grannell, director of the People for the West campaign, defends the group's industry slant. "Obviously," he said, "a vast amount of our funds comes from corporations because they're the ones who can write the big checks. This isn't a front for the mining industry any more than it's a front for anyone else who thinks multiple use should be on public lands."

Grannell continued, "The board is people who could put up money right now. But they're not the ones mak-

ing decisions. Our direction is determined by our strategy group, which has 45 members from all different interests." A list of such "strategy" members obtained by this reporter, however, yields the names of only 14 people, 12 of whom are from mining companies.

Jensen of the Montana Environmental Information Center says People for the West's campaign is a public-relations scheme of the mining industry. He quoted a letter from Mark Anderson, president of the Northwest Mining Association, published in the winter issue of the association's bulletin to solicit support for the nascent People for the West:

"Now is the time to ... begin taking positive steps toward solving some of our public image problems. This is an important step in that direction. Your association has already invested in the program, but operating funds must come from all the mining industry and all those who depend on it for their livelihoods. Send your check today to People for the West."

The fine print

To many of its recruits, the campaign's industry-driven goals are not readily apparent. A Sweetgrass County, Mont., storekeeper who wished to remain anonymous described her encounter with People for the West:

"A local person here gathered an incredible number of signatures on their petition by saying that if you signed, it only meant you support multiple use. In the fine print, though, it also says you are opposed to changes in the 1872 Mining Law. I said, 'What does the 1872 Mining Law mean?' and he said, 'I don't know. It just means you're for multiple use.'"

Lyle Quick, a Circle, Mont., rancher and member of the Montana Woolgrowers Association, gained a similar impression. People for the West, he says, gave a presentation to the woolgrowers and

asked them to endorse a resolution. Despite Quick's and others' opposition, the resolution passed and the association was added to the growing list of campaign supporters.

The resolution itself is vague, saying nothing about mining or the 1872 Mining Law, the preservation of which is the campaign's admitted primary focus. It states, "Whereas the Montana Woolgrowers Association has long supported the multiple use concept presently used on public lands, the Montana Woolgrowers Association endorses the People for the West campaign in their efforts to build community coalitions and advocate continued multiple use activities."

Observes Quick: "They're trying to hornswoggle other user groups to say they support multiple use when in fact the mining industry has first rights above all others. What ranchers ought to be thinking about is how to keep individuals with mining claims off the public lands needed for grazing. The greatest threat to the public lands is having individuals running around staking mining claims."

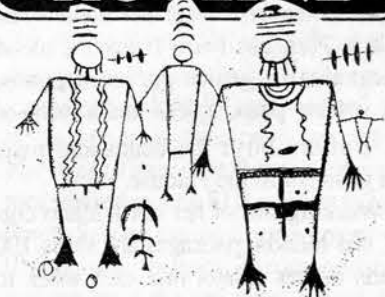
Says Paul Hawks, a cattle rancher in Melville, Mont., and chair of the Northern Plains Resource Council: "I understand that they want to coalesce users of public lands, but the mining industry is using the group to further its own interests at the expense of other interests."

Hawks, who has attended People for the West information meetings in Montana, says, "Mining is given preference over all other uses, but they don't tell you that at their meetings. I have yet to see them lay out exactly what the 1872 Mining Law does." Hawks points out that the law can restrict ranching and logging on public lands in favor of a mining claim, a provision most people don't realize.

"The agricultural people are barking up the wrong tree if they want to join forces with the mining industry," says Hawks, "because they are competing interests for the same resource. I'd caution the ag community to take a long hard look at People for the West before joining."

— Florence Williams, HCN staff writer

HOTLINE



Petroglyphs defaced

Vandals have damaged a well-known petroglyph panel along the San Juan River in southeastern Utah, reports the *Salt Lake Tribune*. The Kachina Panel, a popular attraction for river runners, spreads over a 200-yard-long cliff face and contains art thought to be over 2,000 years old. San Juan River outfitter Charlie DeLorme told the *Tribune* that obscenities had been carved over the rock art and around the margins of the panel in letters big enough to be visible from the river. "This is irreparable," DeLorme said. "It's been chiseled in and there's no way to remove it." One of the obscenities makes reference to the Bureau of Land Management, which oversees the land on that side of the river. This has led to speculation that the vandalism was politically motivated.

A compromise is reached in the Santa Fe National Forest

At a time of warming rhetoric between resource interests and environmentalists, a compromise agreement has been reached in New Mexico's Santa Fe National Forest that will allow a sawmill to reopen in one section of the forest while protecting a prized old-growth stand in another.

Signed on May 10 by 14 representatives of environmental groups, state and federal agencies and lumber companies, the agreement suggests that the new "holy war" in the West (see *HCN*, 6/3/91) may be more smoke than fire.

"Talking to the timber industry and the Forest Service and gaining an understanding of the other position was a major benefit," said George Grossman of the Rio Grande Chapter of the Sierra Club in Santa Fe.

The environmental groups' agreement not to appeal nine planned timber sales will allow the Duke City Lumber Company of Albuquerque to reopen a sawmill in Cuba, N.M., a small town in the Jemez Mountains northwest of Santa Fe. The mill employs about 50 people.

In exchange, Santa Fe National Forest officials agreed to a sweeping review and re-analysis of its forest plan by 1994, including the amount of timber that the forest has put up for sale each year. The existing forest plan went into effect in 1987. The Forest Service also agreed not to carry forward timber-sale shortfalls from previous years into current and future years. Timber sales would be limited by 1993 to 78 million board feet.

The prize concession environmental groups received, however, was that Santa Fe officials agreed to delay any timber sales in what is known as the Elk Mountain area, a large stand of old-growth timber northeast of Pecos, N.M. Elk Mountain is adjacent to the Pecos Wilderness Area, where timber sales have been the focus of heated battles between environmentalists and forest officials for the past decade.

"We were able to do something to keep the Cuba mill open and we were able to save Elk Mountain for the time being," the Sierra Club's Grossman said. "It helps to get together and talk to people. We still don't always agree, but we did compromise and come to an agreement that was helpful."

Al Defler, forest supervisor for the Santa Fe National Forest, said the process was initiated by the state's congressional delegation, which has proved to be a valuable way to reach solutions. "It put all the parties in one place to talk," he said. "It was a good education for people to look face-to-face and share ideas. What we came up with was a way to get through a short-term solution," Defler explained. "It sets the stage for the long-term [problems] to be solved. It got the saw mill up and running, but it did not do away with [environmental groups'] ability to appeal."

Defler concluded, "There are some sales we are going to go ahead and offer, and these will not be appealed by the environmental coalition. But in the case of Elk Mountain, we are going to delay

that offering until we re-analyze it in terms of the forest plan."

Jim Norton, The Wilderness Society's southwest regional director in Santa Fe, said he was pleased with the agreement. "Elk Mountain will be safe until 1994, if not longer," he said. "Elk Mountain will be taken right out of the Forest Service's timber program. It is a reprieve."

The 15-member task force was organized at the request of Rep. Bill Richardson, D-N.M., whose district includes the Duke City mill in Cuba.

Tom Lapinski of Duke City Lumber said the agreement resulted in a good compromise because nobody got everything they wanted. "For the first time we were able to sit down in a room with environmentalists and the Forest Service and say, 'These are our problems,'" Lapinski said. "To the credit of everybody, we reached some compromise. I think it was successful because nobody's happy with the outcome. We all felt we gave up too much."

Lapinski said the mill was restarted this month and will continue operating through September. If Duke City purchases a 20-million-board-foot sale in the surrounding Jemez Mountains, the mill will continue to operate through May 1992, he said.

Sam Hitt of Forest Guardians, a Santa Fe group, was one of the agreement's signers who was not completely pleased with the results. He explained that one timber sale in the area, the Calaveras, has the highest known popu-

lation of Mexican spotted owls, an endangered species. Another questionable sale, called the Bonito, is in the middle of highly prized recreation land near the East Fork of the Jemez River, which is part of the wild and scenic river system.

"What we have done here is sacrifice an irreplaceable habitat in exchange for jobs," Hitt said. He added that he probably would not sign such agreements in the future. "This is a once-in-a-lifetime compromise. You won't see this from Forest Guardians again. Even though jobs are important, what we really need is a new direction from the wood products industry," Hitt said.

Hitt said the agreement was the result of a lot of behind-the-scenes arm twisting. "It was done under enormous political pressure," he said. "We came to the bargaining table in straitjackets."

Lumber mills like the one at Cuba are designed to cut large-diameter logs, but the supply of such logs is rapidly disappearing, Hitt said. The mill should be converted to cut smaller logs that are characteristic of younger trees and newer forest growth, he said.

Despite Hitt's reservations, similar agreements are now being worked out on the Lincoln National Forest and Gila National Forest in southern New Mexico. But it is still too early to tell if they will succeed.

—Peter Eichstaedt

Peter Eichstaedt is a reporter for *The New Mexican* in Santa Fe.

Finding sanity in mixing split peas and garbanzo beans

MOSCOW, Idaho — Two decades of environmental activism led Mary Butters to develop survival skills, such as how to make and sell falafel.

"You see a lot of unhappy activists as you travel around the country — a lot of strung-out workaholics," explains Butters, the founder and former director of the Palouse-Clearwater Hanford Watch and Palouse-Clearwater Environmental Institute. "To continue doing this kind of work, you have to create a bubble world and make your own life very happy."

Butters, a carpenter and single mother, took her own advice last year and launched an environmentally conscientious enterprise from her home. The result is Paradise Farm Falafel, a blend of organically grown garbanzo beans, split yellow peas, spices and a dash of salt. Butters buys the beans and peas from growers in the Palouse.

Working out of her north Idaho cottage, she blends, packages and ships 100 pounds of her falafel mix each week to clients across the country. New England customers prefer her standard recipe, while Southerners crave a spicy hot version. "I add lots of cayenne and hot curry for Texans. They have iron guts down there," Butters says admiringly.

For centuries, falafel has enjoyed huge popularity in the Middle East, where it is prized for its taste, its nutritional value and its long shelf life. It is sold there in restaurants and on street corners, tucked into pita bread or fried into hors d'oeuvre-size balls.

Despite falafel's Eastern origins, Butters believes it may become the quintessential food for America in the 1990s. "It's low on the food chain, low in calories, and high in protein and fiber," she says. "It's healthy, and it's good for the environment."

The same could almost be said of Butters. During her four-year tenure as director

of the environmental institute in Palouse, she nurtured a cooperative relationship with local farmers, encouraging sustainable agricultural practices while seeking new markets for chemical-free crops.

"Encouraging sustainable agriculture is a complicated problem," she says, "because until there are markets for organic or low-input food, these farmers can't quit using chemicals. They're owned by the chemical companies. It's like they're working in a coal mine."

When Butters learned last year that a local farmer couldn't find a market for his Desi garbanzos — a variety that doesn't require pesticides — she stepped in. "I bought thousands of pounds of his beans and started grinding them up."

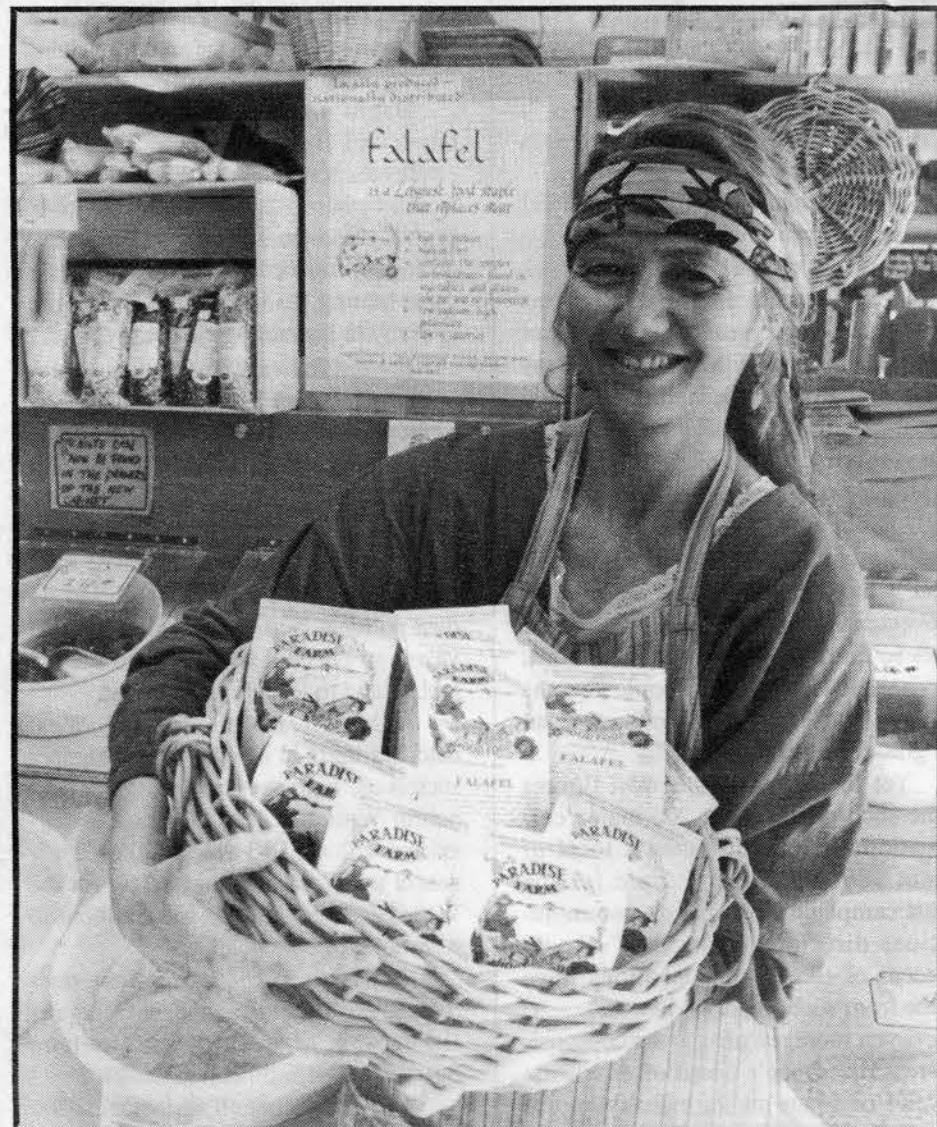
Lacking a recipe for falafel, she said she "just experimented and played around until I got it the way I wanted it." And she takes the same determined approach toward marketing.

"Eight years ago, the American public didn't eat lentils. They were grown here, and shipped overseas," Butters says. "People had to be introduced to lentils. And that's what I'm doing with falafel — introducing people to a good food that's actually produced here."

Grocery stores, gourmet shops, health food stores and co-ops sell her eight-serving, 12-ounce packages for about \$2.50. She also does a brisk business in mail-order sales. Butters's next goal is to persuade area farmers to raise organic spices for the rapidly expanding health-food market.

"She's on the right track," says Jim Toomey, a University of Idaho management specialist assisting Butters and other local entrepreneurs through the Small Business Administration. "Public tastes seem to be running in the direction of health-related sorts of things."

Butters also is helping organize a



Michael Guilfoil

Environmentalist/entrepreneur Mary Butters

national center where community-based activists can get legal and technical assistance. Despite the social and environmental setbacks she sees around her, she says she's encouraged by "little pockets of people all over the country doing their part."

And if her falafel business succeeds, she says, "that will free me to really help other causes. I want to recycle, reuse and

donate 10 percent of my profits to groups helping to solve our problems. I want time with my kids, and I want to pursue a really pure lifestyle here at Paradise Farm. That's what gives me the energy to remain an activist."

—Michael Guilfoil

Michael Guilfoil is a reporter for the *Spokane, Wash., Statesman-Review*.

Pollution problems haunt 'Val-Bwá'

VALLEY COUNTY, Idaho — The quiet, rugged beauty of this valley reveals no hint of the battle raging here over a proposed year-round resort. Residents can't decide if it's an economic godsend or an environmental and social disaster.

"Valbois" — "pronounced (Val-Bwá)" — would include 3,000 homes, a hotel, ski runs, a par-72 golf course, tennis and equestrian facilities, a skating rink, cross-country and snowmobiling trails and a 250-slip marina on Cascade Reservoir.

Dennis Taggart, a Boise architect, and two French associates received a special-use permit from the Boise National Forest in December to begin work on a master plan for the \$120 million recreational haven. The resort would encompass 2,500 acres of national forest as well as 580 acres of private land.

Appeals in mid-March, however, have slowed the process. Seven appellants, headed by the Idaho Department of Health and Welfare's Division of Environmental Quality, questioned the resort's impact on air and water quality, wetlands, fisheries and bald eagle nests. They also were concerned about traffic congestion and the developers' financial ability to complete the resort.

They also criticized Boise forest officials for flimsy research in the proposal's Environmental Impact Statement, a concern shared by the Environmental Protection Agency and Idaho Gov. Cecil Andrus. A Forest Service ruling on the appeals is expected soon.

Taggart, who feels the final EIS handled all environmental and social issues adequately, says his group has a major stake in preserving the integrity of the environment to keep Valbois attractive to tourists. "If the appeals succeed," he said, "we can do the required added work on the EIS. Or, if they deny us the special-use permit outright, we can either walk away from it or try other legal means."

If Valbois's backers defeat the appeal, they will have one year to write a detailed master plan addressing all environmental, social and economic concerns. Construction then must start within six months and be completed in three years. The master plan could cost developers up to \$5 million.

The resort is expected to increase the valley's present population of 6,900 by 73 percent. It would create about 2,500 jobs and attract an estimated 380,000 skiers a year within a decade.

Proponents argue that the economic benefits outweigh the concerns, and believe Taggart's promise to protect the environment. Opponents cite the unanswered questions as proof that Taggart cannot be trusted.



"An entirely new class of continental service in Valbois," says the Valbois promotional material

"It has really split this community," says long-time Valbois opponent Joni Fields. "The whole thing has been a hideous nightmare."

When Boise forest officials finished the draft EIS in June 1989, EPA found it inadequate and asked for a revision or supplement. But the supplement didn't please EPA either. After the final EIS was issued in late 1990, Robert Burd of EPA's Region 10 office in Seattle stated his concerns in a letter to Dave Rittersbacher, supervisor of the Boise National Forest.

Algae blooms

Burd wrote that the Cascade Reservoir already suffers from major algae blooms, an indicator of advanced eutrophication (loss of oxygen), and that there have been periodic fish kills. Burd's letter said that mitigation measures other than what was discussed in the final EIS might be needed to ensure no net increase in phosphorous loading.

Gov. Andrus had written Rittersbacher earlier about the same problem. Both Idaho and EPA project a 4 percent increase in phosphorous loading annually for Cascade Reservoir, and Andrus called that unacceptable.

Valbois supporters argue that water quality will improve if the resort is built, because tourists won't swim in a polluted reservoir and developers will be motivated to keep it clean.

Burd also wrote that water quality and health concerns posed by the septic systems around the reservoir were not adequately addressed in the final EIS. But Taggart says he plans to construct a sewage treatment system that would pump wastewater from a collecting line seven miles north to holding ponds on an 800-acre ranch. Ultimately, the treated water would be used for irrigation.

"There's no farms that irrigate up there," Fields said. "Only two spud farmers are even operating. The rest is in pasture and jack pine."

Air quality and wetlands are other issues raised by critics of the final EIS. Bob Krumm, president of the 500-member

Citizens for Valley County, one of the appellants, questions whether the developers will ever deal with these concerns.

"They don't know what will happen to air quality," Krumm said. "We have air inversion 52 days out of the year, and if you put in 3,000 units, you'll really have bad air quality here."

The final EIS was vague about potential wetlands loss. It contains only general statements, such as that the developers will try "to the maximum extent possible" to keep from filling in wetlands. EPA's Burd wrote that the Army Corps of Engineers will not be able to issue a permit because of inadequate information. A dredge-and-fill permit would probably be required to prepare part of the site.

"The final EIS was full of inaccuracies and mistakes," Krumm said. "We had to appeal. It looked like a PR piece by the Forest Service."

Another environmental issue is the seven bald eagle nests in the region. Ted Swem, a birds-of-prey researcher from Alaska and one of the appellants, said that two eagle nests will be disrupted by the development.

Karen Steenhof, a raptor research biologist for the Bureau of Land Management, agrees. "I'm concerned about the possible abandonment of up to five nests," she said. "I'm concerned that some of these disruptions can be construed as a violation of the Bald Eagle Protection Act."

Taggart ran an advertisement in a Cascade newspaper in mid-March saying that two affected nests would be abandoned anyway. The ad asserted that the eagles would have plenty of time to adjust to the influx of tourists and residents over a 10-year period.

Taggart says he wants Valbois to become a world-class ski destination. But Robert Loughrey, a former general manager of the Bogus Basin ski area near Boise, says this is unrealistic. Loughrey says the resort's ski sites, which have a vertical drop of only 2,800 feet on an eastern exposure, with 1,000 feet of the drop below the 6,000-foot level, would not offer dependable skiing. Krumm agrees, noting that four out of the last five years have been low snow years.

Valley County's anti-Valbois residents don't want their valley to become another Sun Valley or Vail, and they are determined. "We're going to do our best to educate the public to stop it," vows Krumm.

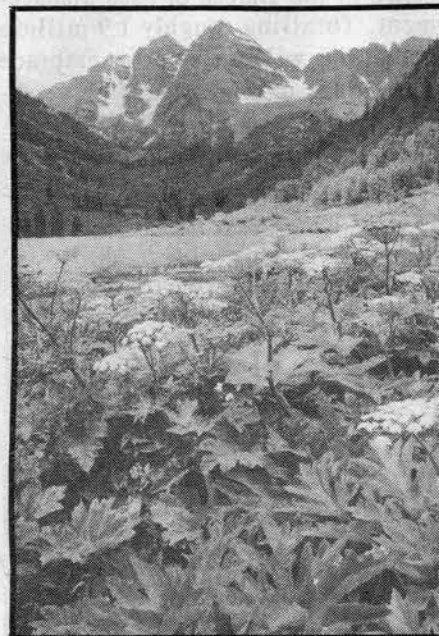
— Dave Ballard

Dave Ballard is a history teacher and free-lance writer in Coeur d'Alene, Idaho.

HOTLINE

Pneumonia delays bighorn reintroduction

A widely supported plan to reintroduce bighorn sheep to their namesake mountains in Wyoming is on hold after a pneumonia outbreak among the animals last winter. The disease killed 35 percent of the Wind River Mountains' Whiskey Basin herd, from which sheep were to be transferred to the Bighorn Mountains. The sheep that originally populated the Bighorns were exterminated early in the century to make room for domestic livestock. The plan survived challenges from local grazing interests, but will now have to wait until the Whiskey Basin herd returns to its lower elevation wintering grounds and can be counted. Thad Harper of the Forest Service's Greybull office said plans to transfer 70 to 80 animals will not proceed unless the herd has regenerated sufficiently by December. If the Whiskey Basin herd's population remains low, the plan will be delayed for at least one year.



Steve Collector

Maroon Bells near Aspen, Colorado

Paving the Bells

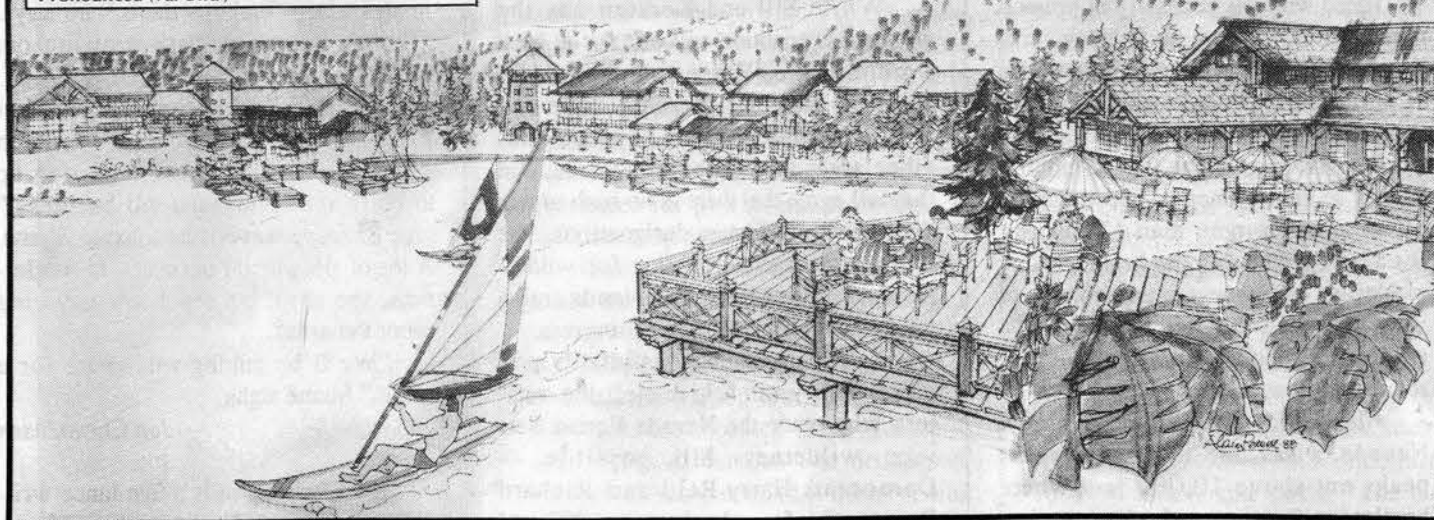
Executives of Aspen Highlands, an Aspen, Colo., ski corporation, say they will stop renting their parking lot to the Forest Service unless the Pitkin County commissioners approve a 300-unit hotel proposal. In order to avoid automobile congestion and pollution, the Forest Service has been using the Aspen Highlands parking lot to bus visitors up to Maroon Lake, in the Maroon Bells mountains of the White River National Forest near Aspen. The Forest Service is now studying a proposed parking lot and visitors' center at the lake as an alternative, according to *The Aspen Times*. The Aspen Ranger District planned to seek \$1.8 million in federal Forest Service capital improvement funds for the new visitors' center and paved parking lot at the site even before Aspen Highlands' decision, said Loren Kroenke of the Aspen Ranger District. But this "adds some weight" to the situation, he said. During this summer's peak season, the Forest Service will try to bus visitors to the lake from another parking lot in downtown Aspen. Unless signs are in place soon, said Kroenke, a lot of angry visitors will be turned around on their way to the lake at a checkpoint a few miles up Maroon Creek Road.

BARBS

I always thought I was riding in a tin can!

A reader in Seattle writes: "Recycling is big here at Boeing — our motto is: 'Save an Airplane! Recycle Aluminum Cans.'"

Valbois. French for Wooded Valley.
Pronounced (Val-Bwa)



Artist's conception of the future lake front at Valbois marina

Nevada's BLM wilderness issue just simmers along

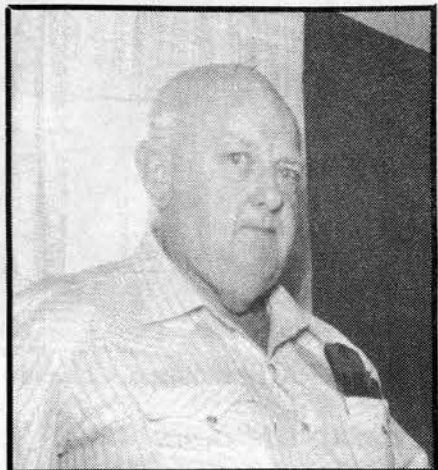
The jewel in the crown of Nevada wilderness is a seemingly endless and barren alkali flat. This dry lake bed may seem an unlikely priority on a preservation agenda filled with hard-fought battles over picturesque peaks and colorful canyonlands. But for some, the immense expanse of the 30-mile-wide Black Rock Desert evokes an unparalleled wilderness experience.

"It's almost like going to another planet," says Nevada wilderness advocate Ann Kersten. "It's so unearthly."

"Nowhere else is the Great Basin Desert reduced to such simple terms," writes Stephen Trimble in *The Sagebrush Ocean: A Natural History of the Great Basin*. "Elemental time and space play round every perception of the Black Rock Desert. Some say you can feel the curvature of the earth out in the playa's center."

The Black Rock Desert — about 219,000 acres of some of the most featureless terrain on earth — is among 56 areas that have been recommended for official wilderness status by the Nevada office of the Bureau of Land Management. Totalling roughly 1.9 million acres, the wilderness areas embrace some of the most remote and least visited territory in the United States.

Utah's spectacular slickrock canyons are far better known, and the controversy over wilderness is more heated there (*HCN*, 6/17/91). But the push to designate wilderness on lands



Charles Watson Jr.

Kit Miller

HOTLINE

Sullivan kills pipeline loan

Wyoming Gov. Mike Sullivan has killed a proposed \$250 million loan to the Kern River Gas Transmission Co. The low-interest loan was intended to guarantee that Wyoming natural gas be carried by the company's Wyoming-to-California pipeline, which is currently under construction (*HCN*, 10/8/90). Another company, Altamont Gas Transportation Co., intends to build a connecting pipeline that would bring gas from Canada, and some Wyomingites feared their gas would be supplanted by Canadian fuel. Sullivan originally supported the loan plan, which would have reserved pipeline space specifically for gas from new projects in Wyoming. Such developments could have meant \$50 million in annual tax revenues for the state. But when Kern River refused to make guarantees the state requested, Sullivan cancelled the loan, the *Casper Star-Tribune* reported. Kern River has said that the loan decision will not affect its plans to build. Environmental advocates have opposed the pipeline because it passes through sensitive lands and because much of the clean-burning gas will be used to extract pollutant-rich crude oil from California wells.



Charles Watson/NORA

Reveille Range wilderness study area in Nevada

managed by the BLM actually began more than 30 years ago in Nevada, the state with the largest amount of public land outside of Alaska.

In the early 1960s, wilderness apostle Charles Watson Jr. called the public domain "the lands no one knows." At the time, even the Sierra Club seemed to prefer not to let desert wastelands detract from its islands-in-the-sky approach to wilderness preservation.

Watson's missionary zeal and bulldog tenacity on behalf of unappreciated public lands got him drummed out of the local Toiyabe chapter of the Sierra Club. BLM lands were left out of the 1964 Wilderness Act; it took more than 10 years for the mainstream of the environmental movement to come around. But with the passage of the Federal Land Policy and Management Act in 1976, the untracked desert wilderness began to gain grudging recognition.

Today, however, while Utah's red-rock wonders attract national attention, Nevada's wilderness areas remain "the lands no one knows." Even among the Friends of the Nevada Wilderness — a coalition that includes Watson's Nevada Outdoor Recreation Association, as well as the Sierra Club and other groups that united around the Nevada Forest Service wilderness bill in 1989 — few people aside from Watson and Dave Harmon, a BLM wilderness specialist, have visited more than a couple of the 112 official wilderness study areas in Nevada.

"There is still a widespread perception that these are just alkali flats, smelly sumps and sun-baked hills," says Watson. "But we've been finding treasures out there."

Faced with the necessity of promoting these places where so few have trod, Watson long ago abandoned the notion of keeping his favorite places secret. Over the years, the photo album of Nevada wilderness areas that he faithfully lugs to environmental meetings has grown to weigh more than 125 pounds. His album is probably the best inventory of Nevada wilderness areas outside of BLM files, and the official state BLM wilderness recommendations include some of his favorites:

- In the Hot Creek Range in central Nevada, a 127,588-acre wilderness peaks out above 10,000 feet where bristlecone forests overlook an ancient

caldera in the sere valley below. Desert-bound waterfalls and perennial streams tumble from the mountains. Human signs are few and mostly already taken by the desert — the ruins of Shoshone wickiups, a wild horse trap, abandoned charcoal ovens.

- In eastern Nevada, more than half a dozen mountains rise from a sea of valleys totalling more than 350,000 acres of wilderness. Pristine meadows and aspen forests grace otherwise rugged peaks of alpine limestone.

- In southern Nevada, nearly 600,000 acres of wilderness provides additional land for the Red Rock Canyon and Lake Mead national recreation areas as well as for Death Valley National Monument. Six other mountain wilderness areas featuring remote canyons, caves and cliffs surround Las Vegas.

The state BLM's recommendations were greeted with enthusiastic support from Nevada environmentalists.

"Talk about wilderness," says Marjorie Sill, of the Sierra Club. "You can go for days and days and not see a soul in these areas."

"There will always be areas we feel have been left out," says Ann Kersten, who is coordinating the efforts of Friends of Nevada Wilderness. "But it's going very well overall."

The wilderness coalition would like to include a number of areas dropped from the BLM recommendations because of mineral potential. And Watson reels off a dozen areas not included in the recommendations because of "the Sagebrush Rebellion mentality" at the district level in some parts of the state.

While Sill and Kersten say the wilderness coalition will ask for at least 3 million acres, Watson vows to fight for all of the more than 5 million acres currently in wilderness study areas, plus other areas that were not studied. But they all agree that there is no rush to win the official wilderness designations. The interim management policy for wilderness study areas protects the lands until a wilderness bill is passed by Congress.

Environmentalists confidently predict that they will help re-elect the senators who made the Nevada Forest Service wilderness bill possible — Democrats Harry Reid and Richard Bryan, who face elections in 1992 and

1994 — before pushing for another wilderness bill. At 733,400 acres, the 1989 Nevada wilderness bill nearly doubled the Forest Service recommendation, but it took three sessions of Congress to pass. No one in Nevada's congressional delegation is publicly discussing a BLM wilderness bill at this time.

"We're going to face a lot of opposition," Sill acknowledges. "But we can afford to take our time."

On the other side, Grant Gerber, head of the Wilderness Impact Research Foundation in Elko and a leading opponent of wilderness designations, confidently asserts, "The longer they wait the less they'll get."

"I don't think it's a done deal," says Gerber, who will spearhead the coalition against BLM wilderness in Nevada. "In the Forest Service wilderness debate, we succeeded in demonstrating the number of people in the opposition. They were shocked by the effectiveness of our coalition."

Gerber claims that many of the areas are not even truly roadless, a primary consideration for wilderness.

"If a rancher could haul water to sheep, there's a road," he says.

In that sense, none of these areas qualify. The questions become, Where is it worth eliminating people? It's a political decision. Who are we going to agree to hurt? Which ranchers, grazing in which areas, are expendable?

"Stories are coming out on how wilderness is affecting ranchers when they said it wouldn't," Gerber goes on. "We've got a lot of wilderness refugees coming into Nevada after being squeezed out elsewhere. They're telling stories about lockups there," he says. "There's a tension that's growing out here. Everyone is upset."

Meanwhile, as the debate over wilderness in Nevada simmers noisily on the back burner, the BLM is gearing up to be in the "show-and-tell business," says BLM spokeswoman Maxine Shane. A lot of people are interested in wilderness, she says, but few know anything about the areas.

"We'll be talking wilderness for a while," Shane sighs.

— Jon Christensen

Jon Christensen is a free-lance writer in Carson City, Nevada.

Park Service and Geological Survey split over geysers

With an estimated 10,000 geothermal features within its borders, Yellowstone National Park holds the largest concentration of active geysers and hot springs in the world.

But in a few weeks, Congress must make a decision that could determine the fate of such priceless landmarks as Old Faithful and Mammoth Hot Springs. Lawmakers on Capitol Hill will be asked to contemplate whether the protection afforded to the park's famous geothermal wonders should be extended to features beyond the park boundary. Environmentalists say the outcome is as important to geothermal protection nationwide as the laws that originally established the park in 1872.

Four years ago, Congress ordered the Interior Department to prepare a report on the relationship between geothermal features inside Yellowstone and those existing on adjacent federal, state and private lands. The congressional study was fueled by concern that a geothermal well drilled by the Church Universal and Triumphant might somehow harm the travertine terraces at park headquarters in Mammoth just down the road. Although the New Age sect defended its right to pump hot water from a well near La Duke Hot Springs, church officials led by Elizabeth Clare Prophet voluntarily complied with a federal moratorium on geothermal development.

That temporary ban will be lifted, however, as soon as Interior Secretary Manuel Lujan Jr. delivers the report to Congress in July. Already, there is a slight problem. The authors of the report — the National Park Service and U.S. Geological Survey — cannot agree on how Yellowstone's wonders should be protected.

While the Park Service strongly supports a permanent ban on all geothermal development outside Yellowstone, the USGS believes that limited geothermal development can occur at the church's well without harming features inside the national park.

Among those who disagree with the USGS findings is senior geologist Irving Friedman, who works for the USGS in Denver and who helped develop the Park Service report.

"You simply cannot have geothermal development close to an area like Yellowstone without having some effects — even the Survey realizes that," Friedman said. "I was very concerned with the original draft which the Survey prepared. It was wrong and politically dangerous."



La Duke Hot Springs

Jeff Henry

Friedman said that although one well developed by the church may not threaten features inside the park, it "opens the door" for other developers. He believes it would be extremely difficult for Congress to legislatively permit development by the church but then deny the right to other citizens.

Friedman, who is being praised by environmentalists and scientists for courageously defying the pro-development stand of his agency, described his concerns even more succinctly.

"I can't think of anyone who thinks that developing a few thousand dollars' worth of geothermal energy is worth risking a billion-dollar-a-year tourism industry in the park," he said. "These features are irreplaceable and we know for a fact that once you start losing them there are no certain ways to bring them back."

Underground roots

Yellowstone geologist Roderick Hutchinson and other geothermal experts say the underground plumbing system of geysers and hot springs, like roots dispersed from an ancient tree, stretches far away from where the feature actually breaks the surface of the ground. Complex and convoluted, the structure of a given geothermal system may very well be linked to arteries moving back and forth across the man-made park boundary.

One potentially revolutionary theory emerging from the congressional study is the possible connection between hot springs north of Yellowstone and the Norris Geyser Basin some 50 miles away, the hottest geyser complex in the world.

If this is true — and the odds are it may never be proved conclusively — it means that development near La Duke could affect the travertine terraces at Mammoth and might even have a domino effect on features in the park's geothermal center.

"We should not be playing fast and loose with the premier resources of Yellowstone," said Michael Scott, Northern Rockies field director of The Wilderness Society. "Does the American public want something to happen to these treasures at Old Faithful, Mammoth and Norris? The answer is resoundingly no."

"Any risk is unacceptable," added Terri Martin of the National Parks and Conservation Association. "Development at La Duke could sacrifice values of international importance for trivial use of hot water."

Murray Steinman, a spokesman for the Church Universal and Triumphant, said his organization would not develop the La Duke spring if it is shown conclusively that harm might come to the park.

According to Hutchinson, the only certainty is that geothermal development occurring in close proximity to other features usually results in their immediate demise or slow deterioration. He said evidence from around the world — New Zealand, the Soviet Union, Iceland and northern California — suggests the best guarantee for geothermal protection is strict bans on development.

Hutchinson said a parallel can be made between features in Yellowstone and in New Zealand, which used to hold the second largest concentration of geysers on the planet. During the 1950s New Zealand boasted more than 300 active geysers, but after four decades of energy development that number has withered to 15 or fewer.

"Geysers and hot springs are super-



Todd Wilkinson

Travertine terraces at Mammoth Hot Springs

fragile and vulnerable when you extract water from them," Hutchinson said. "They're the type of things that when they freeze or dry up, they crumble. And when they crumble, you can't repair them."

Despite attempts to salvage many of its geysers, New Zealand recently was forced to adopt drastic measures. "They realized their last remaining geysers were a national resource worth protecting at all costs," said Hutchinson. "New Zealand passed legislation which shut down all development within a certain radius of the geysers. They haven't lost any more geysers since they shut down

the bore holes."

Hutchinson said the frightening aspect of tapping geothermal areas is that impacts might not be known until years later, when it is too late to respond.

Although the USGS findings say there is no clear connection between La Duke and features inside Yellowstone, Hutchinson said the agency had not disproved the possibility of a connection.

— Todd Wilkinson

Todd Wilkinson lives in Bozeman, Montana, and writes regularly for *High Country News*.

HOTLINE

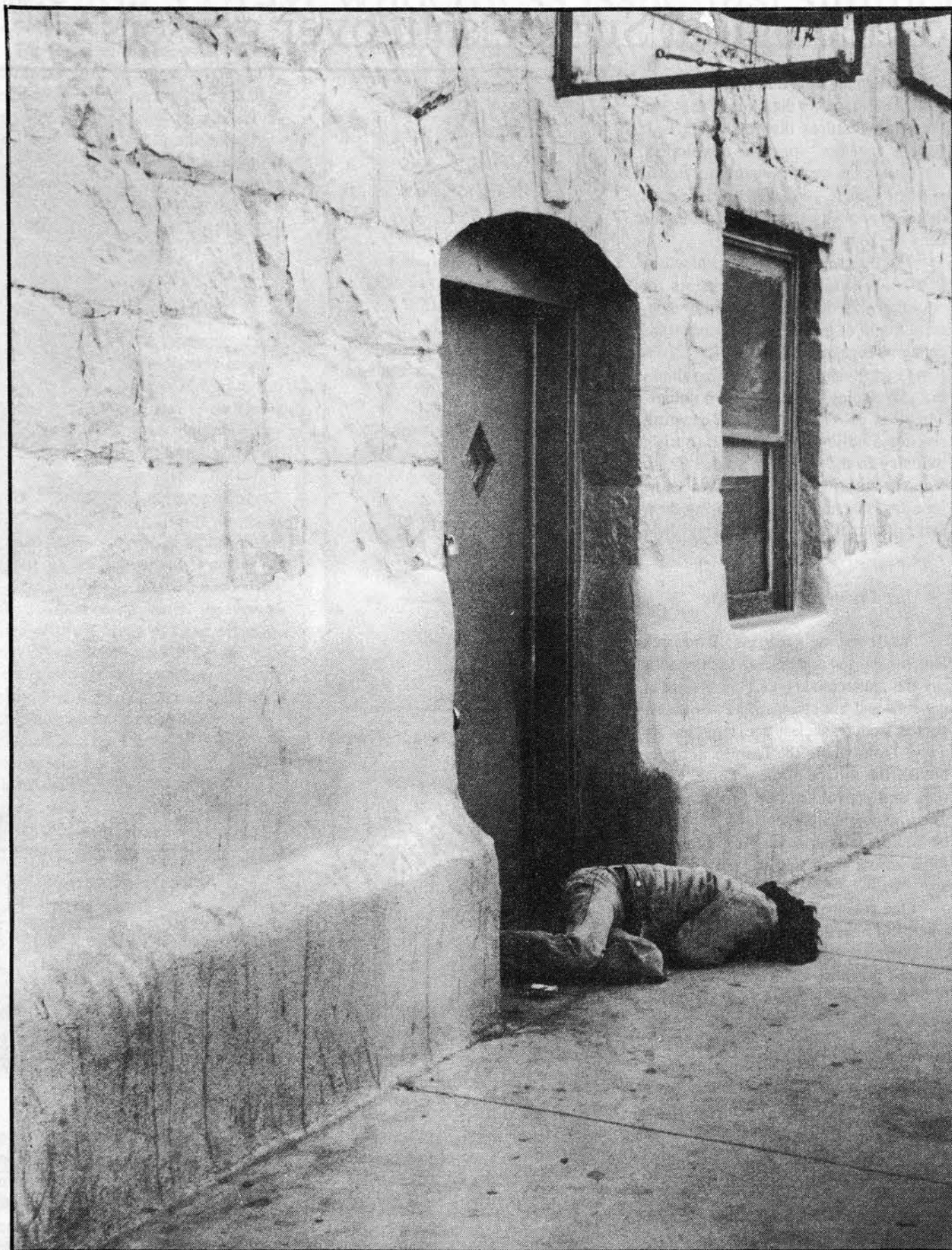
Bison plan proposed

A "revolutionary new plan" for managing bison in Yellowstone National Park has been forged after three months of negotiation, according to the *Billings Gazette*. The plan, created by a coalition of citizens' groups and submitted to wildlife officials from Yellowstone, the U.S. Forest Service and the state of Montana, would allow bison to roam freely outside the park boundaries in certain areas. It is a departure from the existing management program, which restricts bison to the park. The plan calls for increased research on the actual risk of brucellosis transmission to cattle. It also would enlist hunters to help limit bison populations and would restrict winter range to avoid encounters between bison and cattle. "The most important thing about this plan," said John Cada, regional supervisor for the

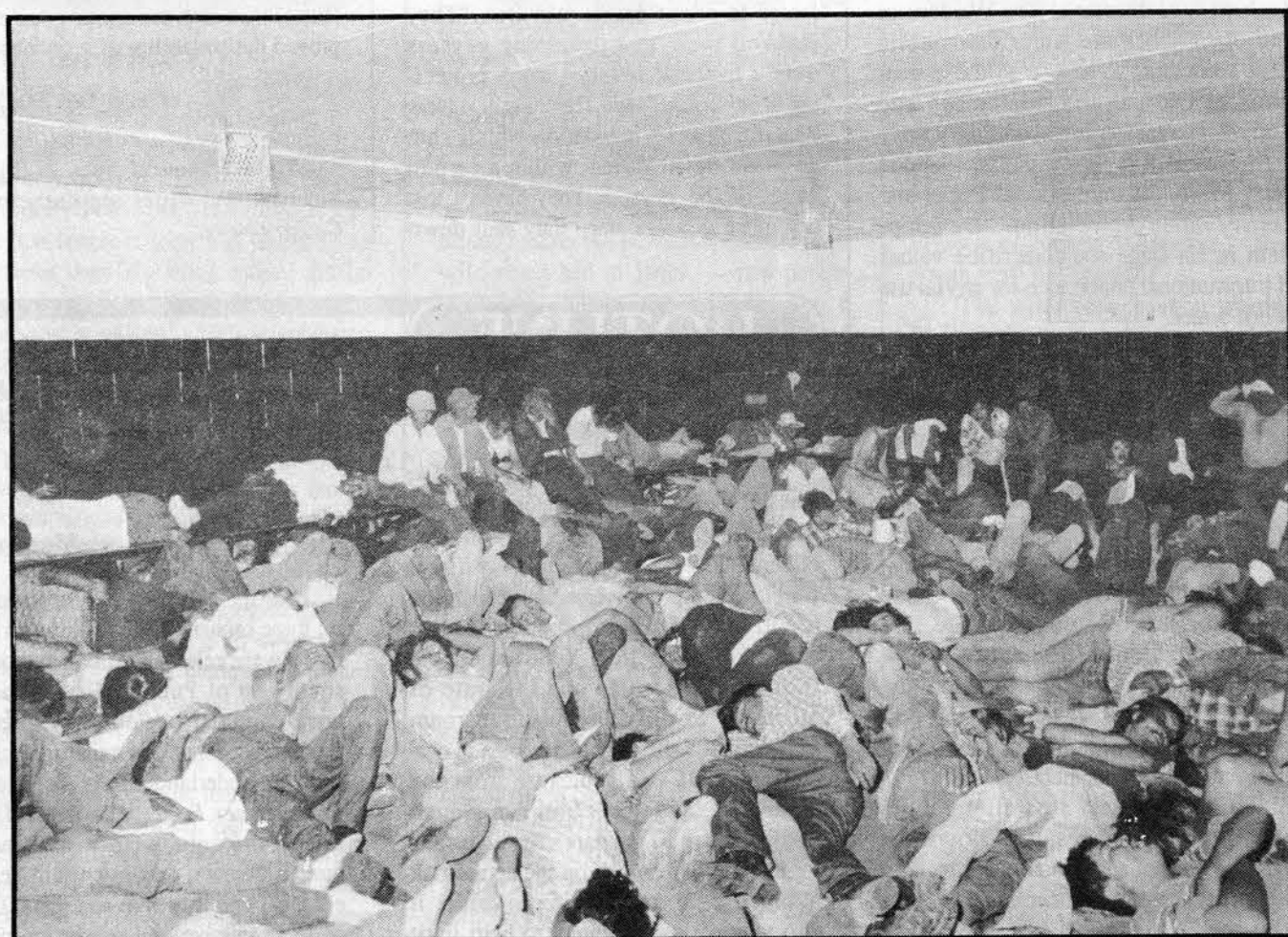
Montana Fish, Wildlife and Parks Department, "is there appears to be agreement from a diverse group of people."

Orphan cubs released

For the first time in Colorado history, three orphaned cougars raised in captivity were released into a remote area southwest of Pueblo, Colo. The cubs were captured in February after their mother was shot for raiding a chicken coop in Nederland, Colo., according to *The Denver Post*. Wildlife officials raised the cubs with a minimum of human contact, feeding them deer and elk meat and later live rodents. "They're quite aggressive and ready to go," said Steve Lucero, district manager with the wildlife division. "When they see a deer outside the fence, they show aggression." The cubs were marked with ear tags before being released.

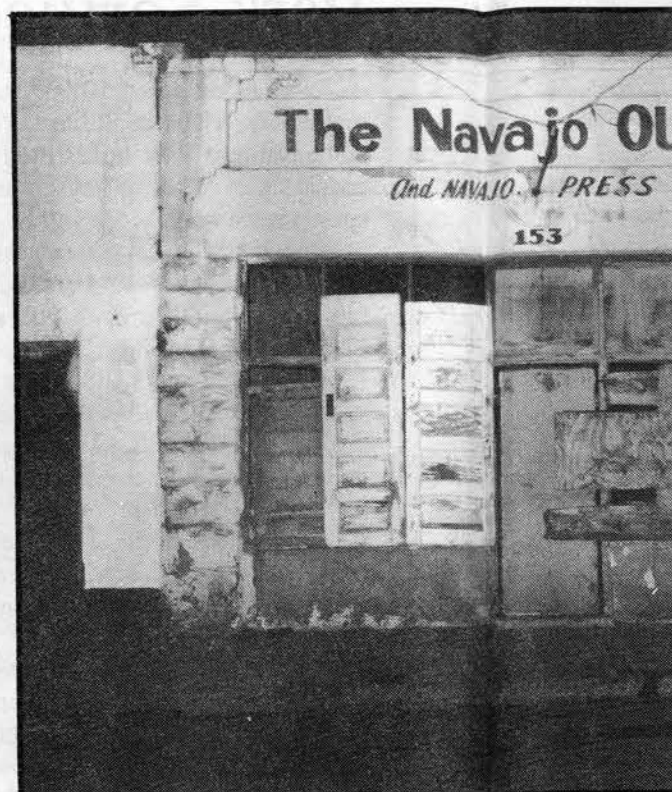


Passed out in Winslow

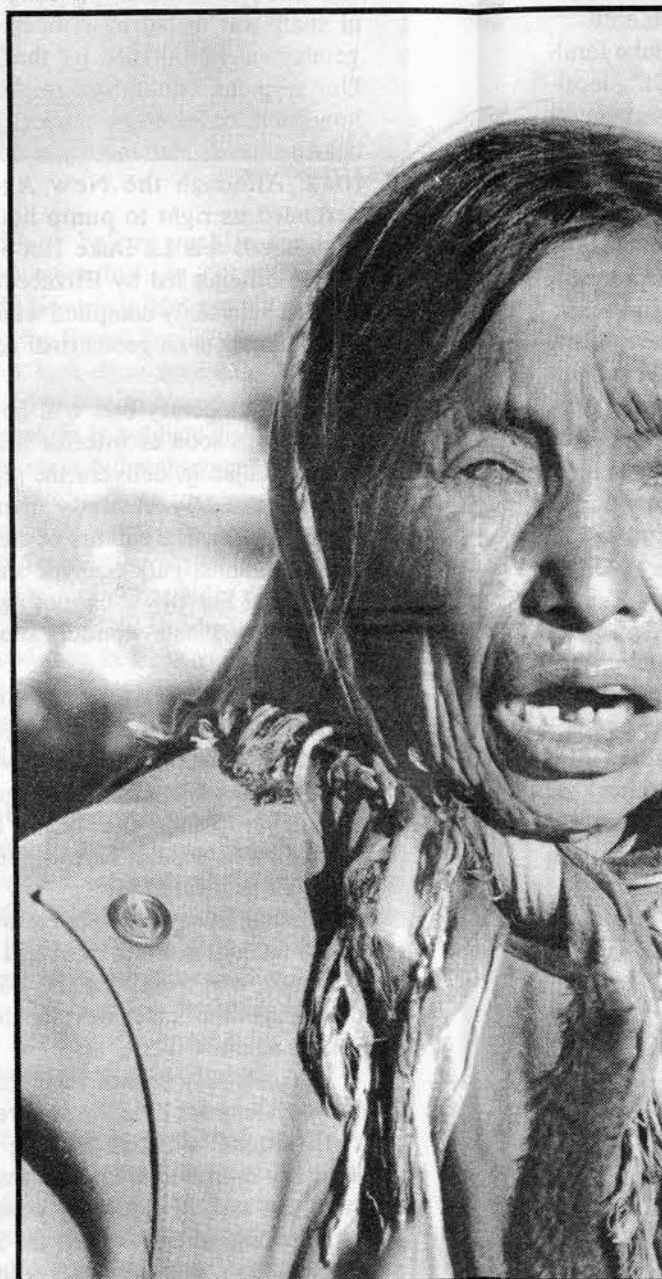


The big tank

With dimensions of 4,500 square feet, this jail cell is reported by *Police Magazine* to be the largest in the United States. It holds 500 people ... uncomfortably. The heat generated by so many bodies creates a furnace effect, and there is a blast of hot air on approach to the entrance.



Holbrook

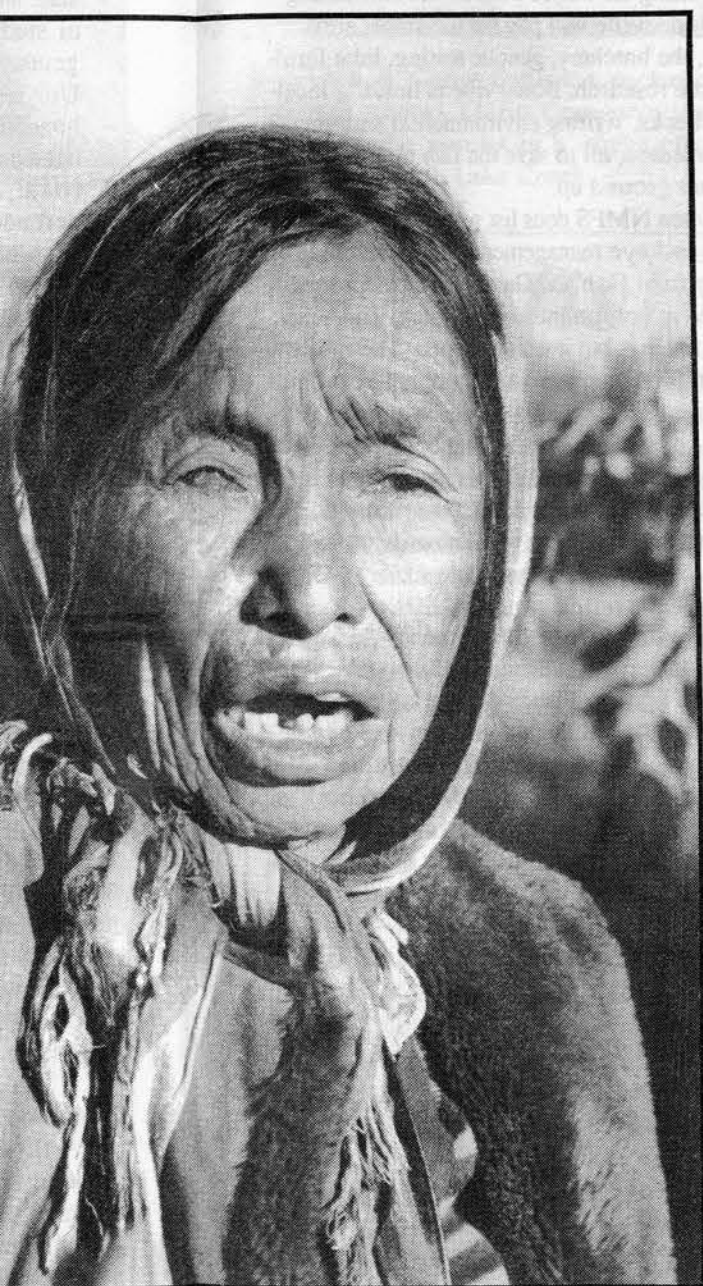
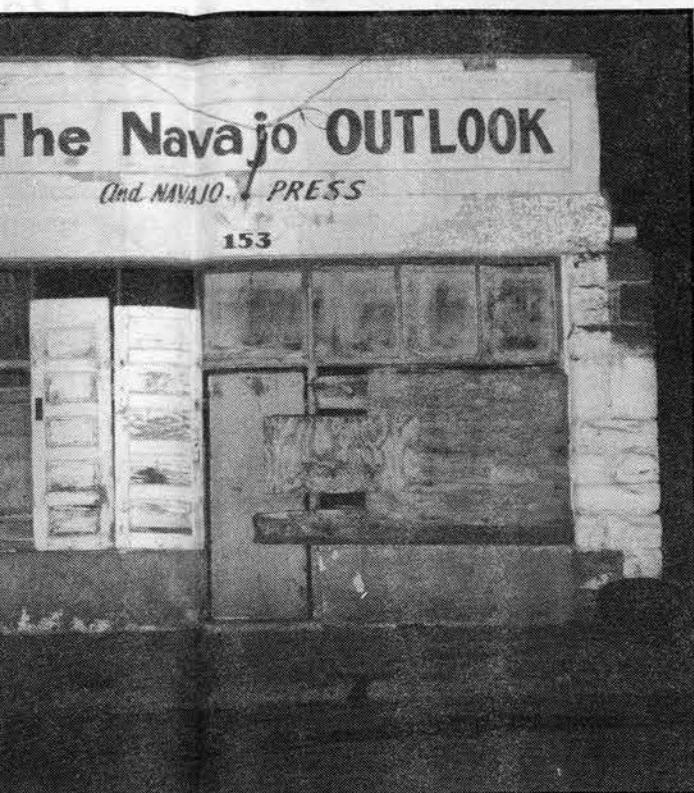


"No pictures, no pictures!"

For years she has walked the streets of Gallup. A small man, they sort trash bins together for a living. Her face is a mask, nothing of the woman can be seen. Perhaps she isn't as old as When the photographer previously requested photographs, she said, "No pictures, no pictures!" But this time she gave in, probably for

"American Indians die the youngest, have the poorest living, the least education and the shortest life expectancy Americans. Until we stop the drinking, we can't solve a What good is a fine education if you're going to drink your "The situation persists, and has for decades, because p is and the way it's supposed to be, especially in the South these are 'only Indians.' People have grown accustomed think it's no big deal. But it is a big deal, especially for our

—Robert Sundance, a Sioux Indian and executive based in



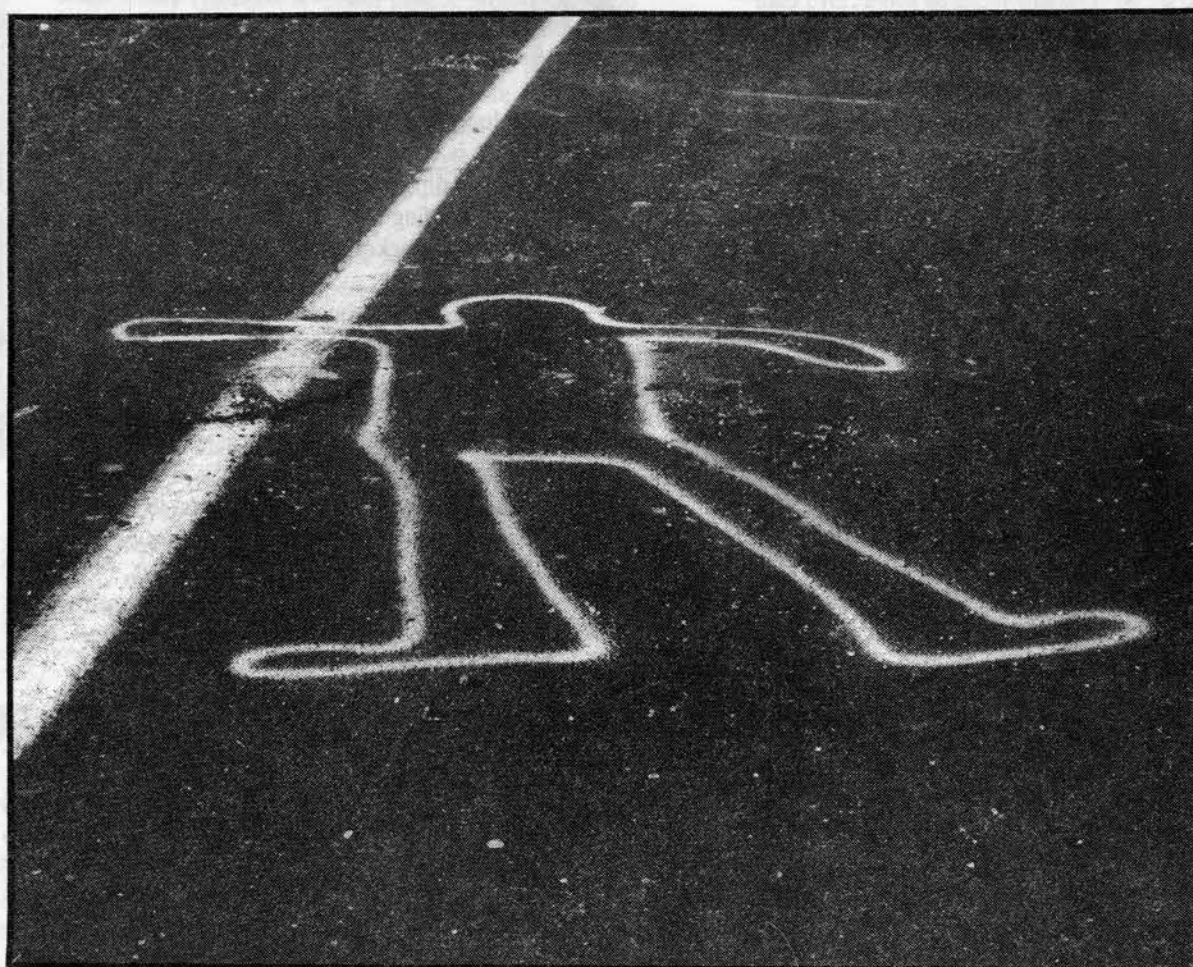
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dance, a Sioux Indian and executive director of the Los Angeles-
 based Indian Alcoholism Association

BORDERTOWNS

Photographs by Marc Gaede



Body outline, blood and a quarter, Gray Mountain

The seeds for this book began when, as a child, I was witness to the adversity within the bordertowns. Because it is illegal to sell liquor on most southwestern reservations, resident Indians who want to drink visit the surrounding communities. These border-towns have the liquor and are settings of varied and extensive drinking activities. The fact that most Indians have neither shelter nor money for rooms makes the display of binge drinking visible to everyone. Defenseless, these individuals are made objects of violence and degradation by their own people and by other ethnic groups....

It is the purpose of this book to present a situation that needs to be recognized as a reality and a problem. I tried to avoid sheer horror, and most of the excessively shocking images were excluded or taken from a distance. To those who see their family and friends on these pages, please forgive me. Their pain and tragedy are in my memory forever. Hardly a day goes by that these people do not cross my mind, and in a sense, I have scarred myself with this book. But I know in the long run, far more good will come from it than harm.

In what is probably one of the greatest novels ever written on the American Indian, James Welch's *Fools Crow*, Fools Crow has the final vision for his people's fate. "He saw white children playing and laughing in a world the Indian had possessed. And he saw the Indian children, quiet and huddled together, alone and foreign in their own country." Had Fools Crow's vision been stronger he might have seen distant towns surrounding Indian land. Towns on the plains, in the desert, towns surrounding Indian land. Towns on the plains, in the desert, against the mountains, where Indians fight in the streets, lie drunk in the alleys, families torn to shreds and heritage forgotten. The faces and the words echo the past, and hope of a different vision waits in the shadows.

— Marc Gaede

Bordertowns: photographs by Marc Gaede, edited by Marnie Walker Gaede. Chaco Press, 5218 Donna Maria Lane, La Cañada, CA 91011. 818/952-0108. Cloth: \$27.95. Unpaged. Illustrated with 98 black-and-white photographs.

Idaho's salmon ...

(Continued from page 1)

listing forces NMFS to take action now; a proposed listing gives them another year for study. Given a choice between studying the fish and confronting the more powerful federal agencies whose dams are killing the fish, NMFS will study the fish.

We can understand; most of us are used to, sometimes even party to, the bureaucratic politics of delay. But we are 75 feet from Redfish Lake. Can we just nod to the facts of life and move on? Can we accept ourselves accepting standard operating procedure for the last of Idaho's red fish?

People want to do something. Can we, here, today, petition NMFS for an emergency listing? You can, says Vic Sher of the Sierra Club Legal Defense Fund. Would it do any good? It could, says Chaney, if you're prepared to sue them when they say no.

Gary Richardson volunteers to write something. The panel ends. Chaney and Sher are surrounded by people who want to talk salmon. People walk out to Redfish Lake.



In Idaho Conservation League organizer, Lill Erickson, began this event in 1983. The topic was Idaho mining; maybe 40 of us were here. That year 216 sockeye returned to Redfish Lake.

In 1985 the event got its permanent name: The Idaho Conservation League's Wild Idaho Conference. Jack See and his family offered us this fine old lodge and cabins, cut rate, every year on the weekend before their public opening on Memorial Day. Twelve sockeye came back.

In 1986, a lucky few of us were on the dock when the big mid-lake ice sheet tipped, stood up almost vertical, then slipped into the water. Twenty-nine fish approach that year.

Dave Foreman gave his unforgettable speech in 1987; 16 sockeye.

In 1989, we had a reunion of and tribute to Idaho wilderness pioneers; one redd and maybe two fish. Last year, the first one I missed; no fish.

The memories rise, and the fish fade. I face the truth: This is the first time I have really put the two together. This place so beautiful, this time with my friends so annually renewing; I would tell you there are few places on earth I care for more. Yet I have watched, only watched, an extinction happening here.

I was the Idaho Conservation League's director in 1983-84. We could have filed an endangered species petition for sockeye, with enough of them left to mean

something. From 1985 on I could have convinced the league or others to do it, or done it with 100 friends. What were we thinking? Why were we not thinking?

At dinner Gary reads his eloquent petition. There is applause, and it is passed around. Exactly 100 people sign. Two days later, on behalf of the league and Chaney's non-profit group, Vic Sher will send it to the U.S. Secretary of Commerce: our request for emergency endangered species listing of Snake River sockeye.

My tent is on the shore. I listen to the lake and ask myself, Why so late.



Sunday morning. We drive to Redfish Lake Creek near where it joins the Salmon River. In mid-creek, where the current is fastest, Idaho Fish and Game has anchored a five-foot-long wood frame mesh trap. A man in waders cleans it, moving carefully in the fast water. He opens it and dips a few two-inch fish out into a small bucket. Wading back toward us, he dumps them in a bigger plastic bucket with about 25 others from yesterday.

We peer down in the bucket. Cameras click away. Rick Alsager tells us what's happening. These juveniles — 750 will eventually be collected — will be taken from the creek to the Eagle hatchery near Boise, which they will never leave. Three years from now, Fish and Game hopes maybe 40 adults will survive to be spawned. Their eggs will then be reared to fingerlings, and returned to Redfish Lake, to — maybe — migrate out.

Are these Snake River sockeye, born from the two sockeye that may have spawned in 1989? We don't know. Perhaps most of them, perhaps all of them, are kokanee, the landlocked form of sockeye. The two fish are indistinguishable. Whatever they are, they are migrating out from Redfish drainage.

That's one end of the watershed. At the other, a few adult sockeye — one, two, five? — might arrive at the dams in July, heading up for Redfish. If any do, they will be trapped at Lower Granite Dam, taken to Eagle, spawned, their progeny raised to adulthood, spawned, and their progeny returned to Redfish Lake.

It's dramatic stuff; Alsager is peppered with questions. You can almost see the writers composing their leads: "In the rushing waters of Redfish Lake Creek, a young biologist holds what may be the last Snake River sockeye gently in his hands. A bold rescue mission has begun...."

A late-comer sees us from the road above; we are circled around the bucket looking down. He says it looks like a burial.

Back at the lodge, biologist Michael Scott shows us his slides. Not long ago he was helping manage the condor captive breeding rescue in California. "Welcome," he says, "to emergency room conservation. There's something you need to understand. You're too late."

He shows his two-line condor graph. One line rises steeply up — the rescue dollars spent. The other line plunges down — the number of animals left and the chances of success.

At the break Jack See asks me into the kitchen. His family owns and manages this old place, just managing to break even in order to live in God's country. They've hosted us for eight years because they love Idaho and think we're doing good work. Now they're not sure.

Suddenly they are seeing their lake on national TV. They know there aren't any sockeye; they don't know about the Endangered Species Act. Last week they heard Fish and Game might close all fishing and would not plant any catchable rainbows. Fishermen are half their guests. All yesterday they heard us plotting to speed up this law they think could shut them down. They are mad and worried.

I corral a Fish and Game I trust. It seems Bonneville Power Administration is putting on heavy pressure, and is opening its wallet wide to "do something" for sockeye. Bonneville will pay for the smolt and adult trapping, the hatchery, genetic testing, lake fertilization and more research. Bonneville is holding meetings, signing checks, writing environmental statements, issuing press releases, all to save the fish their hydrosystem has ground up.

It seems when NMFS does list sockeye, Bonneville will try to take sockeye management (that is, sockeye recovery) away from Fish and Game. So the department needs to be seen as competent and in charge. There was talk of closing fishing, but it won't happen. The rainbow plants are short-lived hatchery weaklings, no great threat to young sockeye that probably don't exist anyway. But fewer will still be planted. Appearances count. The Fish and Game says the one part of all this that matters is trapping adults if any reach the dams. (Even then no one has ever cultured sockeye well; who knows what will happen over three years?) But the whole sockeye condor program will still go on.

Bonneville's strategy is to throw money and publicity at saving sockeye, get them out of the watershed, and gain control. I gather Fish and Game's strategy is to keep some fish alive at Eagle, call them sockeye whatever they are, and force changes downstream in the hydrosystem by insisting those fish will go back in the watershed in 1994. The battle has barely begun.



During April and May this simple trap set in Redfish Lake Creek caught 848 young sockeye salmon — about 18 percent of the smolts leaving Redfish Lake

Diane Ronayne/IDFG



Diane Ronayne/IDFG
Fish & Game fisheries technician Steve Warren shows Idaho Conservation League members the results of a night of trapping smolts on Redfish Lake Creek

I figure translating this back to Jack should wait until I understand it. Wild Idaho 1991 ends after lunch with an Idaho wilderness strategy session in the bar. Simple conservation; what a relief.



have not found understanding in the month since. But a few things are clearer.

My culpability is clearer. I do love the country around Redfish, the upper Salmon River, more than anywhere on earth. But I have been too much a weekend recreational lover. It feels so good to be there, and I have fought for that experience, by fighting for wilderness more than for the place.

Do Snake River sockeye still exist, and if so are they only symbols, levers or genetic artifacts, or real fish in a watershed? I don't know. I know wild chinook salmon still do, in the streams rather than lakes. They're in about the shape sockeye were 10 years ago; maybe 4,000 will make it back to spawn in all of Idaho this year, the fewest ever. They need the same thing sockeye needed, and didn't get — safe passage through the hydrodams.

So I will do what I can for the chinook. Perhaps success for them can open a window for sockeye to recreate themselves in Redfish Lake. I suspect it's in the hands of God and the fish more than the biologists at Eagle Hatchery.

Every week makes it clearer that Ed Chaney is dead right about the institutions. If the salmon's fate is in the hands of the agencies, the fish are doomed. I am afraid the same is true if their fate is in the hands of Northwest politicians.

So I have written to a non-Northwest politician. I hope others will consider doing the same:

The Honorable John Dingell
U.S. House of Representatives
Washington, D.C. 20515



Dear Congressman Dingell:

You are the father of federal law demanding restoration of Northwest salmon. Ten years ago, you inserted into the Northwest Power Act clear direction to the Bonneville Power Administration, the U.S. Army Corps of Engineers and the Northwest Power Planning Council to restore Columbia Basin salmon.

As you know, those salmon are in worse shape than ever. Four of them will soon be on the endangered species list. The agencies you directed to save salmon are ignoring your direction with all their might. Northwesterners need your help again.

On May 18-19, Idaho conservationists gathered at Redfish Lake in central Idaho. The lake is named for Snake River sockeye salmon, which may already be extinct. But if any still exist on earth, Redfish Lake is their home.

Have you ever watched extinction happen before your eyes? That's how it felt May 18-19, as we witnessed emergency-room conservation in action — a few small fish, a few of which might be sockeye salmon, milling in a plastic bucket on the bank of Redfish Lake Creek. It is being billed by Bonneville Power as a rescue mission. It felt like a burial.

It made 100 people mad enough to sign an on-the-spot petition for emergency endangered species listing

Continued on page 12

U.S. fish agency takes the slow road

The National Marine Fisheries Service proposed last month to list two strains of Snake River chinook salmon as threatened species under the federal Endangered Species Act. Despite strong and numerous signs that all of the wild salmon in the Snake River are heading toward extinction, Rollie Schmitt, NMFS's Pacific Northwest director, decided against recommending the stricter "endangered" status for the chinook.

Meanwhile, adult chinooks were returning to Idaho spawning grounds in near-record low numbers. By June 13 only 6,079 spring salmon had reached Lower Granite Dam, the last dam on their way to Idaho. That compares with a 10-year average of 17,813. In the mid-1950s, the sport catch of springs averaged 36,000 fish annually in the Salmon River alone.

Schmitt said scientific evidence and improving conservation trends made endangered status unwarranted for chinook. But he said his agency will immediately list chinook under emergency provisions of the act if it becomes necessary.

The Fisheries Service, an agency within the Department of Commerce, recommended listing spring and summer chinooks as one threatened species. It also proposed listing the far rarer fall chinooks as a threatened species.

The agency decided against proposing protection for Columbia River coho stocks. Schmitt said his scientists could find no evidence that a distinct wild population of the once abundant species exists, and that the mixing of hatchery stocks with naturally producing coho had washed away any genetic distinctions. The agency genetically tested 51 cohos collected at 15 different sites, Schmitt said. The genetic characteristics can be seen on slides under a powerful microscope.

"When you pick out any slide it's exactly like any other slide," Schmitt said.

Oregon Trout, along with several other environmental groups, had petitioned NMFS for protection of the four

salmon species. Its attorney, Rick Braun, was incredulous. "There must be a mistake," he said.

The decision to lump spring and summer chinooks together as one species also drew fire from conservation groups. They argued that lumping the species could allow the agency to give up on some stocks while saying the species as a whole was improving. Schmitt held that NMFS scientists could find no distinction between these two species either.

"I don't think that can be supported on observable facts, let alone science,"

"There must be a mistake."

commented Ed Chaney, executive director of the Columbia-Snake Rivers Mainstem Coalition.

Perhaps the most controversial and surprising of the proposals was for listing fall chinook only as a threatened species. NMFS acknowledged that only 400 fall chinooks have returned to the Snake River annually over the last four years. New data showed that fewer than 75 made it over the final dam into Idaho in 1990.

But Schmitt said NMFS made its determination on a number of factors beyond simple numbers. First, the agency had to determine that fall chinooks still exist as a distinct species. This was not a given, he said, because of a serious contamination of the genetic stock in the Lyons Ferry Hatchery in Washington.

It is in Lyons Ferry, above Ice Harbor Dam, that Snake River fall chinook have been raised as a part of the recovery effort put in place in the late 1970s. But in 1984, another strain of fall chinook released in the Umatilla River, a tributary of the Columbia in Oregon, found its home dry. Irrigators had dewatered the Umatilla, sending the fish to look elsewhere for spawning grounds. They entered the hatchery and mixed with the Snake River strain.

Hatchery biologists also were collecting too many of the wild fall chinook

from their natural spawning beds in the river, Schmitt added.

He said the states of Oregon and Washington, which agreed to ensure that the Umatilla would have enough water, had promised to stop taking wild fish for hatchery stock. The states also agreed to cut the harvest for Snake River fall chinook. Moreover, the U.S. Army Corps of Engineers agreed to barge more fall chinook through the dams. All of this, Schmitt said, convinced NMFS that conservation measures were adequate to prevent the imminent extinction of the fall chinook, and led to the threatened-

species recommendation.

The fisheries service has some experience with this kind of approach. In the late 1990s, it decided not to list Sacramento winter run salmon as endangered, acting on a conservation plan prepared by irrigators and the Bureau of Reclamation. When the farmers and the agency did not live up to their promises and the Sacramento numbers plummeted, NMFS jumped in with an emergency listing.

Conservation groups, however, said the recommendation for threatened status showed that NMFS was knuckling under to powerful electric power and industry interests in the region. "It is totally ridiculous and against the law not to list all three chinook stocks as endangered," said Mitch Sanchotena, executive director of Idaho Salmon and Steelhead Unlimited. "This is clearly a decision based on politics, not science."

Even the electric utilities' lobbying group, the Pacific Northwest Utilities Conference Committee, found the agency's proposal surprisingly mild. "These findings appear to be inconsistent with the scientific information PNUCC salmon experts submitted to NMFS," said Al Wright, the committee's executive director.

NMFS must make a final decision on the listings by June 7, 1992. It will

hold public hearings on the proposals in Portland, Ore., on July 30; Seattle, Wash., on July 31; Richland, Wash., on Aug. 1; and Boise, Idaho, on Aug. 7.

If the agency decides to list any of the species, it must prepare a recovery plan and designate critical habitat. That plan can determine the economic effects of an action. Schmitt said he hopes to form a committee of economic interests to help survey the effects of listing on the Pacific Northwest.

Most political leaders in the region do not want any action taken under the Endangered Species Act, and so were not disturbed or surprised by the agency's latest proposals. Only Gov. Cecil Andrus of Idaho is supporting strong application of the act by NMFS.

"The Endangered Species Act is the law of the land," Andrus argues. "Rather than fight it by using scare tactics on the public, we should focus on trying to meet its objectives in the best way possible."

Andrus, a former Secretary of the Interior, is pushing a plan to modify the four Snake River dams that biologists say kill 90 percent of the migrating smolts as they try to return to the ocean. In the meantime, Andrus would draw down the reservoirs behind the dams during the spring migration to rescue the young fish from entrapment in the currentless reservoirs (HCN, 4/22/91). His proposal also would provide additional water later in the year for fall chinook migration.

The Army Corps of Engineers has only agreed to consider a test of the drawdown proposal, and refuses even to study modifying the dams to permit downstream fish passage. The Corps and waterway economic groups contend that the Andrus plan could ruin the region's economy. Andrus and others, on the other hand, argue that the economic costs would be far from ruinous, and could be mitigated.

— Rocky Barker

The writer reports for the Idaho Falls Post Register.

Idaho's salmon ...

(Continued from page 11)

of Snake River sockeye. But that seemed like only flailing in the terrible face of ultimate failure.

This week Bonneville's deputy administrator is touring Redfish Lake and other "sockeye-saving" projects they (we) are paying for. Their (our) wallet is open for any project that takes these fish out of the watershed. The less said about the dams the better.

The National Marine Fisheries Service hasn't responded yet to our petition for emergency listing of sockeye. NMFS did propose that Snake River fall chinook — whose stock is down to 75 fish — be declared "threatened" a year from now. NMFS has begun consulting with the Forest Service about managing salmon spawning habitat. But the agency is not consulting with the Corps of Engineers and Bonneville about managing salmon migratory habitat. NMFS is simply scared to deal with the federal dams and fellow federal agencies operating them.

The Northwest Power Planning Council, created by you and Congress in 1980 explicitly to restore Columbia Basin salmon, is now adopting "emergency" habitat, hatchery and research measures to help Snake River salmon. It will be some months yet before they take up the lesser matter of 95 percent mortality through the hydrosystem.

The 1991 salmon migration is nearly over. Three weeks out of 10, waterflows through the hydrosystem were enough for Snake River salmon to maintain current numbers. For seven weeks the flows were below maintenance — meaning extinction flows. For no weeks — for no days — were flows high enough to begin restoring salmon. This is the case even with the Endangered Species Act hanging over the system. Bonneville and the Corps have no intention of killing less fish at their dams.

The 1991 spring chinook run back to Idaho is over. About 2,100 wild fish will be back on spawning grounds that once supported 250,000. It is probably the lowest return since the species came into being.

The eight federal dams and reservoirs on the lower Snake and Columbia rivers now kill nearly every juvenile salmon and up to half the adults reaching them. These rivers, as managed today, are lethal to their ancient inhabitants. Thus we have the "condor conservation" we saw at Redfish Lake — a desperate effort to take salmon out of the watershed before it kills them.

Who manages these rivers? Who is killing the salmon? The Bonneville Power Administration and Army Corps of Engineers — public agencies, *our* agencies, using our charter and our money.

This shouldn't be surprising. But it does surprise — and sadden and infuriate — when you stand at Redfish Lake and feel what has been taken. When you stand at the scene of the crime, reflecting upon the fact that each of us, in the Northwest and the nation, is paying for Bonneville and the Corps to commit it.

Since the salmon endangered-species petitions hit the streets last year, only one Northwest politician has named the killers and the crime. Only one has seen the Endangered Species Act accurately — as an opportunity, not a threat. Only one has proposed doing what the salmon need — making their migratory rivers safe for their use again by re-engineering the dams. He is Idaho Gov. Cecil Andrus.

Perhaps others will start joining him. So far their message has been merely managerial: Let's settle this in the region before Congress blunders in *à la* spotted owl.

The Northwest's public institutions are settling the problem; give them another few years and the problem will be extinct. But they are not capable of restoring Northwest salmon, in large part because the region's people don't and can't speak through them.

Because Congress and the nation blundered in, there's some chance that the remaining tatters of the Northwest ancient forest ecosystem will be saved. There will be some chance of restoring the Northwest's salmon ecosystem only if Congress and the nation blunder in.

Congressman Dingell, please come back to the Northwest and help its people save these salmon. Oversight hearings on the agencies you directed 10 years ago to do just that would be a start. Redfish Lake would be a good place to hold one. I know you would

feel, as we did, the wound beneath its beauty, the death rattle beneath its ice.

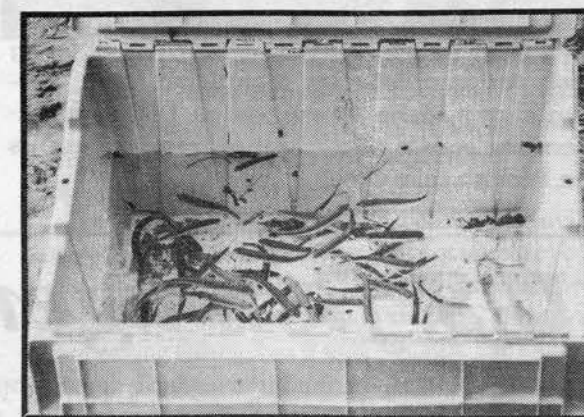
Bonneville, the Army Corps, NMFS and the Power Council are all federal creatures. They need to hear your voice — the common-sense voice of fishermen, the blunt voice of lawmakers who believe federal agencies should obey the law. Please tell them that salmon must be restored in the watershed, not in hatcheries, buckets and barges; that the hydroelectric system must be re-engineered and re-coordinated to give the salmon safe-passage.

The salmon don't need much — just the use of their ancient migratory path. They, and we here who want them back, need your help once more. Thank you.



Pat Ford, editor of HCN's special issues on the Northwest's ancient forests and salmon, is a free-lance writer in Boise, Idaho.

[Readers wishing to express their views about the salmon issue can write to both Rep. John Dingell and Rep. George Miller, chairman of the Interior and Insular Affairs Committee at the U.S. House of Representatives, Washington, D.C. 20515.]



Diane Ronayne/IDFG

A night's catch of smolts ready for transport from Redfish Lake Creek to a fish-rearing facility

Lemhi Valley laments loss of salmon

When Lewis and Clark entered the Lemhi Valley in 1805, they saw its river teeming with chinook salmon, providing food for the Shoshone Indians who lived along its banks.

Today the Shoshone are gone, moved to the Fort Hall Indian Reservation. And the salmon are almost gone, too. Only 80 redds, or nests, were counted in the Lemhi River in 1990.

But the demise of the chinook in the Lemhi, as in many other tributaries of the Salmon and Snake rivers, has taken place in the lifetimes of many who still live along its banks. While hydroelectric dams downstream have taken the major toll by preventing migration, old-timers see a patchwork of events in their own valley that have contributed to the degradation of the chinook's spawning grounds in the Lemhi. At the top of the list, old-timers say, is increased irrigation and dewatering of a portion of the river.

Delbert Stroud remembers times when he saw "nine or 10 salmon on one spawning bed, and there were beds in every ripple in the river." His cousin, Bedford Stroud, recalls counting as many as 150 spawning salmon in a quarter-mile stretch of the upper Lemhi River.

"I speared my first salmon with a pitchfork when I was five years old," said Wynn Stokes of Salmon, Idaho. "You'd just wade in and throw the fish out on the bank like you would a bale of hay."

Stokes came to Salmon in 1937 during the Great Depression. He grew up beside the Lemhi and the canal that fed the nearby power plant. For his family, salmon and other fish were a staple that could always be counted on to fill hungry mouths. Salmon were also a source of wonder and entertainment for locals.

"Everybody used to go over by the old sawmill and watch the salmon jump the dam," said Stokes. "We'd take a picnic just

like we were going to the drive-in show."

For some, the loss of the salmon has been an economic blow. Viola Anglin, owner of the Tendoy Store, says that in the 1950s, just after she and her sister had bought the store, her yard and the riverbanks were full of fishermen who had come from all over to catch the mighty fish.

"The best fishing hole was the Tendoy hole," recalled Anglin. "If you wanted to fish there, you got up early and crawled over the people sleeping on the trail."

Now 71, Anglin still stocks the store with such items as horseshoes, irrigation boots, bedding, stock salt, ranch wear, an assortment of last-minute gifts and just about anything else you might want to find at an old-time country store. But things just aren't the same and the margin is a bit tighter.

The salmon are gone and so is her little four-stool counter where fishermen used to wait three-deep for a meal, a beer and a measure of Anglin's hospitality. Fishing of any kind has gotten so bad on the Lemhi that most of the old-timers don't even bother going anymore.

"Some people think it's good now, but they didn't know it before," said Bedford Stroud.

Old-timers have their theories about circumstances that might have contributed locally to the demise of the salmon. But Idaho Fish and Game fisheries biologist Jim Lukens believes locals didn't have much to do with it.

"We have our own problems up here, but those are minuscule compared to the problems downstream," said Lukens. "Primarily, it's the effect of the eight hydroelectric facilities downstream."

But when you've lived in the Lemhi Valley all your life and have never seen the dams downstream, it's difficult to see beyond the mountains that hem in the valley. Valley dwellers blame the loss of the salmon on a number of things, including

Fish and Game traps that took as many as 5,000 salmon out of the Lemhi for spawning each season, major straightening of the river to accommodate Highway 28, hydroelectric dams on the Lemhi that provided electricity for the valley until 1950, and heavy irrigation use of the river.

In dry years, the Lemhi is dewatered for a stretch about five miles up from its confluence with the Salmon River. While old-timers remember early years when the river was occasionally dewatered, they also say that in recent years dewatering has occurred more frequently.

At least two residents remember stories of an unwritten law that protected the salmon by requiring ranchers to leave enough water in the river to float an eight-inch log. Some say that water usage has grown as more land has gradually been cleared. Others say there just isn't as much water in the river. One old-timer said that irrigation presented another kind of problem.

"The biggest effect probably was that there were no preventive measures

at the headgates," he said. "When we were kids, we could go out in the irrigation ditches and catch them by the hundreds. The attrition on the Lemhi had to be absolutely fantastic."

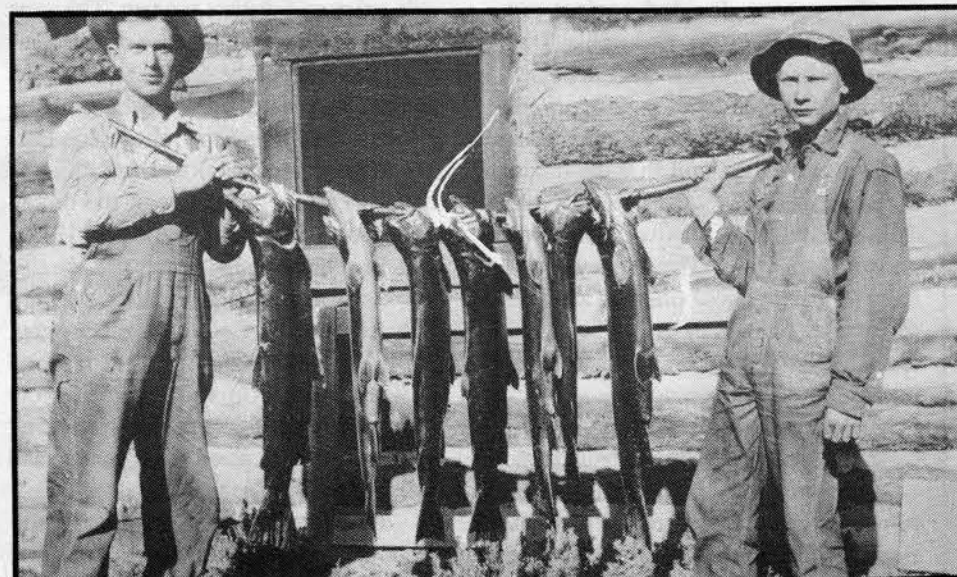
The canal screening program has come a long way since those days, and, according to Lukens, Fish and Game plans to step up its screening program.

The screening program and other measures could get a higher priority now that the National Marine Fisheries Services has proposed listing the Snake River chinook as a threatened species under the federal Endangered Species Act.

"We've never had a federally listed fish in Idaho before. It's new to us, and we just don't know where it's going to lead us," said Lukens. "There's going to be a lot of attention focused on the Lemhi to help the salmon return. What that's going to mean, we don't know."

— Candace Burns

Candace Burns is a free-lance writer in Salmon, Idaho.



Tom and Walter O'Connor with their chinook salmon catch, 1917

BULLETIN BOARD



COLORADO WATER WORKSHOP

The 16th annual Colorado Water Workshop — "From the Dome to the Ditches: Translating Environmental Legislation into Practice" — will be held at Western State College in Gunnison July 21-23. The workshop will explore water regulations and their progress in the West. The \$195 conference fee includes meals and materials and can be mailed to: Colorado Water Workshop, Western State College, Aspinall-Wilson Center, Gunnison, CO 81231. For information call 303/641-2238.

WATER SEMINAR

The Wyoming Water Institute for Teachers will offer a two-week seminar on Wyoming water issues in July. Participants will increase their understanding of water issues and the legal problems involved while exploring new classroom activities and teaching methods. The seminar, which includes field trips and guest speakers, will be held at the University of Wyoming at Laramie from July 8 to 19. For further information write the Wyoming Institute for the Development of Teaching, Box 3992, University of Wyoming, Laramie, WY 82071-3992, or call 307/766-6381.

DINOSAURS AND ROCK ART

A three-day dinosaur seminar called "A Safari into the Past and Present of the High Plains" will be offered by the Snake River Institute July 17-20. Participants will visit quarries near Como Bluff in Wyoming and will have the opportunity to excavate bones while learning local ecology. The seminar is open to people with all levels of experience and will be taught by Dr. Robert Bakker, who is known for his lucid and entertaining style of teaching. Lodging, transportation and lunches are covered by the \$475 tuition. The institute will also offer a separate field seminar July 10-13 on the pictographs and petroglyphs of central Wyoming, taught by George Horsecapture. For information, contact the Snake River Institute in Jackson, Wyo., at 307/733-2214.

AUDUBON CONVENTION

The Audubon National Convention will be held July 21-27 at the YMCA Camp of the Rockies near Estes Park, Colo. The conference, focusing on "Audubon in the Americas," will be geared toward influencing the 1992 United Nations Conference on Environment and Development. For information contact Audubon Convention Office, 4150 Darley Ave., Suite 5, Boulder, CO 80303; 303/499-0286.



ENVIRONMENTAL ADVOCACY CONFERENCE

The University of Utah's Humanities Center will sponsor a conference titled "The Discourse of Environmental Advocacy" in Alta July 29-31. The conference features the presentation of scholarly papers that explore the ways people communicate about the environment. For information write Prof. Christine Oravec, Department of Communication, University of Utah, Salt Lake City, UT 84112, or call 801/581-6527.

WILDLIFE ON PRIVATE LANDS SYMPOSIUM

A symposium titled "The Business of Managing Wildlife on Private Lands" will be held July 25-27 in Albuquerque, N.M. It is sponsored by Multiple Use Managers Inc., and will focus on managing private lands for hunting opportunities. Contact Wayne Long, Box 1210, West Point, CA 95255; 209/293-7087.



NATIONAL PARKS WITH CHILDREN

If you love the outdoors but worry about taking your children on potentially strenuous excursions, *National Parks: The Family Guide* could be useful. Dave Robertson and June Francis have compiled a comprehensive almanac of the national parks, complete with highlights, historical notes and "kids' stuff" — programs and attractions appealing to children. This book concentrates more on organized events than spectacular natural attractions; for example, the Glacier National Park section highlights Going-to-the-Sun Highway and, for kids, a junior naturalist program. Perhaps this lack of sympathy with the idea of nature for nature's sake is best summed up by the fact that the authors were "somewhat amazed to see how fascinated [their] children were with the redwoods."

WILD AND SCENIC NOMINATIONS ACCEPTED

The Moab district of the Bureau of Land Management is accepting public nominations of streams to be protected under the Wild and Scenic Rivers Act, reports the Moab *Times-Independent*. The BLM will consider rivers within the San Juan and San Rafael resource areas, which cover the southern two-thirds of San Juan and Emery counties. Nominated stream segments must be free-flowing and have at least one remarkable value (scenic, recreational, geologic, historic, cultural, wildlife or other). Nominations must be received by the Moab District Ranger, Box 970, Moab, UT 84532, by July 23. For more information contact Russell von Koch at 801/259-6111.

CLASSIFIEDS

THE NATURE CONSERVANCY has a caretaker/ranger position and a guest services position available at the Muleshoe Ranch Cooperative Management Area located in southeastern Arizona. A willingness to live in a remote setting and a commitment to conservation are among the requirements for these positions. A couple is desirable. For information, contact: Katherine Beekman, The Nature Conservancy, 300 E. University Blvd. Suite 230, Tucson, AZ 85705. (2x12p)

"OUTDOOR PEOPLE AD-Venture" lists 60-word descriptions of active, outdoor-oriented Singles and Trip Companions nationwide. \$3/issue, \$12/ad. OUTDOOR PEOPLE-HCN, P.O. Box 600, Gaston, SC 29053 (7x12b)

HIKE OREGON'S ANCIENT FORESTS. Transportation, cabin, ecologist, meals, hot springs soaks — \$525/wk! AF Hikes, Box 13585, Salem, OR 97309; 503/370-9844. (5x11p)

OUTDOOR SINGLES NETWORK, bi-monthly newsletter, ages 19-90, no forwarding fees. \$18/1-year, \$4/trial issue-information. OSN-HCN, 1611 Cooper #7, Glenwood Springs, CO 81601. (10x10p)

Solar Electric Power Systems Water Conservation Alternative Energy Equipment Designs & Devices for High Quality, Low-impact Living Natural Resource Co. Box 91 Victor, ID 83455 (208) 787-2495

SUMMER ADVENTURES. The Idaho Department of Fish and Game has some volunteer opportunities that are almost too good to believe. How would you like to spend your summer in some of the most beautiful areas in the country? IDF&G's Volunteer "Host" program offers just such opportunities. Contact: Volunteer Coordinator, IDF&G, 208/334-2658. (1x12p)

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LETTERS

THE WIRTH-BROWN COLORADO WILDERNESS WATER COMPROMISE

Dear HCN,

I wanted to thank you for the very balanced, careful and thoughtful editorial you ran in the June 3, 1991 issue on the Wirth-Brown wilderness bill.

Like you, I would have preferred to protect more of Colorado's high-elevation forest lands as wilderness. And I certainly understand the concerns of conservationists about the bill's water language. Nevertheless, I share your conviction that the time to act has come.

This summer, loggers will enter the Sandbench area near Pagosa Springs and we will have lost forever the opportunity to preserve it as wilderness. Roubideau Canyon is threatened by off-road-vehicle users, as are Fossil Ridge and Oh-Be-Joyful. Clearly, the threats to Colorado's wild lands are intensifying and, absent legislation, will inevitably make it more difficult — perhaps impossible — to protect these areas.

Sen. Brown and I reached a compromise that permanently places these wilderness lands off-limits to water resource development. No other state has been able to eliminate that loophole in the 1964 Wilderness Act. I recognize that some conservationists would have counseled a different approach. But ultimately, we had to find a solution that both Sen. Brown and I could support. This agreement meets that crucial test.

Most important, our bill protects nearly 700,000 acres of Colorado's roadless areas, includes a soft release provision for future studies, and protects water resources within these wilderness lands. I believe that is a good deal for Colorado.

Timothy S. Wirth
U.S. Senate

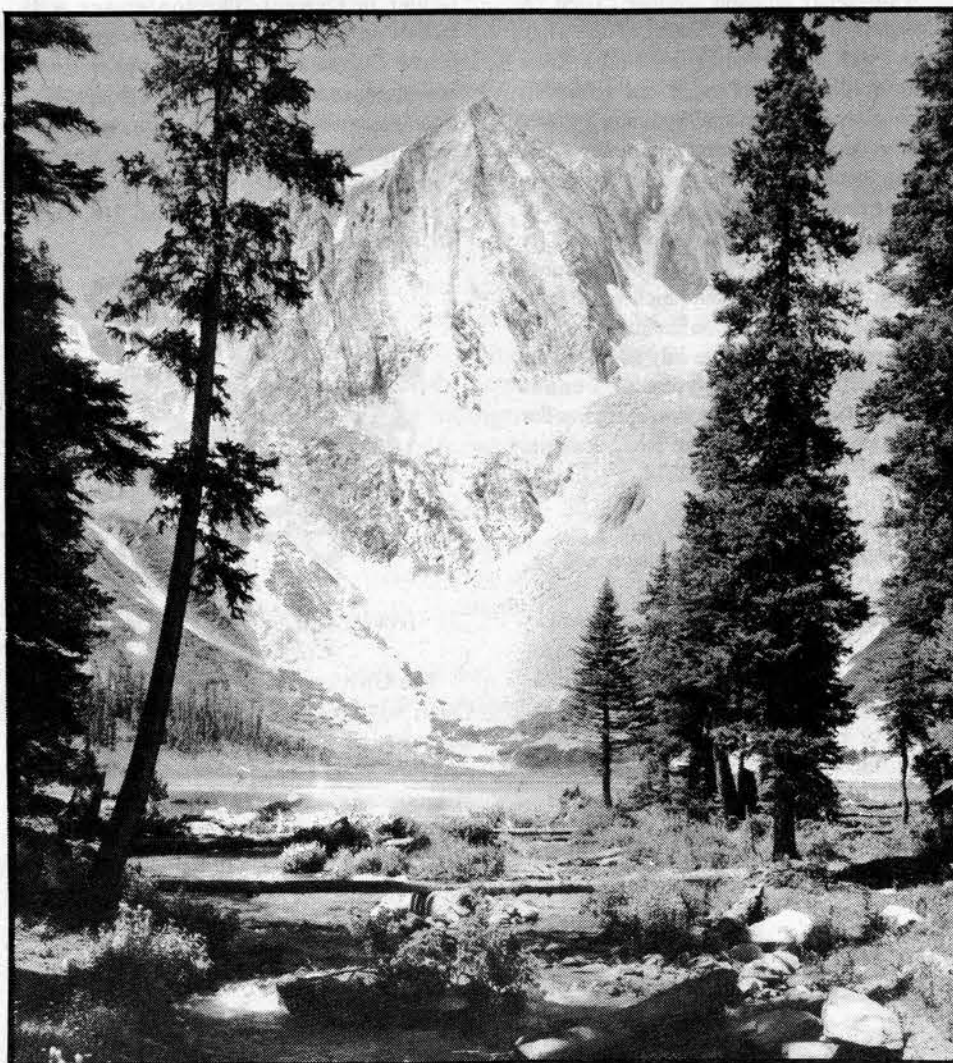
Dear HCN,

Your essay of June 3, 1991 regarding the Colorado Wilderness Bill, S. 1029, co-sponsored by Sens. Tim Wirth and Hank Brown, requires some clarification. The authorization for the U.S. Forest Service and the Department of Justice to file water claims in Colorado Water Court requires the federal government to proceed in accordance with the "substantive and procedural requirements of the State of Colorado." Colorado substantive law currently provides that only the Water Conservation Board may appropriate and hold instream flow water rights for "preservation of the environment to a reasonable degree," after receiving recommendations from federal agencies.

Several environmental groups have criticized Colorado's instream flow program on grounds that 1) it is unenforceable by federal agencies, and 2) does not provide sufficient water to protect wilderness values.

You are absolutely correct that the Wirth-Brown wilderness compromise renders a federal water right claim meaningless in headwaters areas as a means to control new water development, since S. 1029 overrides the presidential authorization for new water facilities presently contained in the 1964 Wilderness Act. Instream flow water rights could make a difference, however, with regard to protecting against dry-up of downstream areas.

The Piedra Wilderness Area is the only downstream area in the bill, and S. 1029 addresses environmental criticism of the Colorado Water Conservation Board's instream flow program in two ways:



Hagerman Peak above Snowmass Lake and Creek in Colorado

1. It requires the U.S. Forest Service to enter into an agreement enforcing state instream flow water rights for the Piedra River; and

2. It authorizes the Forest Service to purchase water rights on a willing buyer-seller basis.

Under Colorado water law, the acquisition of a senior water right can be made for the purpose of abandoning it to the stream or donating it to the Colorado Water Conservation Board for use as instream flows. If a federal reserved water right were created, it would be junior to all existing Colorado water rights. Thus, S. 1029 provides the mechanism for utilizing Colorado law to obtain senior rights which are already causing some diminution to flows in the proposed downstream Piedra Wilderness Area.

At its May 31 meeting, the Water Conservation Board unanimously passed a resolution supporting the Wirth-Brown Colorado Wilderness Bill and agreeing to enter into a contract with the Forest Service to enforce state instream flow water rights for the Piedra River, including those which presently exist and those which may be acquired in the future.

There is limited development potential in the few miles of private land between the existing upstream Weminuche Wilderness Area and the proposed downstream Piedra Wilderness Area. Given federal permitting requirements under Section 404 of the Clean Water Act, it is unlikely that any significant amount of additional water could be withdrawn above the Piedra Wilderness Area. Moreover, existing senior agricultural water rights which exist in this intervening reach could be retired by the U.S. and state governments.

Finally, the Water Conservation Board explicitly stated in its discussions on May 31 that it does not consider itself bound to appropriating only in accordance with a cold-water fish flow criterion, commencing to address environmental concerns that fish flows alone are not sufficient to protect wilderness values.

There is absolutely no proof that the Piedra Wilderness Area cannot be protected under the cooperative state/federal mechanism established by the Wirth-Brown Bill. The future of other downstream wilderness designations in Colorado will depend upon case-by-case solutions. There is little risk and much to gain in starting with the Piedra, as the Colorado senators, with the concurrence of Congressman Ben Campbell, have concluded.

Gregory J. Hobbs Jr., Principal Counsel
Northern Colorado Water
Conservancy District
Denver, Colorado

Dear HCN,

Larry Mosher's editorial extolling the virtues of Colorado's "good" wilderness compromise missed the point in many ways. Mosher's opinion was based on misinformation about the true nature of the so-called compromise, and he ignored the impact of denying wilderness protection in one state on the rest of the National Wilderness Preservation System.

Perhaps knowledge of the exact facts of the Wirth-Brown Colorado Wilderness compromise would not change Mosher's basic premise, but the inaccuracies in his editorial should be noted. The Wirth-Brown bill does *not* allow the federal government to file water claims in Colorado court, as Mosher thinks, but instead requires the federal government to purchase any rights it needs. Not only is the legality of this approach uncertain under Colorado law (whereby only the state water conservation board can purchase water rights for instream flows); it also denies the American public the same rights and access to the state courts that everyone else possesses in Colorado in filing for unappropriated water. Colorado conservation groups believe that legal discrimination such as this cannot be condoned.

The Wirth-Brown compromise also limits the public to acquiring only enough water to satisfy the underlying

needs of the national forest reservation, and explicitly states that wilderness needs no more water than do the national forests, despite the great difference in the establishing legislation for each. We really can't be expected to agree with such nonsense.

Contrary to Mosher's claims that water developers are displeased by the deal, all of the organizations cited in his editorial have blessed the deal and have been overheard to gleefully exclaim that the Wirth-Brown language begins to undo the damage done to water developers in wilderness legislation for Arizona, New Mexico and Nevada. Water developers like the deal because it explicitly denies the public's right to file water claims as of the date of wilderness designation, exactly the opposite of the facts as stated by Mosher.

Mosher also does not understand the issue of "release." Release was decided for Colorado roadless areas in 1980 wilderness legislation, whereby all areas not designated wilderness were made available for development. This compromise was crafted in 1980, and has been used in every state wilderness bill since. It baffles conservationists that Wirth thinks keeping a previously agreed-to deal was a significant victory in negotiations with Brown.

Finally, the issue of the integrity of the National Wilderness Preservation System must be considered. A wilderness system in which Colorado wilderness has no water rights, and perhaps Idaho wilderness allows motorbikes, and perhaps Montana wilderness allows logging, is no system. It would instead be a ragtag collection of pseudo-protections wrapped in an appealing name. Every compromise that weakens wilderness protection in one place ultimately weakens the concept of wilderness everywhere. Rather than being the teapot tempest that Mosher claims, wilderness water rights in Colorado have far-reaching implications for all states, including Idaho, Montana, Utah and the California desert.

Mark Pearson, Wilderness Chair
Rocky Mountain Chapter, Sierra Club
Grand Junction, Colorado

Lawrence Mosher replies:

The Sierra Club's Mark Pearson is correct in noting my error concerning how the federal government can protect wilderness instream water in Colorado. He also is correct in acknowledging that this does not in any way affect my editorial's conclusion. Yes, one can continue to argue over the still unknown difference between national forest and wilderness water needs. And one can quibble over whether Sen. Wirth gained anything in his bill's wilderness release language. (He says he did: the right to add more acreage as potential wilderness areas.) And one can wonder if Colorado's wilderness enemies were sincere in their opposition to the Wirth-Brown deal. But these conundrums merely make my point: Enough is enough! I do honor the argument that giving up on the value of those four magic words — federal reserved water rights — for Colorado's headwaters areas might give comfort to those enemies of wilderness in other states where downstream areas are involved. Nevertheless, I still believe the nation's wilderness values will be better served by going forward with this Colorado compromise, rather than not.

SOLAR ENERGY: PIE FROM THE SKY?

Dear HCN,

Interesting as it was, I thought the solar power article in the May 20 issue was grossly lacking. Economics is a link in the chain supporting any such enterprise. Without a realistic economic justification, solar power will only be temporary hope. The article has tempting clues, but essentially no economic analysis — only a gee-whiz-isn't-it-wonderful picture.

There must be something there, or Luz would not be so large. But without an economic discussion I don't know whether to look on this as dream or reality. I want to know how much "artificial" governmental support Luz relies on, what's the comparison with fossil fuel and nuclear costs, how many locations can support solar, does transmission cost allow supplying distant, less appropriate locations, etc., etc., etc. In other words, does this thing have the long-range potential to displace nuclear, hydro and fossil energy sources?

Your article whets the appetite, but feeds only thin sugar water. Can you do a repeat, but with enough substance to tell if this hope is real?

Tom Budlong
Los Angeles, California

Dear HCN,

It seems to me that HCN has fallen victim to the disease it was formed to combat. Two feature articles in recent editions focused on wind and solar energy in ways that perpetuate the belief that we can have something for nothing. You are providing a forum for misinformation that belies your motto, "A Paper for People Who Care about the West." My commentary is a response to Don Olsen's article, "Solar power becomes a reality" (HCN, 5/20/91).

The desirability of solar power is predicated on the assertion that it is environmentally benign. It is "obvious" that solar is non-polluting. Although it is charged that solar plants cover up a lot of land, Olsen lets stand (as do the HCN editors) the industry rep's response that this is a "myth. There's a lot of desert out there." The lowering costs of solar are cited ("substantially" cheaper at 8 cents per kilowatt hour than that of "nuclear power plants now coming into production"), and even more attractive if

the hidden costs (pollution) of fossil fuel generation are considered. And, to show that this is all within our grasp, the capabilities of the Luz system — hottest thing on the market — are provided in terms of supplying X households, or the "needs" of Y cities.

First, let's look at the numbers games, designed by the generating companies to give the investor confidence, and passed on to us by HCN to give the consumer confidence that here is an environmental free lunch. "By 1994 the company ... plans to generate more than 680 megawatts, enough electricity for a city the size of Phoenix or San Francisco." The credibility of this statement suffers on several scores: (1) The Luz brochure is careful to couch this figure in terms of "residential needs," not an entire city's actual consumption. On a national average, resident use constitutes only 34 percent of urban electrical consumption. (2) Phoenix's 1990 population is 36 percent greater than San Francisco's, so how can two cities of such disparate size be supplied by the same amount of electricity? (3) The climates of San Francisco and Phoenix are very different, so that the amount of electricity used per capita is likely also to be very different.

Olsen suggests that a price differential between generation of electricity by fossil fuel burning and solar would be substantially reduced if the hidden societal costs of pollution were considered. At face value this argument has much merit, but the implication of the article is that there are no hidden societal costs of solar. This is far from the truth. Let's take Las Vegas as an example, now surging in population even beyond the figures cited by Olsen (up to 6,000 per month). Luz hopes to install 140 megawatts for the city to help cover the added consumption. At the figures given by Olsen, a minimum area of 7,800 acres will be needed. Since flatlands are utilized by Luz, this probably means loss of another 7,800+ acres of tortoise habitat.

And what do we do with abandoned solar farms? We do have one, you know. Solar One at Daggett, Calif., is abandoned. Its mirrors were removed, and what is left is a stripped surface, stalks of mirror supports, and the central water tower with its permanent, lonely strobe light that locates yet another phony dream.

And what about that "myth"? Does HCN really subscribe to the view that "there's a lot of desert out there"? An area 78 by 78 miles, said by Luz to be sufficient to generate (by solar installations) the entire installed capacity for electricity in the United States is, after all, nearly 4 million acres. If, as Olsen's article suggests, we can replace all those polluting sources by solar, where will the 4 million acres come from, not to speak of the land needed to satisfy endless increases in demand? Does HCN have a particular area in mind that the People Who Care about the West are willing to sacrifice?

What is especially frustrating is that the accompanying article, "Staying off the grid in solar country," is so apt. This individual application of solar truly is environmentally benign. What if this, instead of the Luz solution, were applied to Las Vegas? Build the buildings right, and mount the solar collectors on them, instead of ruining land for the sole purpose of power generation.

Jerry Fetterman is quoted as saying, "You have to remember that when you buy your [conventionally generated] power, you're also buying into strip mining and you're buying into Lake Powell." Well, just take note that when you buy your power from centralized solar (or wind) developments, you're also buying into the destruction of scenic and biologically productive lands and into the pollution of our air and water.

Howard Wilshire
Mountain View, California

Don Olsen replies:

Mr. Wilshire is correct in pointing out that Luz will only be supplying enough electricity for the residential needs of a city the size of San Francisco or Phoenix. Still, this is nearly 1 million people.

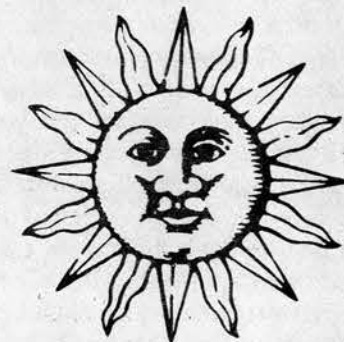
In a perfect Western landscape, there would be no large-scale power generating systems (solar, coal-fired or nuclear) scarring the landscape. Nor would there be huge Western megacities like Los Angeles, Phoenix and Las Vegas sucking up vast amounts of natural resources to fuel their seemingly endless growth. While I'm in complete agreement with Mr. Wilshire that small-scale, decentralized residential photovoltaic systems sitting on individual rooftops would be preferable to siting a

large solar facility in the desert and shipping electricity to urban areas, the affordability of such technology is at least a decade away, and I doubt that most Americans will be willing to install it without major state or federal encouragement (read tax credits).

But, as Mr. Wilshire points out, there is no environmental free lunch. Not even for his "benign" individual applications. Even small-scale, decentralized solar energy is not completely without environmental problems. Imagine the rural sprawl over endangered Western landscapes that might be encouraged if attachment to utility grids were no longer necessary. One might also take into account the large-scale mining and manufacturing processes needed for solar panels, batteries, wiring, etc.

Luz estimates that its existing solar power plants displace the equivalent of 1.2 billion pounds of carbon dioxide and 750,000 pounds of nitrous oxide per year. Each new 80-megawatt plant being constructed at Harper Lake will displace more than 340 million pounds of carbon dioxide and 250,000 pounds of nitrous oxide per year. While not perfect, Luz is at least producing large-scale solar energy without the emissions of conventional power plants or the dangers and radioactive waste of nuclear energy.

Until we decide to either depopulate the West or find a way to radically reduce the region's high energy consumption, solar plants may be one of our best alternatives to increased pollution, or to Bush administration plans for more oil, coal and nuclear plants.



SUNSHINE

Dear HCN,

Congratulations on your solar energy edition.

Having used solar-heated hot water and rudimentary solar space heating for almost 10 years at an estimated savings of 50 percent in purchased power, I am positive that solar is economically viable right now.

I also want to mention that Solar Box Cookers International, 1724 11th St., Sacramento, CA 95814, not only has available plans and kits for the cookers, but is doing a very valuable and practical service by supplying same to Third World countries and teaching their use. The organization deserves a lot of support.

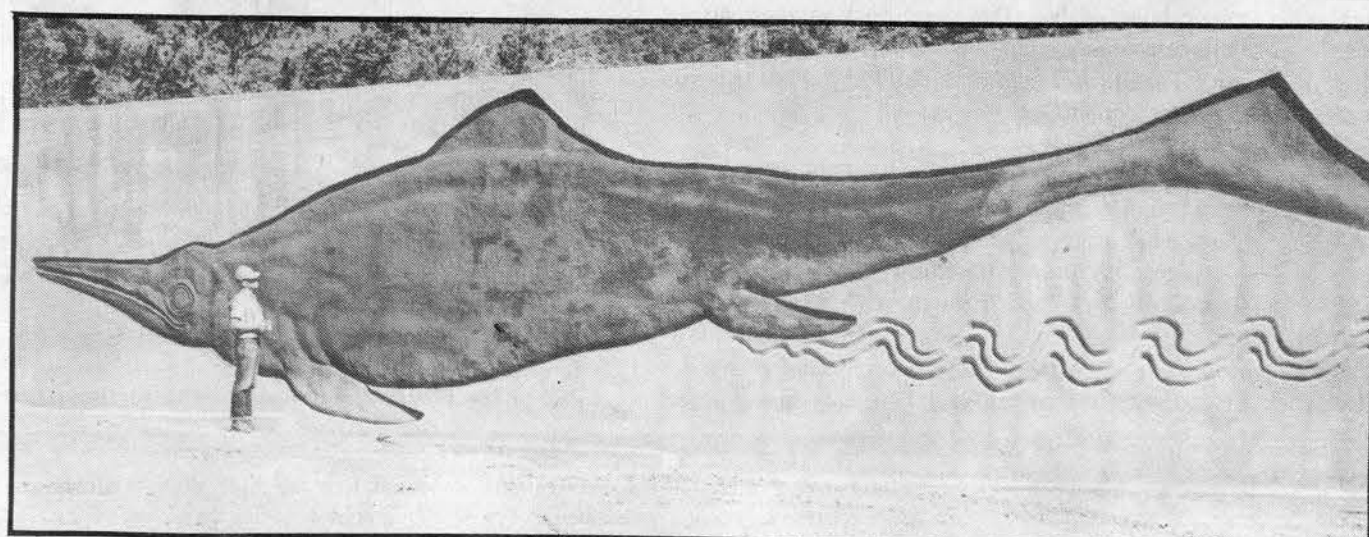
John R. Bailey
Durango, Colorado

UPBEAT

Dear HCN,

I enjoyed your unusually upbeat, optimistic May 20th edition and encourage you to include articles of this type in each edition. All too often I can't bring myself to read HCN, for it appears that all is lost, the environmental cause is fruitless and the West will soon be a wasteland. I know we are in a battle for our land and wildlife and I know there will be casualties, but those of us on the frontline will give up in despair if we don't hear of the occasional encouraging victory.

Jane E. Hamilton
Aspen, Colorado



State of Nevada, Dept. of Economic Development

Ichthyosaurus State Park near Gabbs, Nevada, is home to this representation of a 100 million-year-old fishlike reptile

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Vol. 23, No. 12

BOOKS

Rediscovering our desert roots

Desert Heart: Chronicles of the Sonoran Desert by William K. Hartman. Fisher Books, P.O. Box 38040, Tucson, AZ 85740-8040. Cloth: \$35. 192 pages. Illustrated with 40 color and 20 black-and-white photographs and 7 maps.

Sonoran Desert Summer by John Alcock. The University of Arizona Press, 1230 North Park, #102, Tucson, AZ 85719. Cloth: \$19.95. 198 pages, with 30 illustrations.

reviewed by Jacob Forman

"A forgotten country straddles the international border where Arizona, Mexico and the Colorado River meet," writes William K. Hartman in his remarkable book, *Desert Heart: Chronicle of the Sonoran Desert*. Hartman first traveled into the Sonoran as a graduate student in geology and astronomy at the University of Arizona. Students visited the desert, he writes, "to appreciate the alien landscapes of other planets."

Hartman's earliest reaction to the desert was an "aesthetic response to [its] harsh simplicity." He quotes *The Desert*, by John C. Van Dyke (1901): "The aesthetic sense — the power to enjoy through the eye, the ear and the imagination — is just as important a factor in the scheme of human happiness as the corporeal sense of eating and drinking; but there has never been a time when the world would admit it."

Hartman was awestruck by the great, yawning craters just south of the border, and the black heart of the Sonoran — the Pinacate Mountains, lava formations and sand dunes — is a geologist's dreamscape. But he carefully avoids telling the reader exactly where to find the sites he describes. *Desert Heart* is not a guidebook, but a cross between a coffee-table picture book (most of the photography done by Hartman himself), a history book and an environmental geology text.

Journals of the desert's earliest explorers, including Father Eusebio Francisco Kino, William T. Hornaday, Fray Marcos de Niza and John C. Van Dyke, further inspired Hartman's exploration of the Sonoran, and he uses excerpts from them as the foundation of *Desert Heart*. As a child in Pennsylvania, he heard all the Eastern folklore of Daniel Boone and George Washington, but whenever he went to see historical sites he found only parking lots and convenience stores. The desert, on the other hand, had preserved the sites and trails that the early desert heroes frequented. Every chapter of *Desert Heart* ends with excerpts from Hartman's own journals, adding a personal touch to the historically and geologically factual text. The scientific text is spiced by Hartman's knowledge and experience of planetary geology, as well as Native American folklore and mysticism.

The historical text is thrilling, alive with Western adventure and frontier penetration. "Each story of fantastic deeds leads to a story still more fantastic. Tough men, walking, walking, across lavas and dunes, all the way to the Colorado River and back," Hartman writes.

He believes this Southwestern history, unknown to most Sunbelt city dwellers, is vital to their understanding of their environment. For, in the end, *Desert Heart* is an environmental book. The combination of history, geology, sociology and personal observation lends itself to a holistic approach to environmentalism:

"We've got to increase *sense of place*. That happens by a slow, generation-to-generation process of education: a spreading not just of facts, but a mixture



William K. Hartman

West of Moon Crater

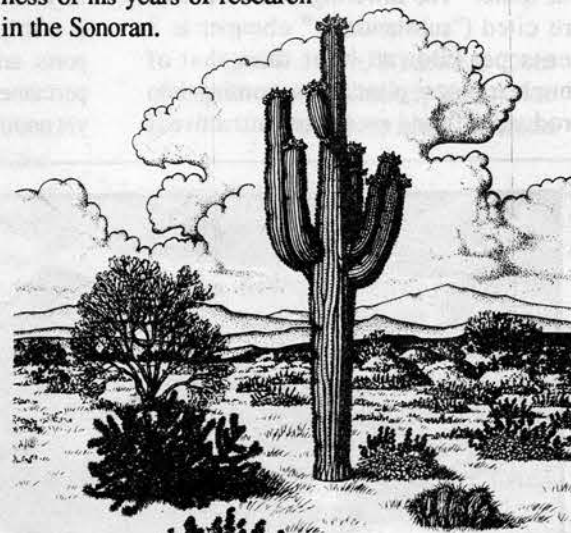
of facts and feelings about the land ... Modern urban Sunbelt inhabitants no longer experience the original beauty of the Southwest, nor do they understand much of its history. This is a loss of roots. They are disconnected from the original reality of their surroundings."

Here is Hartman's journal entry from El Camino del Diablo, October 18, 1965:

"I think of the two magic moments in the desert day — dawn and dusk — when there is a half hour of change and promise: it is getting dark, it will be cool and pleasant; or, it is getting light, it will be warm and dry. Two moments of reward are all the desert grants in its day of testing. At night, it grows cold when you are outside; and in the midday it grows hot, parched. We must survive through 10 hours of day, to reach the magic hours of dusk. Dawn and dusk are moments we ignore in ordinary life ... Simplify, simplify, Thoreau said. The desert simplifies things for you and tells you what's important."

Sonoran Desert Summer, by evolutionary biologist John Alcock, makes desert biology pure fun. With chapter titles such as "Cooperative Killers and Lovers," "A Wolf in Vulture's Clothing," "Altruism Among Ground Squirrels" and "How to Wave to a Predator — and Get Away with It," Alcock twists humor, violence, adventure and sex into a very technical analysis of evolutionary and behavioral biology among desert

life forms. "Ironically," he writes, "it is the extreme hostility of the climate that is responsible for the exotic and intriguing nature of the desert's biology. Only very special plants and animals can survive and reproduce in a place that may receive as little as six inches of rain in a year, a place where the temperatures may rise above one hundred degrees each day for months on end." Alcock successfully portrays this "exotic and intriguing nature" without compromising the seriousness of his years of research in the Sonoran.



Drawing by Marilyn Hoff Stewart from *Sonoran Desert Summer*

BOOK NOTES

WALKING WITH GOATS

Jim Corbett's *Goatwalking: A Guide to Wildland Living, A Quest for the Peaceable Kingdom* could have been a twentieth-century combination of *Walden* and *Civil Disobedience*. It has all the necessary elements: a novel approach to the experience of wildness, an author with the courage to challenge social conventions, and a real-life collision of wilderness values with oppressive civilization. Corbett introduces us to the concept of goatwalking by explaining that milk goats can provide all the nutrition a wilderness traveler needs, and that "pastoral nomads" thus are free from the schedules other hikers must meet. But instead of expanding on this unique way of experiencing wildlands, Corbett spends his

wandering hours in philosophical ruminations that are never quite as interesting as the goats and the southern Arizona desert that he writes about with such immediacy. Corbett, a founder of the Sanctuary movement, is a genuine seeker of truth and is guided by a very evident personal honesty and a deep, intelligent faith in God. Yet his ideology doesn't relate convincingly to the real-life experience of walking with goats because details of the land and the animals, the best parts of the book, are too few. When Corbett is drawn into the plight of the oppressed Central American refugees crossing through the Sonoran desert he inhabits, his story gains momentum. His Gandhian efforts to help these people as they flee the death squads are compelling. If

he had made a believable link between this brave effort to defy unjust government policy and the simple beauty of unfettered desert travel, his wilderness classic would have been achieved. Unfortunately, Corbett's persistent efforts to explain the deeper meanings of this fascinating story often obscure what a simpler telling could reveal.

Viking Penguin, 375 Hudson St., New York, NY 10014. Cloth: \$19.95. 237 pages.

—Rick Craig, HCN intern

THE STORY OF A COLORADO RIVER

If *Cache la Poudre: The Natural History of a Rocky Mountain River* is not an argument for animism, then no such argument exists. Howard Ensign Evans's and Mary Alice Evans's account of a river in Colorado

reads like the most intimate of historical biographies, tracing the lifeline of the Cache la Poudre from its headwaters to its outlet in the South Platte, and leaving the reader with the feeling that he or she knows its waters well. The effect is achieved in a factual manner, often exhaustive in detail with regard to flora and fauna — the authors are biologists — but the book conveys a sense of the need for ecological conscience. *Cache la Poudre* will most likely find its greatest audience among those who know the river from experience, but it will carry weight with devoted naturalists, too.

University Press of Colorado, P.O. Box 849, Niwot, CO 80544. Cloth: \$19.95. 260 pages, illustrated with maps and black-and-white photographs.

—Auden Schendler, HCN intern