

# High Country News

January 4, 1988

Vol. 20 No. 1

A Paper for People who Care about the West

One Dollar

Leonard Lee Rue III



Grizzly bear cub, two months old

*Is the grizzly adapting  
fast enough?*

✓ See page 9

*A reborn  
Mt. St. Helens*

✓ See page 16

## Dear friends,



### High Country News

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### Salt Lake event

Readers in and around Salt Lake City will soon receive an invitation to the Sat., Jan. 30 potluck in that city. The invitation will include an RSVP form to give us an idea of how many to expect. But if you should forget to send the form, and then wish to come, please do so.

The potluck will be at Social Hall, Pioneer Trail State Park, 2601 Sunnyside Avenue, east of downtown SLC and across from Hogle Zoo. It will start at 6:30 p.m. Beverages, plates and utensils will be supplied; we ask that you bring a main dish, dessert or salad. Parking is 300 feet from the building; handicapped access is available.

Arrangements were made for us by Dennis Burns of the Utah State Department of Recreation and Parks, which runs historic Social Hall; we thank him and the many other readers who volunteered to help.

The board meeting will be held all day Saturday at the house occupied jointly by the Southern Utah Wilderness Alliance and The Wilderness Society at 436 E. Alameda Ave., between 1st South and S. Temple and 4th East and 5th East. The entrance to the house is via an alley beside IBM. Utah addresses are supposed to be easy to find once you understand them, but we've never reached the understanding stage.

Potlucks always accompany board meetings, and they are always enjoyable. Thus far, the Boulder, Colo., meeting last February holds the attendance record, despite a bitterly cold night, but we have high hopes for Salt Lake City. Our 400 or so Utah subscribers are dwarfed, numerically, by the paper's 2,000 Colorado subscribers. But Utah has no casual environmentalists, and we are expecting a healthy turnout. Plus, Evanston and Rock Springs, Wyo., aren't that far away.

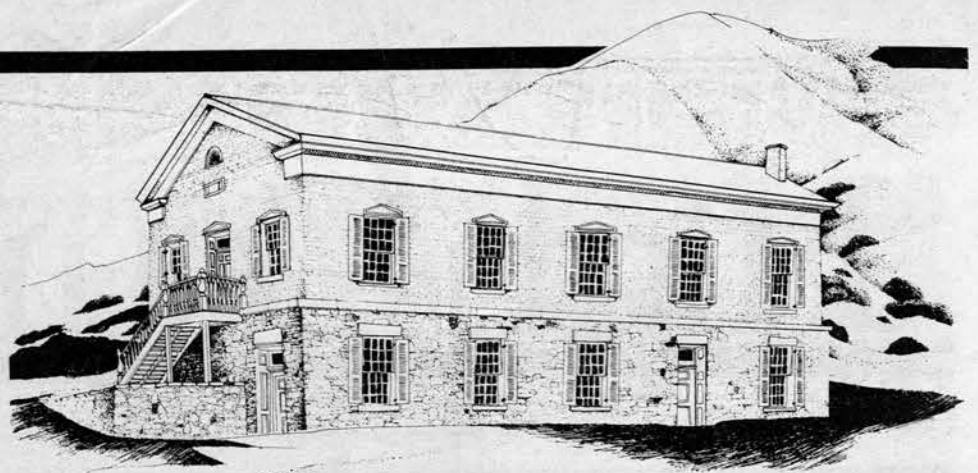
### Sophomores at work

For a long time, we had a headline pasted to our bulletin board that read something like: "Agency shifts duties to new area," except that the typesetter left out the f. The headline came close to being incorporated into 6,000 or so copies of *HCN*.

So our sympathies are with the public relations people at the U.S. Department of Agriculture in Washington, D.C., As joke or hoax, someone in that group had a mock press release written about David R. Lane, "inventor of the famed and expensive pink-eyed ferret, who will take over USDA's number one information slot Dec. 7, succeeding current OI Director John M. McClung, who is resigning the position to become public hairs director of the United Fruit Association."

Lane was quoted as saying, "Running the USDA information shop will be a lot like raising ferrets. Government public affairs employees are known for their ability to weasel through tight spots and they'll often turn around and bite the hell out of you."

Lane also commented on McClung, "Putting it bluntly, John was just too damned competent for the position." The press release also contained a joke about Lane's experience milking cows.



Social Hall - Pioneer Trail State Park  
Salt Lake City, Utah

According to AP, up to 230 releases were sent out, mistakenly or otherwise, including the one that came to *HCN*. Refreshing though it was, we decided to chat with DOA before spoofing it. The agency told us that McClung had indeed left and Lane had indeed arrived, but that the accompanying flourishes were not true. USDA may revamp its procedures so that humor, frankness and other inadvertent bits of humanity no longer slip through.

### Congratulations

Congratulations to Charlotte and Andy Wiessner of Denver on the birth of Angus, an 8-pound, 10-ounce boy. He joins sister Mia, 3½, who is about to find out what sibling rivalry means. Andy is an *HCN* board member.

### Thanks

Our thanks to Ken Gamauf of Boulder, Colo., for sending us his collection of *High Country News* from 1976 to 1985. The issues are in perfect shape, and a welcome addition to our stockpile.

Coincidentally, we have been reading our back issues as part of research for a story, and have discovered that 1977 was a wonderful year for *High Country News*. In addition to fine news coverage, the paper, under editor Joan Nice, was printing Peter Wild's articles on conservationists and was exploring the dynamics of the environmental movement as it shifted from pure idealism toward a more pragmatic approach to issues. In a modest way, the paper was also thriving. Circulation was at a high -- about 4,000 thanks to the promotional efforts of August Dailer -- and the renewal rate was close to 70 percent.

## HOTLINE

### Nevada wilderness

The House passed by voice vote Dec. 1 amendments to the Nevada Wilderness Designation Act, setting aside 731,000 acres in 14 areas as wilderness. Introduced by Nevada Rep. James Bilbray, D, the area in the bill is somewhat smaller than that in his original bill since Nevada Rep. Barbara Vucanovich, R, trimmed wilderness boundaries to remove hundreds of energy and mining claims and areas popular with off-road vehicles. Vucanovich also downgraded one proposed wilderness area, Mt. Rose, near Reno, to a national recreation area but was rebuffed when she tried to prevent the proposed wildernesses from gaining federal reserved water rights. The Senate version of the Nevada wilderness bill, introduced by Sen. Harry Reid, D, proposes

### Ex-subscriber

We received an angry letter from a subscriber, written over a Research Fund card, telling us to "cancel my subscription" because, "I'm not satisfied with the paper's coverage of the environmental concerns of the eastern Montana plains country," including overgrazing, abuse and inaccessibility of state lands, and the awful abuse of croplands. Unfortunately, the note was unsigned and lacked an address. If the subscriber will write again, we will cancel and send a refund for the unused part of the subscription.

### Condolences

We were sorry to hear of the death of Olga Crandell in December. We send our condolences to Harry Crandell, a long-time, now retired, staff member on the House Interior Committee. Olga and Harry came through Paonia two summers ago on a visit to relatives in the nearby town of Montrose.

### Who's the farthest?

In a thank-you note to Research Fund contributor Carol Peterson, we wrote: "You are undoubtedly our most distant Research Fund contributor." Ms. Peterson wrote back from Nairobi, Kenya, to say that Australia is probably as far, or farther. Then circulation manager C.B. Elliott said the paper has subscribers in 11 foreign countries, including the Philippines, Japan, Tasmania and Singapore. Short of taking a string to a globe, we're at a loss to say which is farthest.

--the staff

### Spin-off

A long-idled steel fabrication plant near Provo, Utah, may soon re-open as a result of the Geneva Steel plant start up last summer. A Provo business partnership recently announced a tentative agreement with the McNally Pittsburg Corp. to buy the old McNally Mountain States Steel plant for an unknown price. Jack Olsen, who is one of the partners and a former manager of the plant, says the recent purchase and re-opening of the Geneva steel manufacturing plant in Provo made the move possible. Olsen told the *Deseret News* he expects to buy steel from Geneva.

## WESTERN ROUNDUP

### Group fights Wyoming river development

Flying above the east slopes of Wyoming's Bighorn Mountains, you can see the plume of smoke and steam from the coal-fired power plants across the border, in Colstrip, Mont. That facility has been so hurt by the lack of demand for electricity that Montana Power Co. has said it might even give away one of the half-billion-dollar units.

The flight I am on, piloted by Bruce Gordon of Project Lighthawk, was set up in November by the Powder River Basin Resource Council for officials and the press. The object of the group is to cast some harsh light on another proposed power project -- one the council says is as unneeded as Colstrip.

The site of the proposed project -- a 1,000-megawatt pumped storage hydroelectric plant -- is clearly visible below the plane. If built, it will affect an elk winter range that is separated from an elk calving ground by the high, limestone canyons of Dry Fork and the upper reaches of the Little Bighorn River.

The dam, its reservoir and the generating plant would all be placed in what is now the elks' territory. The developer also plans to build a large storage pond above the canyon floor, on a windy ridge. Water would be pumped uphill from the canyon reservoir to the pond during hours of low demand for electricity. At peak times, the water would be released from the pond to drive the 1,000-megawatt generator.

At present, the area is a rugged, timbered stretch of alpine watershed and wildlife habitat in the Bighorn National Forest. Just within the perimeter of the proposed development lies the southern edge of the Little Bighorn's section of possible wild and scenic river designation. From there, the mountain canyon cuts through more rock, drops, widens, and then the river bursts dramatically out onto the open plains of Montana, flowing past the Custer Battlefield on its way to a confluence with the Bighorn River.

The developers plan to run transmission lines out of the mountains to tie in with the transmission lines of the utilities that will buy the power. In addition to the initial burst of construction jobs while the \$700 million project is being built, the firm says Sheridan will gain 100 jobs.

Opponents repeat arguments made a decade ago, when Montana Power was preparing to build the last two Colstrip units: that the peaking power isn't needed now and most likely won't be needed in the future. The Powder River Basin Resource Council also contends that blasting, scraping, dozing and building dams, ponds, generators, roads and powerlines in this remote area will wreak havoc on the scenery, fish and wildlife. And new jobs and economic development have been exaggerated, the council says.

In large part, this project is being driven by the state of Wyoming in the name of economic development. The company, Little Horn, Inc., obtained the water rights through the Wyoming Legislature. It is reportedly backed by D.I.T.T., the French national utility.

Little Horn, Inc., commissioned a study that assessed the demand for peaking power from the proposed



Part of the Bighorn development site as seen from the air

project, with the study funded by a \$25,000 grant from the Wyoming Economic Development and Stabilization Board and carried out by R.W. Beck and Associates. In the June report, Beck concluded that "there appears to be a need for a significant amount of additional capacity commencing in the mid-to-late 1990s."

Powder River Basin Resource Council board member Ronn Smith, an engineering instructor, followed Beck's "Power Requirements Reconnaissance Study" with his own analysis. "PRBRC has concluded that at best Beck's study fails to establish a probable market for the proposed project ... PRBRC believes that the central purpose of the study was to shape public opinion, which stands to influence the fate of this or companion projects" located in the area.

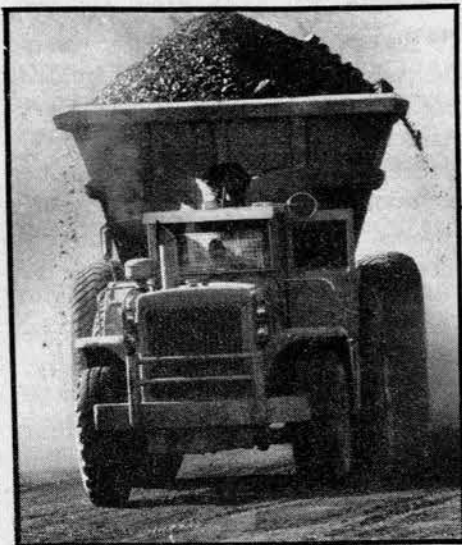
In the meantime, a competing use -- wild and scenic status for a 19-mile

stretch of the Little Bighorn River and its tributary, Dry Fork -- is being investigated on the cheap. The Forest Service awarded a \$50,000 contract to a Virginia consulting firm to do an environmental impact study of the river's wild and scenic status. Originally, the Forest Service estimated the study should cost about \$100,000. In this lower cost study, the agency did not require the consultants to come to Wyoming for field studies. Instead, they remain in their Virginia offices and will base the report, due out this month, on existing data.

Because of the proposed hydro development, the Little Bighorn is fourth on the list of the 10 most endangered rivers in the nation, as rated by American Rivers, Inc., a preservation and lobbying group.

--Pat Dawson

## HOTLINE



### Coal ruling challenged

Four environmental groups plan to appeal a federal court ruling upholding the Department of Interior's controversial 1982 sale of coal leases in the Powder River Basin on the Wyoming-Montana border. The National Wildlife Federation, the Montana Wildlife Federation, the Powder River Basin Resource Council and the Northern Plains Resource Council say they will ask the Ninth U.S. Circuit Court of Appeals to review a Sept. 22, 1987, U.S. District Court decision that Interior received fair market value for its sale of 1.6 billion tons of Powder River coal. It was the largest coal sale in U.S. history (*HCN*, 10/12/87) and criticized by many as a "fire sale." National Wildlife Federation representative Karl Gawell says the district court narrowly interpreted the law, ignoring three separate studies showing that Interior, under the direction of Secretary James Watt, may have lost up to \$100 million on the sale.

## BN says unions dragging railroad down

To the Burlington Northern's union employees in Montana, the railroad is a shark, intent on eliminating their jobs so that it can generate yet more wealth.

But to the BN's management, the union is an albatross around the railroad's neck. Unless that dead weight can be cut free, says BN chairman Dick Bressler, the railroad will be captured by T. Boone Pickens or some other corporate raider and sold for salvage.

Bressler made his argument in the Nov. 16 issue of *Forbes*, which hails itself as a "capitalist tool." The railroad's fate was considered at the most abstract level -- there was no mention of the employees, of Dennis Washington's takeover of the main southern line, or of the community dislocations BN's maneuverings have caused (*HCN*, 12/7, 21/87).

According to Bressler, the railroad's maneuvers come from a need to cope with an over-paid but unproductive workforce. BN is in competition with trucking, and thanks to its employees, Bressler said, it is losing that competition.

*Forbes*, without attributing the source, wrote: "According to one estimate, in 1985 a two-man railroad crew averaged 32,000 miles of rail service at a wage cost of \$102,000. One truck driver produced 105,000 miles of service for \$31,000."

How does the railroad survive at all, when truckers have a three to one advantage in labor costs? In

part, because the estimate tells only part of the story. The railroad crew is pulling a train, while the trucker is pulling at most three trailers. But that advantage, Bressler said, is due to capital put up by BN's shareholders and not to labor's productivity:

"A trucker puts a box on his truck and drives clear through with his wife or a helper, whereas we change crews ten times at a wage rate that's two or three times as high. We're using the efficiency of capital to overcome the inefficiency of labor, but we're not too successful."

The "not too successful" refers to BN's slashing of its workforce over the last five years. The number of employees has dropped from 59,000 employees nationally to 32,000. But wage and fringe benefits, in unadjusted dollars, have stayed essentially constant, and in 1985 began to increase again. Of course, if adjusted for inflation, the numbers would show that BN has cut its labor costs.

According to *Forbes*, the railroad's workrules go back to monopoly days. "Operating employees are still paid a day's wage for every 100 miles they travel, no matter how long it takes, and it still usually takes four or five men to staff a train when two or three could do the job."

Bressler told the magazine, "This is the last industry to eliminate its archaic labor practices. Railroad labor is basically overpaid and underworked. Such things could only

exist in a time of tight regulation, when companies could just pass the cost onto their customers."

Bressler told *Forbes* he isn't worried about a corporate raider taking over BN because the railroad and its workforce are "our poison pill."

The trauma shaking BN and its workers in Montana is the same change that has hit such formerly protected industries as AT&T due to the anti-trust lawsuit; the airlines due to deregulation by Congress; and the auto and steel industries due to competition from abroad. BN and other railroads have been partially deregulated by the Staggers Act, although critics charge that the Interstate Commerce Commission has interpreted the act so that the railroads can do as they please.

For the present, the trend is unstoppable. The only question is: What economy and nation will this trend lead to? BN's workers in Montana say it will create a nation of blue collar serfs, toiling under dangerous, inefficient conditions for Dennis Washington's Rail Link -- a company that knows nothing of railroading.

Those who welcome the breakup of both corporate and union monopoly power say the trend will create an economic system in which capital assets and human energy are used in flexible, efficient ways, rather than in protected, regulated ways.

--Ed Marston

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## Montana wool growers say that the wolf is at their door

BILLINGS, Mont. - Most years the talk is of coyotes and golden eagles at the Montana Wool Growers Association Convention. Sometimes, a renegade grizzly bear gets its name or number mentioned. This year, coyotes and eagles were scarcely mentioned. The featured predator for 1987's gathering was the wolf.

Wolves were thought to be extinct in this part of the country, wiped out over a half-century ago by bounty hunters and government trappers. There was a reason for the wolf's extinction: it held a bad reputation in livestock country.

The organization's Animal Damage Control Committee report usually draws a fairly small audience. This year, the meeting overflowed with sheepmen and women who have become both curious and enraged in the past few months. In the spotlight was Browning rancher Dan Geer, who this summer lost three yearling cattle and 10 head of sheep to a pack of wolves that apparently had crossed over from Canada and developed a taste for domestic meat (HCN, 11/23/87).

Once Geer was able to prove to government hunters and wildlife officials that it was indeed wolves that were killing his livestock, the hunt was on. In late August, they killed the first adult wolf as it was leaving the scene of one killing, then two more adults -- including one wearing a radio tracking collar -- and two pups from the six-wolf pack were destroyed. One pup was sent to a research lab in Minnesota, and the remaining adult has disappeared. Under the original government guideline, only two adult wolves were to be killed.

The cost of the wolf hunt was \$41,000. Is the problem gone? Geer said, "When I left my house to get in the pickup, there was a wolf on the hill by the house." (See story on page 5).

Geer's presentation seemed to rally the wool growers to a fever not seen in years. There has been talk for some time now about bringing back wolves to Yellowstone National Park, but that plan was thwarted this summer by Wyoming congressmen sympathetic to the livestock industry. Then, out of nowhere, came the marauding wolves that hit Geer's ranch on the Blackfoot Reservation.

The government was at first "uncooperative," when he complained, Geer recalled, but finally came to trap the wolves. The wolf is listed as an endangered species, so Geer risked a fine and jail time had he taken vigilante action against the predators. The government does not compensate stockmen for losses to wolves. But he was paid \$2,239 for the three cattle and 10 sheep by Defenders of Wildlife, a national organization advocating bringing the wolf back to Yellowstone. Geer said the money didn't quite make up for the market value and expenses of the stock, "but if you need the money, it's a damn nice thing to have."

Wool growers at the meeting cheered on Geer and wondered aloud why he couldn't just "slip out and get him" if he saw a wolf on his ranch. He should do just that, some members suggested. One member said his father shot the last wolf in Garfield County, and the head and hide are now displayed in the bank

Dick Randall, Defenders of Wildlife



at Jordan. A ranch woman said her operation believes in "Three Ss -- Shoot, Shovel and Shut up."

Geer told the wool growers that without hard evidence, such as fresh tracks, the government will not go after wolves suspected of killing livestock. Also, he noted, they are limited to hunting wolves within two miles of a stock kill. But wolves move fast and far, as he discovered when they were tracking the radio-collared wolf.

Rancher Dick Christy of Fairfield added an update of his own war story. Christy was convicted in federal court and fined \$3,000 for shooting a grizzly bear in July 1982 that had been "depredating my sheep for several nights." He is now appealing his case in the Ninth U.S. Circuit Court of Appeals and hopes to have it remanded back to a federal district court for a full-blown trial. Christy argues that he was only exercising his constitutional right to protect his property. "A rancher is helpless against protecting his herd or flock against a depredating endangered species."

Christy warned that under the Endangered Species Act, the Secretary of Interior can "walk all over your constitutional rights." He said his legal expenses have run to \$22,000 so far. Geer and wool grower leaders urged members to write checks to Christy's legal fund.

Wolf recovery plans for Yellowstone are still alive, warned Joe Helle of Dillon, who is chairman of the National Wool Growers Environmental Committee. Thanks to the

Wyoming congressional delegation, "We got it stopped," he said, but advised members that Defenders of Wildlife and the Audubon Society are still pressing it.

"We still have the political clout, but we're up against some tough guys -- big guns. We can't go to sleep," Helle said. "The Endangered Species Act is the villain behind all this. We were asleep at the switch back when it was passed. We saw nothing wrong with saving the whooping crane. But the list now is ridiculous. Who cares about a piping plover or a snail darter?"

Helle said he attended the Defenders of Wildlife wolf symposium in Washington, D.C., last May, and out of 200 people, "I was the only one there not in favor of wolf reintroduction. I felt like a sheep in a den of wolves. The wolf is almost a religious symbol to these people."

Montana's Department of Livestock can't hunt wolves or grizzly bears, but it does issue permits for aerial hunting of predators. State veterinarian Dr. Don Ferlicka told the group that in 1986 the department issued 45 permits, and aerial gunners killed 2,962 coyotes and 348 fox. In 1984, they shot about 5,000 coyotes. He reported no golden eagles trapped last year. Between 1975-80, 357 eagles were trapped on or near Montana sheep ranges.

Montana sheep ranchers plagued with coyote problems will be able to use a limited form of Compound 1080 beginning Jan. 1, 1988, he added.

The EPA has granted the Montana Department of Livestock a provisional permit to issue toxic collars for lambs weighing from 25 to 50 pounds. Ferlicka told the wool growers convention, "I realize that this toxic collar is not what the sheepmen want. They want the single lethal dose. It's a trial balloon for Compound 1080."

The collars, Ferlicka said, can only be issued to certified applicators who are state trained. Each collar is designed to be fastened with Velcro on a lamb or kid's neck, behind the jaw, and contains two rubber bladders containing a total dose of 30 milliliters of 1080. That is enough poison, he said, to kill 300 25-pound dogs, or two to six grown men.

He noted that the collar is not a protective device. A lamb wearing the collar will be attacked, bitten on the neck and probably die, but poison in the collar should cause the death of the coyote within four hours.

Compound 1080 (sodium fluoroacetate) was banned from use by order of President Richard Nixon in 1972. Many eagles, domestic dogs and other non-target animals were reported poisoned from eating chunks of meat or suet baits laced with the single lethal doses of 1080. Birds and mammals also died from feeding on poisoned coyote carcasses. Sheepmen have lobbied ever since for its return. There is no known antidote for humans poisoned by 1080.

--Pat Dawson

## HOTLINE



### Ski resort dies

The proposed Wolf Creek Valley ski area near Pagosa Springs, Colo., is now history, following the near total collapse of its backer, WestFork Investment, Ltd. Last month regional forester Gary Cargill revoked WestFork's permit to develop the ski area because the company could not prove it had the necessary financial and technical qualifications. John Korb, the Forest Service region's director of winter sports recreation, says the agency gave WestFork 90 days to prove its qualifications (*HCN*, 10/26/87), but received no response and lately has had difficulty finding anyone to correspond with at the investment company. Several environmental appeals against the WestFork permit were rendered

moot at the same time. While a revived company or another developer could theoretically pick up where WestFork left off, Korb says the Forest Service considers the project dead and is not interested in pursuing it further. But across the valley from the Wolf Creek site, another proposed ski area is still being contested. After the East Creek ski area gained a Forest Service permit earlier this year, appeals were filed by a coalition that includes the Colorado and National wildlife federations, local chapters of the Sierra Club and the Audubon Society, and a neighborhood environmental group. Opposing the environmentalists as intervenors in the case are the town of Pagosa Springs, Archuleta and Mineral counties, the Archuleta County Development Association and a local resort. Korb says no ruling on the case is expected before February.

### L-P asks change

Louisiana-Pacific is once again stirring up controversy at its Olathe, Colo., waferboard plant. The company tossed a monkey wrench into the state's environmental permitting process last month by asking for last-minute increases in air emissions and for permission to change resins used to bind the waferboard. Its request to increase air pollution emissions is the fifth in three years and comes on top of the 1,000-plus tons of pollutants the plant now emits every year, reports the Grand Junction *Daily Sentinel*. The L-P plant has never received a final permit from the state of Colorado and since opening has operated on a series of temporary permits, two of which were revoked for pollution violations. The company said it wants to go back to using formaldehyde resins because the substitute resin it began using last year makes workers sick. Colorado officials say they will consider the changes.

## Wolf stalks rancher's livestock

Rancher Dan Geer said this fall he was missing one calf and another was dead after a wolf apparently attacked calves penned up in a corral near his house. Geer lives in northern Montana close to the Canadian border.

There were wolf tracks near the dead calf, and the next day Geer says he saw a wolf on the ridge above his house. "We want to remove the wolf from the area," said Dale Harms, an endangered-species biologist for the U.S. Fish and Wildlife Service in Helena, Mont. Animal Damage Control trapper Ken Wheeler looked for tracks, but blowing snow made the job difficult. "You've got to find sign before you can set traps," Wheeler said.

The area around Geer's remote ranch is where four wolves were killed and two were sent to Minnesota after being trapped earlier this summer (*HCN*, 11/23/87). Geer and two neighbors were paid \$3,149 for verified wolf kills of cattle through a compensation program initiated by the conservation group, Defenders of Wildlife.

Geer says at least one wolf was living in the midst of his cattle this

summer after the six wolves were trapped or killed. Although the cows and calves were in a constant state of turmoil, bellowing and running whenever the wolf was nearby, the wolf didn't attack. Geer says he suspects that although the wolf lived on his land, it ate his neighbor's cattle.

When Geer's calves were attacked recently, they were in a corral made from tubular steel panels only 20 feet from his house. They had never escaped from that corral before.

Geer says it took him and a neighbor two days of dawn-to-dusk riding to round up the more than 80 missing calves. Some had run three miles away and were so exhausted they fell down after being herded a few hundred yards. Several of the calves required antibiotics to prevent sickness from stress and exhaustion.

"It seems to me that if just a few wolves cause this kind of havoc and trouble," Geer said, "what would it be like if we had an established population like a lot of people want?"

--Bert Lindler

## The eternal EIS

The long overdue final environmental impact statement on Colorado's controversial Two Forks dam has been delayed once again, this time until at least the end of March. The delay -- its fourth -- will add another \$1 million to the cost of the mammoth \$40 million study. The U.S. Army Corps of Engineers blamed the setback on the "massive number of ideas and concerns" expressed during the public comment period on the draft EIS, reports the *Denver Post*. Those worries include destruction of a gold medal trout stream, loss of endangered butterfly and bird habitat, dislocation of residents in the Two Forks area, and the dewatering of streams both across the Continental Divide on Colorado's Western Slope and downstream on the Platte in Nebraska. Angry with repeated delays, Denver water officials accused the Corps of inadequate management. "They don't understand the issues and they don't know how to deal with a project like this," Robert McWhinnie, director of the Metropolitan Water Providers, said. Meanwhile, Nebraska Rep. Hal Daub, R, said his state would not stand by and let Denver turn the South Platte River into a creek. Daub says the corps failed to examine the project's impacts on Nebraska's farms, towns and recreation areas. The Platte provides 40 percent of Nebraska's drinking and irrigation water and 25 percent of its recreation areas.



### Quiet in the canyon

The National Park Service has recommended that the Federal Aviation Administration ban low-level flights over 44 percent of Grand Canyon National Park. Park Service officials say the plan will steer noisy aircraft away from 90 percent of the backcountry used by hikers and campers and 100 percent of the rim area used by car-bound visitors. But the plan also reserves two two-to-nine-mile-wide corridors for air tours of the canyon, which would range from 30 to 60 minutes in length. In the corridors, no flights would be allowed below the rim. In their recommendation, Park Service officials also asked the FAA to move three low-altitude and two high-altitude jet routes out of the park's airspace and not allow any deviations from normal flight paths or cruising altitudes for sight seeing. The recommendations came from a law passed by Congress last summer directing the Park Service to draft a plan to restore peace and tranquility over national parks. Director William Penn Mott told the *New York Times* the plan "recognizes for the first time that silence is an attribute of national parks" and may establish a precedent for restricting air traffic over as many as 30 other parks. The FAA must implement the Park Service plan within 90 days and by law can only change it for safety reasons.

## Flathead Forest appeals

Two years after a record 39 appeals were filed in Montana against the Flathead National Forest management plan, three have survived and are now on the desk of Forest Service Chief Dale Robertson. The appeals by Resources Limited, Five Valleys Audubon Society and the Swan View Coalition object to the Forest Service's plan for annual timber harvests of 101 million board feet. Appellants say the below-cost timber sales would milk the treasury of \$8.1 million a year for the next decade. In their final arguments, the groups asked: "Why sacrifice fisheries, compromise wildlife habitat and harm tourism -- all at taxpayer loss?" reports the *Great Falls Tribune*. Flathead forest officials respond that timbering will be done by the most ecologically and economically sound methods, and that nearly half the Flathead National Forest is already wilderness and constitutes a considerable reserve for fisheries, wildlife, old growth timber and recreation. Agency officials say they are still unsure when the appeals will be decided.

### Clean air battle

In what lawmakers described as the environmental vote of 1987, the House overwhelmingly rejected an industry-backed drive to delay the Clean Air Act's compliance deadline by 19 months, to Aug. 1, 1989. Instead the House passed an eight-month extension to Aug. 31, 1988, which backers say will keep pressure on Congress to write new legislation on the controversial issues of air pollution and acid rain. If the Senate concurs, the extension will temporarily spare many Western cities and dozens of other metropolitan areas with dirty air from federally imposed penalties (*HCN*, 8/3/87). Environmental Protection Agency administrator Lee Thomas says most cities in the country will almost certainly fail the act's current Dec. 31 deadline, and many have little hope of meeting federal air quality standards in the near future. Meanwhile, the EPA has unveiled plans for its own extension of the Clean Air Act, which would give polluted areas up to three more years to draft air pollution control plans and four years to implement those plans. Under its complicated proposal, the agency would not impose sanctions on polluted areas, nor require them to implement stringent sanctions on polluted areas, nor require them to implement stringent air quality controls, as some members of Congress wish. Colorado Sen. Tim Wirth, D, labeled the EPA plan the environmental equivalent of unilateral disarmament.

## BARBS

*Fulfilling the age-old dream of beating plowshares into swords.*

A report by the Department of Energy concludes that a mothballed WPPSS nuclear power plant can be converted to a military reactor for the production of tritium.

*What's all the fuss about? A three percent increase ain't bad.*

It is estimated that during President Reagan's eight years in office, the national debt will rise from \$1 trillion in 1981 to \$3 trillion in 1988.

# BULLETIN BOARD

## STONE HOUSE LANDS

The San Rafael Reef



### SAN RAFAEL REEF

Joseph Bauman, environmental reporter for the *Deseret News* in Salt Lake City, Utah, has spent a decade researching and writing a book that calls for the creation of a national park. The park would contain the 56-mile San Rafael Reef formation, which begins just west of the Colorado border. The wild and rugged reef would have been better served by designation as wilderness, Bauman writes, but off-road vehicle drivers have created so many roads that the desert has been scarred by human use. Bauman says he loves the area because it awakened his senses to the wonder of the outdoors, and making the area a park would at least separate the vehicular traffic, which now tears up the land at a fast and noisy rate, from people who just want to walk around. A provocative book, with a foreword by Stewart Udall.

University of Utah Press, Salt Lake City, UT 84112. Paper: \$19.95. 272 pages, illustrated with color photos.

### THE SNAKE

The Nov./Dec. issue of *Northern Lights* magazine has several excellent articles on the Northwest's Snake River, collected under the title, "The Care and Feeding of the Snake." They include a description of the steelhead (Rob Moore's "The Trout Who Would Be Salmon"), an overview of the steady pressure toward reform that is moving southern Idaho away from a dewatering of the Snake River (Scott Reed's "The 99 Percent Solution - And Other River Revolutions"), and an account of a lawsuit that stopped the dewatering of the Snake for several years (Glenn Oakley's "A Picturesque Structure, As Dams Go"). Single copies are \$3.25 from Northern Lights, Box 8084, Missoula, MT 59807-8084.

### ANIMAL DAMAGE CONTROL PROGRAM

The Department of Agriculture will re-evaluate its Animal Damage Control Program this winter, holding public meetings and preparing a new environmental impact statement. The mission of the federal program, run in conjunction with state agencies, is to protect agriculture and ranching interests from damage caused by predators and other wild animals. The program includes killing predators, disseminating technical information and research (HCN, 10/26/87). Issues to be addressed in the EIS include the potential impacts of control projects on biological and physical environments, wilderness areas, public health and safety, recreation, public attitudes and the economy. Agriculture officials are also seeking public comment to identify additional issues that should be included in the EIS. Written comments, postmarked no later than Jan. 20, 1988, may be sent to Steve B. Farbman, Assistant Director, Regulatory Coordination, APHIS, USDA, Room 728, Federal Building, 6505 Belcrest Road, Hyattsville, MD 20782. Comments should refer to Docket No. 87-151 and include the original and two copies.

### IT'S UP TO US

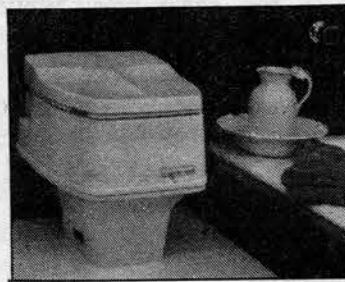
A companion volume to National Audubon Society's television specials, *Life in the Balance*, warns us that the natural world and quality of life dependent upon it are in jeopardy. Nature writer David Rains Wallace escorts the reader through deserts, wetlands, rivers, mountains and forests to describe various conservation issues and the history of human involvement in each environment. The author tells us: "Whether the wildlife of tomorrow will retain both the abundance and diversity that has made it so important to humanity's own survival, however, will depend very much on humanity."

Harcourt Brace Jovanovich, Inc., 111 Fifth Avenue, NY, NY 10003. Hardback: \$29.95. 309 pages. Illustrated.

### LOBO

Environmentalists in the Southwest are mounting a campaign to gain public support for reintroduction of the endangered Mexican Wolf, or Lobo, in Arizona, New Mexico and west Texas. The Albuquerque-based Mexican Wolf Coalition is planning a "Bring Back the Lobo" week in late February and is circulating petitions asking state and federal officials to speed reintroduction. The Mexican Wolf was driven from the Southwest in the 1930s by government trappers; then listed on the federal endangered species list in 1976. Thirty captive-bred wolves held in zoos in New Mexico and Mexico now await a suitable site for reintroduction. For more information on the Mexican Wolf Coalition, contact Susan Larsen at 505/299-3496 or 505/265-5506 to leave a message.

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## ACCESS

### WORK

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THE WILD HORSE CONTROVERSY by Heather Thomas is out of print but available from the author at the discount price of \$18, postpaid. 284 pages. Write Heather Thomas, Box 215, Salmon ID 83467. (1x)

NEW COLORADO WATER PUBLICATION: Introduction to Colorado Water Problems emphasizing water use. For information write: Trans Mountain Development Co. P.O. Box 823, Dept. HC, Golden CO 80402. (6x24)

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## WATER AND WILDERNESS

The fall issue of *Wilderness*, a publication of The Wilderness Society, is an excellent mix of stunning photos and fine prose on the subject of water. The lead article, "The Function of Aridity" by Wallace Stegner, is both history and philosophy, ending with a pardon: "Our very virtues as a pioneering people, the very genius of our industrial civilization, drove us to act as we did. God and Manifest Destiny spoke with one voice urging us to 'conquer' or 'win' the West, and there was no voice of comparable authority to remind us of Mary Austin's quiet but profound truth, that the manner of the country makes the usage of life there, and that the land will not be lived in except in its own fashion." The issue includes speculations by historian Donald Worster and an essay on wilderness water rights by Dennis Drabell.

The Wilderness Society, 1400 Eye St. NW, Washington, D.C. 20005. Single issues are \$3.50.



## THE WORLD OF THE CROW INDIANS

From the end of the Indian Wars in the 1880s, to the middle of this century, the federal government's American Indian policy assumed indigenous peoples would either assimilate into Anglo culture or become extinct. Many Native American peoples have survived -- embittered and poverty stricken -- but with their culture and world-view largely intact. Rodney Frey's book, *The World of the Crow Indians: As Driftwood Lodges*, tells the story of the Apsaalooke peoples' rugged journey into the 20th Century. It is a vivid picture of current life on the Crow reservation along the Bighorn River in southern Montana. Frey, who lived among the Crow for much of the 1970s and 1980s, intertwines Crow oral tradition and legend with vignettes about modern Indians. His book is laced with candid interviews of both tribal elders and young people: Sun dancers wear feather and bone ornaments and polarized sunglasses; an apprentice learns chants and prayers from a medicine man with the aid of a tape recorder; a Vietnam veteran tells how his grandfather's prayer bundle saved his life.

University of Oklahoma Press, Norman, OK 73019. Hardcover: \$21. 193 pages. Illustrated with photos, sketches and maps.

## RESTORING THE EARTH

In an effort to advance the task of restoring damaged natural systems and the planning of environmentally sustainable urban areas, a conference titled Restoring the Earth, Conference 1988, will spend four days in January exploring the revival of damaged riparian habitat, restoring forests, stabilizing and revegetating mined land, bringing back wildlife, planning urban ecosystems and stabilizing climate. It will also look at building a restoration movement, restoration as a profit-making activity, a look at various case studies, examine this movement's information and research needs, provide space for poster displays and how-to workshops, and so on. For information on the Jan. 13-16 conference to be held at the University of California, Berkeley, write to: Restoring the Earth, 1713C Martin Luther King Jr. Way, Berkeley, CA 94709.

## THE PUBLIC LANDS NEWSLETTER

Those interested in more detailed information on public lands may wish to take a look at a quarterly newsletter of modest format but much information. The *Public Lands*, a newsletter published by the Sierra Club Public Lands Committee, features in its summer issue a long article on the 1872 mining law by Michael McCloskey, Bruce Hamilton and William Curtiss; an article on BLM land use plans by Johanna Wald; the new control states have over activities on federal lands by Eric T. Freyfolge; and a look beyond present forest planning to the need for citizen monitoring once the plans are approved by Jean McGrady. Subscriptions are a modest \$5. Checks should be made out to the Sierra Club Foundation, and sent to the Public Lands Committee, J. Hopkins, 3316 Cutter Place, Davis, CA 95616.

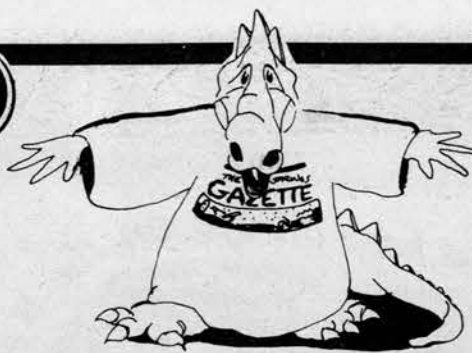
## LEARNING VACATIONS

A stimulating and challenging vacation rather than an escape is the subject of Gerson G. Eisenberg's book, *Learning Vacations: The All Season Guide to Educational Travel*. He covers more than 500 programs available here and abroad on archaeology, science, history, arts, crafts, photography, music, dance, drama, museums, the outdoors and much more. The fifth edition of Eisenberg's book, it contains just a sample of what can be found in the West.

Peterson's Guides, Department 7701, 166 Bunn Dr., P.O. Box 2123, Princeton, N.J. 08543-2123. Paper: \$9.95. 250 pages. Illustrated with black and white photographs.

## CONTAMINATED GROUNDWATER

Environmental monitoring and protection of natural resources on Indian reservations is difficult if not impossible, says the Rural Coalition. The coalition, a national alliance of citizen's groups dedicated to the improvement of rural life, has just released a study, *Groundwater Quality for Nine Reservations in South Dakota*, which found that little groundwater study has been done. South Dakota's 28,000 Sioux rely almost exclusively on groundwater for domestic and agricultural uses, but their aquifers are polluted by a variety of natural and human-caused pollutants, including uranium and sewage. Deb Rogers, of the South Dakota Technical Information Project, and Mary Lee Johns and Madonna Thunderhawk, Cheyenne River Sioux organizers, found high levels of contaminants in all 14 major aquifers underlying South Dakota's reservations. Their evidence showed nearly half the reservations' water systems are also polluted, leading to possible connections with high incidence of kidney disease, methemoglobinemia -- or blue baby disease -- and several forms of dysentery. The study combines available data on reservation geology and hydrology, aquifer water quality, pollution sources and public drinking water systems. It also includes research on the confusing welter of federal, state and tribal laws protecting groundwater; contaminants not regulated by law; and how to get money for increased testing and reclamation of contaminated groundwater. The study is available for \$15 from the Rural Coalition, 2001 S. St. NW, Suite 500, Washington, D.C. 20009 (202/483-1500).



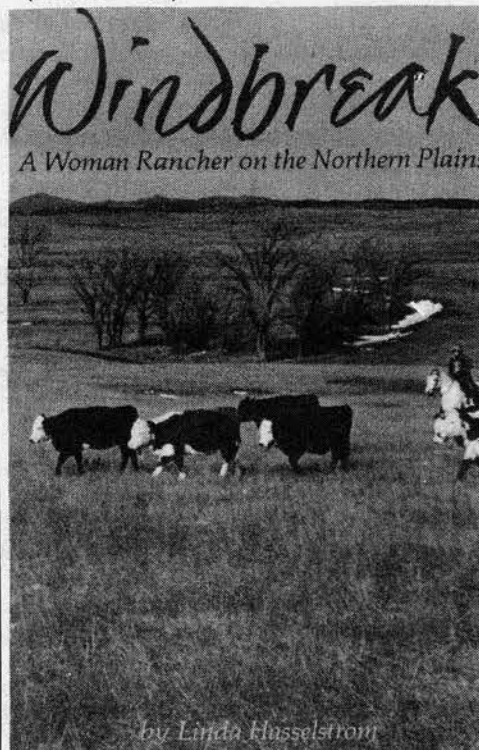
## MUSCLE STEW

If you are a hot springs adventurer and the thought of winter chills your bones, relax. Warm yourself with the *Hot Springs Gazette*, an illustrated guide to hot springs throughout the West. The *Gazette* is an old publication with a new editor and a new infusion of humor, we're told. Each issue ("published spasmodically") provides descriptions and camping information for dozens of hot springs, hints on "creative trespassing" and tips on hunting your own natural bath. The literary-minded bather will also find short stories and tall tales for tubside reading. Best of all, one can attain a measure of immortality by contributing illustrations, maps, tubside tales, or facts about hot springs. The *Gazette* says it is happy to publish discoveries if you're willing to share them.

The *Hot Springs Gazette*, 12 South Benton H, Helena, MT 59601. Published quarterly. Paper. Single copy \$4.75. One year subscription, 4 issues, \$14.95. 48 pages.

## PESTICIDE PROTECTION TIPS

"Pesticides are not safe," says the Environmental Protection Agency in its new *Citizen's Guide to Pesticides*. The 16-page booklet covers household pesticides and insecticides, herbicides, fungicides, rodenticides, disinfectants and also chemicals used on lawns and swimming pools. The EPA suggests ways to control pests, first by eliminating habitat and food sources, then by using non-chemical controls. It lists tips for safe pesticide use, correct dosage, storage and disposal, ways to reduce exposure and, finally, first aid for pesticide poisoning. The free pamphlet also lists addresses for both state and federal pesticide agencies. It's available from the U.S. EPA, Office of Pesticides and Toxic Substances, 401 M Street SW, Washington, D.C. 20460 (202/382-4454).



## LINDA HASSELSTROM'S SOUTH DAKOTA

It is hard for us to be impartial about the prose and poetry of this feisty, brutally honest and increasingly graceful writer whose work has appeared in *High Country News*. Linda Hasselstrom intimately knows her turf -- life on a South Dakota ranch -- and she has thought deeply about why she and her husband George endure and enjoy it. *Windbreak: A Woman Rancher on the Northern Plains* covers a year in her life, and like others it was anything but a romp. There was illness, drought, prairie fires, blizzards. Times of celebration, such as bird watching, driving to catch a sunset or just plain resting, glow. Hasselstrom includes poems and a fine glossary of ranching terms.

Barn Owl Books, Box 7727, Berkeley, CA 94707. Paper: \$12.95 postpaid. 256 pages.

## A GREAT READ

*High Country News* gets several pounds of mail a day, much of it newspapers, newsletters and press releases. Scanning most of the material is a chore, but there are uplifting exceptions. The major exception is the weekly collection of Pacific News Service articles. It isn't the layout that causes us to open the PNS envelope first -- the "format" is 10 or so typed pages, set ragged right and printed on both sides of the page. But the content is excellent. PNS editor Sandy Close imposes discipline on her writers -- their articles are always brief and tightly written. PNS takes as its beat the Pacific Basin, Latin and Central America, youth, immigrants to the U.S., and the growing connection between the U.S. and the Third World. PNS got its start in 1970 as a source of independent news on Indochina, and it survives today as purveyor of several articles a day to some 200 subscribers, including the *Washington Post*, *L.A. Times*, *Baltimore Sun*, and others. Individuals and non-profits can receive the PNS weekly packet for \$50 a year; others pay \$100. Contact the Pacific News Service, 604 Mission St., Room 1001, San Francisco, CA 94105.



## A LOVER OF TREES

*The Man Who Planted Trees* is a brief story about hope and generosity. After losing his wife and child, a farmer travels to a windswept, abandoned corner of France where he quietly and happily goes about his self-assigned task of planting 100 acorns a day. His work spans 40 years, both world wars, and transforms the region into one of forests and running streams where people return to live. The author is Jean Giono, among France's finest writers, who donated the tale to whoever would publish it "to make people love the trees, or more precisely, to make them love planting trees." Until his death in 1970, Jean Giono lived in a small village in rural southeastern France. The fine woodcuts illustrating this little book are by Michael McCurdy. The publisher has been unable to identify who translated the story 30 years ago.

Chelsea Green Publishing Co., P.O. Box 283, Chelsea, VT 05038. Paper: \$6.95. 52 pages.

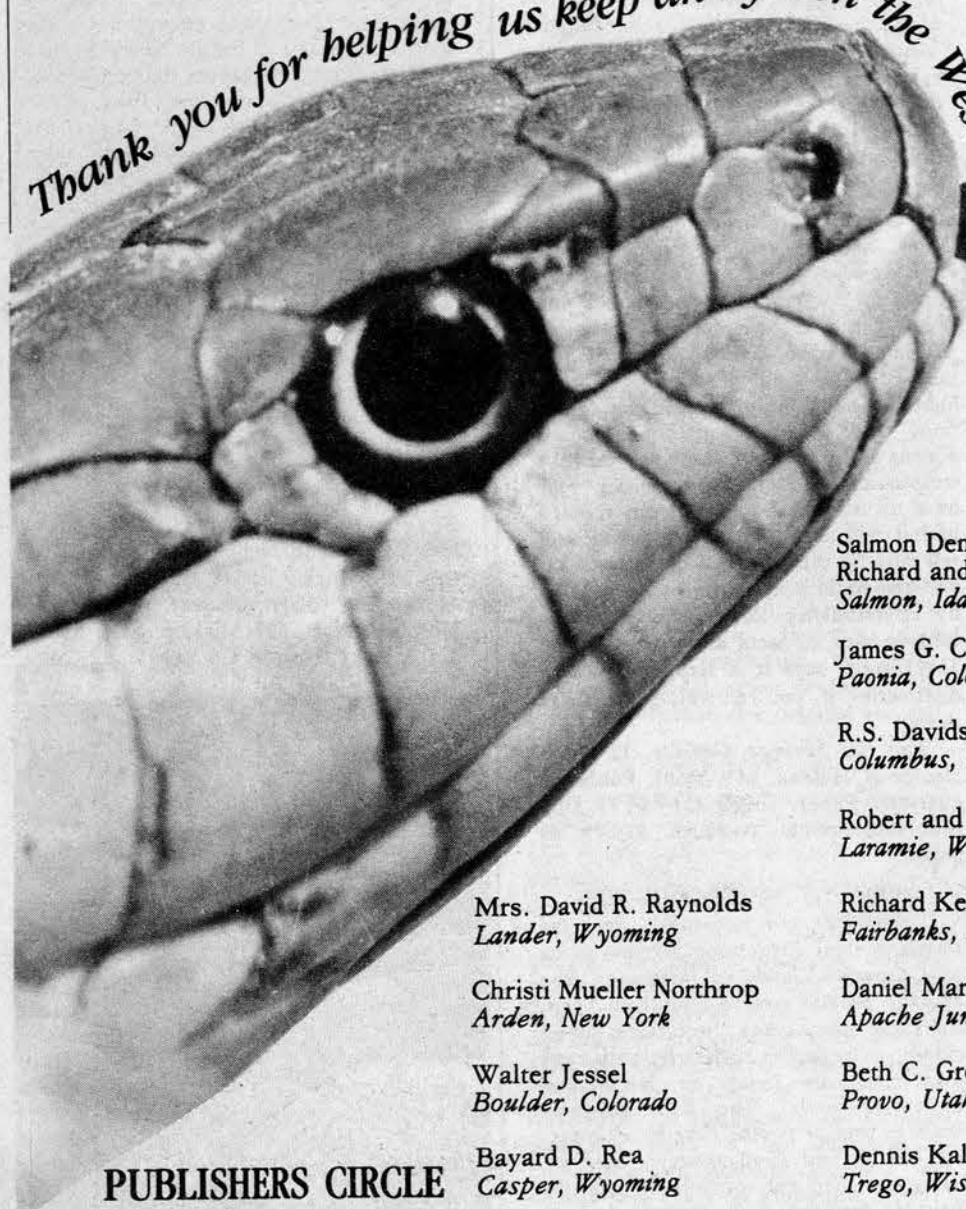
## PEACE NEWS IN ARIZONA

"The World Anti-Communist League (a contra fundraising network) has deep connections to Arizona," reports Prescott *Peace News* in its September issue. "Gen. John Singlaub, one of Reagan's Secret Team, is a leader of (the league), which is headquartered in Phoenix, and Gov. Evan Mecham's recent trip to Taiwan was paid for by the (league)."

As the quote illustrates, *Peace News* covers both international and local stories about peace and war. The publisher is the Prescott Peace Network, an Arizona group founded in 1983 to research peace education, ecology, nuclear threats, events in Central America and personal and institutional non-violence. The network's July-Aug. issue focused on a nuclear-free Pacific and U.S. involvement there. The September 1987 issue investigated Lt. Col. Oliver North's secret plan to impose martial law in the U.S. in the event of an emergency. The 16-page newsletter comes out every other month and sometimes more often. Subscription donations are \$6/year and can be mailed to PPN at P.O. Box 1463, Prescott, AZ 86302.

Dick Randall, Defenders of Wildlife

Thank you for helping us keep an eye on the West.



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## Learning to live off the land

by Rocky Barker

**Y**ELLOWSTONE NATIONAL PARK -- The grizzly sow came out of the timber at a full gallop and caught the elk calf running. She dragged and carried the kicking calf toward Antelope Creek as elk cows milled around. The sow, who wore a radio collar tagged 59, dropped her prey and rounded up her cubs, which she had left behind in the chase. She returned later to carry the calf into the woods for a much-needed feast.

Her success at elk-calf predation demonstrates a dramatic change in grizzly behavior in the greater Yellowstone ecosystem. Instead of grubbing through garbage dumps as her ancestors did, Bear 59 and others have learned to hunt the growing herd of elk in the park. They are successfully fishing for the increased cutthroat trout populations that run up the streams around Yellowstone Lake.

They have turned to food sources long ignored before the controversial

closing of the dumps more than 15 years ago. But Bear 59's life story also bolsters the fears of critics that man-caused mortality continues to threaten the future of the grizzly. While Bear 59 had learned to prey on elk, she also had become habituated to humans.

She was often seen near the roads around the park's Canyon Village development, and drew a crowd of amateur photographers anytime she came into view. Last September, photographer William Tesinsky of Great Falls, Mont., apparently got too close and she killed him.

At the hands of park rangers, she soon shared his fate. Her eight years of learning to cope with Yellowstone's environment will not be passed to another generation.

Research during the last three years shows that fewer bears are succumbing to similar deaths. Increased sightings of grizzlies, particularly adult females with cubs, has fueled optimism about recovery of the species.

"We think things will probably improve for the next few years unless something unforeseen or catastrophic happens," said Richard Knight, Interagency Grizzly Bear Study Team leader. "I've been cautiously optimistic for three years now. That's a record."

But while there is hope that the grizzly is nearing recovery in the short term, most scientists remain worried about the long haul. The relatively small, isolated population of some 200 bears and the limited

habitat may leave the population in a precarious state indefinitely.

"We don't have much room for error with this population," said John Weaver, U.S. Forest Service grizzly bear habitat coordinator. It is the competition between humans and bears for the same space that is the major hurdle to long-term preservation of the bear. Oil and gas development, subdivisions, recreational developments, logging and grazing compete with the grizzly outside of Yellowstone. The near 1.5 million visitors and the developments in prime grizzly habitat, such as Fishing Bridge and Grants Village in the park, threaten grizzly use of habitats as well.

**T**he problem becomes even more complex in poor food years, when grizzlies need more range to survive. This year provided mixed signals. "It's not a great year, but it's not a bad year," said David Matteson, a biologist on the Interagency Grizzly Bear Study Team. A good year to bears is usually the same as a good year for irrigators. Heavy snows in the mountains improve vegetation, kill elk and buffalo and generally enhance the bears' food base throughout the year. A bad year is generally cold and dry. Bears find fewer winter-killed elk and buffalo, and vegetation is sparse and dry in the late season.

When a "bad" year is combined with a white bark pine nut failure,

which happens about once every four years, bears are forced to find other food.

Often that draws them toward humans and trouble, usually in late summer when food sources dry up. That happened this September when the pine nuts became scarce.

Before 1971, when the dumps were closed in Yellowstone, the bears depended on garbage to get them through the lean seasons. But when the dumps closed they reverted to the next best thing: campground food and garbage dumps in surrounding communities.

Management efforts have significantly dried up these food sources and bears have been forced to adapt. Research by the Interagency Grizzly Bear Study Team indicates that the bears are using new natural food sources and finding ways to use traditional sources longer.

Grizzlies are different from many animals because they learn most survival skills from their mothers, rather than acting instinctively. Yellowstone's elk herd has grown from around 4,000 in the 1960s to more than 30,000. That has helped to provide bears with a substitute for garbage, scientists say.

Many bears have learned to efficiently kill elk calves in the late spring and summer. Some have learned a more complicated fall hunting strategy of preying on rutting bulls, said Matteson.

The Yellowstone elk population, which faces little hunting pressure,

(Continued on page 10)

## In search of the wild, adaptable grizzly

**Y**ELLOWSTONE NATIONAL PARK, Wyo. -- Steve and Marilyn French are quick to point out they are not grizzly bear experts.

"The grizzly needs more experts like it needs another development," said French.

But the couple from Evanston, Wyo., probably has spent more time observing grizzlies than anyone in the last three years. And their efforts to document grizzly behavior on film have resulted in wide acceptance of the concept that the Yellowstone grizzly bear has changed since its garbage-grubbing days.

His motion pictures and her still photographs show bears preying on elk and efficiently catching cutthroat trout. They are also documenting changes in breeding behavior since the bears left the dumps and became free-ranging.

Despite all the time the Frenches spend watching bears, they do it from a distance. "I want to document the bear's natural behavior, not its reaction to me," said French. "We don't ever put ourselves or the bear in jeopardy. We always position ourselves with an escape route."

They stress the importance of distance because of the deaths of two photographers in Yellowstone and Glacier National Park in the last two years. The two photographers stalked to within 70 yards to get the grizzlies in their telephoto lenses. "A 300 millimeter (lens) is not big enough for grizzlies," said Marilyn French, a nurse. She uses a 600 millimeter with a teleconverter that doubles the magnification to 1,200 millimeters. This allows her to get good shots of bears without getting close.

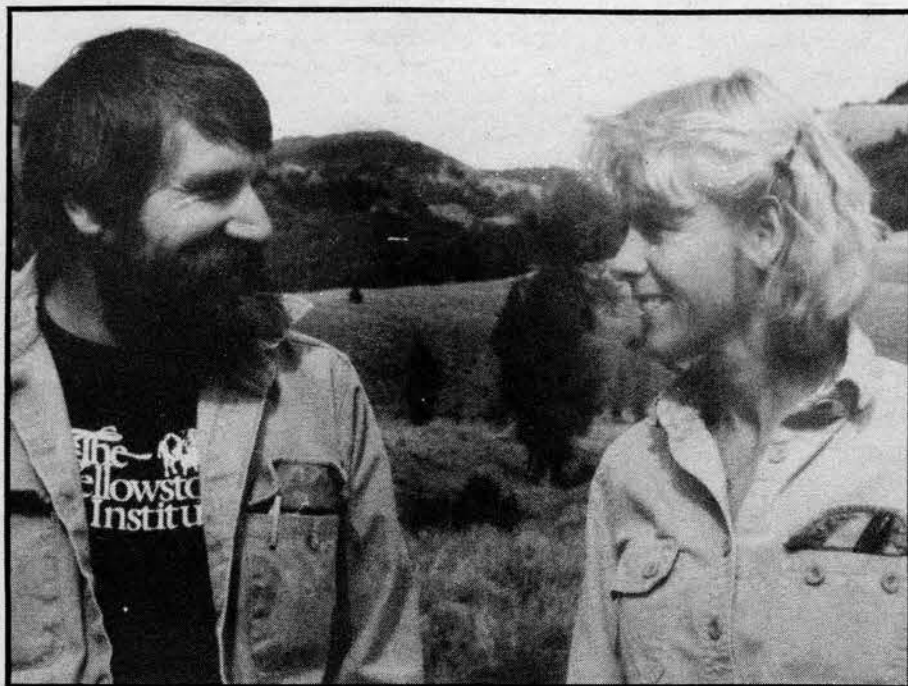
"Some say the grizzly is unpredictable," said French. "I say it is predictable. If you harass it, it will attack you."

French is a doctor and head of emergency services at the Evanston hospital. This allows him to spend summers in Yellowstone following the bears. His interest in grizzlies began after he did an internship at Lake Hospital in the park. He treated people mauled by bears and became fascinated with the grizzlies.

After two unsuccessful summers looking for bears in the park, he took a class on grizzly bears in 1983, offered by the Yellowstone Institute. The day the class ended, he used an industrial camera and a telescope to videotape a grizzly. That started him on what has grown beyond a hobby.

He had noticed that every documentary on the Yellowstone bear used film footage from Alaska and Canada. In 1984 and 1985, the Frenches attended every conference and read every book they could about the grizzly. French continued to film Yellowstone grizzlies and in 1985, Mrs. French began taking still photos.

**S**oon they were recognized as accomplished "grizzly watchers." But they were unique because they were lay people not tied to an organization. That independence has enhanced their credibility with the various agencies and groups that deal with the bear.



Steve and Marilyn French in Yellowstone National Park

"More importantly, we had time to observe the bear," said French.

Their observation work has turned into a formal research project on grizzly bear behavior. A contract with the Park Service directs them to document the life history of the Yellowstone grizzly on film.

The Frenches also are working with the Interagency Grizzly Bear Study Team identifying and observing bears throughout the greater Yellowstone ecosystem. While scientists realized that grizzlies were increasingly depending on elk calf predation and fish for food in the spring, it was the Frenches' film that gave widespread support to the phenomenon. They also have shown that grizzly females are taking a new, more dominant role in mating behavior.

Scientists saw males as the aggressors that controlled breeding selection during the time bears congregated around dumps. But the Frenches repeatedly have observed females as the dominant sex during courting activity now.

"We found a different bear than we read about," said French.

But since most public perceptions about the bear are based on the older studies, they often have been critical of the current management program.

This has sparked the call for supplemental feeding programs to replace the food that was available in the dumps.

"Our basic premise is that the public cannot understand the management program until it understands the bear," he said. "What I see is there are a lot of bears, they're wild, they're free. They don't need your handouts."

He makes no secret of his interest in preserving the grizzly in Yellowstone.

"But it isn't the grizzly we're trying to save," said French. "We're trying to save the kind of grizzly bear that has the ability to adapt to its environment and change with it."

The Frenches have avoided publicity and shunned celebrity status, despite growing prominence. They worry that it would hurt their ability to carry out their work.

Both get many offers for their film, but they have turned down lucrative offers to ensure they keep editorial control over how their pictures are presented. They avoid publications and programs that they think portray the bear falsely.

--Rocky Barker



Fish-eating grizzly, photographed by Marilyn French

## Learning...

(Continued from page 9)

has a large number of big, older bulls. Many compete for the same cows during the breeding season.

The combined efforts of breeding, herding their harems and fighting off competitors leave many bulls very weak after a few weeks. Grizzlies have learned to wait for and kill one of these bulls with little effort.

"It is complicated behavior based on the spring experience of preying on dead animals standing up," said Matteson.

Just as elk numbers have risen, so have cutthroat trout in Yellowstone Lake. Catch-and-release regulations have increased once-depleted cutthroat trout numbers to a point where they have become an important summer food source for bears.

"We estimated that there are as many as 40 different grizzlies using Yellowstone Lake spawning streams during June and July so it's a significant eating pattern," said Matteson.

While eating elk and trout are the most obvious new feeding habits, the grizzly's major food source remains succulent grasses, forbs and roots. These foods are available most of the year, but are not as easily turned to the fat that bears need.

"This year we've found a kind of feeding activity we've never seen before," said Matteson. "We find bears eating insects in alpine areas."

Some grizzly researchers, sheep ranchers and politicians are not convinced. They argue that grizzly bears need supplemental food sources to survive. They are led by biologists John and Frank Craighead, whose classic study of Yellowstone grizzlies between 1959 and 1971 provides the basis for all studies of the population since. They argue that in most grizzly ecosystems there are "ecocenters" that attract and provide a concentrated food source. Whether it is salmon spawning streams in Alaska, cliffs where bison were driven off by Indians, or even garbage dumps in Yellowstone, ecocenters have been an important part of grizzly survival, said Frank Craighead, of Moose, Wyo.

With grizzly habitat limited, supplemental feeding is one alternative to expanding its range, particularly in a poor year.

**B**ut Matteson said the problem would be targeting the ecocenters of female grizzlies with cubs, bears that would need the extra nutrition in poor years. Males, said Matteson, get the best food sources in the ecosystem.

The key is their ability to use all of the prime habitat, however. Today, most of the alternative habitat that was available for bears in bad years has been developed for man.

"Before, during the (pine) cone failures, the bears used to go down to low elevations," said Dick Knight. "But now we've got the low elevations filled up."

A new planning tool, called a cumulative effects model, may help managers make decisions on how proposed development will effect the bear. All available data about bear use in an area, habitat, food and current human uses of the area are fed into a computer so that effects on



## Creating a truce between bears and people

In a small, crowded house in Missoula, Mont., Lance Olsen sits next to a wall covered with prints and photographs of bears. He flips through a pile of documents and fields the third phone call in the last hour. All are about a proposal to let some hunters kill problem grizzlies -- bears that state wardens normally shoot.

As president of the non-profit Great Bear Foundation, Olsen's job is helping people separate facts from fiction about bears. He also has another, more fundamental mission -- making people feel comfortable about living with bears.

"Basically, we're trying to smooth out the truce between people and bears," Olsen says.

The truce appears tenuous. Olsen talks of problems grizzlies face in the northern Rockies where an estimated 1,000 animals eke out a precarious existence. He cites proposals for roads, logging, subdivisions and natural gas drilling that could threaten grizzly country. "The grizzly in the lower-48 states and western Canada is in as much trouble as any bear species in the world," he says.

The foundation's agenda for helping wild bears is unique. Unlike most conservation groups that rely primarily on administrative and legal solutions, Olsen's group focuses mainly on education.

A key effort is the group's donation of educational materials to libraries, schools and land managers in grizzly country. The group distributes its publication, *Bear News*, and selected books on grizzlies, which Olsen says help "improve local good will toward the bear."

The foundation frequently donates Andy Russell's *Grizzly Country* and Stephen Herrero's *Bear Attacks* to schools and communities. Olsen says Russell's book is important because it is a first-hand account of someone living in grizzly country. The colorful Russell is a writer and outfitter from Alberta, Canada.

He says *Bear Attacks* is important because "it doesn't list simple do's and don'ts about human behavior in bear country."

The foundation is also planning a traveling, natural history exhibit on bears. Olsen's group has given \$10,000 to the Science Museum of Minnesota for an exhibit similar to one on wolves that toured the country after a stay in Yellowstone National Park. That exhibit, which Olsen says cost half a million dollars, was sponsored by Defenders of Wildlife and funded largely by a National Endowment for the Humanities grant.

Olsen says he doesn't want the foundation to fund the whole exhibit project because "it will be better for the bears if others are involved." He estimates the project will cost \$100,000 and hopes to have it completed in a year.

The foundation's most novel venture may be its fund that reimburses ranchers for grizzly-killed livestock.

In 1986, the foundation paid over \$2,000 to ranchers who lost livestock to grizzlies.

The key to the program is that it involves no paperwork by the ranchers, Olsen says. The foundation

bases reimbursement on reports prepared by game wardens who investigate grizzly-predation incidents. Ranchers need not file official claims.

Despite its projects, many people have never heard of the foundation. Olsen says "we haven't sought much publicity ... publicity and fundraising are traps you can get stuck in and they can get in the way of doing a job." Private donations, grants and memberships are the foundation's sole income sources.

The foundation was started in 1981 by two Montanans, botanist William Callaghan and artist Frank Ponikvar, who were angered by what they saw happening to bears, Olsen says.

Bear biologist Charles Jonkel was also involved in the foundation's formative years. Jonkel, a familiar face in conservation circles in the northern Rockies, has long been known as an outspoken proponent of grizzlies and wilderness. He heads the Border Grizzly Research Project and teaches at the University of Montana.

Callaghan and Ponikvar remain on the foundation's board of directors. Its chairman is Arnold Bolle, former University of Montana dean of forestry, and Jonkel serves in an advisory role.

As for Olsen: Why does someone with an advanced degree in developmental psychology leave an academic career for a \$12,000 a year job in bear conservation?

"It interested me that when psychologists talk of the environment, they talk only about people," the 43-year-old Montana native says. "I guess I always took it for granted that bears would always be around."

When he found that was not necessarily true, and when the opportunity to work for the foundation came in 1981, Olsen dropped plans for obtaining a master's degree

in environmental studies and became a professional conservationist.

Speaking of his opportunity to help grizzlies, Olsen turns philosopher: "Losing them is more than a biological loss ... in some ways (saving them) is a test to see what we humans are made of."

To Olsen, saving grizzlies needn't involve shrill attacks on people who see the bear as something to be eliminated. He speaks respectfully of Ira Perkins, a Montana rancher who both refused money from the foundation's reimbursement fund, and who filed suit to have the Endangered Species Act declared unconstitutional.

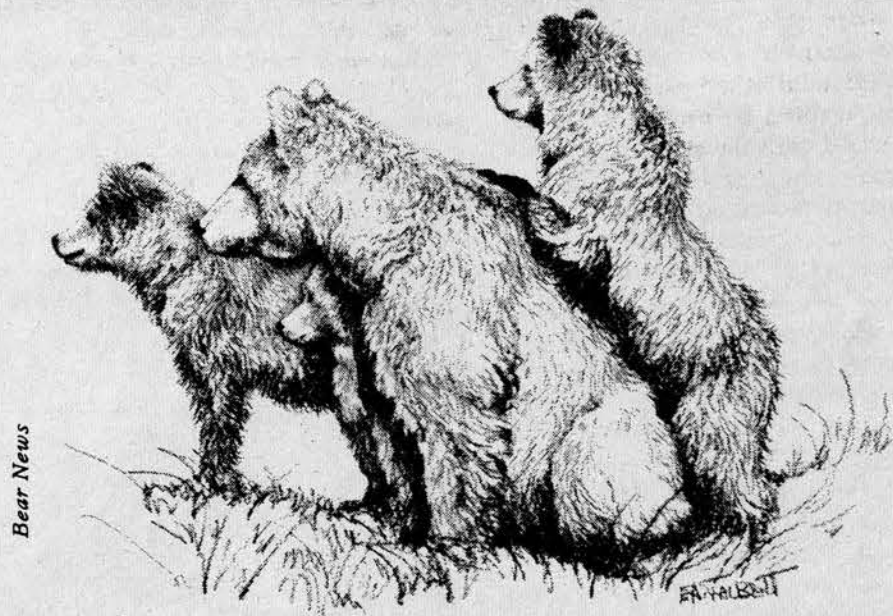
Olsen says of the long-time stockman, one of only a few large sheep operators left in the northern Rockies: "I can feel some of the things for Ira that I feel for the bear ... they're both feeling cornered."

Olsen saves much of his criticism for the Forest Service. He says the agency's timber program is destructive not only to bears, but also to the economy the agency says it helps. Olsen refers to below-cost timber sales and elimination of old-growth trees as problems, and says: "The bear and logger are victims of the same process."

He says the bears are losing habitat while loggers are subject to a boom-and-bust economy brought on by the agency's practice of selling trees at a loss to the government. Olsen claims the below-cost sales have led to overcutting, meaning "the loggers get jobs digging their own graves."

What will it take to save grizzlies? Olsen answers by reversing the cumulative-effects concept biologists use to measure harmful human impacts to bears. "The road to salvation for the grizzly is in the cumulative effects of lots of small, good programs."

--Bruce Farling



## The best-kept secret on bears

*Bear News* may be one of the conservation community's better-kept secrets. Published by the Great Bear Foundation, the quarterly tabloid is loaded with stories on natural resource issues and research.

Recent issues of the four-year-old publication have included stories on grizzly recovery programs in Montana, conservation in Italy and the

Andes and public land access around Yellowstone National Park. The paper is edited by Lance Olsen with stories submitted by bear biologists, conservationists and land managers.

For a copy or more information about the Great Bear Foundation, write Box 2699, Missoula, MT 59806 (406/721-3009).

--B.F.

the bear can be assessed. Once a manager has the information, he or she can decide whether the proposal is acceptable.

"No matter how many tools managers have, they need support of the people that have to share with the bear," said Bob Hammond, a Shoshone National Forest Ranger.

"I think the biggest problem for the grizzly bear is the attitude of the local people," said Hammond.

About 1 percent of the land in the greater Yellowstone ecosystem is private, yet 80 percent of human-bear conflicts occur on that land, said Steve Mealey, Shoshone National Forest supervisor.

Developments on private land keep bears from using all of the available habitat effectively. But worse is the food and garbage that affects a bear the way heroin does an addict.

Garbage dumps in surrounding communities, such as Montana's West Yellowstone, Cooke City and Gardiner, have attracted bears to these easy, high-energy food sources. This has habituated them to humans and often has led to the bears' deaths or removal to zoos.

Dumps in these communities have been cleaned up, but problems continue at private residences.

"There are too many places for bears to get into trouble," said Tony Povilitis of the Campaign for Yellowstone's Bears, based in Boulder, Colo.

Knight's team has estimated that the Yellowstone grizzly population can remain stable, or grow, if man-caused bear deaths are held below 11 annually. Only two of those can be adult females with cubs. The average death rate from 1981 to 1986 was 10.1 per year, according to the interagency grizzly committee.

Managers cautiously point to reduced mortality as a sign the grizzly is recovering in Yellowstone. But critics like Povilitis say it's too soon to consider the lower mortalities a trend. "I wouldn't want to make any strong conclusions based on short-term trends."

Illegal kills are hard to measure since many are never reported, Povilitis said. And management actions seem to be playing a bigger role in grizzly deaths than in the past. "This seems to show we have as many bears getting in trouble for the first time now as in the 70s," he said.

While most managers and re-

(Continued on page 12)

## Residents learn the grizzly is not an easy neighbor

**C**RANDALL, Wyo. -- Lumberman Mike Hanson has seen more bears in the last five years than in the previous 25 he has spent cutting and milling timber in the Shoshone National Forest east of Yellowstone National Park.

The owner and manager of Cody Lumber Co., Hanson says he doesn't mind sharing his neck of the woods with the grizzly -- even though its presence has placed many restrictions on timber harvesting practices.

"He's a part of the environment," said Hanson. "He belongs here."

Montevideo, Idaho, sheep rancher Sam Davis also says he can live with the grizzly, but not under the current arrangement.

Davis' family has herded sheep on the same allotments on the west slope of the Tetons for more than 100 years. He and his brother Jim are among the last sheep ranchers with flocks grazing in Situation One Habitat under grizzly bear guidelines for the Greater Yellowstone Ecosystem. Situation One means that when a grizzly bear starts eating their sheep, they, not the bear, have to move.

"My business can't survive if it means moving out of the bear's way," Davis said. "We've been on these ranges for more than 100 years and dealing with the same grizzly

bears. We've never killed them off and they've never driven us off."

**O**ther residents just don't want the bears around. "We don't want any more bear," said Mrs. Garnet Carey, who operates a guest ranch in Crandall. She says bears have limited recreational opportunities for her visitors. "They would like to enjoy the trails but they can't because of the grizzly bear," said Mrs. Carey. "It used to be that when you came up to black or brown bear they would run. Now the grizzlies come right at you."

Steve Mealey, Shoshone National Forest supervisor, says there is a place for Mike Hanson and other residents to live and work in the grizzly's important stomping grounds. Just as the grizzly has adapted to man's intrusion into his world, residents can adapt to the bear's presence on their land.

"If we can't create a situation where people like Mike can live, then my sense is the grizzly can't either," he said.

But federal land managers have not held out similar hope for people like Davis. He faces restrictions on land use that may last far into the future.

Hanson, who selectively cuts his timber, is not typical of timber

harvesters in the Yellowstone ecosystem. The lodgepole pine he cuts can be managed efficiently without clear cutting, which is the case on the Targhee, Gallatin and Bridger-Teton national forests.

Unlike most mills that use lodgepole in the region, Hanson's mill specializes in high-quality lumber for paneling, trim and rustic siding. That allows him to employ 36 full-time employees and 20 part-time workers, nearly the same number employed in a larger mill in Dubois that mills 25 million board feet a year. His business pumps \$700,000 into the Cody economy, but he only harvests five million board feet annually.

"I employ near as many people as a stud operation that cuts five times as much timber," he said.

He also can work with rules designed to protect grizzlies that allow only primitive roads that must be abandoned when logging is finished.

"We don't need a boulevard," he said. "We just need to get our trucks in and out and then close the road."

Adjusting to those and other rules had its costs. Hanson had to buy more equipment so he could get the wood out of the forest before a fall closure. He also had to spend five years logging an area that could have been logged in three years.

Davis, whose business pumps about \$250,000 annually into the

Idaho economy, had little problem with grizzlies before the bear was placed on the threatened species list in 1975. He was spared the problems of his neighbors when Targhee officials installed grizzly rules early in the '80s.

But this year, in July and August, Davis faced his first confrontation with a grizzly bear since the Forest Service installed its sheep-monitoring system. For the Targhee National Forest, the survival of that particular bear spelled success.

But for Davis, it added costs that cut his business' slim margin. It also fueled uncertainty over whether he could continue to graze the area that his herders, sheep and family know so well. "It's already cost me \$20,000 or more," said Davis. "It could cost me the whole operation, all for one bear."

The incident started in July when herders reported a bear was killing some of Davis' sheep on the Bitch Creek ridge in Wyoming, northeast of Teton, Idaho. The area had a history of black bear predation, so government trappers came in and set snares.

**A** black bear was caught and killed, but the signs pointed to more than one bear. On

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## Learning...

(Continued from page 11)

searchers are concentrating on recovery, plans for what happens once it is achieved are being discussed. But there are very different perceptions of what kind of activities will be

allowed in occupied grizzly habitat once the bear is removed from the Endangered Species Act's threatened list.

The U.S. Fish and Wildlife

Service's recovery plan says once population estimates have reached 301 bears over six consecutive years, the grizzly will be considered recovered and Fish and Wildlife will take it off the threatened species list. But new recovery goals have been proposed to the interagency grizzly team.

New goals, approved by the Yellowstone subcommittee of the team and pending before the entire committee, include four conditions:

- Adult females with cubs must be distributed throughout the available habitat.
- There can be no more than an average of 11 man-caused mortalities, only two of which can be adult females over a six-year average.
- Over a six-year average, 15 females with cubs of the year must be found.
- Adequate regulatory mechanisms must exist to assure proper management of the population and the habitat.

Researchers say the population is near meeting the first three conditions; the fourth requires continued restrictions though perhaps not as strict, said Stan Tixier, U.S. Forest Service Intermountain Region forester and chairman of the interagency team.

"I think it's important that we not just digress or we'll have her back on the list," he said. But once the bear is delisted, Wyoming and Montana hunters once again may get to stalk grizzly bears near Yellowstone. "I do envision at least Wyoming, possibly Montana, and less likely Idaho will establish a hunting season," said Tixier. "One reason is to keep the bears wild, more leery of humans."

--Rocky Barker



## Neighbor...

(Continued from page 12)

July 16, a grizzly sow was found in the trap with two cubs near by. Wyoming Game and Fish officers tranquilized the bear and released it.

Davis' sheep were allowed to stay, but a week later the grizzly struck again. Moving the sheep at that time would mean a loss of 10 to 15 pounds of weight gain in his lambs just prior to shipping. Sam Davis contacted a U.S. Department of Agriculture official, who contacted Regional Forester Stan Tixier, chairman of the Interagency Grizzly Bear Committee.

Tixier and the Forest Service held fast and Davis began moving the sheep out of the mountains. The grizzly followed and took more sheep before it left.

"It just took a lot of thrashing around and getting people educated," said John Burns, Targhee National Forest supervisor. "The question now is what that holds for next year."

The number of sheep grazing in Situation One Habitat on the Targhee National Forest has dropped from 30,000 adults and lambs in 1975 to 2,120 in 1986, said Burns.

In the 1970s, the area around Davis' allotment became a "black hole" for grizzlies; they entered but often never left. Official mortality figures show seven bears were killed by sheepherders in the area in 1978 and 1979. No legal action was taken. Targhee officials began sending monitors along with the sheepherders to ensure that they were not killing grizzlies.

Burns said livestock protection is important to the self-esteem of most ranchers. It is almost a Biblical responsibility.

"You aren't very well-respected in your area if you don't take care of your animals," he said. "It's hard to stand by while your animals are being killed by a bear."

Once the monitor system was in place, only one major incident took place on the Targhee prior to this season. "We're not going to move unless they force us to do it," said Davis. "If they force us to do it then we're broke."

Davis is pinning his hopes on changes in regulations once the bear is no longer listed as a threatened species. But that is not expected to happen soon, if ever, said Tixier.

"I think those kinds of provisions need to remain in place or we will relapse," said Tixier.

There are many vacant sheep allotments outside of Situation One Habitat that could be used by Davis, said Tixier. But Davis said the cost of moving his operation and the adaptation of people and sheep to new range would make moving impossible.

Grizzly country residents resent the restrictions, road closures and other management considerations for the grizzly, said Mrs. Carey. "I don't believe they (federal officials) have any consideration for the landowner."

Mike Hanson said he recognizes his place in grizzly country. "I know when push comes to shove the bear would win over me," said Hanson. "The United States wouldn't miss Cody Lumber Co. But it would miss the grizzly bear."



## Yellowstone: well managed, or a mess?

Changes will be needed to improve coordination among six national forests and two national parks with land in the Greater Yellowstone Ecosystem, according to a report written by the federal land managers.

The report cites areas where resource management is done differently in similar situations or where different data is collected by different people.

The "aggregation" report is the first unified attempt by the agencies to show the current condition of natural resources within the 12 million acres of land in Montana, Wyoming and Idaho surrounding Yellowstone National Park.

Titled, "The Greater Yellowstone Area: Aggregation of National Parks and National Forest Management," the report has maps and charts which show management approaches at present and 15 years from now on the six forests and two parks. Previously, a person wanting to compare current management of the eight units or their plans for the future had to thumb through and compare many different documents.

But the new report will not end controversy over management of the spectacular area. John Burns, Targhee National Forest Supervisor and a member of the committee that wrote the report, said that while it

shows problems, coordination is good overall.

"The differences in the on-the-ground management -- given that the Forest Service has one mission and the Park Service another under the law -- are very few and far between."

However, Burns also said, "We've identified several problem areas, such as data inconsistencies, and we'll be starting to work on those right away."

The report shows wide differences in mineral leasing policies, especially with regard to regulations designed to protect grizzly bear habitat from oil and gas development. The Gallatin and Targhee national forests allow restricted oil and gas exploration on land where grizzly management is the top priority. But the Shoshone and Bridger-Teton national forests prohibit exploration in these Situation One areas.

The forests also have different regulations and strategies for stopping the spread of noxious weeds, driving motorized vehicles on and off roads, and protecting native and exotic fish, the report said.

The six forests are located in three separate national forest regions, and therefore are subject to different land management guidelines. The committee which wrote the report -- made up of the six forest supervisors, the three Forest Service

regional heads, the superintendents of Yellowstone and Grand Teton national parks and the Park Service regional head -- will now analyze the two agencies' regional guidelines to see where modifications can be made.

Ed Lewis, whose Greater Yellowstone Coalition in Missoula has pushed hard for a comprehensive look at the ecosystem, said the document confirmed his group's fears.

"There are glaring management differences even within the same agencies. There is also a lot of missing data. In graph after graph, there are footnotes saying: No data."

According to Lewis, the agencies are managing resources for which they have no data. Overall, he said, "The report confirms the degradation of these renowned resources." And from the maps displaying plans for future management, "The report shows the degradation will continue if current management continues."

Lewis also said the report was incomplete because it was prepared only by Forest Service and Park Service officials. "There are 125,000 acres of BLM land and 75,000 acres of Fish and Wildlife Service refuges within the ecosystem. That land should have been included."

--Rocky Barker, Ed Marston

## BOOK NOTES

*Park Service: Playing craps in Yellowstone*

*Wildlife in Transition*  
*Man and Nature on*  
*Yellowstone's Northern Range*

Don Despain, Douglas Houston, Mary Meagher, Paul Schullery. Roberts Rinehart, Inc., Box 3161, Boulder, CO 80303. 1986. 142 pages. \$6.95, paper. Photos, illustrations.

—Review by Charles Kay

*Wildlife in Transition*, a popularly written book about wildlife management in Yellowstone National Park, appears to be a defense of the park's management policy.

It answers criticism like Alston Chase's recent book, *Playing God in Yellowstone: The Destruction of America's First National Park*. Unlike Chase's book, which addressed all aspects of park management, *Wildlife in Transition* focuses on Yellowstone's northern winter range and the question of whether that area has been severely overgrazed by an unnaturally large elk population.

Before 1968, Park Service personnel believed that an unnaturally large population of elk was causing severe range damage in Yellowstone, and they shot elk in the park to reduce the herd and protect the range. This upset many people, and a political decision was made in late 1967 to stop the killing of elk in the park. Shortly thereafter, the policy of "natural regulation" was implemented, which involved a complete reversal in park management.

Throughout this book, the authors emphasize that "current management of the northern range is experimental management." Chase and other critics contend that present management of Yellowstone Park is based on political considerations and that science has been used only after the fact to justify policy decisions.

Nowhere in *Wildlife in Transition* (which draws heavily on Houston's 1982 book, *The Yellowstone Elk: Ecology and Management*) is there a precise statement of the model being tested by the "great experiment." Nor is there specification of the assumptions and hypotheses that are essential to meaningful experimentation.

The model is evidently the "natural regulation" model referred to repeatedly in the book, but one must search out Houston's (1976) paper for a detailed statement of the hypothesis, methods for evaluation and bases for rejection. Meanwhile, the book uses nine pages to list the assumptions on which "early managers" based pre-1968 policy.

As best I can determine from this book and other park documents, Yellowstone's "natural regulation" policy rests heavily on the herbivore-vegetation model developed by Graeme Caughley (1970, 1976) from his work with introduced ungulates in New Zealand. Caughley's model implies that when ungulates are first introduced into an area, they and the vegetation will oscillate over time until they arrive at some equilibrium termed "ecological carrying capacity." If ungulates and vegetation have coexisted in an area for a long period of time, they should have reached such an equilibrium.

In the Park Service's analog of

Caughley's model, the ungulates at equilibrium cannot erupt, cause retrogressive plant succession, or competitively exclude herbivores. That is to say, a burgeoning elk population will not cause a decline in bighorn sheep, pronghorn, mule or white-tailed deer, or beaver. If any of these three things occurred, it would be the basis for rejecting the hypothesis (Houston 1976). The authors of *Wildlife in Transition* contend that large numbers of elk have always inhabited Yellowstone's northern range and that they co-evolved with the vegetation to reach a dynamic equilibrium. Furthermore, they maintain that the archaeological evidence supports this contention.

The authors are correct in stating that little archaeological research has been done in Yellowstone Park, but they make no mention of the extensive archaeological research conducted in areas near the park. Elk presently make up 80 to 90 percent of the total ungulate population of the Greater Yellowstone Ecosystem.

Assuming that Native Americans killed ungulates in proportion to their abundance, and that pre-Columbian ungulate communities had the same composition as today's, archaeological sites in the area should be dominated by elk.

Such is not the case. Elk bones are rare in almost all Intermountain sites. What's more, the bighorn sheep-to-elk ratio in the remains of archaeological sites are 25 to 430 times the ratio in the contemporary Yellowstone Ecosystem populations. Similarly, mule deer-to-elk ratios at the sites are 15 to 250 times today's ratio.

Jackson Hole, which is part of the Greater Yellowstone Ecosystem, has an historic elk problem similar to Yellowstone's. Park Service biologists now believe that large numbers of elk have wintered in Jackson Hole for thousands of years. This would lead one to predict that elk would dominate archaeological sites in the area. Once again, however, no elk bones have been found in any of Jackson Hole's many archaeological sites.

These results suggest that large numbers of elk could not have coevolved with the vegetation, as required by the "natural regulation" hypothesis.

The authors of *Wildlife in Transition* admit that aspen has declined in the park by 50 percent, but they attribute its demise to suppression of natural fire and climatic change, not elk browsing. They maintain that the elk have not changed the direction of plant succession.

While the book does not specifically state that all aspen stands are seral, it does seem to imply that all aspen stands will be replaced by conifers or other vegetation if they are not burned at frequent intervals. The book also makes no mention of climax aspen stands, which are well documented in the literature. Data that I have collected show that many of the aspen stands in the Yellowstone area are not being invaded by conifers.

The authors maintain that, when burned, aspen stands will regenerate despite heavy elk browsing. The Park Service has no data on ungulate



Aspen enclosure within Yellowstone National Park, 10/15/41

grazing pressure before or after any burns. Moreover, the few aspen stands that have burned in or near the park have been located where there are few elk. No mention is made of the extensive Forest Service research on aspen ecology. In Jackson Hole, where aspen is also declining because of elk grazing, the Forest Service burned a 905-acre area that contained many aspen stands.

Forest Service scientists documented 10,000 to 15,000 aspen sprouts per acre after the fire. However, elk ate all of the aspen suckers and prevented the stands from regenerating.

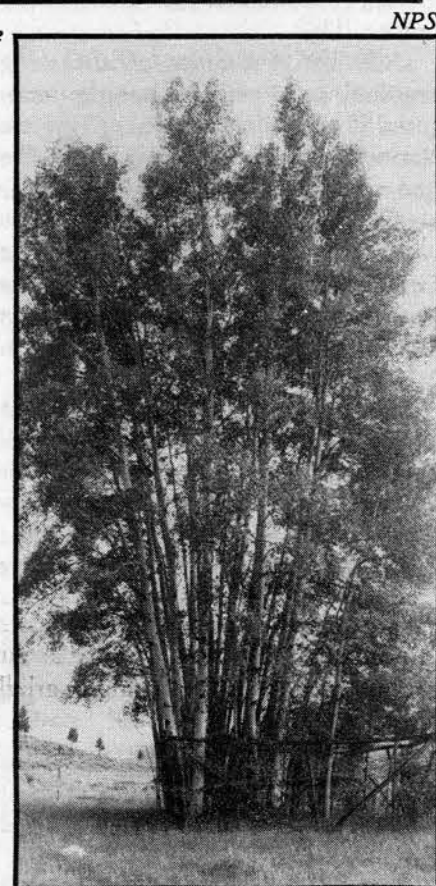
As discussed in this book, Park Service fire-frequency studies have shown that the northern range burned every 20 to 25 years before modern fire suppression. The authors also point out that the Park Service has had a policy of letting natural fires burn since the early 1970s. Under a 20- to 25-year fire frequency, about half the northern range should have burned in recent years. As of 1985, one fire had burned one acre on the range.

The authors attribute this lack of fires to the fact that "lightning has chosen not to strike very often on the northern range." But they provide no data to support this contention. No mention is made of aboriginal burning, although recent studies have noted that burning by Native Americans was widespread. In some habitat types, aboriginal fires were probably more common than fires caused by lightning.

The authors declare that the decline of aspen in the park "means relatively little to the ecological functions of the northern range." This statement is incorrect, in my opinion.

As they point out, aspen almost never grows from seed in the Intermountain West and hasn't done so for thousands of years. Aspen produces vast numbers of viable seeds, but the conditions in this area are not right for germination and establishment; it is thought that conditions have not been favorable since shortly after the glaciers receded.

This means that the aspen clones of today have occupied their sites for 7,000 to 10,000 years through vegetative regeneration. During those thousands of years, aspen survived climatic variation and all sorts of



The same enclosure at Yancy's Hole in the park, 7/27/86. No aspen survive outside the fence 45 years later.

other natural phenomena. Yet U.S. Forest Service researcher Norbert DeByle recently predicted that aspen will be virtually extinct in the park within 50 years under present conditions.

The plight of grizzly bears in the Yellowstone area has garnered considerable attention. Based on what is presently known about ecosystem control and function, it is my opinion that aspen may be more important than grizzlies. Numerous birds and other animals utilize aspen stands, and their numbers will decrease as aspen declines.

Thousands of beaver once inhabited the northern range; now they are practically nonexistent. In the early 1920s, E.R. Warren conducted a detailed beaver study in a relatively small area around Tower Junction on the northern range. He reported 232 beaver and extensive beaver dams. R.J. Jonas redid Warren's study in the early 1950s and found no beaver or recent dams. I redid the survey in 1986: no beaver.

Beaver need aspen or tall willows (which have also declined in the park) as food and dam-building materials. Aspen and willows that are cut by beaver normally resprout and grow new stems, which in turn

(Continued on page 15)

# LETTERS

## BROKEN PROMISES

Dear HCN,

The recent killing of bear #83 in Yellowstone National Park, which environmentalists described as an "execution," confirms the contention of grizzly bear expert Dr. Charles Jonkel that "Yellowstone is a problem bear factory."

In bureaucratic language, bear #83 was "removed from the population" because it was a "problem bear" that frequently exploited "unnatural food sources" and was "unnaturally aggressive" toward humans. In everyday language, this means park officials decided to kill the bear because it got into garbage that people failed to store properly, and then charged anyone who came too close when the bear was near "its" food.

Bear #83's problems were all caused by human error, including an incredible blunder by park service personnel who failed to secure a grease trap at the Lake Hotel kitchen last fall. Since 1981, bear #83 has always been able to find and feed on garbage in Yellowstone. The Park Service can't train its own employees to secure garbage from grizzlies, and Yellowstone's "don't feed the bears" campaign, a laudable effort to educate the public, must be judged a failure, too. On the average, a grizzly-a-year is executed in Yellowstone after being corrupted by people who condition the bear to receiving food from humans. The record is clear: so long as the Park Service insists on operating hotels and campgrounds in top-quality grizzly bear habitat, there will be "problem bears" in Yellowstone.

## SEEKS ANTI-CHECKOFF

Dear HCN,

I read with interest Louise Moody's last gasp as she drowned under the flood of direct mail from environmental and other non-profit organizations. I can relate, for I also cart home tons of this mail every year. But as an employee of a non-profit group I am one of those responsible for over-loaded mailboxes and I would like to share how we handle folks like Louise.

About 10 or so people a year (1 percent of donors) request that their name not be traded to another group or they request only one solicitation for renewed financial support. With computers it is easy to code these folks to comply with their wishes. The trick is to tell those non-profits

But people should realize that the execution of bear #83 is a classic example of treating the symptoms of a disease rather than the cause. A grizzly eating garbage is the symptom of a disease. Hotels and campgrounds in great grizzly country are the cause.

Significantly, bear #83 had problems at the Fishing Bridge development. If Yellowstone is a problem bear factory, then Fishing Bridge is where the Park Service manufactures most of its deluxe guaranteed - to - be - unnaturally - aggressive - garbage - eating - problem - bears. Yet Park officials have just released a Fishing Bridge Environmental Impact Statement that recommends breaking an Endangered Species Act agreement to close 661 campsites at Fishing Bridge.

Park officials claim they wanted to close Fishing Bridge, but "political pressure" has blocked their earnest attempts to honor the agreement fully. First, Yellowstone Superintendent Robert Barbee has told the media (*Billings Gazette*, 6/14/84) that the Park Service has a "legally binding agreement" to close Fishing Bridge. The whims and fancies of politicians don't take precedence over the letter of the law. Congressmen and Senators can write new laws; they can amend existing law. They cannot, however, violate existing laws or break agreements drafted under existing law.

Despite this fact, the Park Service and the Wyoming congressional delegation agreed to keep Fishing Bridge open before the public had any opportunity to participate in the "scoping process" that determined what "alternative" plans would be offered in the Environmental Impact Statement (EIS). Then, throughout the scoping process, the Park Service

you send money to what your wishes are.

Non-profits have a commitment to honor these requests and if they don't, then they deserve to lose your support. Donors are our life-blood and making them happy is a top concern of ours. The few extra minutes it takes to comply with their wishes pays off in the long-run.

But if our donors don't tell us any differently, then they stay on the regular list and I keep writing them solicitation letters and paying the post office for the opportunity to fill their mailbox.

Jim Stratton  
Alaska Conservation Foundation  
Anchorage, Alaska



offered the public a choice of five alternatives that called for keeping Fishing Bridge open. The Park Service knew every one of those alternatives was blatantly illegal. It's clear that instead of trying to honor the agreement to close Fishing Bridge, the Park Service, by acting in complicity with politicians, is attempting to violate the law.

The third point I want to make is that politicians (and park officials?) are acting on behalf of park concessionaires such as TW-Services, which leases the Fishing Bridge recreational vehicle park from the National Park Service. TW-Services and politicians like Wyoming Sen. Alan Simpson had two opportunities to block the "trade-off" agreement that required the Park Service to close Fishing Bridge after building new facilities at Grant Village. There was a 30-day public comment period on the proposed trade-off in 1979, and again in 1981. But there was no opposition against the trade-off in 1979 or 1981. If TW-Services and Senator Alan Simpson had any objections to the Fishing Bridge closures, they should have expressed their opposition in 1979 or 1981 -- before the Park Service built Grant Village. It's apparent they waited until construction at Grant Village

was completed, and then blocked the Fishing Bridge closures. That's simply preposterous.

The park's plan to keep Fishing Bridge open is not only illegal and deadly to grizzlies; it has a hidden cost. Few people realize that in an attempt to "mitigate" for the adverse impact the Fishing Bridge development has on grizzly bears, the NPS is restricting public access to nearby wilderness areas such as Pelican Valley. The freedom to interact with grizzlies on their terms, at a meaningful, gut-wrenching level, is being lost. As bears are executed and the backcountry is locked up, people are losing the opportunity to participate in the quintessential wilderness experience. Instead, the Park Service promotes public use of the Fishing Bridge recreational vehicle park, a generic experience no different than camping in a Winnebago at 10,000 other KOA-type campgrounds.

Park officials are making backpackers pay for the cost of operating major developments located in prime grizzly bear habitat. That's roughly akin to making the citizens of San Francisco pay the bill for operating a sewage treatment plant that serves the residents of Los Angeles.

Ultimately, Yellowstone's bear management program consists of business as usual in developed areas, and locking up the wilderness. There's no question Yellowstone will continue to have problem bears and grizzly bear executions until park officials enact a realistic people management program. I suggest they begin by honoring the agreement to close the Fishing Bridge campground and recreational vehicle park.

David A. Smith  
Gustavus, Alaska

## A SOLUTION

Dear HCN,

Cheers for Louise Moody (*HCN*, letters, 12/7/87). I have to agree that so far in my experience *HCN* has been relatively innocent of over-mailing. Louise has been luckier than I with Greenpeace, and I could double her list of good cause organizations who offend me by overfrequent solicitations that must consume most of what I can afford to give them, to say nothing of the wasted resources.

My strategy suggestion, in addition to letters to all editors within reach: write back to the offenders totaling or returning the accumulating mailings with a note suggesting one would give a few dollars more to reward *not* hearing more than a couple times a year.

I'm told it does cost to check lists for duplication and split out names of supporters who don't want to spend their lives reading mail. But, it is possible! One group has earned my loyalty for life by offering a box to check on their annual solicitation. Donors wishing not to be dunned during the year can mark the box and can look forward to receiving only the quarterly newsletter.

This is written in hope that others will join the cause -- one cause that might be supported by all who don't have secretaries bringing in the mail.

Laura Jackson  
Hamilton, Montana



## Craps...

(Continued from page 14)

provide more food for the beaver. However, once the mature aspen trees or tall willows are cut, the new suckers are then entirely within reach of browsing elk. By preventing aspen and willows from growing into mature plants, the elk (and moose) have eliminated the beaver's foods and thus the beaver.

Recent studies by Bureau of Land Management and Forest Service researchers have shown that beaver create and maintain riparian areas. In fact, both agencies are using transplanted beaver to restore livestock damaged riparian areas. More-

over, other researchers have demonstrated that the beaver is a keystone species that completely alters the hydrology, energy flow and nutrient cycling of aquatic systems. Beaver are relegated to a single footnote in *Wildlife in Transition*.

The decline of aspen in Yellowstone Park is no small matter and symptomatic of an important problem. The book notes the Park Service is charged "with maintaining examples of primitive American settings." What was the natural state of Yellowstone before the park was established? The authors tell us they do not know, so one wonders how the "great experiment" can be judged a success or a failure. If this is an experiment, where is the

control? Without controls, meaningful experiments cannot be conducted.

The Greater Yellowstone Coalition sponsored a conference this summer on the park's northern range. Most speakers appeared to support current Park Service policy. However, even they concluded that what the Park Service is doing is *not* experimental management, but simply park policy and should be stated as such.

□

Charles Kay's research at Utah State University involves an evaluation of elk-aspen interactions with particular emphasis on the greater Yellowstone ecosystem. This review appeared in *Western Wildlands*.

16-High Country News -- January 4, 1988

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## It is very early springtime on Mt. St. Helens

Jim Stiak

by Jim Stiak

Above, there once was a mountain; below, a new one is rising, a jumbled mound of steaming magma. Surrounding it, striped spires of rock shoot 2,000 feet straight up from the bottom of North America's most famous volcano.

At the 8,365-foot summit of Mt. St. Helens, it's hard to find the life that has returned early to the area -- the five tons of insects carried 'in daily on the breeze, the lupine and red alder aided by the relentless tilling of pocket gophers, the 18 million seedlings planted by Weyerhaeuser, or the Roosevelt elk that roam such an inhospitable land.

Nevertheless, the renewing hand of nature is evident. In less than eight years, a yellow-spotted lava dome has risen to fill the massive crater. In another century or two, geologists guess, it may completely replace the 1,300 feet of mountaintop that was last seen rocketing toward Montana.

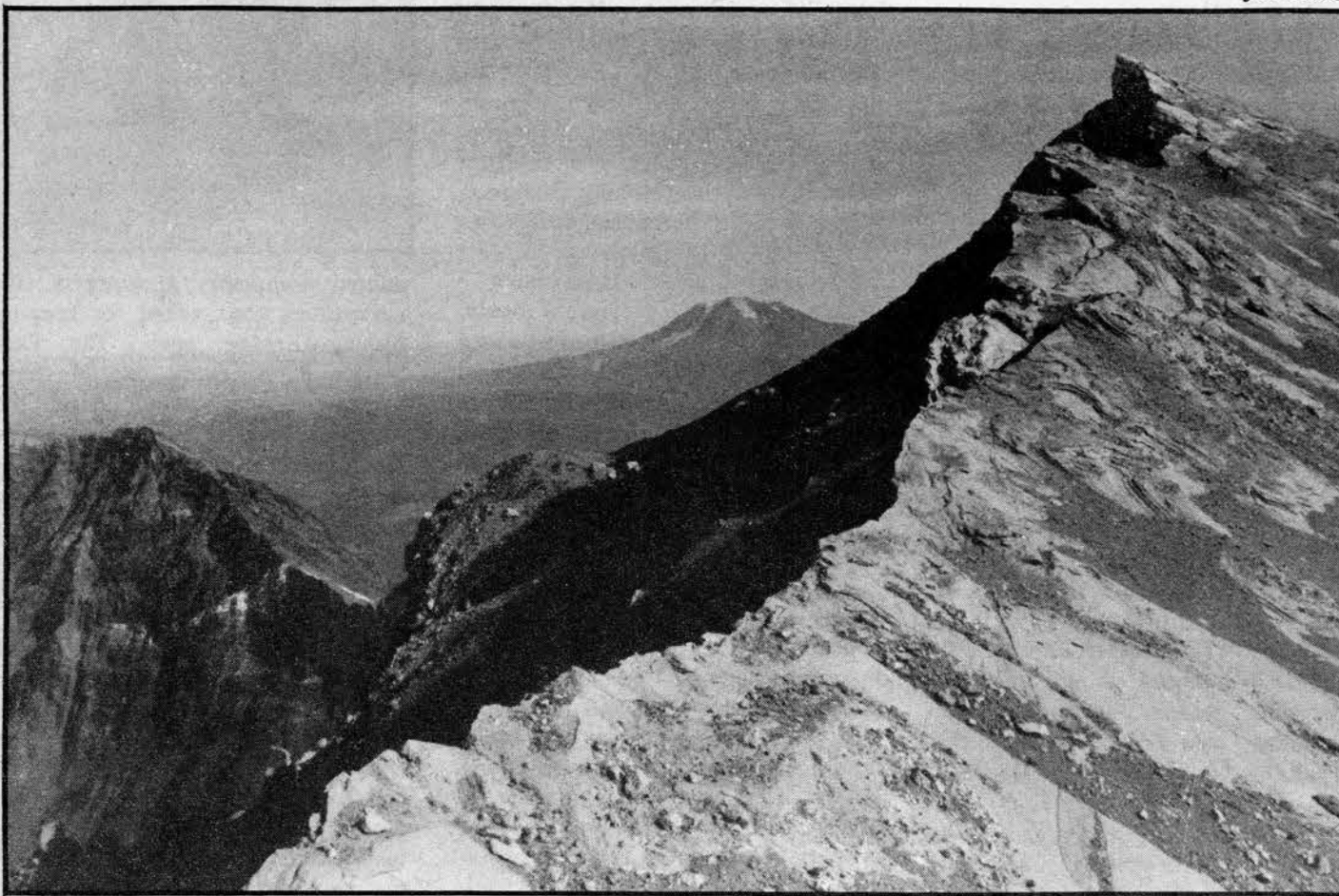
But for now the volcano, which killed millions of birds and fish, thousands of deer and elk, hundreds of bears and 57 humans in its 1980 eruption, has become one of the most popular peaks in the world. Since it was re-opened to the public last spring, it has been scaled by some 17,000 people. On a cloudless October morning, I followed their tracks.

The ascent to the top of Mt. St. Helens is not a technical climb; no ropes, crampons or ice axes are needed. It is more like climbing a 4,000-foot sand dune straight up. The ashen soil sinks beneath every step like a feet-in-clay nightmare. The easy parts are the gullies where jagged rocks provide a semblance of solid footing and some slight shelter from the wind.

Orange flags whipped in the wind as my West German hiking partner and I emerged from the forest to face the barren south flank of the mountain. The flags flew on a long rusty wire. I resisted the temptation to pull myself up with it, remembering a warning below. You will see many things that look like garbage, it had read, but they are actually scientific equipment.

A dozen seismometers ring the volcano, as well as dozens of instruments inside the crater: strain meters to record the fracturing of rocks, gas sensors near the most active fumaroles, and tiltmeters to measure changes in slope. The mountain is totally wired. Please don't touch the merchandise.

After hours of struggling up the loose scree, I fell behind. During one of the many breaks my legs demanded, I noticed a small bluff protruding from the steep slope. The dirt on its side, although exposed to the constant sun, looked moist. I clawed my way over and put my fingers to it. It was cold. Scraping away the thin surface of dirt, I discovered ice. Buried by the eruption, but still intact some 10,000 years after the last ice age, it was, according to the map, the remnants of the Drier Glacier, one of several still scattered about the mountain.



Almost at the top of Mt. St. Helens, with Mt. Rainier in the background

Cut off from its source -- snow that once accumulated on the high peak -- it may not survive much longer.

I was resting on the leeward side of the glacier when there came the sound of falling rock. A hundred yards above, rising dust marked the progress of a small landslide.

Another steep stretch of volcanic sand beckoned. Digging fingers into the ash, splaying feet out for

traction, I proceeded from large rock to large rock, seeking shelter in their wind shadows. After one particularly comforting boulder, I saw as my next sanctuary a small sandstone clump 50 feet above. But as I neared my goal, I saw that it wasn't so small, that it stretched a long way in either direction, and that beyond its top was blue sky.

The scent of sulfur reached my

nostrils. I suffered up the last few feet, fell flat and looked over the top.

For one brief slice of a second, Mt. Rainier looked close enough to touch. From its glacier-pocked face some 50 miles away, a river of destruction stretched all the way from the crater below me. The grey of that river was punctuated only by the blue of Spirit Lake. On the far side of the lake, what looked to be the shore revealed itself to be thousands, perhaps millions, of dead floating trees. In another century and a half, dendrologists predict, those downed trees will be replaced by virgin forest. For now, they mark the final resting place of Harry Truman. He is the octogenarian lodge-keeper who refused to leave home before Mt. St. Helens erupted.

The torn jaws of the crater yawned like fangs, striped in whites and browns. From the crater floor some 2,000 feet below came ominous rumbles, echoes of rocks crashing down the sheer sides of the crater. Welling up were clouds of dust that whipped up and over the rim, into my face.

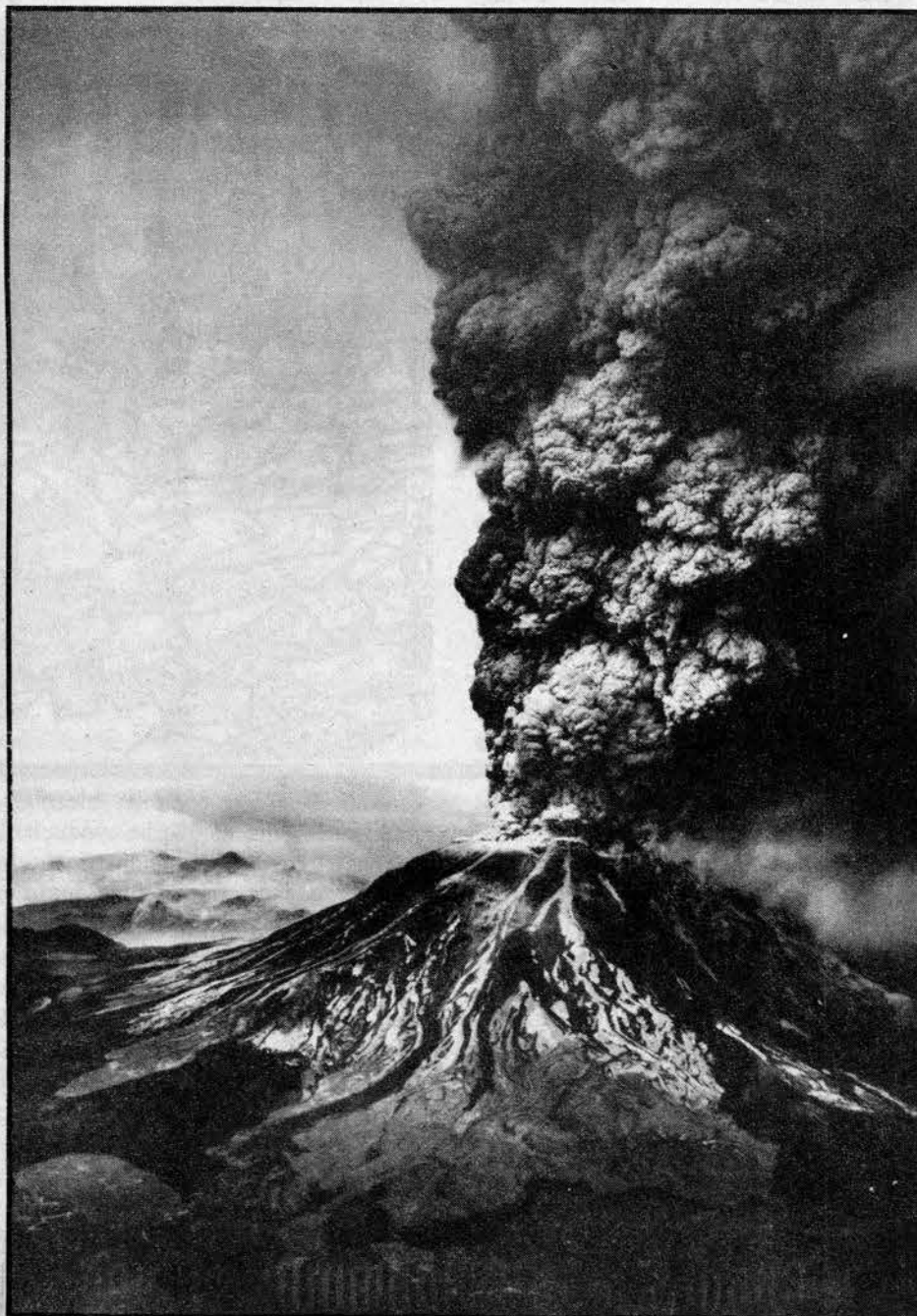
Mt. Adams stood guard to the east, an ocean fog far to the west. Behind, Mt. Hood poked its peak above misty green rolls, and a wide bare strip marked what used to be the lush Toutle River Valley, before the volcano blew.

I stood beside the sharp ridge, my balance wavering. Even after a six hour struggle to reach it, I was happy to leave the summit quickly.

The descent was faster, if harder on my behind. We reached the car about the time the sun ducked behind the hills and my legs refused to rise anymore. Over scalding stew at a cafe in the eye-blink town of Cougar, I taught my hiking partner a new Americanism to describe the climb to his countrymen: piece of cake.

□

Jim Stiak lives and writes in Eugene, Oregon.



Mt. St. Helens in Washington blows its top, 1980