

High Country News

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A Paper for People who Care about the West

One dollar



WOLVES make a comeback in Montana

by Bert Lindler

While politicians, scientists and bureaucrats argue over reintroduction of the wolf to the western United States, the animals have taken the initiative. According to biologists, they are moving down into Montana out of Canada to occupy long-vacant habitat.

As a result, wolves may remove themselves from the endangered species list. Ed Bangs, a biologist for the U.S. Fish and Wildlife Service in Helena, Mont., says: "Wolves are coming, and we need to plan for it." Bangs, who is responsible for wolf recovery in northwest Montana, thinks that within five years wolves may no longer be an endangered species in his area.

Bangs' prediction is based on his experiences in Alaska. As in Montana, all the Kenai Peninsula's wolves were killed during settlement. Then, in 1967, a single pair of wolves was spotted. By 1976, that pair had grown to 150 to 180 wolves. The number hasn't increased since, according to Bangs.

Such rapid increases are possible only when wolves leaving packs find new, unclaimed areas. Otherwise, they are likely to be killed by other wolf packs or to wander randomly without finding a mate and raising young.

What are the chances for explosive expansion of the wolf population in Montana? Bangs estimates that northwest Montana and southern British Columbia may hold six wolf packs with about 68 wolves. If they are protected from man, there is a large amount of territory in Montana for new packs to form in.

The potential return of the wolf is good news for the 65 percent of Montanans who told the Montana Poll in 1987 that wolves belong in the state. But it is not good news for the ranchers and hunters who, in March, filled meeting halls in Cut Bank, Conrad, Choteau, Stanford and Judith Gap to listen and agree with wolf critic Troy Mader. And although wolf opponents are a minority in the state as a whole, they may be a majority out on the rural land the wolves

need if they are to expand.

Some in the Montana state wildlife agency believe that the conflict between wolves and some rural residents and hunters is a no-win situation for the wolves, and that the Endangered Species Act itself is wolf recovery's worst enemy right now.

The packs known to be in the state include Glacier Park's Camas Pack, which apparently has two females denning in the park; a female relocated from Marion last year and her mate, now denning in the Ninemile Valley northwest of Missoula; and the Wigwag Pack that lives primarily in southeastern British Columbia, but spends some time in Montana's Kootenai National Forest.

Sightings indicate wolf packs probably are living along the eastern slopes of the Rocky Mountains, in the Swan Valley southwest of Kalispell, and in an area northwest of Kalispell.

Northwest Montana still has plenty of areas without wolf packs, meaning wolves theoretically could increase by up to 40 percent per year, as they did on the Kenai Peninsula. Beginning with the pack of 10 wolves in the North Fork in 1985, such a rate of increase would mean 192 wolves in Montana and southern British Columbia by 1995, Bangs said.

"No one expects them to move that fast, simply because we're going to have to remove some for livestock depredation," Bangs said. In addition, the wolves are hunted in much of southern British Columbia. And one pack in Glacier Park lost its entire litter last year, probably to a disease.

Hunters and ranchers could slow the recovery by illegally shooting wolves they encounter. But unless they kill nearly a third of the wolves each year, or disease strikes, wolves could continue to increase.

Since wolves are an endangered species in Montana, anyone killing a wolf faces a fine of up to \$50,000 and a year in jail. That threat hasn't stopped illegal killings in north central Minnesota.

During a seven-year study there, nearly two-thirds of the wolves found

dead had been killed illegally. Even though a third of the wolves died each year from all causes, the wolf population appeared to be doing well.

Illegal killings in Montana could delay the time when wolves can be legally killed under state management, Bangs said.

"If you want wolves off the endangered species list, the quickest way is to get to 10 breeding pairs and get it over," he said. Illegal killings also could lead to road closures and other restrictions on federal lands that wouldn't otherwise be necessary, he said.

Northwest Montana is one of three areas in the northern Rockies where the Fish and Wildlife Service wants wolves to recover. The other areas are the Yellowstone Park area and the central Idaho wilderness complex. Yellowstone isn't thought to have any wolves.

For wolves to be considered "recovered" in the northern Rockies, each of these areas must have 10 packs of wolves. Packs generally range in size from a pair of wolves to eight or more. As far as the recovery plan is concerned, the number of wolves in a pack is not important, but each pack must include a breeding pair.

Northwest Montana could end up with a lot of wolves if they were protected as an endangered species until wolves recovered in Yellowstone and Idaho. That sort of protection prevented sport trapping of wolves in Minnesota even though the state had an estimated 1,200 wolves at the time.

In Minnesota, the Fish and Wildlife Service wolf recovery plan tied endangered species status to the number of wolves in Wisconsin. Wolves have not reached the recovery goal of 100 there, partly due to illegal killing.

The situation in Montana is different, Bangs said. Here, the recovery plan will allow the state to take over once 10 breeding pairs of wolves have been documented for three consecutive years and there is an approved wolf management

plan, he said.

Wolves then would be considered threatened because of their "similarity of appearance" to wolves living in areas where they were endangered. Wolf pelts would have to be tagged to certify the animals had been killed in northwest Montana.

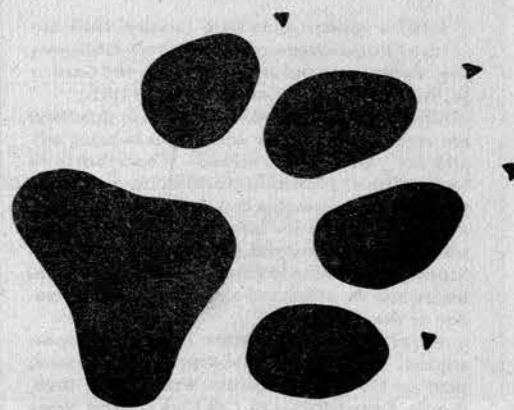
K.L. Cool, the director of the Montana Department of Fish, Wildlife and Parks, is skeptical. He still has not received a response to a letter he sent the Fish and Wildlife Service last October, asking pointed questions about endangered species protection afforded the wolf.

For instance, Cool asked the Fish and Wildlife Service to "establish the line of legal authority from the Endangered Species Act that allows confining an endangered species to a recovery area and authorizes capturing, relocating and killing individual animals."

He asked what method would be used to determine if wolves were conflicting with the state's wildlife management objectives and "how the Endangered Species Act authorizes killing wolves at that point." And he asked about funds that would help defray the state's costs in wolf recovery.

"When this information has been provided, the Department of Fish, Wildlife and Parks is willing to consider a memorandum of understanding with the Fish and Wildlife Service regarding

(Continued on page 10)



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Dear friends,



HIGH COUNTRY NEWS

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A traditional July 4th

Although it works out well enough for the rest of the nation, for Paonia, pop. 1,600, the Founding Fathers jumped the gun a bit when they declared independence on the Fourth of July. This fruit-growing town combines its Fourth of July celebration with its harvest celebration under the name Cherry Days.

This has turned out to be something of a shotgun wedding; usually the sweet cherries are not ripe until a week or so after the Fourth has passed, with the pie, or sour, cherries not ripening (some say they never ripen) until mid-July. The timing is another example of the insensitivity of the East when it comes to Western concerns.

However, this year the Founding Fathers' insensitivity did not matter: the sweet cherries — along with the apricots, plums, most of the peaches, most of the pears and 50 percent or more of the apples — were wiped out by a late spring snowfall and freeze. The weather has been unkind to the North Fork Valley's fruit for five of the last six years.

The town, however, is accustomed to a lack of cherries, and even to the lack of a prospect of cherries, at Cherry Days, and events went on as scheduled, beginning with a 10 a.m. parade. The parade, which took an incredible 35 minutes (they usually take 10 minutes) was notable for the lack of a single float and for the presence of two large pieces of coal mining equipment. One, a mucker, built squat and wide to fit underground in a coal seam, appeared to wend its way down Grand Avenue by remote control. The operator was there, however, tucked into a front corner, but shielded from view by thick sheets of steel used to protect him or her in case of a roof fall.

The lack of cherries and the presence of coal mining equipment may be a sign of the times. Paonia, like many towns in the rural West, has emerged from its five-year-long economic depression and is modestly booming. Unlike the last energy-driven boom, this one has a wider base, with retirees, economic refugees who can no longer afford to live in the Glenwood Springs-to-Aspen area, and a few more coal miners combining to make rentals almost impossible to obtain. In addition, property is selling, including houses and commercial buildings that had sat, unlooked at, for years.

The revival was signaled by the October 1987 crash on Wall Street. For whatever reason, the rural West appears to sit on one end of a teeter-totter, with the nation's financial center on the other end. When the financial center is high, the West is low. Back in the 1970s, when President Ford, as paraphrased by the *New York Daily News*, was telling an almost bankrupt New York to Drop Dead!, the West was beginning to boom.

Then, in the 1980s, when anyone who could pronounce investment banker was earning at least \$100,000 per year on Wall Street, the West was taking in its own washing. Now that Manhattan condominiums are again being auctioned off, Moab, Utah, Idaho's Magic Valley, western Colorado and other subregions of the West are doing well. This teeter-totter relationship was true when William Jennings Bryan made his Cross of Gold speech, and it appears to be true today.

The hunt for space

High Country News is interested in the West's economy not just as an issue, but because we find ourselves in the

local real estate market. Our present office — all 1,400 square feet — is bulging with staff, interns, stored back issues and visitors. Although we rent space elsewhere in town for our darkroom and for mailing, and use the library's Xerox machine and the telephone company's fax machine, and have material stored in staff's basements, we are still short of space.

That has hurled us into the real estate market and derailed the meeting of the High Country Foundation Board of Directors, which gathered in Paonia on June 23 for the summer meeting. Normally, the summer meeting is low key, consisting of a budget review, discussions of long range plans and the like.

This time it consisted of hikes up and down Paonia's main street to look at property. One building — the site of a failed savings and loan — was sold even as we looked at it. A closed theater made some board members nostalgic, but was judged impractical. A 6,000-square-foot former garage the staff had tentatively put under contract made the board gasp in horror at the expense of renovation, at the grease drain still filled to the brim with the last oil changes the garage had done, and at the lack of views.

Board members thrashed matters over for hours, leaving the agenda in shambles but coming up with clear instructions for staff to follow as it searches for adequate space. Staff hopes to present the board with an optioned piece of property, surrounded by detailed estimates of remodeling and moving costs, at the Sept. 22 meeting in Missoula.

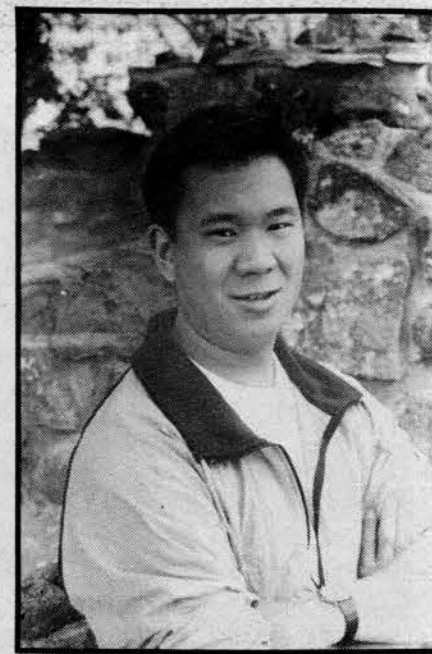
The meeting also served to introduce Larry Mosher and Mary Jarrett to the board. A few members had met them or spoken to them over the telephone, but for most of the board, this was their first sight of the people who will take over direction of *HCN's* editorial functions during Ed and Betsy Marston's one-year sabbatical at Stanford University.

In the best of all worlds, their first board meeting would have been a more orderly, restrained event. Instead, with staff whipping up hysteria about the real estate boom, it seemed more like a combination of musical chairs and a search for a good seat in a lifeboat on the Titanic.

In the end, the board set in motion a more orderly process. But readers should be warned that at some point *HCN* is likely to mount a capital fundraising drive to provide the paper with an adequate office. Paonia's main street is mostly made up of 25-foot-wide storefronts, one of which we now occupy. Retail trade has faltered in this and other small towns, thanks to regional shopping centers, and these converted storefronts are now home to lawyers, travel agencies and the like. But the stores lack windows except in the front, they are long and narrow, and they are rarely more than 2,000 square feet or so. We need 2,500 square feet today, and want room to expand. That means either building from scratch or renovating a garage, warehouse or the like.

A traveling *HCN* board

The board meeting drew 13 out of the 15 members from around the country. From Colorado's Front Range came Michael Ehlers, Dan Luecke and board president Andy Wiessner. From eastern Wyoming came Sally Gordon and Lynn Dickey, and from *HCN's* home town of Lander came founder Tom Bell. From the Moab area came Bill Hedden and from Park City, Utah, came Karil Frohboese.



Ken Wright

Clay Fong

Up from the south came Susan Williams (Arizona) and Lynda Taylor (New Mexico) while Judy Donald came from one coast (Washington, D.C.) and Herman Warsh from the other (California). Judy was one of two new board members, the other being Bert Fingerhut of nearby Aspen. The northern Rockies were missing: Jeff Fereday of Idaho and Tom France of Montana could not make the meeting. Northwest regional editor Pat Ford, based in Boise, also made the trip.

The evening potluck for readers was held in the Paonia town park and was a great success. Past Paonia potlucks (*HCN* holds potlucks around the region, after each of the three-times-a-year board meetings) have been poorly attended, but this one drew readers from hundreds of miles around, if you count Ann Finley of Boise. We had feared attendance would be low because we were in competition with Telluride's bluegrass festival. But a few subscribers said they had left the festival because of the crowds, in order to attend the more relaxed potluck.

HCN potlucks specialize in relaxation. They consist of lots of conversation and very little ceremony. This one did make time, however, for board president Andy Wiessner and master furniture maker Bill Hedden to present the Marstons with a headboard made by Hedden and adorned by his wonderful carving of a lustful mountain goat — *HCN's* mascot.

New intern

New intern Clay Fong, who was born and raised in the San Francisco Bay area, will be a senior at Dartmouth College this fall. He is majoring in history, but he takes as many environmental studies and creative writing courses as he can.

Before coming to Paonia, he explored his interest in journalism as a press intern in the Washington, D.C., office of Sen. Edward Kennedy, D-Mass. Last winter, Clay began working as the press secretary for the Dartmouth Ski Team, which enabled him to ski all over the East.

He also writes a weekly column in *The Daily Dartmouth*. In his column, he has written first-hand accounts of the San Francisco earthquake and the oral arguments at the Supreme Court for the *Webster* abortion case. To cover *Webster*, Clay camped out overnight on the steps of the Supreme Court.

Clay's interest in environmental issues was piqued when he took a course in social and political aspects of the environment. "It was one of the most useful and enlightening courses I've taken," he says. "I hope to apply what I've learned in that class while writing at *HCN*."

— Ed Marston, for the staff

WESTERN ROUNDUP

Leaking storage tanks cause gasoline droughts in small towns

Since Jim Davis closed his Conoco station on Jan. 1, residents of Kim, Colo., have had to drive a 100-mile round trip to Springfield to fill their tanks.

Davis didn't hang a "closed" sign at his station, which opened in the 1950s, because business was bad. He says he couldn't afford the \$15,000 to \$20,000 in improvements and \$7,000 yearly insurance premiums required by EPA regulations last December.

Kim, a small agricultural community in southeastern Colorado, is not an isolated example. Gas stations across the West are closing because owners can't cover the costs of upgrading underground storage tanks and paying for additional insurance required by the Environmental Protection Agency.

Rural areas are hit hardest. Many stations are mom and pop operations, whose owners, running one or two stations, can't afford the extra expense. Compounding the problem is low sales volume. According to Bill Garland of the Wyoming Department of Environmental Quality, "Some service stations along the interstate have a sales volume of 50,000 to 60,000 gallons per month. In rural areas, some don't sell that much in three years."

According to a Petroleum Marketers Association of America poll, of the almost 50 percent of its members' gas stations that will close, over 60 percent will be in towns with populations less than 10,000. Another 25 percent will be in communities of less than 50,000.

A poll of Colorado retailers shows an equally disproportionate number of closings in small communities, and a Wyoming study shows that one-third of the mom and pop stations examined have already closed.

"The situation is very grim for rural areas," said Pam Oldham of the Rocky Mountain Oil and Gas Association.

The regulations' devastating impact on small retailers is partially explained by an absence of previous laws, says Terry Bahrych of the EPA's Denver office. Before 1989, no federal standards governed the estimated two million underground storage tanks.

The regulations consist of financial and technical requirements. Retailers who own less than 100 tanks must have \$1 million of aggregate insurance coverage by April 1991; those with fewer than 13 tanks must be covered by October 1991. The problem, however, is that "many tanks are simply not insurable," said the EPA's Ronald Brand in testimony before the U.S. Senate. "They are either too old, have leaked, or are currently leaking. No insurer will insure these 'burning buildings,'" he added.

When available, coverage can cost as much as \$12,000 per year, according to Bill Garland of the Wyoming Department of Environmental Quality.

The technical regulations require that underground storage tanks have leak detection systems. Compliance dates are based on the age of the tanks, but by December 1993 all tanks must comply.

Retailers have five options for leak detection systems. Four of the five, featuring monitoring wells with sensors, computerized sensors or electronic sniffers, cost between \$10,000 and \$30,000, according to Bahrych. The fifth option, the dip-stick method, costs \$10 for a stick, \$4 for fuel paste and \$1.69 for a spiral notepad, said Montana underground gas storage coordinator Larry

Mitchell. But this method must be done in conjunction with yearly tests that cost \$500 to \$800, and can only be used until 1998, when more costly precautions are required, he added.

These regulations add up to a prohibitively high cost for small gas stations. Some assistance will come from state trust funds, which help station owners meet EPA financial requirements. As of March 1990, 34 states had established trusts, funded by a gasoline tax, that also help pay for any cleanup. Typically, if a retailer can demonstrate a certain level of financial responsibility —

by paying \$35,000 in Colorado and \$17,000 in Montana — then the state guarantees the required \$1 million of coverage.

But even trust funds don't provide an answer for the mom and pops. The EPA, in an effort to reduce pressure on retailers, recently extended insurance deadlines for smaller retailers by a year.

Legislation pending in Congress could also provide more help. Rep. Virginia Smith, R-Neb., introduced a bill to halve financial liability from \$1 million to \$500,000. A bill from Rep. Ron Marlenee, R-Mont., goes further by suspending EPA enforcement of financial requirements for a year. It also absolves gas station owners of any liability to damaged or injured third parties, and limits financial liability to \$500,000. Both bills are still in subcommittee.

Federal grants for upgrading under-

ground gas tanks under the Rural Economic Development Act provide another avenue to help owners, said Liz Brimmer, press secretary for Rep. Craig Thomas, R-Wyo. But competition for the grants, which support a myriad of development initiatives, is stiff. Furthermore, few retailers are aware of the obscure grants, according to Pam Oldham.

Some in the industry point to above-ground storage tanks as a possible solution. However, these tanks are prohibited by most state, county and city fire codes. An exception is Texas, where above-ground storage tanks are allowed in rural areas. A similar measure has been introduced in Colorado by state Sen. Jim Rizzuto, D, who represents the town of Kim.

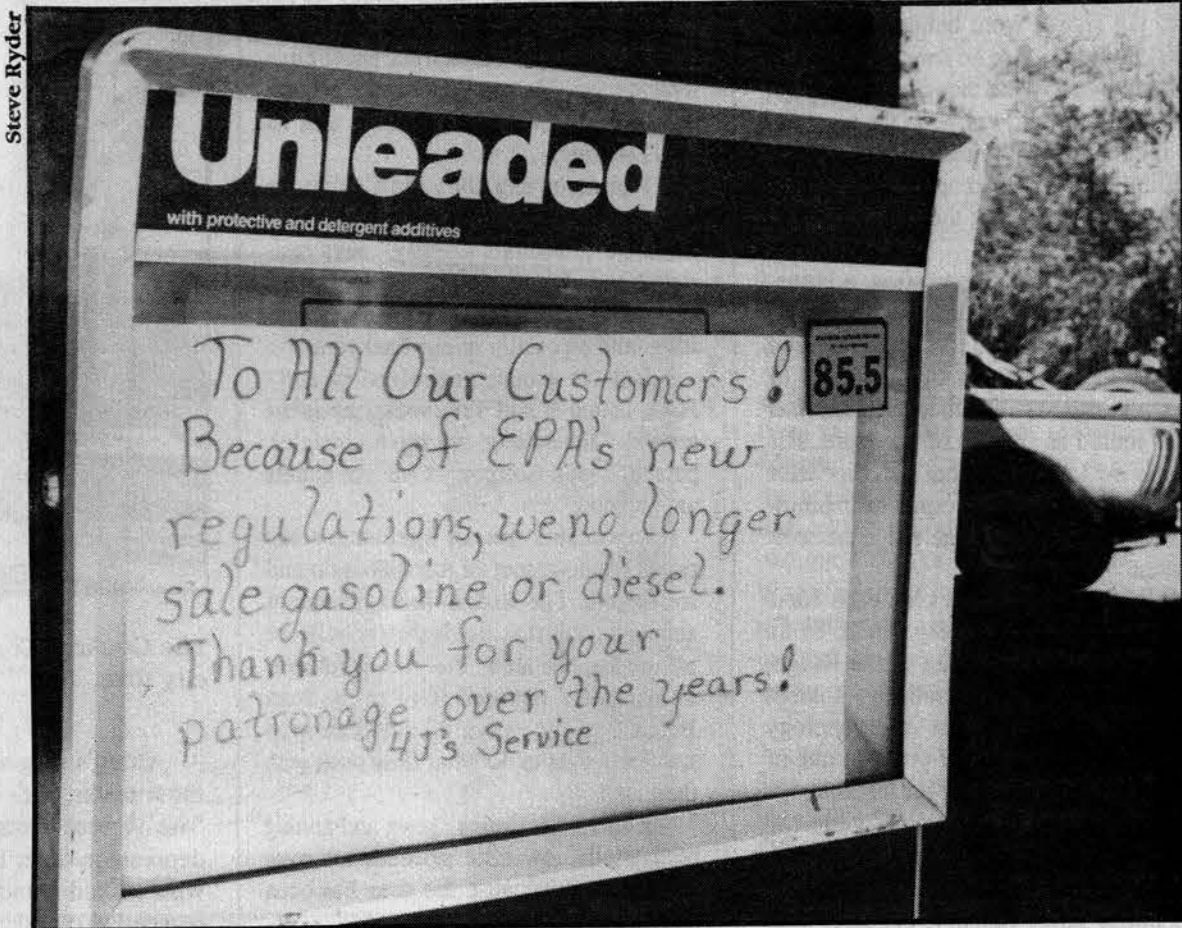
Though these efforts to assist small retailers may help, many rural areas stand to lose their gas stations. This means driving farther to fill gas tanks

and alienating tourists unprepared for the long distances between gas stations. The small stations "just don't have the volume to make upgrading profitable," said Rocky Mountain Oil and Gas Association's Pam Oldham.

Despite the widespread closings, no one seems to question the need for the new regulations. The EPA estimates that fully 25 percent of the nation's underground gas stations are leaking. State inspectors and retail organization representatives don't dispute that figure.

Some leaks threaten water supplies, streams and rivers. Many tanks are decades old and constructed of unprotected steel, which is susceptible to corrosion. To the EPA's Jim Rakers, the costs of complying with the new regulation are minor compared to the environmental damage caused by leaking underground tanks.

— Rob Bleiberg



A sign of the times in Crawford, Colorado

Exploding barbecues led to leaking gas tanks

Hardly anyone in Fort Collins, Colo., knew there was a problem with leaking underground gasoline storage tanks until backyard barbecues began exploding in August 1987.

The freak fires were traced to leaking fuel from a nearby gas station, said Terry Bahrych of the EPA in Denver. It all began when gas migrated along sewage pipes into a lake in a city park, arriving shortly before the Division of Wildlife stocked the lake with fish. Eager anglers lined the shores, and no one seemed to notice that their catch was coated with a residue of gasoline.

When barbecued on grills around town, the incendiary fish kept the fire department busy. Further investigation revealed that the gas station owner was fully aware of his leak. He even recorded the lost fuel, claiming it as a business expense on his tax returns, said Bahrych.

Leaking gasoline in Mission, S.D., population 500, ended up in automobiles, not fish. It all began in the early 1960s when complaints of foul-tasting water led to the construction of a water treatment plant. City residents closed their wells and switched to city water. The problem was that no one looked into the source of the contamination.

When a strengthened Clean Water Act forced the city to upgrade its water plant in the early 1980s, the city raised water fees to offset expenses. Rather than pay higher bills, many residents re-opened their wells to water lawns, and "within days yards turned brown, flowers dropped petals, and vegetables started coming up funny," said Bahrych.

Bahrych and seven others from the Environmental Protection Agency went to Mission to investigate the town's 13 gas stations. The first private well they tested "had five feet of gasoline on top of the water and coffee cans lined up to collect the gas to use in cars."

One man refused to let the EPA investigators look at his well; it had been his private fuel supply for the last 25 years.

Mission is located over the Ogallala and Arikaree aquifers, and the underground gas is moving towards wells on the Rosebud Indian reservation. Bahrych estimates that the cleanup will cost from \$3 to \$5 million.

While Mission and Fort Collins provide colorful examples, the problem of leaking underground gas tanks is widespread and serious. The EPA estimates that as many as a quarter of the nation's two million tank installations are contaminated by either leaks or spills. With over 225,000 of these tanks in 12 Western states, excluding California, the West is home to as many as 56,000 contaminated sites. Wyoming alone is working on 540 cleanups, and state officials in Colorado, Montana, South Dakota, North Dakota and Utah investigated another 450 "substantial leaks" in 1989.

These leaks have enormous environmental and financial costs. Spills threaten ground water, soil and air quality, and cleanups can take months, with an average cost over \$150,000, according to the EPA's Ronald Brand.

— Rob Bleiberg

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Town decides drill rigs and subdivisions are compatible

CRAIG, Colo. — It was mid-May when Dave Cooper noticed a 112-foot drill rig rising from behind his neighbors' houses. Since he lives in a residential subdivision, he thought this strange. Although the rig was gone the next day — ordered down by the city for illegally drilling in an area zoned residential — he soon learned that the giant platform may return.

Cockrell Oil Corporation, a Houston-based company, plans to begin its hunt for coalbed methane gas in and around this northwest Colorado city of 8,000 residents. Coalbed methane has been touted as the fuel of the future. The gas is sucked from coal deposits after pumping off vast amounts of groundwater, which unlocks the gas in the sediments.

Part of Cockrell's plan calls for a well within Craig's city limits, in an undeveloped 40-acre lot in the Ridgeview subdivision. Cockrell says it needs the in-town well because of the geology of the coalbed. The well would be one of many required to extract the methane.

Although the drill rig is gone for now, Cooper says the effects of its short stay remain. He has been trying to sell his house since January, but since that day in May no prospective buyers have come to view it.

His insurance agent then said that even if he sold the house, Cooper would have to tell the buyer about the planned gas drilling. Otherwise he could be liable for damage for as many as 20 years hence. The agent added that his policy will not cover subsidence if drilling causes his home to resettle, or his foundation to crack.

Once the drill rig appeared on the horizon — a complete surprise to residents — people quickly formed a group

called Concerned Citizens for Ridgeview. Members say they worry about seepage from methane gas, explosions, and tapping and releasing poisonous hydrogen sulfide gas. Cockrell Corporation, however, assured residents that its wells are safe.

Residents say they don't oppose development. "We welcome Cockrell's initiative to Moffatt County," says resident Nancy Bauman, "but we don't want or need this development in our city limits — and especially in our backyards."

But the group, organized in early June, found it had few weapons in its arsenal. "Essentially, we have no rights, period," says Cooper. "Our covenants are no good."

Covenants are an agreement between the developer of a subdivision and lot buyers. The Ridgeview agreement seems to say that no industry will be allowed in the area. But the developer, an outspoken representative of the John Birch Society, says no one can stop another's right to do what they want with their land.

Either way, Craigs' laws and zoning regulations now take precedence over the covenants because the area has been annexed to the city.

Ridgeview residents fought Cockrell Corporation's application for a zoning variance. But Craig, a coal mining and powerplant town with a depressed economy, is partial to natural resource extraction, and on July 5, the Craig city council voted 5-2 to approve Cockrell's plan.

The decision came after a crowded public hearing June 26, attended by more than 200 people.

Of the more than 35 people who spoke after the company's experts had their turn, about half wanted the council to issue the variance.



Dave Cooper

The Cockrell Co. drill rig that was erected recently on the Craig, Colorado, city line.

Craig's sagging economy was cited most often, with one speaker saying: "We've been through nothing less than a depression here. I've seen consultants who talked about buying helicopters reduced to car salesmen."

Opponents targeted the one spot in the variance requirements left vulnerable after Cockrell's arguments: that a new use must be compatible with existing uses. If the drilling really were compatible, one Ridgeview resident asked, why did it need a variance?

Rusty Bonser, a consultant and chief planner for La Plata County, Colo., where coalbed methane is experiencing a small boom (HCN, 12/4/89), warned the council about "opening the door" to this type of development inside the city.

"The impacts are real, complicated

and ever ongoing," and range from drilling to trucking and pipelines, he said. He asked them to think hard about their decision, because "you'll have to live with it."

At that meeting, Craig Mayor Saed Tayyarra urged the council to vote immediately to approve the variance. Council member Kathleen Neil, however, pointed out that no one had had time to review a thick packet of information from the opponents. Although the audience grumbled, the council finally opted to delay the decision.

Opponents have not yet decided whether to challenge the council's decision in court.

— Ken Wright

In Wyoming, residents take the lead in recycling garbage

Landfill space for garbage isn't a problem in Wyoming. The nation's least-populated and ninth-largest state has plenty of places to bury its garbage. Some people have even suggested that Wyoming dispose of other states' waste (HCN, 5/22/89).

What may be surprising about Wyoming is that no fewer than 30 businesses and seven volunteer groups collect paper, metal, glass, used oil, animal hides, old batteries and radiators in 13 communities across the state.

Mike Boyd, owner of Rocky Mountain Recycling in Laramie, says there are two reasons people come to him. "One is to get paid for their aluminum cans. Other people bring things in because they want to recycle. They don't want [recyclables] to go to the landfill, they just want to see them used again. And that's far and away the majority of people."

Suppliers of Rocky Mountain Recycling include area residents, businesses, government offices and the University of Wyoming. From the 15 to 20 percent of Laramie households that recycle, Boyd says, he collects about eight tons of newspaper and 7,500 pounds of glass each week.

Laramie, with its population of 25,000, is considered small. "You just don't generate sufficient quantities to make an operation worthwhile," says Boyd. Boyd's collection center, however, seems crammed with plastic milk jugs, pop bottles and other assorted containers that fill half the warehouse. A second peak of aluminum cans rises under a corrugated metal shed across the alley.

The problem is volume. Compacted materials, such as baled plastics, crushed glass or shredded paper, fetch higher prices and are easier and cheaper to transport. But compacting equipment can be prohibitively expensive for small operators like Boyd.

Transportation is an even greater expense. "Freight just eats you up," says Bob Trost, founder of the original Rocky Mountain Recycling Center in

Casper, Wyo. "There's not a big profit margin in this business to begin with, and freight takes most of that."

Transportation costs are compounded in Wyoming: Because there are no end-users of recyclables, all materials must be shipped to out-of-state markets.

"It's always difficult to find markets," says Boyd. Currently there is a nationwide glut of recyclables, and prices are falling.

The imbalance between excess supply and insufficient demand is greatest with newspaper. Because of the collapsed market, most recyclers accept only donated newspaper.

Recycled newspaper has two main end-uses: blown-in cellulose insulation and new newsprint. According to Duane Lühring, president of Wyoming Citizens for Recycling, a lot of cellulose insulation is used in Wyoming.

Recycled newsprint is a different matter. Only one newspaper in the state is printed on recycled paper: The Lander-based *Wyoming State Journal*. Publisher Bill Sniffen is pleased with the quality of newsprint, which contains 60 to 65 percent recycled paper. He enthusiastically boasts of saving 3,000 trees per year.

The role of demand is well illustrated by the familiar recycling logo — a circle formed by three arrows. The first arrow represents materials delivered by consumers to a recycling center. The second depicts materials shipped to a re-manufacturing mill. The third arrow portrays recycled products returning to consumers.

"This last arrow," says Trost, "is the most important. The consumer must ask for recycled goods. If you're not buying recycled products, you're not recycling."

To encourage use of recycled products, the 1984 revision of the Resource Conservation and Recovery

Act requires that if a federal, state or local agency spends \$10,000 a year or more of federal funds to purchase items that can be produced with recovered materials, then it should choose items containing the highest percentage of those recycled materials. The EPA's guideline for paper and paper products was published June 1988.

As a guideline rather than a regulation, the EPA action contains no provisions for enforcement. However, some Wyoming agencies are taking it seriously. The Department of Environmental Quality and the Industrial Siting Administration are collaborating to encourage state agencies to buy recycled paper.

Aside from this effort, the state's involvement with recycling has been on the supply side. Although state agencies are not required to recycle, several do on a volunteer basis. In addition, two programs are being launched to encourage more recycling centers. The Department of Environmental Quality was recently awarded a \$19,000 EPA grant to finance community recycling projects, and the 1990 Wyoming Legislature just passed a bill establishing a \$200,000 loan fund for new recycling centers.

Despite state action to promote recycling, local governments don't seem to be doing much. Involvement by Natrona County and the City of Casper, for example, is limited to collection programs in government office buildings. Recycler Trost points out: "We approached them in every case." Laramie sanitation foreman Kevin Herman says "everyone just sighs" when the subject of a city curbside recycling program is mentioned.

"Things like city councils, state governments and federal governments don't lead people," says Boyd. "They follow people."

— Donna Gilliland Shippen

The writer freelances from Laramie, Wyoming.

Bush team quick-kicks the spotted owl issue to Congress

"The biological evidence says that the northern spotted owl is in trouble. We will not, and by law cannot, ignore that evidence."

With those words, U.S. Fish and Wildlife Service Director John Turner on June 22 did what almost everyone expected, officially declaring the Northwest's most famous bird a "threatened species." Throughout its range of Washington, Oregon and northern California, Turner said, evidence shows that present rates of logging will soon put the northern spotted owl at risk of extinction.

But four days after Turner's announcement, which becomes effective July 23, other federal officials announced plans to dilute the Endangered Species Act and continue logging the owl's habitat.

These plans, announced by Interior Secretary Manuel Lujan Jr. and Agriculture Secretary Clayton Yeutter, who respectively oversee the Bureau of Land Management and the Forest Service, would:

- continue current logging levels through Sept. 30;
- form a Cabinet-level task force to devise Forest Service management plans for fiscal year 1991;
- for two years, until the BLM's new 10-year management plans are completed, implement some, but not all, of the recommendations of the recent blue-ribbon scientific panel called the Jack Ward Thomas report. The panel said a standing "God Squad" committee should be created to decide whether to exempt individual timber sales from provisions of the Endangered Species Act;
- seek legislation to prevent court challenges to timber sales; and
- support legislation to ban log exports from state-owned lands.

The plan may face opposition in Congress. "It would be the Tiananmen Square for American wildlife," said Andy Kerr of the Oregon Natural Resources Council. "They've been stalling on protecting the owl for 10 years," said Doug Norlen of the Oregon Ancient Forest Alliance, "and now they're trying to put the turd back in Congress' pocket."

Rep. Jolene Unsoeld, D-Wash., agreed, saying the Bush plan will "cut the public out and drop it in our laps 30 days before we go out of session."

The administration's plan came after spirited negotiations among the interested parties. Forest Service Chief F. Dale Robertson pushed for more stringent owl protection measures, especially the full implementation of the Thomas report, but was outgunned by Yeutter and others.

Sen. Slade Gorton, R-Wash., aggressively pursued higher timber cuts than the plan provides, including logging 10 percent of the lands occupied by the owl. What emerged was a plan that will continue, but somewhat decrease, logging of the Northwest's old-growth forests, put off any long-term decisions on the fate of the owl and throw roadblocks in the path of environmentalists' most successful avenue, the courts.

An obvious political backlash to full protection of the old-growth habitat of the owl is the massive layoffs that would result. A recent Oregon State University analysis predicted that up to 50,000 jobs would be lost if the Thomas plan went into effect. Thomas, however, says that figure is inflated, because it assumes more logging reductions on private lands than the Forest Service is calling for. A more accurate figure, he suggests, is 12,000 lost jobs, about the number lost



Jim Stak

Owl hanged in effigy in Eugene, Oregon

from closures of Oregon and Washington mills from 1980-89.

Federal agencies are scrambling to further lower that job loss estimate. By not fully implementing the Thomas report on BLM land, said Interior Secretary Lujan, the BLM timber cut in the northwest will drop by only 200 million board feet a year, thus putting about 1,000, rather than several thousand, people out of work.

Agriculture Secretary Yeutter said the task force on the Forest Service will try to set the timber cut at what is called for in the national forest plans — about 3.3 billion board-feet. That is lower than the annual 4.1 bbf level of the 1980s, but much higher than what conservationists recommend in order to protect the owl.

Meanwhile, the Forest Service is still developing its recovery plan for the owl. Director Turner said the agency will use "the basics and principles of the Thomas report," but didn't agree to the creation of large owl conservation areas — 50,000 acres or more — recommended by the report. Officials also hinted at the possibility of reducing logging on private lands, saying that logging that disturbs any spotted owls may be considered as the "taking" of a threatened species, with penalties of up to \$200,000 fines and a year in jail.

But it will probably be left to Congress again to make the call on what to do about the billion-dollar bird, and Congress is currently congested with forest-related bills. One, the Ancient Forest Protection Act, introduced by Rep. Jim Jontz, D-Ind., would place much of the Northwest's old-growth off-limits to logging. It now has 107 co-sponsors.

An even more sweeping bill, pushed by the Native Forest Council, apparently will not be introduced in Congress. "It was more a manifesto than a passable bill," said one supporter.

Oregon Sen. Mark Hatfield, who was one of the original sponsors of the Endangered Species Act 17 years ago, has countered with a bill that is basically a wish-list for the timber industry. It would limit reductions in timber cut levels to 2.5 percent a year, a rate at which it would take 40 years to implement the

new plans for Washington's Mt. Baker-Snoqualmie National Forest. It would also permanently ban many legal challenges to timber sales and require the Forest Service to consider logging previously protected forests to make up for new areas protected by court order or the Endangered Species Act.

Environmentalists quickly dubbed this bill the "Timber Tantrum Act." Washington Sen. Gorton has proposed a bill to set the timber cut level on national forests at 3.5 billion board feet for next year, almost what it was last year. Rep. Peter DeFazio, D-Ore., says he has a plan to protect both forests and workers. Critics counter that you can't protect both old-growth trees and the jobs that depend on cutting them down.

Sen. Bob Packwood and Rep. Denny Smith, both Republicans from Oregon, have suggested their own solution to the problem: raising spotted owls in zoos.

"We're doing it with the California condor," said Packwood, "why not with the owl?"

A high official in the Interior Department also raised the possibility of a captive breeding program. Some observers saw this as a test of the political waters, which are none too warm to the proposal. The Ancient Forest Alliance's Norlen countered with a proposal that probably has about as much support: raise politicians in zoos.

None of these proposals, nor the administration's plan, is likely to survive intact. "The administration plan calls for changing major pillars of environmental law," points out Norlen, "and in this post-Earth Day climate, that's not likely." He says what's more likely are attempts to pass another rider, a one-year solution similar to last year's action. After last year's rider proved such a serious blow to the remaining ancient forest, however, the environmental community is now dead-set against such a move.

If such a rider doesn't pass, says Norlen, the alternative is that the Forest Service and BLM "will have to obey the laws for a change. Whether it's Congress or the courts, it's obvious that someone's going to have to cram the Thomas report down the agencies' throats."

What all the plans, posturing and politicking can't negate is that the Thomas report outlined a minimum protection plan for the owl. Anything less will diminish its chances, the report indicated.

"No matter how the current battle is settled," observes Norlen, "remember that the spotted owl is not the real debate. The Thomas report only protects one-third of the remaining old-growth. Larger battles are looming."

In related moves:

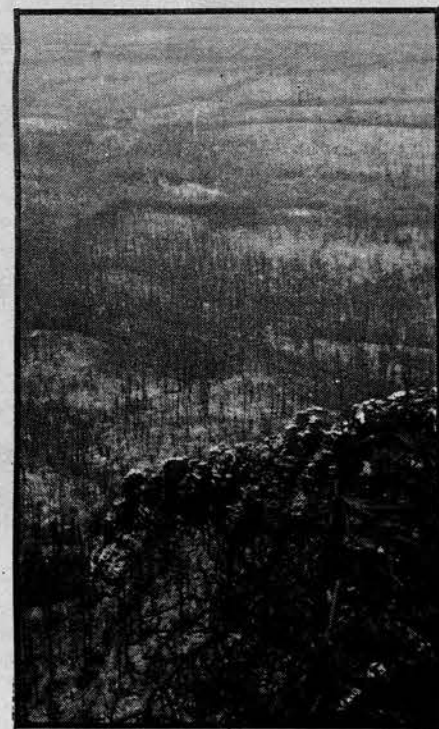
- Ralph Saperstein, vice-president of the Western Forest Industries Association, said that the timber industry will file suit demanding a public review of the science behind the listing of the spotted owl. Saperstein said the timber industry thinks the U.S. Fish and Wildlife Service used "selective scientific information," ignoring reports that the owl has done well in managed forests in northern California.

- Six Earth First! protesters on July 2 locked themselves to a tree outside Sen. Hatfield's office in Portland. Other protesters carried signs opposing Hatfield's support of continued logging of spotted owl habitat and brought a cardboard bulldozer they rammed into the locked doors of the Courthouse.

- Recently released plans for Washington's Mt. Baker/Snoqualmie National Forest call for reducing the timber cut almost in half. Industry howled. The plan, said Forest Supervisor Doug MacWilliams, could cost up to 1,800 jobs.

— Jim Stiak

HOTLINE



Dale Schickelanz

Burned Tonto National Forest
Arizona burning

As Phoenix broils under a 120-degree sun, the Tonto National Forest north of the city is frying in the state's largest forest fire. The advancing blaze forced Arizona Public Service to shut down power on two major transmission lines, affecting almost 600,000 people. The fire, dubbed the Dude Fire, has so far burned nearly 20,000 acres in its march along the southern edge of the Mogollon Rim. Damage is estimated at \$10.6 million plus \$3.5 million in fire-fighting costs. Six firefighters, five of whom were inmates from the Arizona State Prison, died fighting the fire that displaced 1,000 residents and leveled Zane Grey's historic cabin. Record-high temperatures and record-low humidity set the stage for the disaster, conditions that worry people throughout the West.

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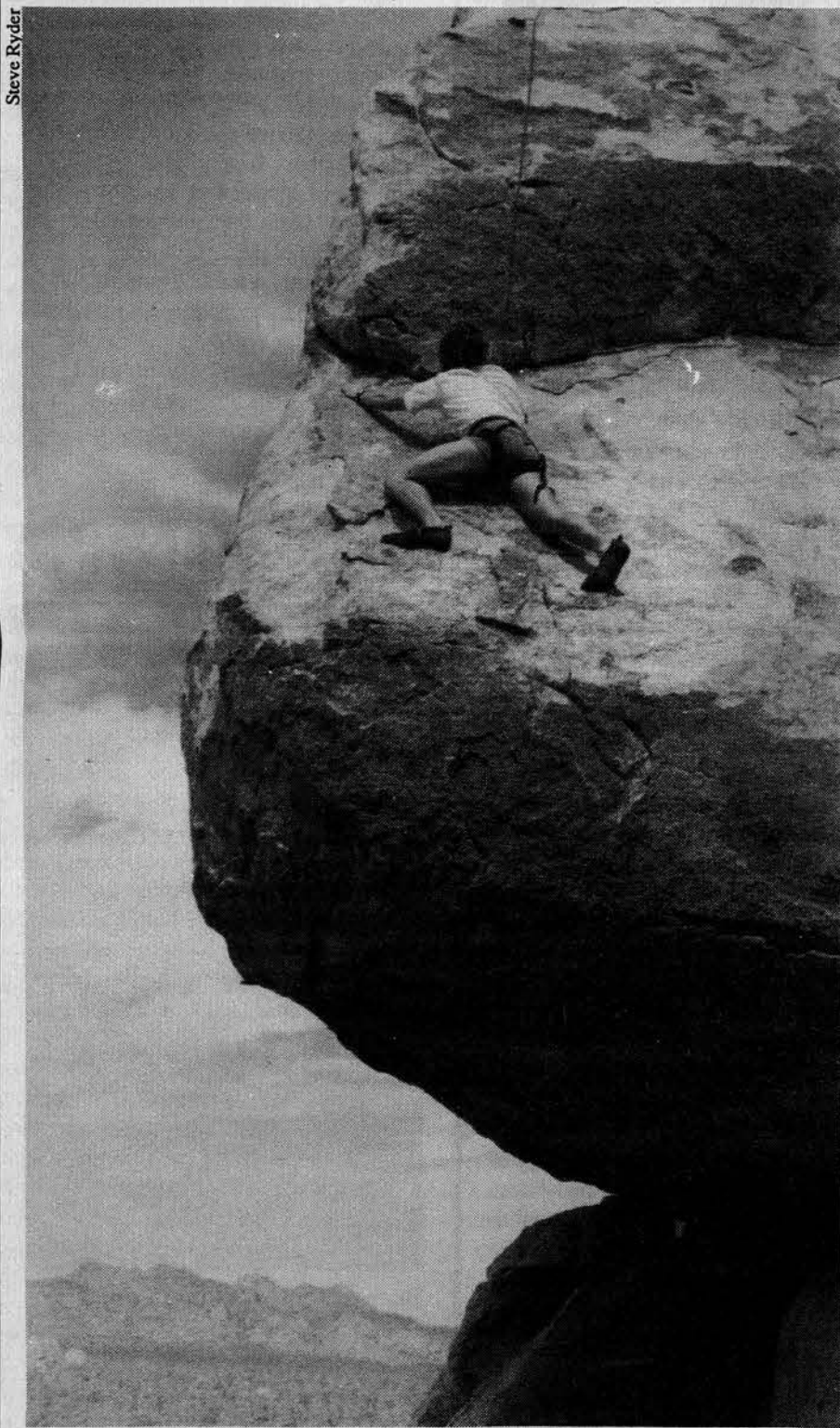
In 1980, the National Park Service published a report detailing significant threats to the beauty and integrity of our nation's 50 national parks. Called *State of the Parks*, the report detailed major threats such as excessive logging, oil and gas exploration and mining on the borders of national parks. In the past 10 years nothing has been done to reduce these incursions, says George T. Frampton, Jr., president of The Wilderness Society. Yellowstone National Park, for example, is surrounded by seven national forests that allow varying amounts of oil and gas leasing, some of it in grizzly bear habitat, Frampton points out.

To obtain a copy of the report and Frampton's May 23 statement, call Steve Whitney at 202/842-3400 or Ben Beach at 202/842-8724.

SYMPHONY FOR UTAH

A symphony commissioned by the Utah chapter of the Sierra Club to promote wilderness in southern Utah will be performed in the state this August. John Duffy's "Symphony No. 1: Utah," consists of three parts: "God's Wilderness; Requiem for Glen Canyon; and Puwa." Duffy, an Emmy-award winner who has composed numerous operas, television and theater scores, recently spent a week hiking in the area. "I seek to touch people's hearts, to make them more aware of the fragility of our natural habitat," he says. Performances are set for Aug. 10, 8 p.m., at Symphony Hall, Salt Lake City; Aug. 11, 7:30 p.m., at Deer Valley Ski Resort, Park City; and Aug. 12, 4 p.m., at Snowbird Ski Resort, Salt Lake City. For more information contact the Sierra Club, 177 East 900 South, Suite 102, Salt Lake City, UT 84111 (801/363-9621).

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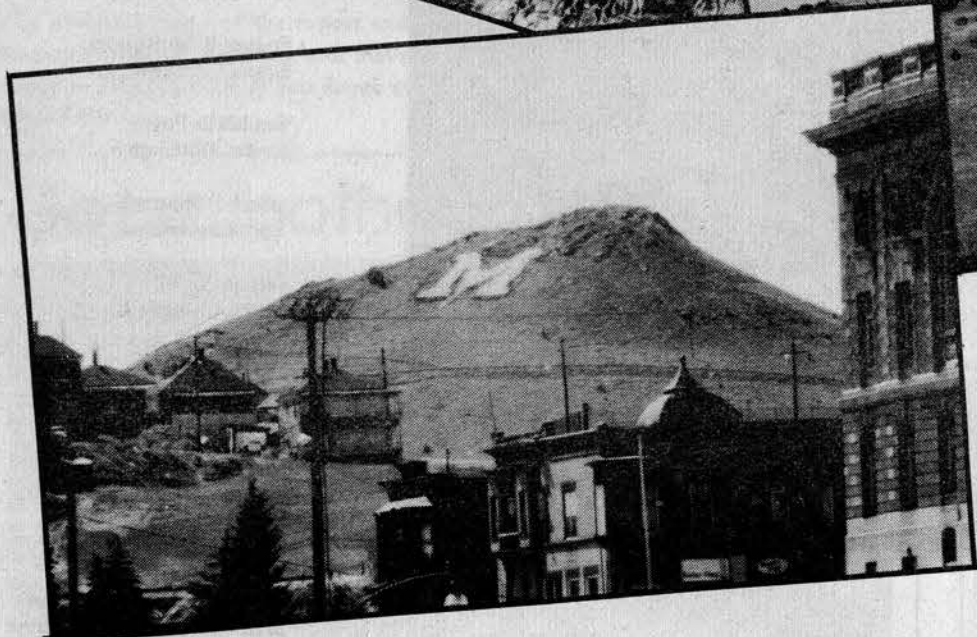
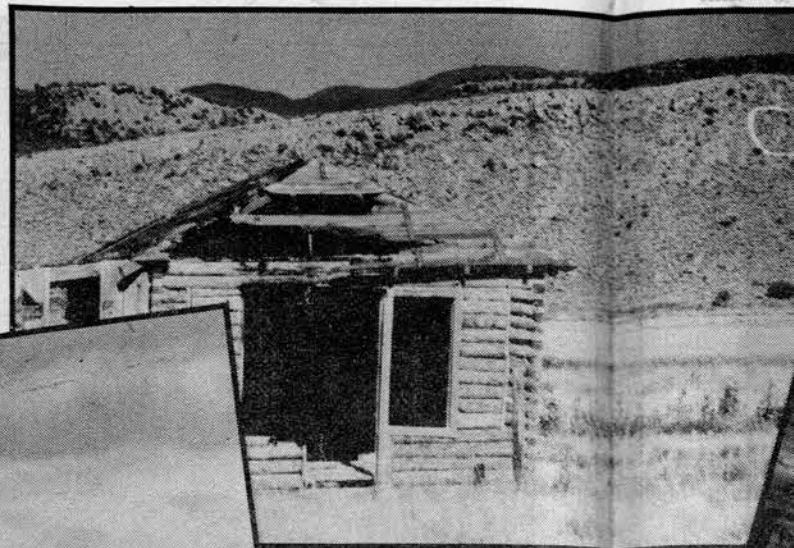
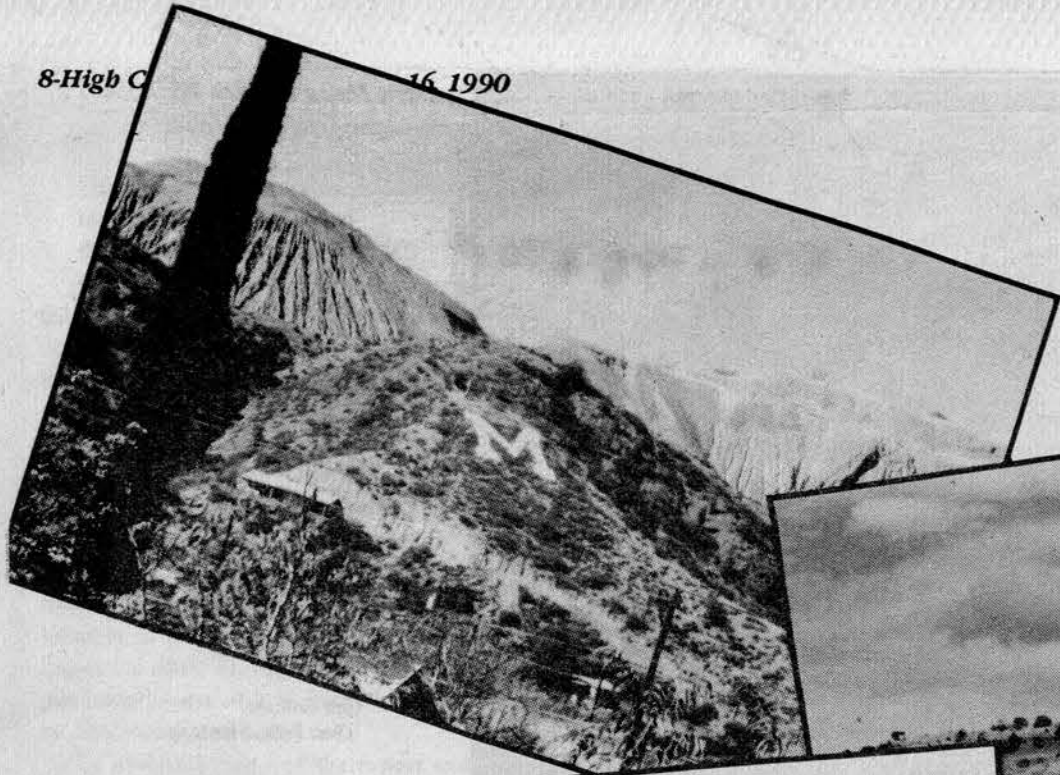
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8-High C

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Letters from left to right

The M of Miami, Arizona, surrounded by copper tailings; the M of the Montana School of Mining and Technology in Butte (1910); the D of Drummond, Montana; the C of Castilla, New Mexico built in 1950 when there was still a high school; the U of the University of Utah (1907); the N of the University of Nevada in Reno, (1913); the W at Western State College in Gunnison, Colorado (1915); the S of Salida, Colorado (1932). Photos courtesy of James J. Parsons.

Alphabet Hills

landscape, and dynamite block form only months were set in place and p

Despite objection to the great C and other letters their way into proud community traditions but with its own brand Utah's Brigham Young foot-tall Y 2,000 feet tenders of the Y sometimes reach the symbol that horses in 1906 .

Of all the hillside Washington, M's are perhaps because more abundant in the West Dakota's school of mine 100 wagonloads of rock 1912 set aside a special trench with a horse-drawn

Today high schools collegiate initials. In hillsides are most communities like Paonia high school takes the name

Paonia resident building the P on Central High Country News off school participated, h and sagebrush, carry

Call them branded bluffs, monogrammed mounts or signed slopes, but hillsides adorned with giant letters are distinctly western American. Geographer James Parsons counts nearly 250 giant letters in the West, most built with white-washed stones or cement.

In most cases students have erected the letters as symbols of their schools. Traditionally they tend them each spring, and in some places football players light them on fire as part of their fall homecoming ritual.

Giant letter-building was especially popular among colleges between 1905 and 1915, says Parsons. The University of California at Berkeley was the first school to initial its local topography. The two-day joint building project helped reduce animosity between the freshmen and sophomore classes during "the rush" of 1905. But although the 70-foot-high C helped unite the two classes, it was the subject of controversy and conflict in the community. Critics accused the University of disfiguring the natural beauty of the

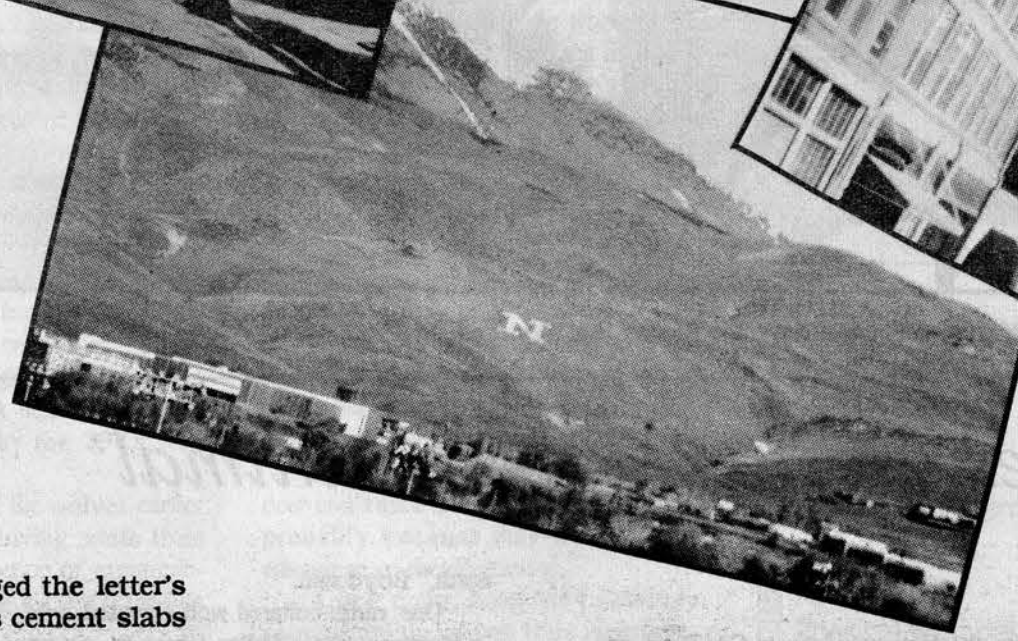
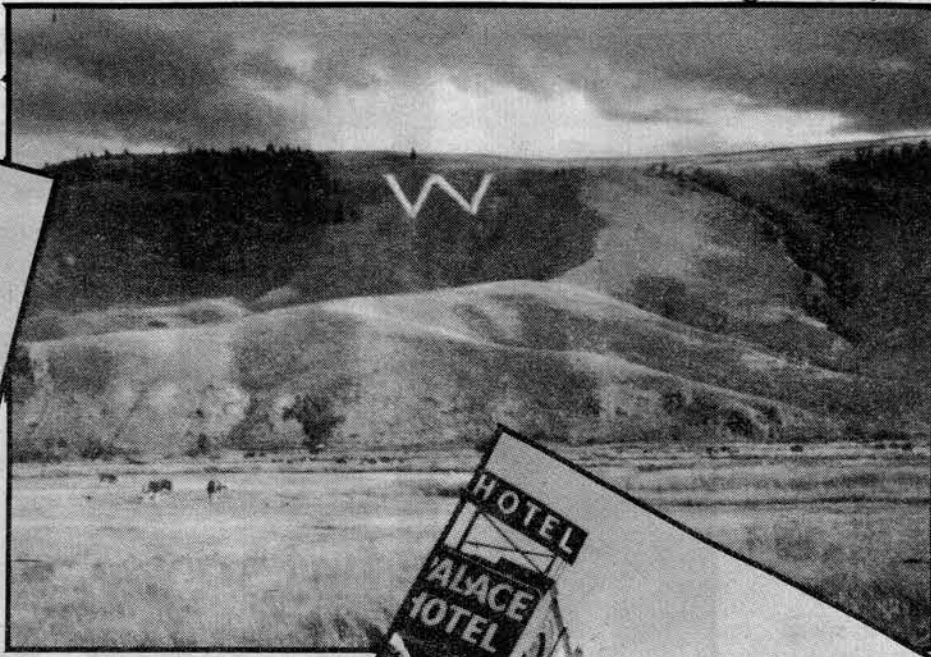
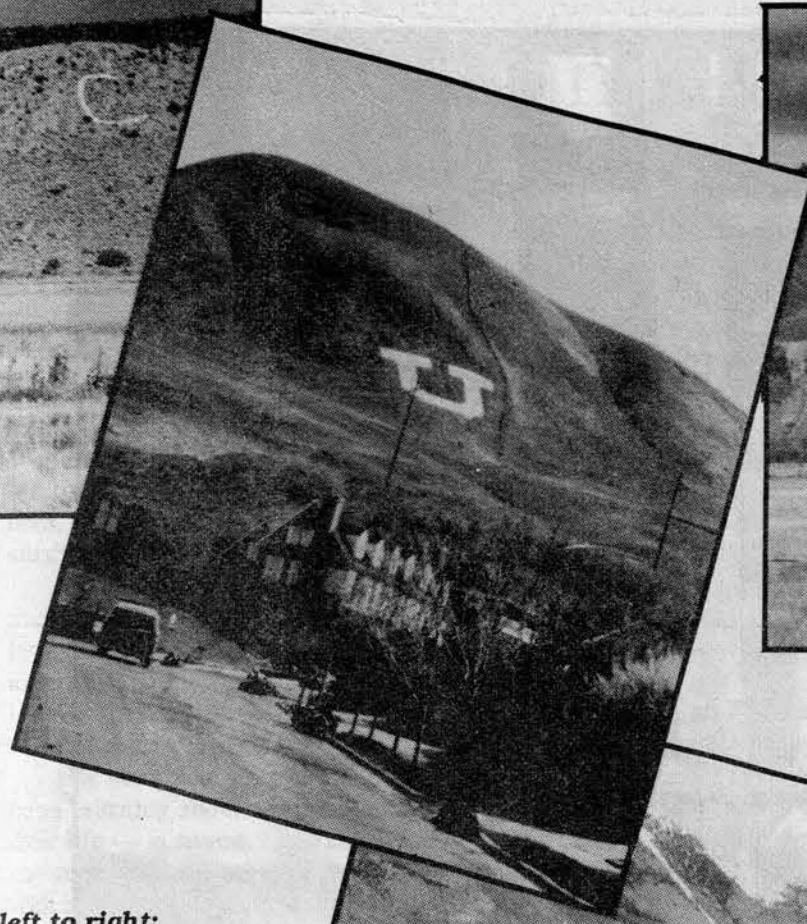
Steve Ryder



Paonia High School students light their letter for Homecoming.



Paonia's P afire.



Letters from left to right:

the M of the Montana School of Montana; the C of Castilla, New the University of Utah (1907); the n State College in Gunnison, courtesy of James J. Parsons.

landscape, and dynamite damaged the letter's block form only months after its cement slabs were set in place and painted.

Despite objections and vandalism, the great C and other letters that followed found their way into proud school songs and community traditions. On Berkeley's heels, but with its own brand of pioneering ambition, Utah's Brigham Young University built a 320-foot-tall Y 2,000 feet above Provo. Today tenders of the Y sometimes use helicopters to reach the symbol that was built with pack horses in 1906.

Of all the hillside letters, from Arizona to Washington, M's are the most common, perhaps because mining schools are so abundant in the West. The M of South Dakota's school of mines in Rapid City took 100 wagonloads of rock to build. Students in 1912 set aside a special "M Day" and made a trench with a horse-drawn plow.

Today high school letters outnumber collegiate initials. In fact, monogrammed hillsides are most prevalent in small communities like Paonia, Colorado, where the high school takes the name of the town.

Paonia resident Jack Patton recalls building the P on Cedar Hill just above the *High Country News* offices in 1932. The whole school participated, he says, clearing cedars and sagebrush, carrying and stacking rocks.

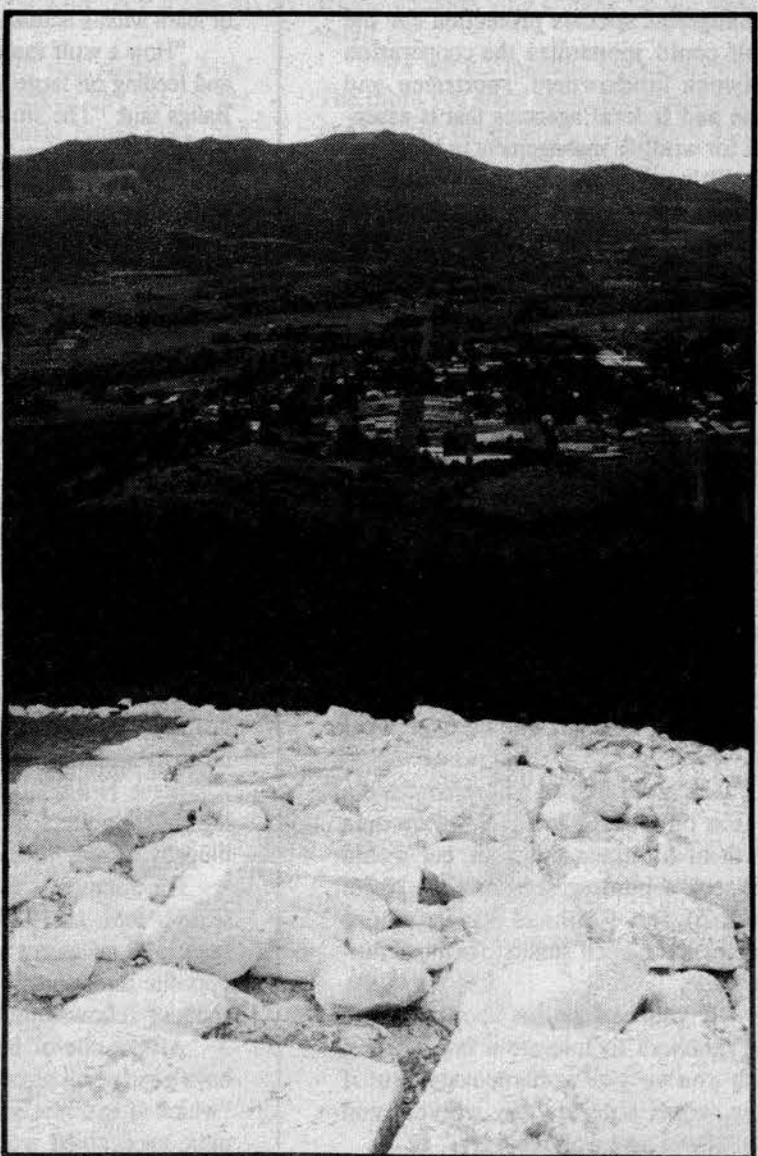
The Holly Sugar Company 30 miles away in Delta donated lime for whitewash. Patton remembers hauling water up the hill in buckets to mix with the lime.

In the spring, Paonia High School celebrated "Red and Black Day," named after the school colors. Paonian Earlane Simms remembers it began with a roll call in the morning at the P. The class with the best attendance got points towards a total collected from interclass games and contests throughout the day. After weeding and whitewashing their letter, students competed in pie-eating, softball throws, dashes, jumps, tug-of-wars, and at night waltzing and jitterbugging. Simms says that the P was also a target for conflict and interschool rivalry. By the 1950s the nearby town of Hotchkiss had its own grand initial, and in 1957 night raiders from Hotchkiss remodeled Paonia's P. They took off the top bar, added a side leg and turned it into an H. School administrators at both schools worried about retaliations and increasing letter vandalism, so they gave Paonia students a "day off" to rebuild their beloved letter.

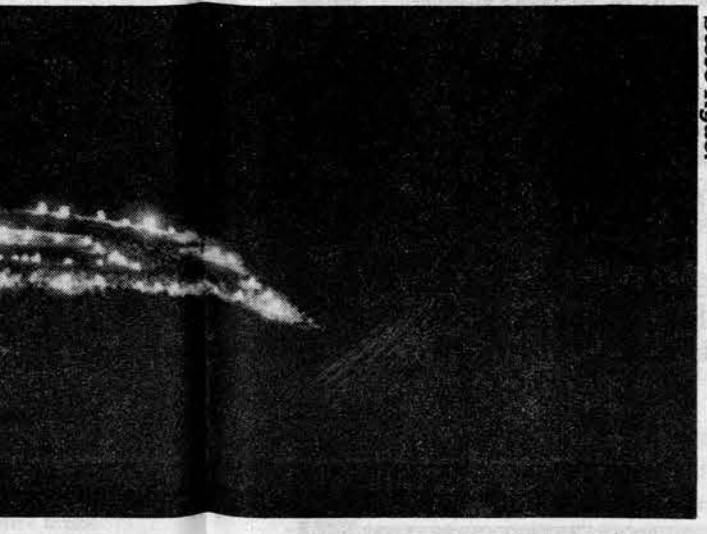
Red and Black Day has disappeared, but in Paonia, fall homecoming rituals still thrive. Before the homecoming football game students line the P with coffee cans filled with kerosene and sawdust. As darkness descends they light them and the captain of the football team runs through town from "P Hill" to the high school, carrying a flaming torch to the traditional school bonfire.

This article was written by former HCN staffer Becky Rumsey in collaboration with James Parsons, professor emeritus of geography at the University of California at Berkeley.

Steve Ryder



View of Paonia from "P Hill."



Steve Ryder

Wolves ...

(Continued from page 1)

wolf management," Cool wrote Kemper McMaster, the U.S. Fish and Wildlife Service's field supervisor in Helena.

"We're remiss in not getting it back sooner, but it's an intricate, detailed response," McMaster said. "Our concern is getting a good solid answer the state can make some good, solid decisions on."

The Fish and Wildlife Service's draft response is now receiving legal review, McMaster said, and should be completed shortly.

Montana could be forced to spend more money managing wolves than it has spent managing grizzly bears, Cool said. The department and the Fish and Wildlife Service are preparing to remove the grizzly bear from the endangered species list in northwestern Montana.

But because of the special restrictions that will be imposed for five years afterward, bear management will cost about \$500,000 a year. Montana expects to pay a share of that cost with the federal government paying the rest, as it does for management of other endangered species, Cool said.

"We think that potentially — in the long run — it's going to cost more to manage wolves than it costs to manage grizzly bears," Cool said.

Gov. Stan Stephens will review the department's proposed wolf management strategy, Cool said. Stephens stepped in last year and objected to problem wolves being moved from the Mari-on area near Kalispell to the Bob Marshall Wilderness. Instead, the wolves were moved to Glacier National Park.

Stephens was also surprised to learn last year that the Department of Fish, Wildlife and Parks hadn't been involved in planning for wolf management, Cool said. "He authorized our direct participation in management planning with the federal agencies and Montanans to develop a management plan for wolves," Cool said.

Meanwhile, Cool said he feels endangered species protection for the wolf could jeopardize the cooperation between landowners, sportsmen and state and federal agencies that is essential for wildlife management in Montana.

"It's my view that the Endangered Species Act is not in the best interest of wolf management in Montana," Cool said. "I don't think in Montana the wolf should be accorded a special status."

Wolves now repopulating Montana from British Columbia show the success of a limited hunting and trapping season, said Ray DeMarchi, the regional wildlife biologist based in Cranbrook, B.C.

About five wolves a year are killed in southeastern British Columbia, DeMarchi said.

"Not in any way has that inhibited wolf recovery," DeMarchi said. "In fact, it's enhanced it. The agricultural community knows they're protected. We don't have a shrill debate over wolf recovery."

DeMarchi said he will recommend a season on wolves in the Wigwam area north of Montana this year, but would not seek a hunting season in the North Fork of the Flathead River, where wolves have been studied for more than a decade.

"If you can get the sportsmen and the ranchers to tolerate a few wolves, then you've got wolf recovery. But if they won't tolerate any wolves, you won't have any wolf recovery." ■

Bert Lindler is a reporter for the Great Falls Tribune in Montana.



Bert Lindler

A cow-killing wolf that was captured near Browning, Montana, in 1987

Wolves are 'just another animal'

Despite the fictions of *Never Cry Wolf*, neither wolves nor biologists regularly make their living feeding on mice. In the book that later became a popular movie, author Farley Mowat described eating mice for a month to prove that wolves could do the same.

Unfortunately, many people's ideas about wolves come from such books, or from the writings of wolf critics such as Troy Mader, said U.S. Fish and Wildlife Service biologist Ed Bangs.

"All kind of stuff gets put in print," Bangs said. "It's a question of whether you want to be entertained or learn what's actually going on."

"How a wolf makes its living is by living in a pack and feeding on large ungulates [elk, deer and moose]," Bangs said. "The smallest thing they regularly feed on is a beaver."

During May and early June, wolves dig dens, where they raise their young. The mother and pups stay at the den, while the other pack members hunt nearby.

When the adults return from a kill, the pups yelp, jump and lick the adults' mouths, persuading them to regurgitate food. After about six weeks, the pups are taken to "rendezvous sites" where they wait with an adult or two while the rest of the pack hunts. By the fall, they're ready to hunt with the pack.

The number of wolves in a pack is determined by the size of the animals on which they feed. Wolves feeding on moose, for instance, tend to hunt in larger packs than wolves feeding on deer.

Glacier Park's Camas Pack, which feeds primarily on deer, has ranged from four to a dozen wolves, averaging about seven to nine in midwinter. Although the wolves have been near cattle, denning several times just a half-mile away, there's no indication they have taken livestock, researcher Diane Boyd said.

Some North Fork wolves have died, been killed legally by hunters in British Columbia, or been killed illegally. Others have simply left.

For instance, a female wolf radio-collared north of Glacier Park in 1985 was shot in Alberta two years later, 525 miles away. If that wolf had gone in the opposite direction, it could have ended up 100 miles south of Yellowstone Park.

All but one of half a dozen radio-collared wolves have gone north after leaving packs in the North Fork, "which is extremely interesting because there's a lot more unoccupied wolf habitat to the south than to the

north," Boyd said.

One radio-collared wolf traveled west, ending up in Montana's Yaak Valley, where it was shot.

Many of the 62 pups raised by wolf packs near Polebridge, in the North Fork since 1982 weren't radio-collared and can't be accounted for. They may be among the wolves now thought to be moving south from Canada and repopulating northwestern Montana.

There are now three packs along the Canadian border. The population along the border is up from a single female wolf in 1979, when Boyd began her research as a University of Montana graduate student.

When Glacier Park was established in 1910, three to four packs of wolves are thought to have lived there. Nearly all of the wolves were killed during the 1920s by a professional wolfer in Canada's Waterton Lakes National Park and by poisoning and trapping in Glacier itself.

Wolves had recovered by the 1950s, when two packs of more than 10 wolves were seen. Government trappers placed baits poisoned with 1080 poison (now banned in the United States) along the park's borders from 1950 to 1952.

Fifteen wolves were shot or trapped along the park's borders during that decade, eliminating nearly all of the park's wolves a second time.

University of Montana professor and state representative Bob Ream started the Wolf Ecology Project's research in 1973. At that time, very few if any wolves were in the state. Ream single-handedly promoted wolf research during the early years. Since then, the Wolf Ecology Project has worked with state and federal agencies, studying wolves and the animals they feed on in the North Fork.

This winter, three University of Montana graduate students radio-collared adult female whitetail deer, elk and moose to determine areas important to the animals wolves feed on, and the causes of their deaths.

Already, two of the 15 radio-collared animals have been killed by mountain lions. One of the 23 radio-collared deer has been killed by wolves.

Bangs tries to rely on such scientific research during his public talks about wolves. "I try and tell the truth, because people are going to have to live with the real wolf," he said. "And they're not evil. They're not good. They're just another animal."

— Bert Lindler

Radio waves and scent help wolfer track packs

POLEBRIDGE, Mont. — Diane Boyd knelt on her skis and scooped up a handful of yellow snow.

"Yep. That's wolves," she said as she took a sniff. "Ungulates smell like trees, sweet. Wolves smell mean, macho, musty."

Such skills are important when tracking wolves through big-game wintering areas, where wolf tracks can be lost in the frozen trails of deer and elk. By checking the urine, Boyd can find out whether she's still on the wolves' trail.

For more than a decade, Boyd has been learning about wolves by living their life — in reverse. Late each spring, she traps wolves so she can outfit them with radio collars. Later, she keeps track of them from her pickup or a light airplane.

Throughout the winter, she skis along their trails, looking for kills and learning about their behavior. She always starts a few miles from the wolves and skis away from them, so they won't be disturbed by her work.

This late winter day, Boyd was in Glacier National Park near Polebridge, in an area burned by the 1988 Red Bench fire.

Boyd had located the wolves earlier that morning while driving south from Moose City, the collection of eight cabins she takes care of along the Canadian border. She stopped the pickup every 10 miles or so. Berms of snow on either side of the road were nearly as high as the truck, giving the road the appearance of a bobsled run.

She took the H-shaped antenna from the gun rack in the back window of the pickup, plugging it into the radio receiver slung from her neck.

Holding the antenna in front of her, she swept it slowly across the horizon as though it were a magic wand. After several sweeps, she dug the heel of her shoe into the snow, marking a line where the radio signal had weakened during the sweep to the left. Later she made a similar line where the signal weakened during the sweep to the right.

The marks made a "V" in the snow. She made a third mark halfway between the other two, indicating the direction of the wolves.

She was receiving signals from four radio-collared wolves in the Camas Pack, each transmitting on a different frequency. The pack had increased from seven to nine wolves last fall, but two radio-collared wolves left the pack this winter.

The radio signals from the Camas Pack wolves indicated they were moving south, nearly as fast as Boyd could drive on the slick, snow-covered road.

She continued past Polebridge, a rustic community far from paved roads and electricity.

As Boyd got out of the truck to take a final radio location, she grabbed a Butterfingers candy bar. "When you're radio-tracking wolves in the rain, chocolate's your savior," she said.

The Camas Pack travels a route that takes it along the North Fork of the Flathead River from 10 miles north of the Canadian border to an area 30 miles south of the border.

The pack stays in Glacier Park, avoiding the cabins and year-round traffic across the river in national forest and private lands.

To follow the wolves, Boyd often has to hike to the North Fork, pull waders out of her backpack and find some place to safely wade the river. But at Polebridge, a bridge eliminates that chore.

Boyd wanted to find where the wolves had crossed the Bowman Lake Road in Glacier Park. She didn't think they would be far from the ranger station.

She skied quickly. Soon she stopped.

"Here they are," she said. "Their dirty little paws gave them away."

In some places the tracks were little more than impressions of a toe or a claw in the crusted snow. But the wolves had gotten muddy sliding down a hillside where snow had melted.

Boyd followed the tracks in the direction the wolves had come from, taking her skis off to slog up the hillside.

After she had tracked the wolves for a kilometer, she stopped to record the tracks of prey animals found within 100 meters on either side of the trail.

Boyd and her volunteer assistants found the carcasses of 23 whitetail deer, 13 elk, three mule deer, four moose and a coyote this winter.

This year, the wolves killed fewer deer and twice as many elk as last year, probably because they were taking advantage of the deep snow.

A few times, Boyd had mistakenly encountered the wolves when investigating their kills.

"The wolves scatter, howling and barking at you," she said. "They'd have you if they wanted you."

When Boyd checks wolf traps outside Glacier Park in the spring she carries a shotgun because of some scary encounters with grizzlies. But she's unarmed all winter when tracking wolves.

Although wolves have threatened and on rare occasions injured people, there are no records of healthy wild wolves seriously injuring or killing anyone in North America, according to wolf researcher L.D. Mech of Minnesota.

When Boyd finds a carcass, she tries to determine the animal's age and physical condition. Often there's too little left for such analysis.

During the winter of 1988-89, the researchers fixed the age of 12 deer, six elk and three moose killed by wolves. Of the deer, 10 were fawns, yearlings or two-year-olds and two were nine or 10 years old. Five of the elk were calves or yearlings and one was 19 years old. The moose included two calves and one 16-year-old.

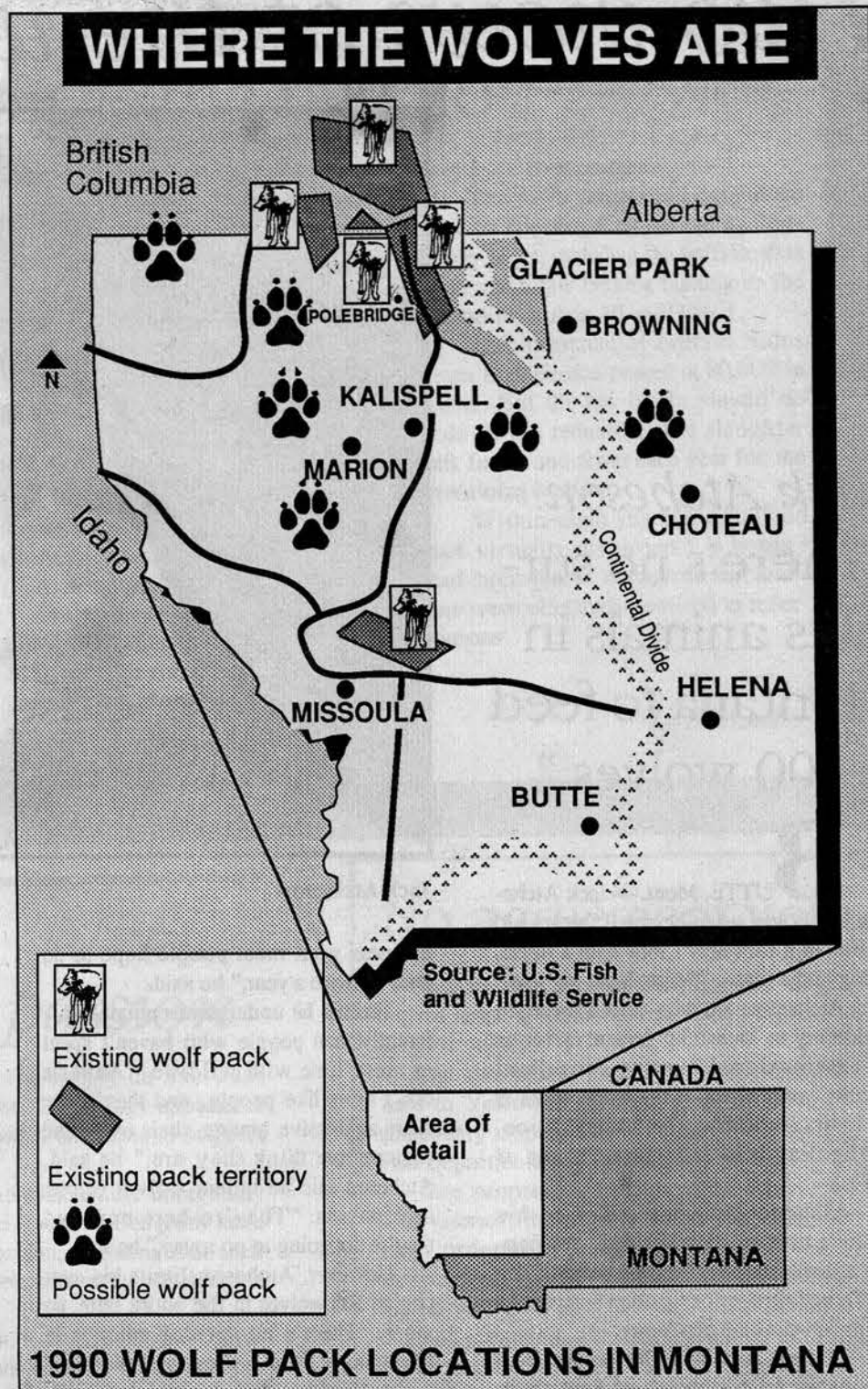
Wolves are capable of killing the biggest, strongest deer, elk or moose. But normally it's safer and easier for them to kill animals that are young, old or sick.

In the "Parts Shed," one of the cabins at Moose City, Boyd stores deer jaws, moose skulls and the deformities of sick animals killed by the wolves.

"Every time a wolf eats, it has to catch in its teeth what it has to kill," Boyd said. "They get kicked. It's not an easy life. During the winter I frequently see wolves limping."

Wolves kill by lunging at the rumps and flank of their prey, Boyd said. If they can stop the animal, they try to get it by the throat.

Wolves may begin feeding before the animal's completely dead.



Boyd's temper flashed when she was asked what she thought of such apparent cruelty. "I'm sure if the wolves had a choice, they'd shoot 'em," she said. "We're the ones who are destroying the world around here. Who are we to pass judgment on a wolf pack trying to eat?"

Although Boyd was raised in Minneapolis, she's forsaken city life for her research and the wild North Fork. She and Max, her tan sheep dog, live in a cabin perched on a bank above the North

Fork at Moose City. She lost a second dog to a mountain lion.

In recent years, she's bought land eight miles south of the border and moved an old homestead cabin there.

"You get something in your life which becomes your central focus," said Boyd, 35.

"For me it's learning about wolves. The more you learn about them and present it to the public, the more you enhance their long-term survival."

— Bert Lindler



Wolf researcher Diane Boyd

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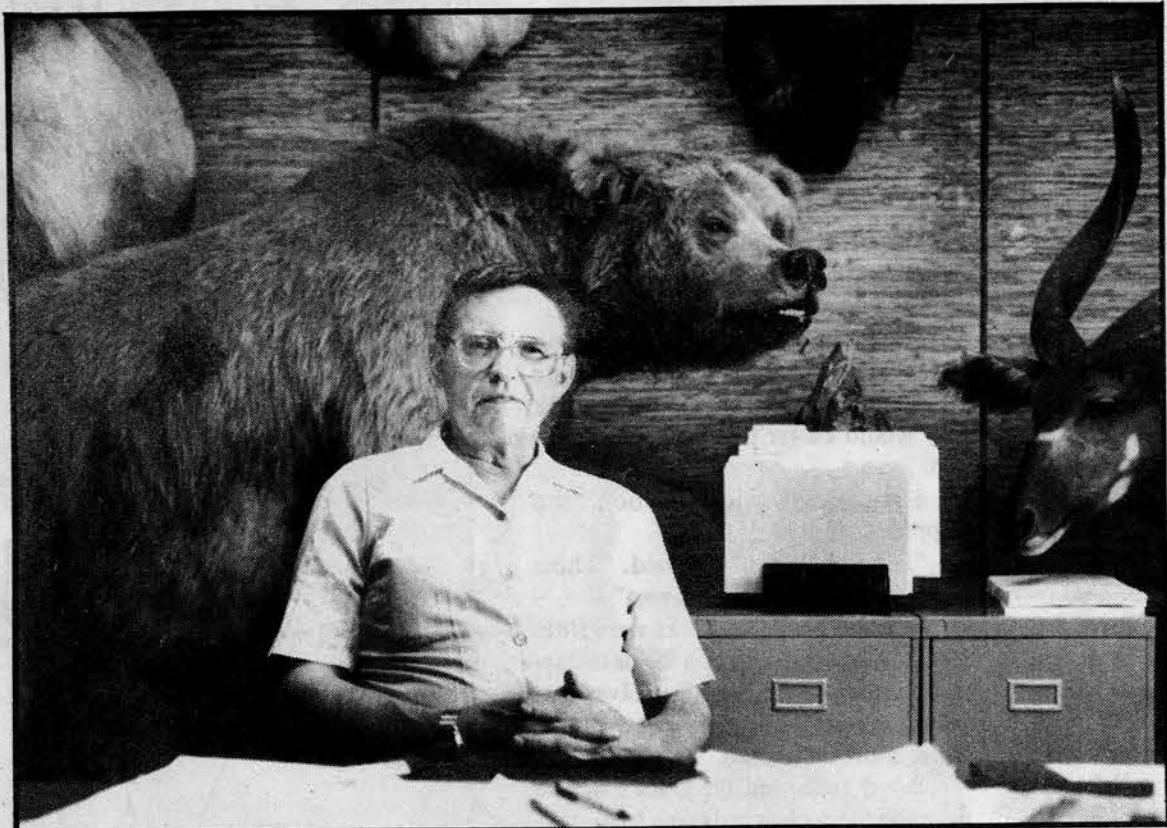
Two views of the wolf in Montana

Jack Atcheson:
"There's no surplus animals in Montana to feed 1,000 wolves."

BUTTE, Mont. — Jack Atcheson left home when he was 15 years old to live in a tent near Libby with a horse, a dog and a crow. "Animals are my life," said Atcheson, 58, who used a career in taxidermy to launch his present career as an international hunting consultant almost everywhere in the world there is to hunt, including the Soviet Union, Mongolia, Iran and several areas of Africa.

Atcheson began working in his father's construction business, developing a taxidermy business on the side. By 1960, he left the construction business to work full time on taxidermy.

Hunters who brought him game to mount asked his advice on hunting in Africa. That generated the hunting consulting business. Meanwhile, he was offered inexpensive hunts around the world in areas that were trying to promote tourism. For several months every year, he was hunting. "I was doing for



Jack Atcheson

business what most people hope to do once or twice a year," he said.

He said he understands animals differently than people who haven't spent as much time with wildlife. "Animals don't think like people, and they're far more aggressive among their own kind than people think they are," he said. Atcheson said he thinks wolves belong in Montana. "They're here now and they're not going to go away," he said.

However, Atcheson limits his support to 100 wolves in the entire state, no more. "There's no surplus animals in Montana to feed a thousand wolves," Atcheson said.

He wants wolf control measures set up now to ensure the state's elk, deer and bighorn sheep herds aren't decimated. Times have changed since 1700, when big-game animals were scattered across the state. Now the animals are more con-

centrated, particularly in winter, and the wolves will concentrate where the game winters, he predicts.

"Anybody that doesn't agree to setting up wolf control measures now is not going to agree later," Atcheson warns.

He is forming an organization known as Western Wolf Management for people who support wolves, but want them managed.

"The big thing I'm concerned about is hunters aren't being told the impact wolves are going to have on this state," he said. "Montana has the best hunting day for day and dollar for dollar of anywhere in the world. The most impressive thing about Alaska and northern Canada is not the abundance of animals, but the lack of animals. Very few animals have calves. Finding an extremely old animal is rare unless there has been a lot of wolf control."

Atcheson says he has nothing to gain financially from the wolf issue.

"If it were business-related, I would be better off if all the public land were locked up and only the rich could hunt," he said.

He remembers when he was 10 years old and his father promised him they would go pheasant hunting along the Jefferson River. When the day came, they loaded their black Lab, Pal, into the 1936 Ford and left Butte. When they arrived, the landowner wouldn't let them hunt.

"That was one of the biggest disappointments of my life," he said. "Ever since, I've felt for people who just can't go."

— Bert Lindler

John Lilburn:

"If there's a conflict between ranchers and wolves, wolves will lose and ranchers will win."

MISSOULA, Mont. — While studying wildlife biology at the University of Montana, John Lilburn decided objective science is a myth.

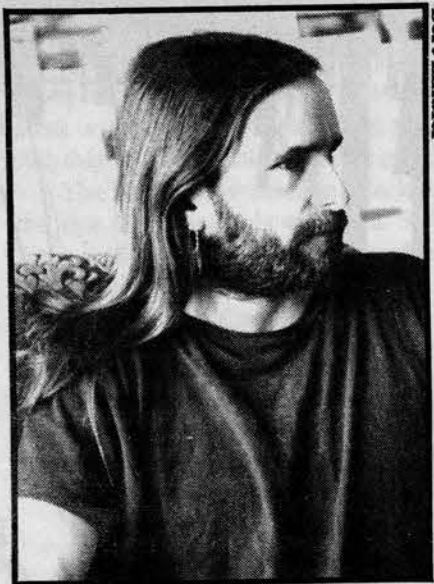
"Especially if you work for the U.S. Fish and Wildlife Service and the Forest Service," said Lilburn, an activist working with Earth First!, the Wolf Action Group and Fund for Animals.

"They're expected to go out and make studies with really ridiculous data," he said. "And then they twist it around to do whatever they want with it in the first place."

Lilburn, 26, originally from New Jersey, spent two summers studying water quality on the Bitterroot and Lolo national forests. Two years ago he was among demonstrators who dumped sawdust, cow pies, old oil filters and other debris on the steps of Forest Service offices in Missoula.

Afterward, he lost his Forest Service job. "Basically, they fired me for being an Earth First'er," he said.

He has since devoted himself to activism, while working odd jobs to



John Lilburn

make ends meet. While demonstrating against Forest Service practices, he was cited in the state of Washington for obstructing a peace officer. Most recently, he was cited for harassing a hunter shooting buffalo north of Yellowstone National Park. He pleaded innocent and faces trial Aug. 7.

In 1988, Lilburn was among 22 activists who went to British Columbia to protest aerial gunning of wolves. "They were trying to make it into a preserve for big-game hunters and the wolf was going to lose," he said. "We thought, 'What's going to convince the British Columbia government not to shoot wolves?' Basically, it's going to be bad press."

The hunt was called off.

Last fall, Lilburn was among Wolf Action Group members who demonstrated at U.S. Fish and Wildlife Service offices in Helena to protest the deaths of three wolves moved to Glacier Park after cattle were killed in the Marion area west of Kalispell.

This spring, Lilburn and other Wolf Action Group members tried to chase surviving wolves from the Marion area, where cattle again were being killed. The wolves didn't leave. The Fish and Wildlife Service says the group's disturbance reduced the chance of trapping the wolves so they could be placed in captivity.

In 1989, the carcasses of 78 winter-killed sheep attracted the wolves to the

Marion area, Lilburn said.

"If I had a \$3,000 stereo and I left it in front of the window with the doors open, I would expect someone to take it," Lilburn said. "That's exactly what they're doing."

The U.S. Fish and Wildlife Service, Defenders of Wildlife and the National Wildlife Federation appease the livestock industry, Lilburn said. "It sends a message to rancher interests: 'Hey, if there's a conflict between ranchers and wolves of any sort, wolves will lose and ranchers will win,'" Lilburn said.

Meanwhile, hunters fear wolves may affect hunting seasons. "Wild animals are not owned by big-game hunters," Lilburn said. "The wolf has a right to be out there and feeding on game."

Lilburn was asked how activist tactics might affect the welfare of wolves that later cross the paths of armed hunters and ranchers.

"To tell you the truth, I don't know the answer to the question," Lilburn said. "Sheer capitulation is not the answer, which is what the policy is now."

— Bert Lindler

Wolves were once as common as the buffalo

“Shepherds of the buffalo” was the name Captain Meriwether Lewis gave to the wolves which trailed the buffalo herds in 1805 when he and William Clark ascended the Missouri River.

Both men were impressed by the numbers of wolves and the numbers of animals they killed. Clark noted, “All meat which is left out all night falls to the wolves which are in great numbers.”

Ross Cox, an early trapper, reported that the Flathead Indians were forced to buy horses from the Nez-Perce, because wolves ate so many of the Flatheads’ foals.

By the 1850s and 1860s, hunters

reported that wolves often waited while they skinned buffalo, feasting on the carcasses once the hunters left.

With the discovery of gold, steamboats hauled supplies to Fort Benton, where wagons waited to take the goods to the gold camps. During the winter, longshoremens and wagon masters became wolfers.

Wolfers were found primarily in Montana because there were abundant buffalo herds, abundant wolves and easy access to steamboats to carry pelts to St. Louis.

Wolfers wintered on the plains, shooting buffalo and lacing the carcasses with strychnine. Wolves and other animals that fed on the carcasses died. The wolfer checked the poisoned carcasses every few days to collect the

pelts of wolves that died nearby. Up to 100 wolves might be found dead at a single bait.

A winter’s supplies cost a wolfer about \$200. With pelts selling for \$2 apiece in the 1860s, wolfers could make more than \$1,000 a winter. In 1873 *The Daily Herald of Helena* described one group of wolfers:

“There were five or six teams, some of them four-horse teams, and they had about 10,000 wolf skins among them. They had put in a very profitable winter, as wolf skins in (Fort) Benton were worth \$2.50 each.”

An estimated 55,000 wolves were killed each year between 1870 and 1877, according to Montana historian Dave Walters. Some people say, however, that some of those animals killed

may have been coyotes.

The 1876 territorial Legislature was so concerned by dwindling big-game herds, including the buffalo, that it passed a law limiting hunting to the period from Aug. 10 until Feb. 1.

The shipment of buffalo hides from Fort Benton peaked at 80,000 in 1876. But the law likely played no role in the reduction. The slaughter left fewer and fewer each year for the remaining hunters.

Within eight years, the buffalo had virtually disappeared, a bounty had been placed on wolves and Indians were effectively confined to reservations.

— Bert Lindler



CAPITOL HILL

Wolf restoration needs passion

by Andrew Melnykovich

WASHINGTON, D.C. — J. Frank Dobie, who understood the West as well as anyone has, wrote that “putting on the spectacles of science in expectation of finding the answer to everything signifies inner blindness.”

Dobie was writing about coyotes at the time, but his words are equally applicable to the ongoing debate over whether to reintroduce wolves into Yellowstone National Park.

If the decision were in the hands of science and scientists, wolves would have been returned to Yellowstone several years ago. That wolves are still absent from the park proves the inability of science to correct restricted vision on both sides of the issue.

The reception accorded the National Park Service’s recent report to Congress titled *Wolves for Yellowstone?* demonstrated yet again the peripheral role of biology in the debate. The report concludes that wolves would benefit the Yellowstone ecosystem without any serious negative effects on human activities in the area, the most important of which are tourism, hunting and ranching. None of the report’s conclusions were particularly surprising. They were all based on readily available biological information or the well-known opinions of leading wolf experts.

Reaction to the report also was thoroughly predictable.

Supporters of wolf reintroduction said the National Park Service study upheld their contention that wolf reintroduction is biologically desirable and would not harm the local economy.

Reintroduction opponents said the report proved nothing of the sort.

Although the report apparently did not change any minds, it may yet prove to have a salutary effect on the nature of the argument over wolf reintroduction.

The Park Service report came about because wolf opponents in Congress wanted to delay implementation of a wolf recovery plan produced by the U.S. Fish and Wildlife Service in 1987. The recovery plan, which drew on much the same biological data the Park Service used, suggested that Yellowstone should serve as home to 10 packs of wolves.

Wolf backers in the House tried to get the reintroduction process going in 1988 by ordering the Park Service to begin preparing an environmental impact statement in preparation for releasing wolves in the park.

Senate opponents raised the cry of “not enough scientific data,” and succeeded in getting the EIS downgraded to a study, the results of which were presented in the report released last week. Another study was ordered last year, with results due in 1991.

But, as the Park Service report demonstrates, the refrain of “insufficient biology” has proven a flimsy

smokescreen for those who simply do not want wolves back in Yellowstone. The biology appears to be more than adequate, and it all seems to support reintroduction.

No longer able to employ scientific uncertainty as a pretext, the anti-wolf forces in Congress have adopted a more honest position, admitting that their opposition is, and has been, driven by politics and philosophy.

As Rep. Craig Thomas, R-Wyo., said, one’s position on wolves “still comes down to pretty much a sense of values.” Either you think wolves belong in Yellowstone, or you don’t, he said.

What your constituents believe also makes a difference, Sen. Malcolm Wallop, R, admitted. He has no constituency pushing for wolf reintroduction, and plenty of ranchers, hunters and outfitters opposed, Wallop said.

Wallop, Thomas and others all said that wolf reintroduction is a political issue that will be resolved in a political arena. Some wolf reintroduction supporters have been slow to recognize that fact, or continue to resist its reality.

“Politics have dictated the outcome of the Yellowstone wolf debate for far too long,” Defenders of Wildlife President Rupert Cutler said. “Now it’s time to listen to the facts.”

While arguing for a biology-based decision, Cutler and other reintroduction proponents expect more from the opposition than they do from themselves. They, too, have employed science as a smoke-screen, using it to hide personal and philosophical passions which are as deep-seated and as deeply felt as the anti-wolf feelings of many opponents.

Much as environmentalists and the biologists themselves would like to see the fate of wolves in Yellowstone determined by science, the fact is that it will not be. Given that, environmentalists would be well-advised to abandon objectivity and pursue reintroduction with all of the emotion and energy brought to the issue by those who oppose it.

A dispassionate mustering of the facts has not accomplished much thus far. Maybe it is time to try a different approach.

Clearly, it is asking too much of science to expect it to overcome or transcend the differences between those who admire and respect the wolf and those who hate and fear it. It may be asking too much of politics, as well.

In any case, the argument over whether to return the wolf to Yellowstone will not be resolved until those who favor it realize that they cannot rely solely on science to make their case, and those who oppose it recognize that science can tell them far more than they have been willing to listen to thus far. ■

Andrew Melnykovich writes for the *Casper Star-Tribune*.

No agreement yet

Yellowstone National Park has had no gray wolves since a 1930s extermination program by the government.

But two recent plans propose restoring the wolf to Yellowstone. Each plan, however, is adamantly opposed by Wyoming’s Game and Fish Department and ranchers.

One proposal is a report called *Wolves for Yellowstone?*, the result of a two-year, \$200,000 study ordered by Congress and performed by independent biologists. It recommends introducing 30 wolves into Yellowstone. The 30 would hopefully expand within two years to 100, the number needed for a viable, surviving group.

Wildlife populations within the park would not be hurt significantly, the report says, estimating reductions of 15-25 percent for elk, 5-10 percent for bison, 20-30 percent for mule deer and 10-15 percent for moose. In the forests surrounding the park, only minor livestock losses are expected. The report also stresses that the wolves would be no threat to human safety.

The second plan for wolf restoration comes from a bill introduced in the Senate by Sen. James McClure, R-Idaho. It aims to reduce fears among wool and beef growers, the major opponents to wolf reintroduction.

Under his plan, three breeding pairs of wolves would be introduced to both Yellowstone and Idaho’s Frank Church River of No Return Wilderness, a much smaller number than the congressional report recommends.

McClure’s plan also says that wolves would lose their endangered species status if they left the study area. These straying wolves could then be managed by state agencies and shot by livestock growers. Any breeding pairs lost this way could be replaced under the bill.

Wyoming Game and Fish Director Pete Petera is particularly disturbed by the congressional report. “Anyone reading this report who is in the business of wildlife management next to the national park shouldn’t feel too comfortable about the whole idea,” says Petera.

The livestock industry, not surprisingly, is fighting all reintroduction plans. Larry Bouret, vice president of the 6,000-member Wyoming Farm Bureau, told the *Denver Post*, “The report was written by federal agencies who have already voiced their support for wolves.” He added that stockmen would not endorse any plan calling for the return of wolves to Yellowstone.

The report, *Wolves for Yellowstone?*, is available for \$16.30 from the Yellowstone Association, P.O. Box 117, Yellowstone National Park, Wyo., 82190. Executive summaries cost \$4.20, and are available from the same source.

— Ken Wright

14-High Country News — July 16, 1990

OTHER VOICES



Jackson Hole Guide

A proposed extended runway at Wyoming's Jackson Hole Airport threatens Grand Teton National Park

Is bigger better in Grand Teton Park?

by Sue Trigg

Grand Teton National Park in Wyoming is under siege again by business pressures and air carriers at the Jackson Hole Airport.

The Jackson Hole Airport Board appears ready to request permission from the Department of the Interior to extend a runway at the only commercial airport allowed in a national park. The 1,700-foot extension would penetrate even farther into the park so air carriers can bring in more and bigger jets with bigger payloads.

The struggle to protect relatively unsullied park values from the bigger-is-better mindset of the airport board and some local businesses has made the airport issue one of the most volatile and strident in the valley. It has spawned numerous lawsuits and countless arguments. In the extreme, proponents of the airport regard it as an economic lifeline that should be given every advantage, while opponents even pushed to have the airport removed from Jackson Hole.

The airport board is about to deliver the knockout punch by claiming that a longer runway and bigger planes will benefit Grand Teton National Park. To the uninitiated, this might appear possible based on information given by the board; but then, this is a complicated issue rife with statistics that are easily manipulated to the advantage of runway extension proponents.

Furthermore, an agenda of never-ending expansion at the airport has, over the years, been supported by Wyoming's congressional delegation. They have intervened repeatedly in the conflict, ignoring the legacy that national parks exist for all citizens across our country.

Sen. Alan Simpson, R-Wyo., went so far as to introduce legislation in 1980 that would have removed the airport from Grand Teton National Park on paper by turning the 533-acre site over to the Bureau of Land Management. The move was scuttled, however, when Laurance Rockefeller, whose Jackson Hole Preserve deeded the lands to the federal government in 1949, threatened to invoke a clause in the deed. It specified that should any of the deeded lands cease to be a part of a national park or national monument, then the entire parcel would revert to the Jackson Hole Preserve.

It was a blow to the values for which Grand Teton National Park was established when, in 1981, commercial jet aircraft were permitted to use the Jackson Hole Airport.

The National Park Service fought the issue, arguing that the introduction of jets would cause an irreversible loss of the relative quiet that is part of the national park experience visitors expect. The agency lost the fight, however, due to some fancy footwork by the Jackson Hole Airport Board, which was helped by Wyoming Sens. Alan Simpson and Malcolm Wallop. The senators rendered useless the Park Service's noise-abatement plan that would have precluded jet

"We have long been lusting after Jackson Hole for 737s."

aircraft from using the airport. The senators amended the Fiscal Year 1981 Appropriations Act to require that no appropriated funds could be spent to enforce the noise-abatement plan.

Glen Ryland, then president of now-defunct Frontier Airlines, went so far as to tell the press in 1981, "We have long been lusting after Jackson Hole for 737s." Through legal and administrative maneuvering, Frontier Airlines, which requested that it be allowed to use the Boeing 737-200 aircraft to replace older Convair 580 turboprops, was granted a so-called temporary change in operations specifications by the FAA.

At the end of the two-year period, FAA personnel stated to concerned local citizens that there was no such thing as a "temporary" change.

Another blow was dealt to Grand Teton National Park in 1983, when then Secretary of the Interior James Watt signed a new lease agreement with the Jackson Hole Airport Board. Disagreement over who had control of development had been ongoing until 1978, when, as part of a lawsuit brought by the airport board against the Park Service for expansion of the airport terminal, a federal judge found that Grand Teton National Park had the requisite control mandated by federal law.

Watt eliminated that measure of control in the new lease agreement by naming the airport board the sole proprietor. Along with the signatures of Watt and the president of the airport board as parties to the agreement appear the gratuitous signatures of all members of the Wyoming congressional delegation. The 1983 Lease Agreement was a reversal of the 1979 Interior Department decision that the lease not be renewed.

The 1983 Lease Agreement specifically stated that a runway extension was not authorized and that such an action could only be accomplished by amending the agreement. The airport board believes that runway extension can be authorized by a simple amendment and that an environmental impact statement is unnecessary.

The 737-200 jets that were used as the model fleet equipment to set the contours for noise limits in the 1983 Lease Agreement are no longer in use at Jackson Hole. Economics and advances in technology have led to the introduction of quieter, more efficient planes. This means that the mix of aircraft currently in use by the commercial airlines serving the Jackson

market produces considerably less noise than is legally allowed by the lease agreement.

Some people refer to this allowance as a "noise bucket" which, under current conditions, is only about one-third full.

A longer runway could reverse the current trend of noise reduction over park lands by accommodating aircraft which are economically marginal to operate on the present short runway, thereby acting to fill up that "noise bucket." The airlines could also increase the number of flights with the equipment currently in use until they reach the outdated noise limitations.

The lease agreement makes it clear that the airport board is obligated to reduce impacts of aircraft noise on the national park whenever advances in technology make it commercially feasible.

Runway extension is not needed to reduce noise. At its present length, the runway will continue to force airlines to look for more efficient aircraft to serve their economic needs in the local market. A longer runway would, however, require aircraft to fly lower over the Snake River and the Moose Visitor Center, thereby increasing noise and visual intrusions in a high visitor use area. Further visual intrusion would result from 1,700 additional feet of landing lights on park land.

The airport board's current position on this issue is that they will not act until the final report is presented; then they will abide by what local public sentiment dictates. One of the three Teton County Commissioners has already stated his eagerness to support the extension purely for economics, and it is likely that a good portion of the business community, as well as the air carriers, will express the same sentiment. This only serves to underscore the fact that some individuals view Grand Teton National Park as an attraction to be exploited for Jackson's economic benefit. They ignore the basic purpose and values of the park and the fact that the park belongs to all of us.

The airport board and its supporters ask those interested in the issue to illogically accept on faith that more runway and bigger planes serving a larger market will somehow benefit Grand Teton National Park. Indications are that the Wyoming congressional delegation will again enter the controversy without regard to proper national park management policy. With pressure coming from that powerful source, it is vital that concerned individuals, not only from Jackson, Wyo., but from across the nation, let Park Service Director James Ridenour know that extension of the runway is an insult to proper national park stewardship. James M. Ridenour's address is National Park Service, Interior Building, 18th and C Streets, Washington, DC 20013.

Sue Trigg, a former Park Service employee, lives in Moose, Wyoming.

OTHER VOICES

Present policy burns trees and money

by Nick Sundt

It was August 1987; the summer was drawing to a close. The land was dry — ready to burn. The place: Cave Junction in southern Oregon. Lightning pounded the ridge tops around town. There would be plenty of fires the next day.

Six years earlier, the most threatening of those fires would have been attacked quickly by smoke-jumpers based just outside of town. But this was 1987. The base had been closed in 1981. A 1979 Forest Service study recommended the closure as a cost-cutting measure.

The study also suggested that two other much more distant bases, one in Redmond, Ore., and one in Redding, Calif., could pick up the slack with 110 jumpers and five aircraft.

Things didn't quite work out as planned. Over the years, Redmond and Redding themselves were cut back. By 1987, the bases combined had fewer than 80 jumpers and only four aircraft. Southwestern Oregon was left vulnerable. Even under ideal conditions, help would be slow to reach the Cave Junction area.

But conditions were far from ideal. In late August, storms ignited fires all over drought-stricken southern Oregon and northern California. Consequently, when the Forest Service decided to attack the Silver Fire, the most threatening of the area's fires, it found that the distant Redmond and Redding jumpers already were committed to other fires. Jumpers had to be brought in from as far as Montana and northern Washington. Serious delays were encountered en route. By the time the jumpers were put on the fire, it was too late. Hours later, there was a Dunkirk of sorts, with the jumpers huddled on a ridge top working out an escape route. Meanwhile, smaller nearby fires that could have been contained were either understaffed or not staffed at all.

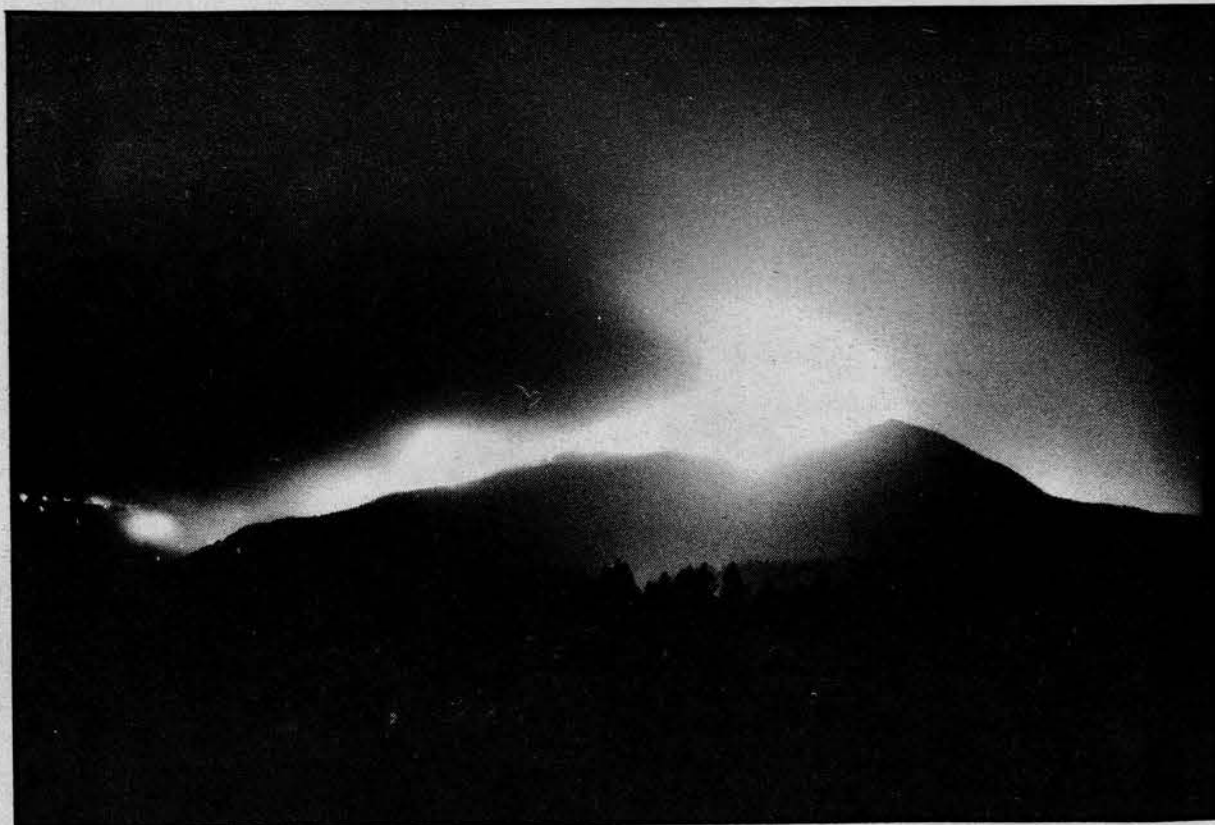
The Forest Service, overwhelmed by other fires, chose to let the fire burn until it had sufficient resources available to deal with it. Two months later, the fire finally was controlled. It burned nearly 100,000 acres, making it the biggest fire in Oregon since the legendary Tillamook burn of 1933. Among the areas burned were treasured stands of old-growth.

At its peak, over 5,000 people were sent to the Silver Fire. The suppression cost was about \$20 million. That amount could have kept the old Cave Junction Jumper Base operating for half a century. Had the base been open, the Silver Fire and many others could have been stopped for a fraction of what eventually was poured into them.

The Silver Fire was not an isolated incident. Analogous situations developed elsewhere that year, and in previous years. They also have happened since then and are bound to occur again this year. In November 1988, for example, the Federal Fire Management Review Team noted in regard to that year's Yellowstone area fires: "Lack of resources was a critical issue with all of the fires, especially as the summer progressed."

In 1989, federal officials yet again were hamstrung by inadequate resources. The situation was aptly captured in the statement by a spokeswoman for Idaho's Payette National Forest in July: "We estimate we have 178 new fire starts from lightning. About 49 are manned and another 129 are not being fought at this time because we simply have no resources."

These situations arise in part because the levels of preparedness and fire-management practices do not match the exceptionally volatile fire conditions we are experiencing. Granted, there always will be shortages in bad years. But they are seriously aggra-



Christopher Hodges

A fire storm crests a peak near Yellowstone's Mammoth Hot Springs during the fall of 1988

vated by short-sighted budget cuts, coupled with policy and management deficiencies. Political decisions, made years before the fire seasons begin, routinely cut preparedness budgets below levels which are considered optimal under average conditions.

Since 1984, a growing portion of the nation has been under extreme or severe drought. At the end of May 1984, less than 5 percent of the nation was under such conditions. By the end of May 1988, the figure had reached nearly 25 percent; and by May of 1989, the figure was in excess of 30 percent.

There is much to burn on many public lands, ranging from large, unbroken areas of heavy brush to sizable stands of dead or dying vegetation. Fires in these areas can grow very quickly; unless they are stopped quickly, they place heavy demands on firefighters and equipment. Adding still further to the load is the growth of settlements in areas vulnerable to wildfires. Protecting such developments requires intensive use of suppression resources.

Yet from 1978 to 1987, the number of full-time seasonal firefighters employed by the Forest Service dropped by 40 percent, and funding levels for preparedness dropped by over 20 percent. On average, the Forest Service has received nearly 20 percent less than what it estimates to be the economically efficient level of preparedness in an average year. Similar cuts have been experienced by other local, state and federal fire organizations; this has increased the dependence of those agencies on the Forest Service, straining that agency's capabilities.

Budget cuts coupled with extreme fire conditions have created conditions for large wildfires and runaway spending. The total area burned each year in the late '80s consistently remained far above the average used by the Forest Service in estimating preparedness needs. In both 1987 and 1988, the area burned on land protected by the Forest Service was between four and five times greater than the 10-year average. Last year also was far above average.

Budget figures show parallel trends. Deficient initial outlays are followed by massive expenditures of loosely controlled, practically unlimited emergency funds. From 1985 through 1989, the Forest Service invested \$794 million in preparedness; expenditures

of emergency funds amounted to an additional \$1.3 billion, for a grand total of over \$2 billion in a five-year period. In many instances, these expenses resulted from fires that could have been much less costly had public agencies been better prepared.

As we begin the 1990s, the pattern persists. The preparedness budget for this season will be roughly unchanged from the levels of the late 1980s; the proposed 1991 budget is even lower. Yet large portions of the country again are afflicted with extreme fire conditions. One high-ranking federal wildfire expert notes that "1990 already has the earmarks of disaster."

Looming too is the threat of climate change. Some scientists suggest that during this decade we may see an increased probability of drought and extreme heat waves. According to Jerry Franklin, of the University of Washington, and his colleagues, "Increased frequency of fire is certain ... and greater intensities are probable, at least during a transitional period" under such conditions if they indeed materialize.

In response to these short- and medium-term risks, an array of changes are urgently needed to ensure that the Forest Service is better prepared, that it is more adaptable to variable and unusual conditions, and that large sums of money are not squandered. The most pressing problem is the 1990 fire season. Given the short time available, little can be done beyond a sharp increase in initial attack forces such as smokejumpers and helicopter crews. This should involve a major shift in already allocated funds, which should be supplemented with an additional \$30-\$60 million of emergency funds sent before the fires break out. These funds will help to keep fires small and avoid the enormous waste associated with the fires once they become large "project" fires.

Time is running out for the 1991 budget, too; in a matter of months that budget will be approved by Congress. If adverse conditions are present next spring, similar budget increases for preparedness will be justified.

Beyond these admittedly stopgap measures, there is an immediate need to scrutinize and reform the entire system by which we manage fuels and fires. Fundamental choices about funding and policies must be clarified and publicly discussed. The issues go well beyond the ecological consequences of so-called "let-burn" policies in wilderness areas. We quickly must assert control over the wildly inflated sums of money being spent on large fires. If reforms are not realized, we will see large and avoidable losses of lives, natural resources, and taxpayers' dollars during the next decade.

There was a Dunkirk of sorts,
with jumpers huddled on a ridge top
working out an escape route.

Nick Sundt is a Washington, D.C., resident who is spending this summer in the West fighting fires.

16-High Country News — July 16, 1990

On March 13, 1988, seven months after my husband George died, I woke from a dream in which he and I were driving somewhere. As usual, I took a few minutes to realize he wasn't lying beside me, and will never lie beside me again. The bedroom was dark and warm.

Often when I can't sleep I read awhile, or walk on the deck looking at the stars and talking to George. Under the deep blue star-filled sky I can believe he is listening. I got up to open the curtains and noticed that the sky seemed light in the east. I checked the time: 1 a.m., too early even for false dawn. The moon had set in the west some time before. I couldn't explain the light, but it was there: a soft glow that made the garage and the van beside it, the woodpile, even a nearby hillside, completely clear.

Barefoot, in my long flannel nightgown, I went to the deck and realized I was seeing the northern lights, but more brilliantly than ever before. Waves of blue and white swept up from the northern horizon to a spot almost directly overhead, to meet in a whirlpool of mingled lights. I got a blanket, woke the dog, and put on the moccasins lined with sheepskin and faced with buffalo hair that George made for me. Together the dog and I returned to the deck and sat on the frosty boards.

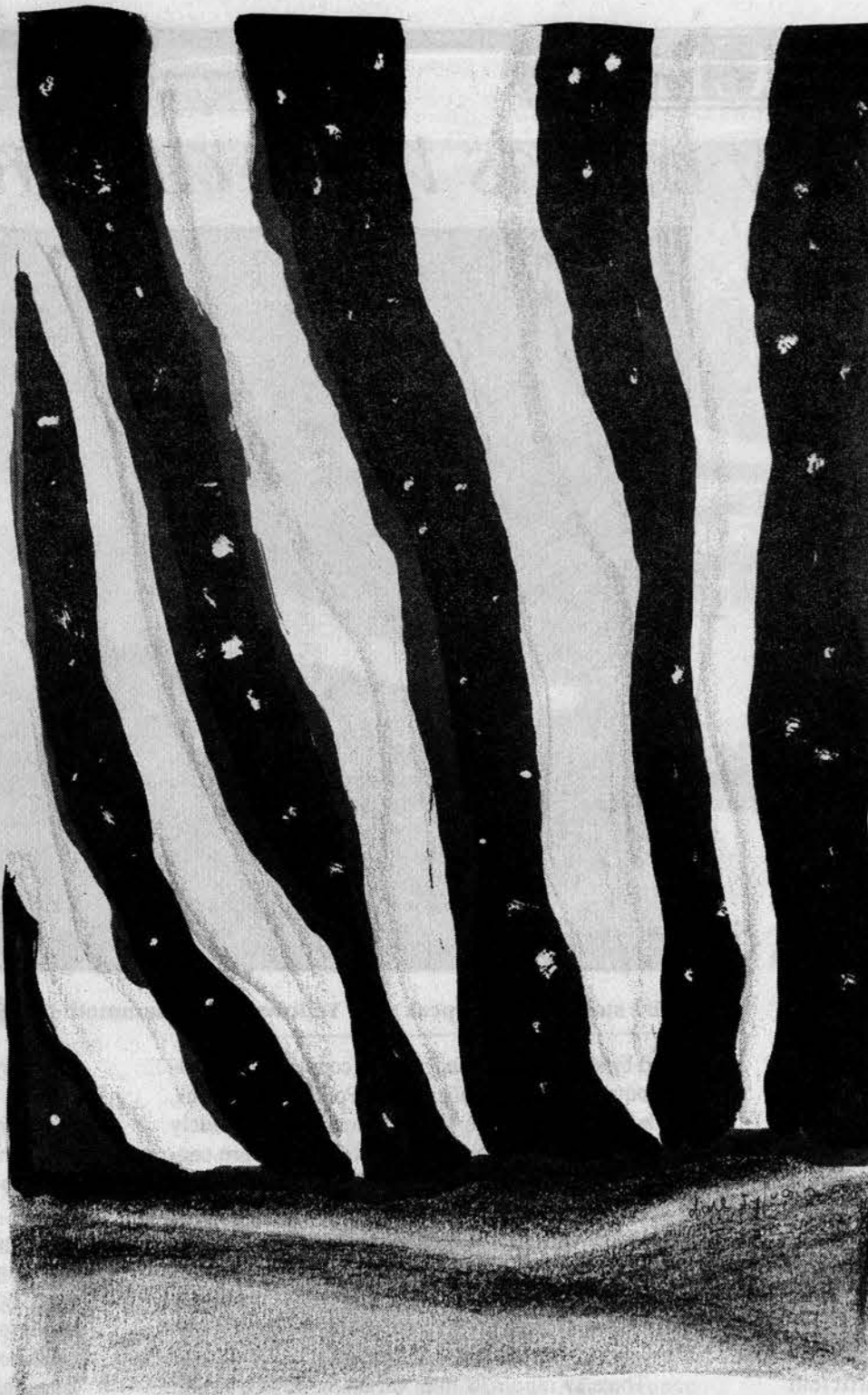
The light began to flow faster, in long streaks of blue and white. Each streamer of light seemed to flare more brightly as it moved toward the south, then diminish as it slid back north. All at once the pulses paused, and I began to gather the blanket around me, thinking the night's show was over.

Then a red glow intensified in the north, and a single shaft of red light shot up, to end at the whirlpool above me. Then came another, and another, until the whole sky pulsated like a heart with red veins of light. I felt like crouching and gibbering, as a primitive woman might have done. Behind the fires in the sky, I could see stars shining calmly in the deep blue.

Once before I had seen red northern lights, when George and I were newly married and lived in a small apartment attached to my parents' house. We all stood in the yard. My father remembered watching the lights glow red as a young man, when his mother said they foretold war. World War I broke out not long after. I tried to dismiss the idea as superstition.

I rose, knowing that I had to call someone to share this. When I looked back, I saw one large oval circle and one small oval circle melted in the frost where the dog and I had sat. My neighbor Margaret sleepily answered the phone, but looked out her window even before I hung up, thanking me while she struggled into her robe. Lawrence didn't sound nearly as grateful, but he did say that even in the trees he could see the lights.

Back outside, I walked to the stone cairn on the hill north of the house. George and my stepson Michael stacked several blocks of sandstone there one hot summer day partly because they were in the way of our house-building crew. Later, George confessed to wishing he could build a tall stone tower, climb to the top to think, and watch the countryside. I love the word "cairn" because of its Scottish origins. George wanted to play bagpipes strutting on this hillside, but his lungs were too weak from radiation. He practiced on his chanter, the



WHEN A SOUTH DAKOTA NIGHT SHUDDERED AND SHONE

by Linda Hasselstrom

flute-like apparatus that makes the tune, but never got the pipes. I have a photograph of him in his kilt, walking into the sunset. The cairn is only waist-high, but I see it as a tower. I leaned against it, and wrapped the warm wool around me. The dog explored for a few minutes, then crept into a fold of the blanket and sat staring out and up, apparently as fascinated as I was.

The lights seemed to streak up the sky faster and faster, changing from red to blue to white to green without pause. Once or twice I craned my neck to look behind me as a single spear of green light shot from the vortex of light to the southern horizon. I heard a coyote howl once to the east, a gentle creaking as the wind pushed softly at the snow fence, and the rustle of grass nearby. No cars went past on the highway. No other human was within a mile of me. The wind was gentler than breath. I thought of all the people sleeping in the town 20 miles away, wasting the night while this glory went on overhead. I wanted to wake them all, dial numbers at random and shout "north-

ern lights!" into the phone and dial again. But all of their homes were so surrounded by the sick colors of artificial light, they would see nothing. Some, fearful of the gadget through which anyone can speak to us at any time of day or night, would call the police to report a crank caller. I kept thinking of people I might call, but I couldn't bring myself to leave the hillside for the house, which suddenly seemed a clumsy way to disfigure a perfectly good grassy hillside.

Then the light wind died completely; all sound ceased. I leaned back against the pile of rocks, expecting thunder, expecting the sky to open and a goddess to descend, expecting a majestic voice. Nothing happened, only the cadences of light continued. I considered drowsing. I felt not only safe, but as if I were in a great cathedral, watching a performance so holy no harm could even be thought about me. The dog's warmth against my thigh was comforting, but so was the chill stone my husband had set at my back, and the hard ground under me, the roughness of the deer antler, one of

many I'd stuck randomly between the stones, on which my left arm rested. I could faintly smell the costly Scotch Jerry had spilled here as a toast, the brandy I had poured on the stones, the sage hung on the antlers or tucked into the stone.

Then I heard a distant tinkling, like bells. I sat straight and thought carefully. I would have welcomed a miracle, but this was serious. Rationally, I considered the possibilities. No wind blew. The sound did not resemble any other I had heard that night: the snow fence, the coyote, the grass. It came again, louder, just as a curtain of green light swept the entire width of the sky from west to east, and died overhead at a line that seemed to divide the sky above me. The universe — isn't it odd that there are no synonyms for "sky" when it is the most obvious element of the prairie? — seemed to vibrate with green light. Again and again, the horizon glowed green and the curtain swept, sky-wide, to the center of the bowl over me. Each time green flushed the sky, the bells rang loudly, dying away to a gentle tinkle with the light's dying. I shut my eyes — I could still see a green glow — and tried to call up an image of what might make that sound. All I could visualize were dozens of tiny glass bells, rung gently by delicate hands somewhere in the darkness between me and the horizon.

I pictured the pasture that lay around me: each post, each strand of wire, each tree, the electric pole. I have sat and paced for hours on this hillside, in all weather. Nothing exists here that could make that sound. No one else was near; no cars passed. The sound could not exist, and yet it did. Finally I remembered reading something about Arctic explorers insisting they could hear the northern lights, but they had given no description of the sound, which they declared to be audible only in the far north.

I watched the lights and listened to the bells until 3 a.m. I drifted into waking dreams in which I thanked George for the lights. Do good souls get to orchestrate the light show? Do several spirits play the lights together, like an orchestra? George could be happy in such company. He had a good sense of rhythm and a beautiful voice, but he had a hard time staying on the same notes other folks were singing. In a soundless orchestra, his abilities would be apparent.

No one to whom I've told the story can think of a rational explanation for the bells; all but my closest friends look at me with doubt in their eyes. I'm satisfied without a logical explanation. Some things should remain mysterious.

In July of the same year, reading an article in a recent *Smithsonian* magazine, I learned that huge sunspots, large enough to contain 70 earth-size planets, had come into view on the sun in mid-March. Giant solar flares erupted; the sun threw radiation and billions of tons of matter tens of thousands of miles into space. The earth's upper atmosphere was struck by solar particles carrying electrical currents that created magnetic fields. Among the results were interruptions of power and communications, garage doors that rode up and down — and the phenomenon we know as the northern lights. One official said all those effects were nothing; a really big solar flare produces enough energy to light a big city for 200 million years.

Not a single scientist mentioned bells.

Linda Hasselstrom, a rancher, poet and author, lives near Hermosa, South Dakota.