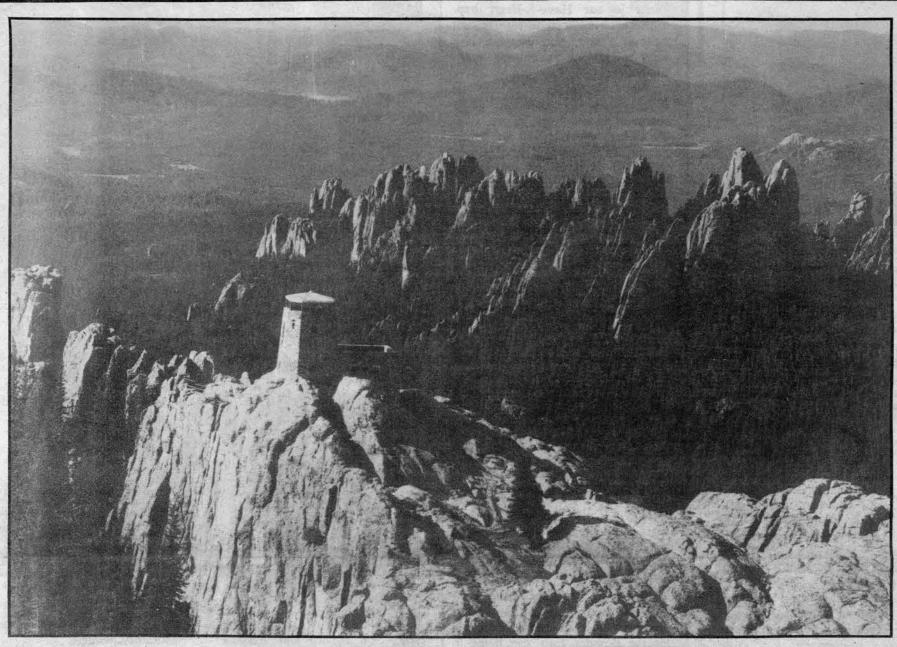
# High Country News

April 13, 1987

Vol. 19, No. 7

A Paper for People who Care about the West

One Dollar



The castle atop Harney Park, the center and highest point within the 2 million acres of South Dakota's Black Hills

# Heap leach mining comes to South Dakota

# There's gold in them 'thar hills

\_by Peter Carrels

hey are called hills although nothing is higher east of the Rockies. They are called black even though deep green fir forests cover the slopes and lush grasses fill the meadows below.

These are the Black Hills, a rugged, timbered range that interrupts the rolling grasslands of the northern plains in southwestern South Dakota. These are the hills that also contain gold that can be leached from the rock with cyanide, a process not without environmental consequence.

From afar, especially in silhouette at sunset or dawn, the Black Hills appear smoothly worn. They are, after all, America's oldest mountains. But age has not completely mellowed the landscape. Geologically this has been a hectic place.

Heaved up by tremendous underground forces, the Black Hills are a perfect example of a mountain range formed as a result of domal uplift. Rough and tumble weather of the northern plains has also contributed to the look of these mountains.

Running through the core of this Vermont-sized range are exposed, jumbled pre-cambrian rocks dating back over 3 billion years. It is here. in the interior portions, that the highest and most rugged elevations are found. Harney Peak, measuring 7,242 feet, reigns as the Black Hills' tallest mountain. Harney is topped by a massive cap of pink granite. Nearby are towering granite spires called Needles that poke through the forest. Rocky ridges, bold escarpments, narrow canyons and small, swift creeks fall between the prominent peaks.

Everywhere in the Black Hills are sprawling ponderosa pine forests. White spruce, lodgepole pine and birch prosper here as well. Underfoot, the forest floor is alive with flowers, ferns, mosses and lichens. Beneath the earth's surface are some

of the world's spectacular caves, as well as rich concentrations of minerals.

The Dakotah, or Sioux Indians, revered the Black Hills as a place of special beauty and sacred mystery. To the Dakotah these were Paha Sapa, the Dark Hills, the hallowed homeground of Wakatannka, the Great Holy.

The Dakotah did not live in the Hills. They entered them to gather lodge poles or pelts. Many bands quartered in the butte-sheltered shortgrass country fringing the range. From this distant vantage, the island of mountains did indeed appear darkly magical.

Paha Sapa was, more than anything else, a spiritual symbol for Indian people living on the northern plains. They came to places like Bear Butte, on the northeast edge of the range, to fast and seek visions. Contemporary Indians continue to travel to Bear Butte for religious

experiences.

The 1852 discovery of gold by

white prospectors in Montana increased the number of wagon trains. This alarmed area tribes, unaccustomed to the steady movement of white settlers. Skilled and fearless Sioux and Cheyenne warriors harassed the settlers and U.S. military assistance increased. Major clashes erupted between the Indians and soldiers. The U.S. Army was unprepared for war and its campaigns proved mostly disastrous. By 1868, army leaders decided its efforts were futile and initiated the Laramie Treaty. The treaty preserved the Black Hills for the Indian people and prohibited white settlement.

But at the same time stories were circulating about vast gold deposits in the Black Hills. In Washington, political pressures increased to open the area, and in 1874, the government agreed to send the 7th Cavalry to survey it.

Under the command of George Custer, an expedition of 1,000

(Continued on page 12)

### Dear friends,



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Tom Bell Editor Emeritus Ed Marston Publisher Betsy Marston Judy Moffatt Development Marjane Ambler Bruce Farling Glenn Oakley Geoffrey O'Gara C.L. Rawlins Pat Ford Contributing Editors Steve Hinchman Editorial/Research Ron Sunderland Darkroom Becky Rumsey

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We boasted too soon of our success in ridding the office of skunks. We had trapped only the tip of the herd; the others are still down there, acting like the Army Corps of Engineers, as they dig new holes and remove rocks we've placed over their entrance. They also scorn the peanut butter in our Have-A-Heart trap. We've been advised to turn to rank meat as a bait, and camphor as a way to induce them to move voluntarily.

We don't understand why the skunks want to hole up in a basement at this time of the year. We recently drove the 50 miles from Paonia to Montrose and almost didn't get there for all the distractions. Unlike office and factory workers, farmers do their thing outdoors, in plain sight of the rest of us, and they are feverishly at work as if there were no agricultural crisis.

Delta and Montrose counties are a mix of livestock ranchers in the high country above 6,000 feet, fruit farmers in the middle elevations around 5,300 feet, and row crop farmers at and below 5,000 feet. The livestock people are still mucking around in a mix of snow and mud. catching this spring's crop of calves and lambs, but the ground is clear at the fruit elevations, and dry enough to permit the fruit ranchers to burn their slash and the weeds off their ditches. Ditch burning, and the resultant smoky skies, is an activity associated throughout the West with spring. It is also the stuff of which legends are made, as one or two of the fires invariably get out of control and burn part of an orchard, or a house, or, if the burner is lucky, nothing more than an old car or two.

Down valley, near Delta, the burning season is over. A dry spring let the farmers into the fields in March to plow and plant. The fruit farmers at the higher elevations won't turn water into the canals for several weeks yet, but the water is already flowing in the canals in the Delta to Montrose corridor, and we saw several fields being irrigated.

Readers will remember that HCN is setting up micro-bureaus throughout the region as a way to improve coverage of the hinterland surrounding metro Paonia. Here is the first of a series of profiles of our micro-bureau chiefs -- a self-profile provided by Paddy Guthrie of New Mexico:

Born and raised in the wake of Lake Erie's "wind chill effect," in Buffalo, New York, Patricia Guthrie left the blizzard city behind in 1980 in search of greener pastures. She settled for the red rocks, muddy waters and perpetual blue sky at the Grand Canyon.

After spending 18 months as a backcountry ranger on the wilderness and mule-circuit trails ticketing hikers for looking ridiculous and other federal offenses, Guthrie left the "world's biggest ditch," for loftier heights -- higher education.

She graduated with a journalism degree from Flagstaff's Northern Arizona University in 1983, after taking a quick seven years to complete her bachelor's degree. Following stints of bartending, driving a wieny wagon and cross-country ski instructing, Ms. Guthrie unwittingly became the first woman to work as a firefighter on the Forest Service's Coconino Hotshot Crew.

Ricocheting around the West the



Patricia Guthrie and friend, Red Rock State Park, Gallup, New Mexico

summer of 1984 -- California, Montana, New Mexico and Arizona -- working inhumane shifts on the fireline in the company of 18 deranged males, Guthrie has not pursued this career further.

After co-establishing Desert West News, a southwestern radio and print bureau in 1983 with Sandy Tolan, Guthrie freelanced for The New York Times, The Christian Science Monitor, Arizona Magazine, Northern Arizona Life and High Country News.

In 1985, she accepted a full-time job with *The Gallup Independent*, covering the Zuni, Navajo and other reservations and environmental and county news. This job ended when she was "kicked" on Route 66 by a fire-setting, lizard-chasing car-basher one sunny Sunday morning in January 1986. Shuffling off to Buffalo, she recovered from back injuries before returning to Gallup, New Mexico, for more abuse last September.

Working part-time for *The Inde*pendent, Guthrie now freelances for regional newspapers.

The Arizona Press Club selected Guthrie's eight-part series in The Arizona Republic last November as a top contender for the state's best investigative work. She will accept an award April 25 in Phoenix, along with the article's co-author, Republic Project Editor Mike Masterson.

The series looked at the widespread use of the contraceptive Depo-Provera on handicapped, Native American and other uninformed women. The long-acting shot is not approved by the federal Food and Drug Administration because it has been shown to cause cancer in laboratory animals.

Searching for signs of civilization in Gallup, New Mexico -- a cup of cappucino, a wine cooler and cajun quiche -- Guthrie has learned to settle for a Navajo taco and a Bud.

The HCN staff wants to thank Superintendent John Hunter of Bandelier National Monument in Los Alamos, New Mexico, for giving the paper a "Take Pride in America Award." Hunter says the awards are part of an Interior Department goal to promote the idea that public lands belong to everyone.

-the staff

# HOTLINE

#### Park proposal flops

Idaho Republican Rep. Larry Craig has begun a study of establishing a national park in Idaho's Sawtooth Mountains and White Cloud Peaks. Most of the area involved is in the Sawtooth National Recreation Area, established in 1972 and managed by the Forest Service. Craig, who last year proposed building a road through Idaho's River of No Return Wilderness, says a national park could bolster central Idaho's economy. As with the River of No Return road, his idea has so far drawn much fire and little support. None of the area Craig intends to study is in his congressional district. Democrat Richard Stallings, who represents the area in Congress, says the idea doesn't make much sense to him.

# WESTERN ROUNDUP

# Western coal mines are hit by strike

KAYENTA and WINDOW ROCK, Ariz. -- Eight Western coal mines are idle following union strikes at two major coal companies, the Pittsburgh and Midway Co. and Peabody Coal Co.

More than 1,000 members of the United Mine Workers of America walked out over the past six weeks after negotiations for a new contract failed. Since Feb. 21, 361 workers at Pittsburgh and Midway's two mines near Window Rock, Ariz., have picketed around the clock.

In late March, 890 union members at Peabody Coal Co. in Arizona, Colorado and Montana also declared a strike, citing a failure to reach job guarantees. A three-year contract had expired at both the companies. The majority of the strikers are Navajo -- a reservation that already faces 40 percent unemployment.

Phillip Henio, president of UMWA District 15, Local 1332, said union members at the Pittsburgh and Midway mines are also concerned about a new drug-testing policy being imposed by Chevron, P&M's parent company. Many of the Navajo miners are members of the Native American Church that uses peyote in religious ceremonies, Henio said.

Though Henio did not know how many P&M miners participate in the 500,000-member Native American Church, he said, "With Chevron's drug policy as it is, we feel we cannot represent our people if we accept that policy as is." P&M officials declined to elaborate on the

P&M Vice President Dick Holsten



Striking coal miners at the entrance to Pittsburgh and Midway Co. mine

told the Gallup Independent recently that the real issue in the strike was "compulsory unionization." Since the trend in the West is toward non-union mines, he can't give that option away, Holsten said.

At the Kayenta and Black Mesa Navajo Reservation mines operated by Peabody in northern Arizona, 740 strikers have halted mining and the coal slurry line that feeds Southern California Edison in Nevada and the Salt River Project in Page, Ariz.

Last year, the two surface mines

produced about 11.5 million tons of coal collectively, said Gayla Hoffman, public relations manager at Peabody's headquarters in St. Louis, Mo. The strike affects about 11 percent of Peabody's total Western work force, Hoffman added.

Peabody's strike also put nearly 100 miners on the picket line at the Seneca and Edna mines near Steamboat Springs, Colo. Seven miners in Nucla, Colo., and 80 workers in Big Sky, Mont., are protesting as well.

-- Patricia Guthrie

# The West will just trickle by this summer

Some parts of the West could face drought conditions this summer. Because of below-normal precipitation and snowpack this winter, Agriculture Department officials predict there is not enough water for summer and warn Western states to begin conservation measures now.

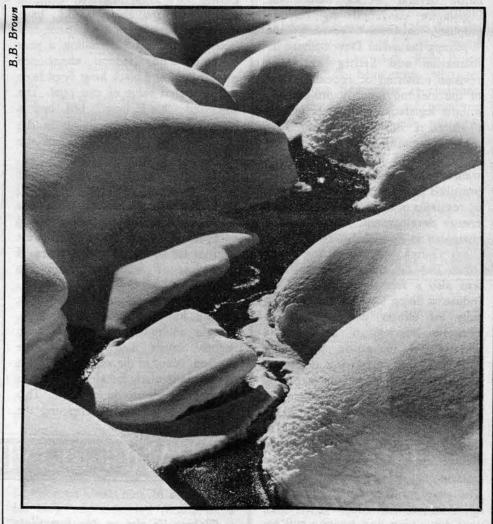
The Soil Conservation Service reports this year's snowpack averages only three-quarters of normal levels in the West as a whole. The agency says snow levels are down in eight out of the 12 states in which the service collects data.

California has the worst forecast. The snow reservoir in the Sierra Nevada is about half of normal, says Jon Lea, a hydrologist with the Soil Conservation Service's snow survey team. Nevada and the Great Basin area currently are at 56 percent of normal snow reserves, and Idaho is little better with 60 percent of its normal snowpack, Lea reports.

Utah, Wyoming, Montana, Washington and Oregon report significant shortages, averaging 75 percent of normal levels. Only Arizona and New Mexico have enjoyed their usual snow levels this year, and Colorado is not far behind with 93 percent of its average, Lea says.

Runoff from melting snow provides about 75 percent of the West's water supplies for cities and irrigation. Water levels in rivers and reservoirs will also affect the electrical power, fish and recreation industries.

Although most rivers in the West are currently meeting minimum



stream flows and fish requirements, Lea says there will be some low waters this summer. The Snake River in Idaho will be the hardest hit, Lea predicts, but California and the Great Basin states will also have to manage their water carefully. Idaho, Montana and Wyoming can all expect widespread shortages of irrigation water and reduced stream flows, according to SCS reports.

Recreational uses of Western reservoirs may also be impacted. Lea says many reservoirs will not get filled up this year, especially along the Columbia River.

-- Steve Hinchman

## HOTLINE



Hogup Ridge pumping station

#### A wet nightmare

Utah is about to begin pumping water from the Great Salt Lake into salt flats to the west. It is a \$60 million gamble to lower rising water levels that threaten millions of dollars in property and equipment on the expanding lake's edge. The first of three giant pumps will come on-line in early April, followed by two more in late May, according to Ron Ollis, public affairs officer for the Utah Department of Natural Resources. The pumps will spew up to 6,000 acre-feet of brine a day into a 320,000-acre basin west of the Newfoundland Mountains. Dykes will keep the 500-square-mile, 21/2-footdeep pond from flowing south over the Bonneville Salt Flats and Interstate 80. The project will not create a new lake since gravity will circulate most of the water back into the Salt Lake. But hydrologists estimate 40 percent of the water pumped into the West Desert will evaporate, reducing the level of the Great Salt Lake by up to 16 inches in the first year of operation. Even if nature cooperates by supplying normal or below-normal precipitation over the next several years, Utah officials say it will take 15 years of pumping to reduce the lake to levels of four years ago. Now at its highest level in 100 years, the lake threatens Interstate 80, the Salt Lake International Airport, the Southern Pacific Railroad corridor and a sewage plant.

#### The West wins one

The Supreme Court gave a major victory to environmentalists and states' rights advocates last month, ruling that states can impose their own environmental regulations on private companies mining federal lands. In a 5-to-4 decision, the court ruled that a California zoning commission could require a gravel company to obtain a state permit before opening an open-pit limestone mine in a national forest on the Big Sur coast. The Forest Service had already granted the company a permit, and the mining company argued that the 1872 Mining Law pre-empted a state's jurisdiction. A major test of the 1872 Mining Law. the case involved the Reagan administration, which sided with the mining company as a friend of the court, against a coalition of environmental groups, the Western Governors' Association and 19 states, mostly in the West. The coalition argued that Congress intended in 1872 not to make mining the preferred use of the land, but only to give miners right of entry. The Supreme Court ruling will have broad, but as yet undetermined, implications across the West.

### HOTLINE



#### Worst of the worst

The West did not fare well in a recent report ranking states by their efforts to correct environmental problems. Nine Western states scored in the lower third of all 50, according to the report by the Fund for Renewable Energy, a private group based in Washington, D.C. The report is the first to compare environmental programs since the federal government began turning more responsibility over to the states six years ago. Called State of the States, the study looked at programs in air pollution, hazardous waste management, soil conservation, groundwater protection, solid waste recycling and energy conservation. Wyoming ranked 48th, although it had high marks in the groundwater category, tying with Utah and North Dakota. Idaho was 44th and Montana, Nevada, New Mexico, and South Dakota ranked 36th. Colorado was 35th; Arizona ranked 31st. According to the report, states with the worst problems often develop the best programs: New Jersey, for example, ranked first for hazardous waste clean-up. The main report without appendices is \$10 from the Fund for Renewable Energy, 1001 Connecticut Ave. NW, Suite 638, Washington, D.C. 20006.



#### Royalty rulings

The Interior Department's Minerals Management Service says recent court rulings will make it easier to collect royalties from federal oil and gas leases. In one case, New Mexico said it should have received its 50 percent share of federal oil-lease royalties before windfall profit taxes were deducted. A U.S. claims court did not agree, which relieved the federal government of a potential liability of \$100 million to several Western states. In another case, a U.S. district court in Louisiana upheld federal claims that corporations should pay royalties on payments made through take-or-pay contracts. The case involved \$10 million in disputed royalties from major producers Exxon, Mobil, Texaco, Diamond Shamrock, and Cities Services.

# The 1987 Wyoming Legislature was no fun

The 1987 session of the Wyoming Legislature could perhaps best be characterized as grim. Confronted with a drastic decline in their mineral-based income, lawmakers came to Cheyenne budget axes in hand.

Wyoming depends heavily on the oil and gas industry for property, severance and sales tax income. Oil and gas provide 52 percent of the state's property tax revenues; coal, another 16 percent. Severance taxes from all minerals provided \$381 million for state programs in 1985. But last year this figure dropped to \$260 million.

The state's financial problems presented themselves to an over-whelmingly Republican Legislature -- 63 out of 94 members -- and newly elected Gov. Mike Sullivan, a Democrat. Sullivan, who has no political track record, last year defeated Pete Simpson, brother of Wyoming's U.S. Sen. Al Simpson, to retain the governorship for the minority party after a record 12-year reign of Democrat Ed Herschler.

Wyoming's bleak economic picture set the stage both for attacks on water projects and for industry lobbyists seeking to weaken the state's regulatory and tax structure. Four paid lobbyists from the Powder River Basin Resource Council, the Wyoming Chapter of the Sierra Club, the Wyoming Outdoor Council, and the Wyoming Wildlife Federation representing conservation issues were heavily outnumbered by nearly 30 paid lobbyists for oil, gas and coal interests.

Despite the imbalance, conservation groups held the line on these major issues:

•Industrial siting. The Petroleum Association of Wyoming began this battle several weeks before the Legislature convened by offering proposed legislation "revising" the Wyoming Industrial Development Information and Siting Act. The revision consisted of repealing most of the existing law. A pro-industry interim legislative committee instead produced a bill creating a "fast-track" permitting process.

Problems of procedure and substance with the fast-track approach provoked heavy grass-roots lobbying by residents of areas hard hit by past energy development. They found a champion in Sen. John Fanos from Uinta County, center of the Overthrust Belt oil and gas boom, who was also a former member of the Industrial Siting Council. He successfully led efforts in committee to reinstate information requirements and criteria to guide the Siting Council in its permitting decisions, and then shepherded the hard-won amendments through floor debate.

Other amendments to the Siting Act clarified disputed areas of jurisdiction between the Industrial Siting Administration and the Department of Environmental Quality. The governor has since signed the revisions into law. Although all agree that the cutting and pasting will not make the Siting Act a piece of model legislation, its basic protections remain intact.

• Severance taxes. The depressed energy market brought on a no-holds-barred assault on Wyoming's severance taxes, with nine different bills proposed. Three relatively minor changes were unopposed by conser-

vationists: exempting carbon dioxide used in tertiary oil recovery, exempting flared natural gas, and changing the method of assessing the value of "stripper" fields (oil and gas stripper wells producing less than 10 barrels a day).

The Wyoming Chapter of the Sierra Club and the Powder River Basin Resource Council worked against the remaining suggestions. Most were defeated, but a tax reduction for oil and gas and one for coal passed.

The "wildcat" bill began as a 4 percent, out of 6 percent, severance tax break on the first four years of production from all new oil and gas wells drilled during 1987 and 1988.

Proponents argued it would encourage new drilling in the state. Opponents said it would reward drilling already planned in existing fields. The Senate Revenue Committee amended the bill so it applied only to wells drilled in new fields, and the governor allowed it to become law without his signature.

An old friend from the 1986 session, the severance tax break for 'high-cost' coal, resurfaced and sailed through with Gov. Sullivan's support. High-cost producers operating in the southern part of the state, where stripping ratios are higher, claimed a reduction in severance taxes would improve their competitive position and thereby save jobs. The bill initially faced stiff opposition from low-cost producers in the Powder River Basin, but this was resolved by an amendment denying the tax break if a high-cost producer steals a contract from a low-cost producer. It remains to be seen whether the break will attract more

Energy tax reductions that died during the session included:

A measure that would have reduced severance and property taxes by at least \$17 million a year by subtracting federal abandoned mined-land and black lung fees from the assessed value of the coal. The so-called "black lung" bill had a long, contentious life, dying in the Senate in the last half-hour of the session by one vote.

An attempt to make the 2 percent "coal impact tax" expire on Jan. 1, 1987, rather than Jan. 1, 1988, was killed in the House. The affected coal companies have now filed suit against the additional year's taxes. If they lose, it will cost them \$20 million.

•Environmental Regulation. A Senate bill to reduce all of Wyoming's environmental standards to federal levels died early in the session. Many of the state's pollution limits, particularly for air, are stricter than their federal counterparts. This has had the effect of increasing the

level of energy development in Wyoming; with only federal standards, earlier projects would have used up available pollution increments and thereby precluded more development.

•Water Development. Waterdevelopment advocates knew they
were in trouble even before the
Legislature started, as critics declared their intention to raid water
development funds for other uses.
Wyoming's water projects are funded
from a coal severance tax account
earmarked for that purpose, but the
Legislature can tap accounts as it
sees fit.

Debate focused on two principal bills: one providing \$70 million in construction funds for the proposed Sandstone Dam (near the site of the former Savery-Pothook project, which was killed by President Carter's hit list); and the omnibus water bill, containing several new and continuing projects. The Sandstone Reservoir is intended primarily for industrial use, but no industrial buyers have yet appeared.

Both bills easily passed the House, then foundered in a sea of unusually emotional Senate debate. The Senate killed the Sandstone bill on a close vote. This does not kill the project, but indicates trouble.

Senators also decided to "send a message" to the public about state-government spending priorities via amendments to the omnibus water bill. For the purpose of bargaining with the House, the Senate offered two options: either temporarily divert severance-tax income from water development to the general fund; or transfer \$20 million from the account itself to either the general fund or schools.

The Senate's message got stalled in the House, which preferred to wait for a specific financial crisis before robbing the water development account. Three successive conference committees could not break the deadlock, leaving Wyoming without a water development bill. The Wyoming Water Development Commission is currently seeking an attorney general's opinion on whether they can spend funds for previously approved projects.

Although pro-water legislators killed the bill, the lack of a compromise will probably hurt the water development program. This time next year there will be a plump, unraided water account and no projects obligating the funds. That is an irresistible temptation for a Legislature facing what promises to be a continuing financial crunch.

-- Sarah Gorin Jones

The writer is a lobbyist for the Wyoming chapter of the Sierra Club.

# BARBED WIRE

Taking "a slap on the wrist" to undreamed of heights.

The Colorado Commission on Judicial Discipline recently reprimanded or censured nine judges for behavior unbecoming a judge. One of the judges had lied about his background on employment documents. The judges' names were not made public.

In case Montana doesn't get the Midgetman, Mr. Moore will no doubt move to Wyoming to be near his beloved missiles.

Former Montana state Rep. Jack Moore recently suggested that it "behooves every Montanan" to accept the Midgetman missile if it is deployed in the state. "Those who don't like it here can leave."

# Idaho wilderness is in the hands of one man: Gov. Andrus

If Gov. Cecil Andrus, D, has his way, Congress will finally pass an Idaho national forest wilderness bill this year. The traditional combatants made their first moves in February. But they are acting with an uncertain eye on Andrus, who is keeping his distance and his options open.

The Idaho Conservation League bumpersticker calling Idaho "The Wilderness State" is accurate. Only Alaska has more wildland. About three-fifths of it, nine million acres, is national forest roadless land whose future neither the Forest Service nor Congress has been able to decide. As elsewhere, the Forest Service's roadless reviews strangled on mistakes, appeals and politics. But the 1983-1984 attempt by Idaho Sen. Jim McClure, R, to legislate resolution also failed when he and Ohio Rep. John Seiberling couldn't agree on a bill.

That stalemate, after long months of hearings, tours, talks and fingerpointing, left the contending parties polarized and the public weary. Andrus played to that in his campaign, calling himself the practical politician who would settle the issue rather than take sides. That remains his approach.

"There has been too much division and delay on wilderness," Andrus says. "The people of Idaho are entitled to resolution this year. I expect to get to it in earnest this spring, after the Legislature adjourns."

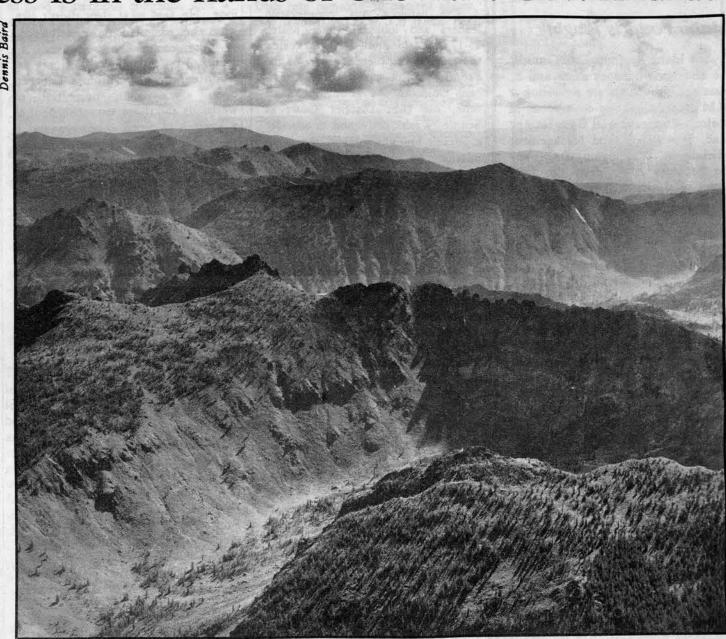
Andrus is the key figure. "He's more than a governor on this, he's really a third senator," says Tom Robinson, The Wilderness Society's field representative in Idaho. "What he wants will carry tremendous weight in Congress." Sen. McClure will be important, but the Democratic Senate take-over tilts things towards Andrus, who has congressional friends and skills from his four years as Interior Secretary. Another stalemate is unlikely; Andrus and McClure can and will work together.

On March 10, in advance of a possible Andrus-McClure compromise, Rep. Peter Kostmayer, D-Pa., introduced the Idaho Wilderness Act into Congress. Developed by Idaho conservationists in 1983, and introduced in each Congress since, the bill proposes 40 separate areas totalling some 4.5 million acres for wilderness. "It's a reasonable, wellthought-out proposal reflecting years of work by Idaho conservationists," says Rick Johnson of the Idaho Conservation League.

Introduction is a tactical move, since neither Andrus nor any of Idaho's four-man congressional delegation supports the bill or anything close to it. Andrus and Rep. Richard Stallings, Idaho's lone Democrat in Congress, were not enthusiastic to see the bill surface, but apparently did not try to dissuade fellow Democrat Kostmayer. "Our job now is simple," Johnson says: "Organize grass-roots local coalitions for as many areas as possible."

The Idaho timber industry floated its ideas in February briefings with Andrus, the delegation and interested parties.

'It's not really wilderness that bothers us," explains Joe Hinson of the Idaho Forest Industry Council. "It's continued uncertainty over what's not designated wilderness.



Proposed Great Burn wilderness area, Idaho

Our experience in Oregon and Washington is that areas supposedly 'released' for development in fact stay off-limits due to appeals and delays of Forest plans. The decision to enter a roadless area needs the same standing in law as a decision to make it wilderness."

So the industry is proposing a three-part allocation not used in other states' wilderness bills. The three categories are: 1. wilderness; 2. 'soft release' for areas not planned for roading in the first Forest plan cycle (meaning those areas would again be considered for wilderness in 10-15 years); 3. a declaration that Forest Service decisions to road remaining areas are "legally suffi- | made clear how involved in the | cient" -- not appealable.

Without endorsing them, Hinson says the Forest Service recommendations are "a starting point:" 1.2 million acres as wilderness, over 4.5 million to stay roadless for the first 10 to 15-year cycle, and over 4 million for entry.

Conservationists disagree. "They want to make one class of Forest Service decisions exempt from law -the Clean Water Act, Indian treaty rights, etc." says Tom Robinson. "That's wrong on principle, and Congress won't buy it."

Andrus has withheld public judgment, and both sides have reason to be nervous about him. In addition to his long and deserved record as a conservationist, most of the timber industry supported his opponent for governor last year. Andrus does not forget such things.

But conservationists recall that, when pressed in the campaign, Andrus said McClure's 526,000-acre wilderness proposal was "a good starting point." He is known to sharply disagree with them on certain key areas, such as the

wildlife-rich Mallard-Larkins area in north Idaho. And his strategy is to settle an issue with minimum public fuss, while raising grass-roots fuss is Idaho conservationists' strong suit.

Andrus does not want hearings. "I know all but a few of the disputed areas personally, and I'll visit areas I don't know," he says. Rep. Bruce Vento, D, of Minnesota, who replaces John Seiberling as chairman of the House Interior subcommittee that will consider any bills, reportedly agrees with him. Vento is considering a trip to Idaho and Montana to see key areas.

Congressman Stallings hasn't

legislation he wants to be; for now, he is saying little. Unless Vento decides to take a strong role, that leaves the process in Congress largely to Andrus and McClure. The two have talked about a bill.

"In the end," says Andrus, "it may come down to an enlightened, intelligent, arbitrary decision by Sen. McClure and myself.'

Actually, there is an "end" that even McClure and Andrus may not be able to settle in-state. Ten Western senators, led by William Armstrong, R-Colo., have asked that no wilderness legislation be passed until the question of reserved water rights for wilderness is solved.

--Pat Ford

#### Beaver-borne giardia

A Montana water utility has asked the state to remove beavers infected with the parasite giardia from a creek used for drinking water outside Missoula. Beavers in the Rattlesnake Creek National Recreation Area are thought to be responsible for a 1983 outbreak of giardiasis, an intestinal disease. Officials of the Montana Water Co. say they worry about another outbreak if Rattlesnake Creek water has to be used in an emergency. The company also says it wants to bring the creek back on-line as a source of drinking water if it can get EPA clearance. By developing a program limiting giardia sources and adding a minimal treatment system, the water company hopes it can skip the expensive filtration systems required by the Environmental Protection Agency. Missoula conservationists say trap-

ping the beavers may not end the contamination threat, which may also come from domestic animals, such as horses. The fate of the beavers is now in the hands of the Montana Water Quality Bureau. Water bureau officials say they will take no action until after a public hearing is held in Missoula, but no date for that hearing has been announced.

The Colorado Legislature answers the ancient question: Who will bell the cat? The answer: A bunch of other cats.

The president of the Colorado State Senate and the speaker of the Colorado State House have appointed a panel of 10 lobbyists to write a code of ethics for the state's lobbyists.

### HOTLINE

#### Idabo road is fought

The Idaho Environmental Council, the Shoshone-Bannock tribes and at least six individuals are protesting a BLM decision to allow construction of Idaho's controversial Egin-Hamer road. Bureau of Land Management officials in Washington, D.C., say the protests could delay the final notice of decision on the road by as much as one year, reports the Idaho Falls Post Register. Last February Idaho BLM Director Delmar Vail approved the 8.8-mile road in southern Idaho, with a four-month winter closure. Opponents of that decision said the road would harm some 2,000 head of elk that winter in the area. Idaho BLM officials must submit an analysis of the protests to Washington, where BLM Director Robert Burford will decide if they are valid.

#### Beachbead in Utab

Two conservation groups opened one office in Salt Lake City, Utah, this month. Sharing a house are The Wilderness Society, whose new staffer Mike Medberry formerly worked for the Idaho Conservation League; and the Southern Utah Wilderness Alliance, whose staffer Fred Swanson worked as a coordinator for the Utah Wilderness Coalition. SUWA, which is based in Springdale, in the last year has doubled both its membership (to 850) and its staff (to six), says Swanson. Medberry can be reached at 801/355-4742; Swanson is at 801/532-5959.

# Americans Outdoors report is released

The nation's top conservation leaders and lobbyists met March 15-17 in Washington, D.C., to review the recently completed report of the President's Commission on Americans Outdoors. At about the same time, the U.S. District Court in Seattle, Wash., convened to consider a lawsuit brought against the Commission by leading conservative groups.

The Center for the Defense of Private Enterprise and the National Inholders Association filed suit against the President's Commission immediately upon release of the report. They said the commission had violated open hearing laws during its two-year study and called into question the validity of the commission's findings. The Department of Interior voluntarily withheld the report, pending resolution of the suit. The court recently dismissed the case, and Interior has ended its embargo.

President Reagan formed the commission in 1985 to examine the impact of a changing American population and its recreation habits. Headed by Tennessee Gov. Lamar Alexander and Gilbert Grosvenor of the National Geographic Society, the commission included local and state government officials, business leaders, members of Congress and private citizens. The commission held hearings nationwide.

Paul Pritchard, president of the National Parks and Conservation Association, said that commission meetings were open and fair, and that the groups that sued presented their views on a number of occasions. He said what they didn't like was the commission's conclusions.

The commission suggests a system of "greenways" to act as wildlife migration corridors between open space lands, protection of wetlands and rivers, establishment of a system of scenic roadways and a review of the management of federal lands with recreation needs in mind. The report calls for re-authorization of the Land and Water Conservation Fund as an annual \$1 billion trust fund.

At the Washington environmental conference, called "Beyond the President's Commission, Preparing for the Future of Parks and Recreation," participants focused on those recommendations and looked for ways to combine the environmental movement with the report's findings of an increasing demand for outdoor recreation. "When you're talking about recreation and conservation, you're talking about children, health, national security and the future," said Marty Rosen, president of the Trust for Public Land.

The conference was addressed by U.S. Sens. Bennet Johnston, D-La., Lawton Chiles, D-Fla., and Dale Bumpers, D-Ark. All called for the reauthorization of the Land and Water Conservation Fund when it expires in 1988. The senators also slammed the Reagan administration for falling far short of the annual \$900 million authorized spending from the fund.

Sen. Johnston, who chairs the Senate Energy and Natural Resources Committee, pointed out that only .01 percent of the federal budget goes to parks and recreation. But his proposal that 25 percent of revenues from oil and gas leasing on national wildlife refuges be dedicated to the new Land and Water Conservation Fund drew a cool response from the conference.

Sen. Chafee also proposed that the new trust fund be financed by taxing federal oil leases. Three million acres of open space are lost each year, he said, and his tax would make land speculators who seek to develop open space finance conservation efforts elsewhere.

Conservationists called for a variety of new approaches to combat what Patrick Noonan, president of the Conservation Fund, called "controlled sprawl" -- the result of failed land-use planning across the nation.

Sally Ranney, president of the American Wilderness Alliance and a member of the president's commission, called for the recognition of "zones of influence" around parks and preserves. She said zones would combat external threats to these lands and aid regional planning based on ecosystems. She also called for a national biological survey and expanded scientific capability within the federal land-management agencies.

Ranney criticized the commission for not examining federal abuses of multiple-use mandates through an over-emphasis on commodity sales on federal land. "As long as you are talking about multiple use, use will be the emphasis. We must talk about the multiple values of these lands," Ranney said.

-- Tom Ribe

### BOOK NOTES

# A prairie fire of concern

Americans Outdoors: The Legacy, The Challenge

The President's Commission on Americans Outdoors. Washington, D.C.: Island Press, 1987. 442 pages. \$24.95, paper.

\_Review by Steve Hinchman

"We find that the outdoors is a wellspring of the American Spirit, vital to our belief in ourselves as individuals and as a nation..."

Thus spoke the President's Commission on Americans Outdoors in the preamble of its report to President Reagan. The commission recently completed an exhaustive two-year survey of America's outdoor resources and the uses and trends likely to impact those resources in the future. The work involved 18 public hearings nationwide, and testimony from thousands of citizens.

This Island Press edition contains the commission's 120-page formal report interspaced with testimony gathered during the survey. There are also some 60 recommendations made by the commission, 12 case studies of successful community and grass roots initiatives to create better outdoor opportunities, and an appendix of reports and recommendations submitted by state and city agencies.

The commission has been controversial from the start. The environmental community criticized it for its lack of balanced representation. Environmentalists feared the commission would be used to overemphasize private development of outdoor resources, limit the federal role and downplay resource protection.

With the release of the first draft of the report, criticism came not from conservation groups but from a coalition of industry trade associations that denounced the report for "expansion of uneconomic and wasteful resource programs."

Despite politics, the commission has managed to produce a valuable report. Unlike most official reports, the commission directs its conclusions not at Washington, D.C., policy-makers, but at the entire nation with hopes of starting a "prairie-fire of concern and investment, community by community." The Commission has written both a call to action and a working manual to start and fuel the prairie-fire.

This report is the first on recreation since the landmark Outdoor Recreation Resource Review Commission, chaired by Laurance Rockefeller in 1962. By finding that America was fast outgrowing its outdoor recreation resources, the Rockefeller Commission helped launch the modern environmental movement. One of the impacts of study was the federal Land and Water Conservation Fund, which has added nearly \$6 billion worth of parks and other recreational lands to the public domain. The national

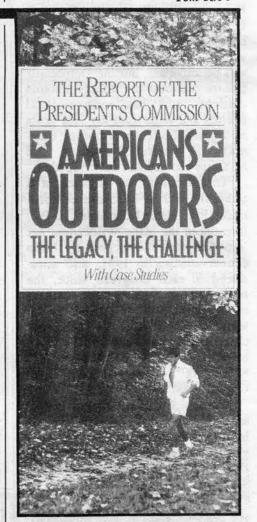
system of wilderness areas, hiking trails and wild and scenic rivers are also direct results of the Rockefeller Commission.

The 1987 report finds that America's use of its outdoor resources is expanding even faster than the earlier commission had imagined. Yet there are significant changes in our outdoor habits.

Increasingly, outdoor recreation takes place close to home in urban parks and natural areas -- nearly 80 percent of our population will live in urban areas by the year 2000. The urban outdoors is often the only outdoors many Americans know. Getting away from it all is no longer a two-week vacation to national parks and seashores; it occurs more often in local or state outdoor recreation areas.

The commission says its single most important recommendation is for local action, for putting ideas and muscle to work to preserve open space and environmental quality in our own communities. Rather than having to commute to isolated refuges, the commission envisions a system of "greenways" linking America's towns and natural resource areas. The system, which already exists in some places, would utilize historic trails, old railroads, highways and river courses.

Accompanying a surge of activity close to home, the commission calls for national action. It recommends strong enforcement of environmental



laws and an annual report on the state of federal lands by the seven principal federal land management agencies. The report also proposes a federal trust fund to provide \$1 billion a year to build and maintain resource areas and recreation opportunities. The money would help expand federal recreation systems, wild and scenic rivers, wetlands and national seashores, but the commission also earmarked a portion for federal grants to stimulate community projects and land purchases.

# High birth rate drives Utah into the ground

The economic pain that until recently seemed to afflict only rural Utah has now hit all of Utah. That pain was clearly on display in the 1987 Legislature, which was caught between a massive budget deficit and its own ideological preferences for low taxes and large families.

The squeeze came partly from a continuing drastic fall in tax revenues, aggravated by rapid population growth caused by a high birth rate. Although Utah is one of the fastest-growing states in the nation, it experienced a net out-migration in 1986 for the third straight year in a row, as families leave in search of work.

Children, of course, are part of the out-migration, but there are still large numbers of young kids left to strain state and local school finances. The out-migration is a reaction to the restructuring of Utah's economy. The historic base for the state's industrial middle class of workers and managers, its mining and energy industries, has all but collapsed. Employment growth is concentrated in low-paying service jobs. Some of those accustomed to higher wages have left. While the unemployment statistics remain acceptable, the real average monthly wage was lower in 1986 than in 1980.

The large number of children and the shrinking number of well-paid jobs hit the 1987 Legislature hard. It is not the first hit. A \$110 million shortfall during 1984 forced a \$74 million cut in all state programs and a 4 percent tax surcharge.

This year, Gov. Norman Bangerter, R, asked the very Republican, very conservative Legislature for a tax increase of \$206 million, which would have held state spending in 1988 equal to the \$2.8 billion appropriated for 1987. The Legislature, 40 percent of whose members are freshmen, grudgingly raised taxes by only \$151 million.

Although the governor chose to bite the bullet this year, the problem traces back to his campaign pledge not to raise taxes for the two years following his 1984 election. As a result, the state's deficit built and he was faced, in this, his third year, with the need to ask the Legislature for the massive \$206 million increase.

The Legislature couldn't swallow the \$206 million pill. The debate over the \$151 million increase it did swallow centered about how the pain should be distributed, and revealed a good deal about Utah politics. Much of the debate was over tax equity, and the burden Utah imposes on itself with high birth rates. For example, a tax on soft drinks proposed by the governor responded to those who argue that large families should share the "sin tax" burden with drinkers of alcoholic beverages.

The small Democratic Party minority backed the governor's partially successful attempt to reform the state's regressive income tax and his unsuccessful attempt to raise taxes on corporations. The Democrats also argued for an elimination of most deductions, including charitable contributions. They argued that the changes would relieve the poor from paying taxes and force wealthier people, who claim many tax breaks, to pay more. But opposition from the Mormon Church, which sees tithing

as both a religious obligation and a source of some of its income, opposed eliminating charitable deductions.

Rather than impose higher taxes on incomes, corporations or large families, legislators raised taxes on cigarettes by 11 cents a pack, to raise \$11 million; added 5 cents a gallon on gasoline to raise \$40 million, and put an extra half penny on the sales tax to raise \$60 million.

The results mirrored the politics. Tax protesters were relentless. Legislators found large constituencies opposed to income tax increases regardless of the consequences. Strong constituencies also opposed business taxes and favored large families, while there was no proconsumer or anti-sales tax constituency.

But there were small gains. Thanks in part to Gov. Bangerter's lead, the inequity of taxing povertylevel incomes at the highest rate became apparent to nearly everyone, and, in the end, there was income tax reform. The reform was "revenue neutral" because it captures only the \$55 million windfall from federal tax cuts. But the new version does shift the burden upward from the lowest incomes. Personal exemptions in the tax still favor large families, but they are countered somewhat by the higher sales tax on food.

Tax protesters also attacked spending, claiming that government could tighten its belt like everyone else. The teachers' associations and the higher education establishment performed well here. They made the logical connection between education and economic development — the justification for nearly all political decisions in Utah these days. They more or less succeeded. The new budget doesn't gut education, but it does hurt, and school districts are now in a mad scramble to cut costs and programs.

Underlying Utah's problems are the shift in the economy and the state's prodigious rate of growth. Utah ranks first in the nation in school-age population as a percentage of total population. Its women have the highest fertility rates in the U.S. In 1980, the rate was 3.2 births per woman. Although it declined to 2.7 births per woman in 1985, the

Utah rate remains 50 percent above the national rate of 1.8 births per woman. The out-migration may mean more than just a search for better jobs out of state. It may also mean that the financial burden imposed by the large number of children may be inducing some working people to leave in search of smaller classrooms and better-funded schools for their children.

The situation is aggravated by the fact that school population growth is not happening where the schools are. Instead, it is occurring in the new suburbs, where young couples can find cheap housing. Meanwhile, older schools in established residential areas face closure. Away from the Wasatch Front, where most of Utah lives, rural school districts face not only declining revenues, but declining enrollments without corresponding decreases in the costs of plant and management.

As a result of these forces, Utah's per student expenditures are the lowest in the nation. Teacher salaries are near the bottom. Programs are being cut. Class sizes continue to

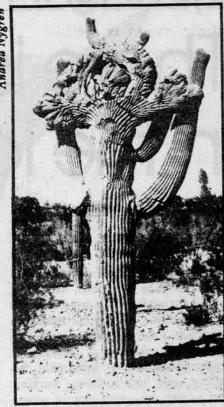
There will be political and economic fallout from this situation, as ideology continues to confront reality. Many Republican legislators feel the governor sold them a bill of goods, and fear they will lose the next election because they voted for tax increases they fear will impede economic development. Environmentalists will be blamed for blocking the state's growth by impeding development of its resources, or stopping such "logical" actions as paving Burr Trail.

On the Wasatch Front, economic development has always been highly valued. But when Utah was economically healthy, the push for development was moderated by those who pointed out its dangers. Now, like the environmentalists in southern Utah, those in urban Utah who oppose development at any cost are likely to be rolled over.

-- Craig Bigler

Craig Bigler is a resident of Moab, Utah, and a specialist in economic development.

# HOTLINE



150-year-old crested saguaro

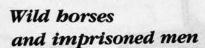
### Crested saguaro

#### recovered

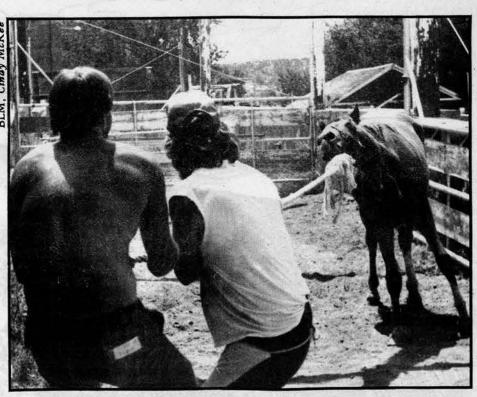
A rare 150-year-old saguaro cactus stolen from public land in the Lower Gila Resource area outside of Phoenix, Ariz., has been recovered and donated by the BLM to the Desert Botanical Garden in Phoenix. The 19-foot cactus, which has a 7-foot wide crest, was found in a Las Vegas, Nev., nursery where it was on sale for \$15,000. Crests occur in only one of 150,000 saguaros. The thieves were fined, jailed, sentenced to probation and banned from any business activities dealing in cactus, says the Bureau of Land Management.

#### Sister dumps

What do Kodiak, Alaska, and Moab, Utah, have in common? They each boast the world's most scenic dumps and are now sister cities. The Moab Chamber of Commerce recently ended its five-month search for the prettiest dump by choosing Kodiak, which was honored with a trash parade timed to coincide with the town's spring cleanup. The contest brought the desert town some publicity when Charles Kuralt featured the Moab dump and its view of the LaSal Mountains on his TV program, "On the Road."



Colorado and Bureau of Land Management officials recently announced they will expand the pilot program that allows prison inmates to tame wild horses. In the novel project, which has attracted international attention, inmates at the Canon City prison learn to gentle and halter-break wild mustangs captured by the BLM on public lands. Prisoners also learn to horseshoe the animals and about general veterinarian care. Canon City will serve as a regional adoption center in the BLM adopt-a-horse program and will funnel 150 gentled horses a month to other BLM centers. BLM officials say the program has speeded adoptions, which decreases pressure on horse corrals crowded with thousands of wild horses.



Prison inmates begin training a wild horse

# Spring in South Dakota There is a quickening in the land

\_by Linda M. Hasselstrom

APRIL 1

ow 26, high 60. Between feeding the cows, watching for and pulling calves, checking the heifers at 10 p.m., midnight and 2 a.m., the days are wearing us down. Yet there's a quickening, almost excitement at being past the waiting and into calving, working hard to get the year's crop of calves on the ground and healthy.

Then just as your bones and sinew adjust to the promise of spring, letting go of winter's tension, you'll see a calf lying too still and know he has scours. A new tension takes over -- can you get enough pills into him, enough mother's milk, work hard enough to save him?

One spring, dead calves were piled at the north edge of the calving pasture like dark snowdrifts. We checked cows for a month with the sweet smell of rotting flesh in our nostrils.

If we can get a couple of pills down them early in the illness, they usually survive. But it's easy to miss a sick one while we're feeding, so Father and I take a slow daily walk through the herd. He ropes a sick calf and my job is to jump on it, hold it down and shove pills down its throat. Naturally this operation covers me with evil-smelling slime.

In early evening we're having tea in the living room with the windows open, reading and not talking after a day spent together feeding, pulling and pilling calves. An April evening in the country is never silent. Killdeer emit shrill questioning notes along the dam below the house.

Blackbirds trill, or gather in the trees around the corrals to hoot at the humans working in the mud. Meadowlarks warble from every fence post. Cows call their calves, gathering them close to the herd before dark.

APRIL 2

ow 42, high 74. After the feeding and pilling today I cranked up the garden tiller and made a few rounds. My hands are blistered and my back sore, but a third of the garden is black and smooth tonight, covered with black-

birds hunting worms.

Last night around midnight George and I pulled a calf and walked back to the house under the stars, happy to have saved one. Tonight, around the same time, we had to call the veterinarian, and still lost one. I pumped his little chest and felt a strong heartbeat, but his lungs were full of fluid and he didn't shake his head to clear his nostrils as a vigorous calf will. George grabbed him by the ankles and held him up to try to drain the fluid. When he put him back down, the calf gasped a few times and kicked. George exclaimed, but the vet and I said simultaneously, "It's the wrong kind of kick."

We have about 45 calves in the pasture now. It's wonderful on a warm day to see them playing, butting heads, switching their tails as they suck. They are such frank and open creatures. If they're curious they simply march up and take a look at you from big brown eyes. As long as you hold still, they'll sniff you, taste your fingers

with rough pink tongues, and generally act unafraid. Only later will they begin to scamper away from humans, and when they're branded they learn real fear. The ones we keep sometimes become tame again while being fed before their first calves, but most stay wild.

APRIL 3

ow 24, high 42. Woke up to about six inches of heavy wet snow, so we were soaked before we were half finished feeding. We came back inside, changed clothes and then George read while I put a roast on for dinner and went to the basement to work on poems, ignoring the dust everywhere, the muddy human, dog and cat footprints crossing the dining room. The house smells of wet wool, with accents of manure and calf scours. As we read we absently pick hay out of our hair and ears. We shower pretty frequently because sweat in our long johns tends to get pretty rank, but we smell of cow all the time anyway. None of this is complaining; it's just calving season.

Around here, this time of year, we have an excuse for any social event we want to miss or any amount of mess if unexpected visitors show up: "Well, it's calving season, you know." Perfect housekeepers, who would normally condemn you to the flames for dust on the books, understand and withhold judgment.

Outside, the snow seemed to muffle all sound. The birds that were so noisy yesterday seemed to be invisible today, with only an occasional squawk from the redwing blackbirds to remind us it is spring.

APRIL 4

ow 27, high 53; melting. Two sparrow hawks visited us this morning. One circled nervously while the other landed on the porch railing, turning his head from side to side to peer at us.

One develops what might be called a sixth sense, or perhaps more correctly a heightened awareness, when working with cattle, and after a few years can recognize danger signals in ways that are almost subconscious. A stranger wouldn't understand what made us drive over to look at a particular cow today, and perhaps we couldn't explain it. She was having a calf backwards. Once we got close we saw the bottom of the tiny hooves pointed at the sky. Only rarely does a cow successfully calve this way without help, so we got her in, pulled the calf and saved them both.

Any cow alone in the pasture in spring is probably calving. At any other time, she may be sick, because cows are social creatures and gener-

ally stay together.

The curse and the attraction of ranching is that it is never routine even though the work sometimes seems repetitive. Cows, weather and nature can surprise anyone. No matter how carefully you plan your day, you can't count on it progressing as your schedule indicated it would.

Low 40, high 82; a record for so early in the season.

love going out at 10:30 p.m. to check the heifers. Even when it's completely dark I



leave the flashlight off as long as I can and try to sense the trail and the fences. It's best when the coyotes are howling -- a cascade of sound, the wailing of the adults mixing with the juvenile yips of pups. When the night is silent -- only the breathing of the wind and a questioning note from a bird -- coyotes always seem very near, almost beside me. I've never been afraid of them, although we've heard of some strange instances lately of them attacking pets on people's doorsteps.

In the distance the big trucks race past on the highway, building up speed for the hill. They glow with ranks of light but seem distant, like ships far from shore. Even the aggressive roar of their engines seems small in the great bowl of night.

Then I'm among the heifers. They lie quietly, chewing their cud and looking unafraid at the pool of light. Some have their calves nestled close on the lee side; others are still waiting to calve.

We feed them at night on the theory that a cow can only do one thing at a time. I've heard the pressure of the full belly prevents calving. Anyway, most of our heifers' calves are born early in the morning or during the day.

Then I turn out the light and walk toward the house, thinking of Wendell Berry's poem:

To go in the dark with a light is to know the light.

To know the dark, go dark.

Go without sight, and find that the dark, too, blooms and sings, and is traveled by dark feet and dark wings.

Finally I see the window of gold and walk on, listening to the tall grass swish against my legs, hearing a questioning cheep from a killdeer down by the water.

APRIL 7

ow 38, high 78. Foggy at sunrise; the calves were cuddled against their mothers' sides, waiting for sun. Three cows were licking new calves or having an afterbirth breakfast when I checked the bunch this morning.

This morning as we struggled to

pull a too-large calf from a heifer I was nearly in tears because she kept bellowing in pain. Usually they are silent, just straining to birth the calf, but she literally screamed as the head and shoulders passed. Usually the calf will slide out easily from that point, but the hips caught, and we had to turn him a little before cranking him out, and the cow screamed again. The calf was a crossbreed. Somehow the heifer managed to get impregnated by a bull other than the one we put her with. After we wiped the calf off he raised his head and was ready to go, but we had to help the heifer to stand up. One back leg kept collapsing under her, so we held her on her feet, swaying in time to her breathing, until she nosed the calf and began to lick him. Tonight she's fine, though exhausted, and her calf is sucking.

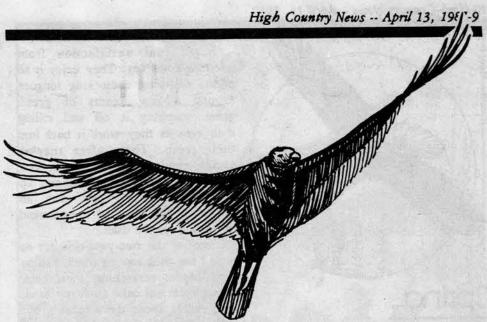
In the evening when we were checking cows we saw a flock of huge birds circling the trees by the folks' house. We drove closer, and realized as they perched in the trees that we were looking at something utterly astonishing: 15 turkey vultures. They stayed in the trees for a few moments, jostling, then soared to new positions. What kind of omen is 15 vultures hovering over your house?

Vultures are the most graceful of birds in the air, seeming never to flap their wings. I love to spot one spiraling across the sky. The sight of several of then perched on the shrunken body of a calf, dusty wings hunched, beaks bloody, is chilling -but they keep the prairie clean. My uncle George often mutters that the animal-rights folks will make us bury dead cattle next. He may be right. I hope not, because without carcasses, vultures would not be here. Without vultures and the whitened bones they leave behind, the prairie would have lost something important but hard to put into words.

APRIL 8

ow 40, high 65. We finally stopped feeding hay to everything but the cows that are calving, at least for now; just gave them all some cake to inspire them to graze.

Like children, calves grow confi-



dent quickly. A few days after birth they begin to play, and you may see a calf running happily across the prairie pursued by a bellowing cow, her bag swinging ridiculously as she tries to catch up.

At first a calf will bawl plaintively if he's left alone, as when the cow races off to the feed truck. If he's safe she ignores him. The same calf will lie quietly sleeping when he's been left with a babysitting cow. But if you want excitement, grab a baby calf in the middle of a calving pasture. He'll bawl, and every cow within earshot will gallop toward you bellowing madly, ready to protect him. That's one of the things I like about cows. Their reputation is placid and non-carnivorous but they'll fight anything to protect their calves.

The long grass on the hillsides is still brown, rippling like hundreds of tawny animals running. Underneath, it is getting green. The short grass in the fields is almost completely green, and when the cows snap it off, the smell of spring comes faintly to our noses. Clouds of blackbirds are hanging around the trees by the corrals, screeching and singing and generally having a great time.

APRIL 9

ow 21, high 38. A cold bleak dawn, with a sky white as snow, no rosy hue. Fierce sleety snow squalls whirled around us all day. Or is my mood affected by the fact that this was once a wedding anniversary for me?

A calf was born dead this morning after a long struggle that

started at 6 a.m. The cow was old and should have been perfectly capable of calving by herself, but the calf was a huge longhorn-cross courtesy of the neighbors' bull, and she'd started calving with only one front foot and the head out. The calf's tongue was already black when we got the cow in, but we struggled until we got the second foot out and pulled him. He didn't even gasp, so we dragged him outside, skinned him, and transplanted a heifer's calf. The heifer will bawl for a few days but then she'll dry up and have a chance to grow before her next calf.

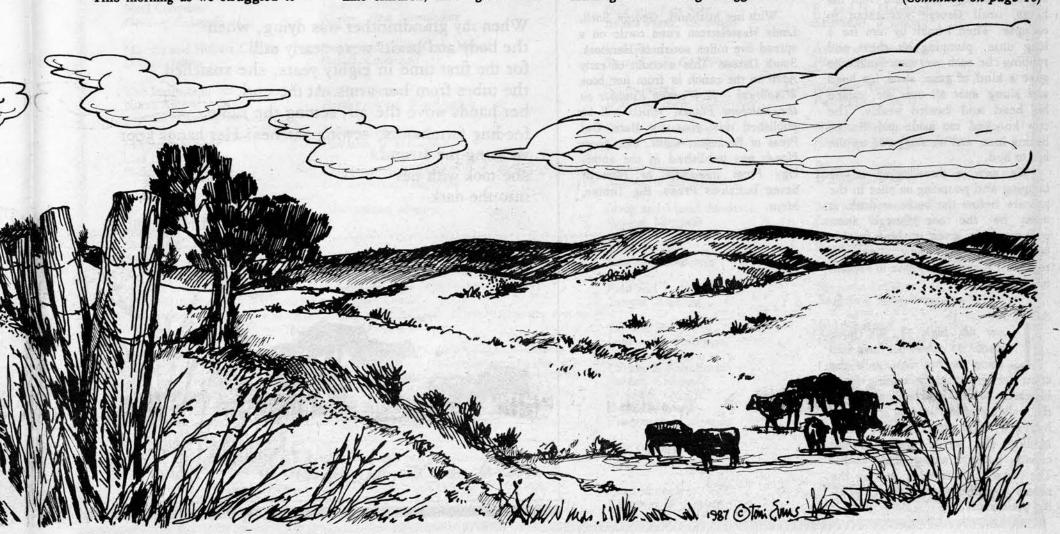
Father conveys important information in such casual ways. "That's why it's handy to have the two-year-old heifers calve at the same time as the older cows; you have cows to put their calves on. People never used to calve out two-year-olds, until they started wanting to make more money."

I've suggested letting the twoyear-olds stay dry because so often we have trouble calving them, but he says they still have trouble calving as three-year-olds. And then we'd have the problem of keeping the bulls away from them an extra year -which is a little like keeping teenage girls away from teenage boys.

APRIL 10

ow 38, high 56. This morning I found a cow with her back legs partly paralyzed from having an especially large calf. She couldn't get up, so I "tailed her up."

(Continued on page 10)





# Spring...

(Continued from page 9)

This involves pulling on her tail to give her enough balance to get her back legs up. Then you're supposed to let go and let her stand until the feeling comes back.

Someone had forgotten to tell this cow the rules. The minute I got her up she started lurching across the prairie, staggering from side to side with me hanging on. Every time I let go she'd fall in a heap, legs twisted. The third time, I just stayed with her, and she played Crack the Human until I was so winded I couldn't hold on any longer.

Then I followed her and hazed her back toward the calf until she scented it and began to murmur and lick. I know animal experts say mothering behavior is strictly instinct, but it's hard not to believe in real bovine affection when a cow is "talking" to a calf, and the calf raises its head and tries to get up to find the teat.

APRIL 13

Low 48, high 76.

Sunny, with clouds in the west and a chill wind. George called me outside after breakfast to see 13 deer nibbling the new shoots in the alfalfa field, led by a big buck who looked ghostly with the light of the rising sun behind him.

We pulled a heifer's calf around 2 a.m.; the heifer got right to her feet but the calf had a terrible time. George shook him upside down several times to drain fluid from his lungs, until George was about to collapse. Then I knelt by him for a long time, pumping his chest and rubbing the sack over him. Finally he gave a kind of gasp, shook his head and slung snot all over me, raised his head and bawled weakly. The cow knocked me aside and started licking him, and we staggered up the hill to bed.

We saw a three-legged coyote hopping and pouncing on mice in the pasture below the house at dusk. It must be the one George shot; perhaps he's given up beef for his health. I'm glad he's alive, for reasons I'd rather not have to explain to anyone else.

APRIL 15

ow 46, high 73. We have about 75 calves but have had none for two days, as if the cows are on strike or waiting for a blizzard. We're still feeding hay to the calving cows, loading it on the hayrack with the tractor, then hauling the whole works to the calving pasture and pitching it off. The cows come running, leaving the calves to totter along behind, bawling plaintively.

I get real satisfaction from watching cows eat. They enjoy it so much, wrapping their long tongues around a few stems of green grass, snapping it off and rolling their eyes as they work it back into their teeth. Then after they've grazed awhile, they lie down, look philosophical, and belch, bringing up a cud that they chew with an expression like that of a gourmand savoring a special dish.

Some of the two-year-olds are so tame I can walk among them, patting their heads, scratching their ears, letting them eat cake from my hand. Last year I spent days coaxing one with a heart-shaped white spot on her forehead to eat; we call her Sweetheart.

George thinks I'm silly to enjoy the cows as much as I do, pointing out they are really rather stupid beasts, but I disagree. They have instincts, and in some cases seem to plot against us. On warm days like this you can almost see them thinking, "I don't think she shut the gate to the stackyard very tight. I'll get it down and then we'll all go in there and pretty soon all the humans will come rushing out cursing and shouting and we won't be bored."

This afternoon I planted garlic, taking pleasure in sliding the paper cover off the bulbs and watching it blow away in the wind. I also put in a few radishes, carrots, lettuce and parsnips and started some pixie tomatoes and marigolds inside.

Tonight I rode back from feeding on the wagon, lying back on the hay and looking up at the pale blue sky. It didn't seem nearly so comfortable as it did when I was a child. The trees are full of redwing blackbirds. I think they come back this early just to play in the trees and fly around and screech, waiting for the grass to get high enough to hang nests on in June.

Just as I turned off the lights to go to bed I saw the green flash of a meteor. I'd had several ideas for poems during the day but was simply too tired to care. I'll accept the meteor as a sign that I will get to them sometime.

With her husband, George Snell, Linda Hasselstrom runs cattle on a spread five miles south of Hermosa, South Dakota. This account of early April on the ranch is from her book Windbreak -- A Woman Rancher on the Northern Plains, which will be published this year by Barn Owl Press of Berkeley, Calif. The poem Hands was published in the anthology From Seedbed to Harvest, Seven Buffaloes Press, Big Timber, Mont.

# **HANDS**

The words won't come right from my hands in spring. The fields are full of baby calves, tufts of hay, bawling cows. My brain is full -- but words won't come. Sometimes when I'm in the truck, leading heifers to spring grass, I find a stub of pencil, tear a piece from a cake sack, and make notes, listening to the curlews' wolf whistle. A barb tore that knuckle, shutting a gate without my gloves. The blood blister came when someone slammed a gate on the branding table; I tore the fingernail fixing a flat. The poems are in the scars, and in what I will recall of all this, when my hands are too broken to do it anymore.

Instead of a pencil my hands, knotted like old wood, grip a pitchfork, pitching hay to cows; blister on the handles of a tiller. Slick with milk and slobber, they hold a calf, push the cow's teat into his mouth, feel his sharp teeth cut my fingers -- another scar. From my hands pours cake for the yearlings, seed for garden that will feed my family.

My hands become my husband's weathering into this job he chose by choosing me; my father's broken and aged, still strong as when he held me on my first horse.

At night, while my body sleeps, my hands keep weaving some pattern I do not recognize: waving to blackbirds and meadowlarks, skinning a dead calf, picking hay seeds from my hair and underwear, building fires. Deftly, they butcher a chicken with skill my brain does not recall.

Maybe they are no longer mine but grandmother's, back from the grave with knowledge in their bones and sinews, hands scarred as the earth they came from and to which they have returned.

When my grandmother was dying, when the body and brain were nearly still for the first time in eighty years, she snatched the tubes from her arms. At the end, her hands wove the air, setting the table, feeding farmhands, sewing patches. Her hands kept weaving the strands she took with her into the dark.

- Linda M. Hasselstrom



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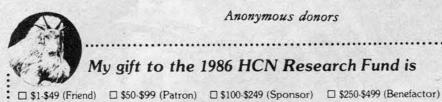
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## Black Hills...

(Continued from page 1)

confirmed that there was gold. Newspaper correspondents accompanying Custer publicized the findings.

The United States war in the midst of an economic depression and the time was ripe for a gold rush; prospectors illegally entered Indian land. Though the government tried to expel trespassing miners, the effort was short-lived. President Grant ordered military troops withdrawn and by November 1875, no police remained.

By 1876, the same year Custer and his soldiers were wiped out along the Little Bighorn River in nearby southeastern Montana, the Black Hills had attracted as many as 25,000 white settlers. This intrusion was a clear violation of the treaty, and for Indians another disquieting example of trust-breaking on the part of whites. It also demonstrated with ominous clarity the tremendous culture clash between themselves and the newcomers.

To the Indians, the Black Hills' unique beauty was inspiring and spiritual. They did not dream of changing it. To white fortune-hunters, the Black Hills meant money; carving up the countryside was a means to secure riches.

The Black Hills gold rush was the last of the great 19th century gold rushes in the United States, and its lifespan was brief. By 1880, immigration to western South Dakota's gold fields had fallen and Black Hills gold mining activity centered on fewer and fewer operations. Shortly after World War II, only the Homestake continued large-scale gold production.

The Homestake mine is still operating today. In fact, the mine, located in Lead (pronounced leed), is the most productive gold mine in the western hemisphere. It is an underground mine of monumental size.

In the scantily populated Black Hills, Homestake's mine is a vital aspect of the economy. Homestake employs over 1,300 people with an annual payroll approaching \$40 million, and it has contributed over \$27 million to South Dakota's coffers via severance and other taxes since 1982. The company's Black Hills' holdings exceed 65,000 acres. It is no exaggeration to say that the company is one of the state's most important and most powerful businesses.

Although Homestake's Black Hills mine has generated its share of environmental problems, the company has started programs aimed at minimizing the impact of its big mine on the environment. Consequently, Homestake enjoys a good public image, and gold mining in general has been seen as being mostly beneficial for residents of the Black Hills.

In 1979, a newcomer to the Black Hills gold mining scene arrived hoping to use a new mining technology. By 1982, that newcomer, a Canadian firm named Wharf Resources, had begun an open-pit/ heap leach mining operation near Lead, and not far from Terry Peak, a popular Black Hills ski area.

Locals paid little attention to Wharf at the time. Black Hills conservationists were busy fighting a Wharf's open pits, roads, parking lots, beap leach piles, holding ponds and refinery are a vast, complex earth-moving enterprise smack in the middle of timbered mountains.

nuclear dump proposed for the southern Black Hills. Rick Walter of the Sierra Club's Black Hills group recalls a common impression nine years ago. Wharf's operation would be small and no one knew about the heap leach process.

In open-pit/heap leach gold mining, rock is excavated, crushed and shaped into massive piles. The piles are then sprayed with a cyanide solution that absorbs gold as it percolates down through the crushed rock. The gold-cyanide solution drains into a catch pool at the base of the pile; refining procedures finish up the process.

Open-pit/heap leach mining lets even marginal gold deposits be mined profitably. The process is simpler and cheaper than underground mining using conventional refining and vat leaching. But there is a tradeoff. The gold recovery rate is considerably less -- about 70 percent -- using heap leaching compared to near 95 percent using traditional techniques.

The efficiency tradeoff has done little to discourage mining comanies from investing in open-pit/heap leaching operations. Last year, more than 25 percent of U.S. gold production came from heap leach facilities, up dramatically from 6 percent in 1980.

According to experts in the gold industry, the number of open-pit/heap leach operations will continue to rise. Mining companies are turning away from less profitable metals to gold, whose prices have remained attractive, and new technologies, such as heap leaching, create increased profit margins.

Currently, nearly every state in the West has heap leach gold mining with Nevada, California, Colorado and Montana leading the way.

Inherent in any discussion concerning heap leach mining is the use of cyanide.

uther Russell, Wharf's director of environmental and governmental affairs, calls cyanide "an emotional buzzword." He blames much of the public's fear of cyanide use in heap leaching on the chemical's deadly role in product tamperings several years ago.

That may be partially true. Nevertheless, cyanide is extremely toxic to man and animals. Long before the Tylenol tragedies, Westerners were acquainted with cyanide as a poison commonly used to kill coyotes. Cyanide's reputation as a dangerous chemical dates back many years and is well-deserved.

If ingested or inhaled, cyanide prevents tissue from utilizing oxygen carried by the blood. Fish and other aquatic life are especially sensitive to even minute traces of the chemical. Fatal doses in humans can come from a single exposure to as little as 50 mg.

In the Black Hills, with its mostly impervious soils and steep drainages, there is concern that leaking cyanide may find its way into watercourses and aquifers. Wharf's heap leach operation sits at the head of a drainage that joins with Spearfish Creek, one of the Black Hills' most scenic streams and a drinking water source for the city of Spearfish.

On-site at Wharf's a tion, company officials point out the measures protecting the environment. At the base of the towering heap leach pile is a so-called "pregnant pond," where cyanide solution and gold flow after filtering through the mined and crushed rock that makes up the pile. From this pond, gold and cyanide are circulated to the mill. There, gold is refined and cyanide is pumped back to the top of the ore heap to begin another downward, gold-leaching journey.

Below the pregnant pond are three more ponds. The first, the "barren pond," holds solution that has leached through the piles. The solution will be pumped up to the top for further use. The third and fourth ponds, the overflow and contingency ponds, act as Wharf's insurance against cyanide escape.

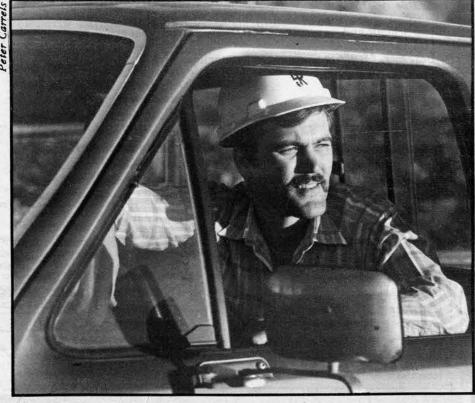
Hank Scholz, Wharf's mine manager, describes the pond system as large enough to withstand 19 inches of rain in 6 hours. The ponds are plastic-lined with a mat of clay beneath the liner. There are also plastic and clay liners beneath the ore pile. It sounds and looks effective, but there have been problems.

n early 1986, the South Dakota Department of Water and Natural Resources recommended to the state's Board of Minerals and Environment that it deny two mining permits requested by Wharf. The company hoped to expand its operations from the Annie Creek area to nearby Foley Ridge. The department based its recommendations on previous permit violations by Wharf at its Black Hills mine site.

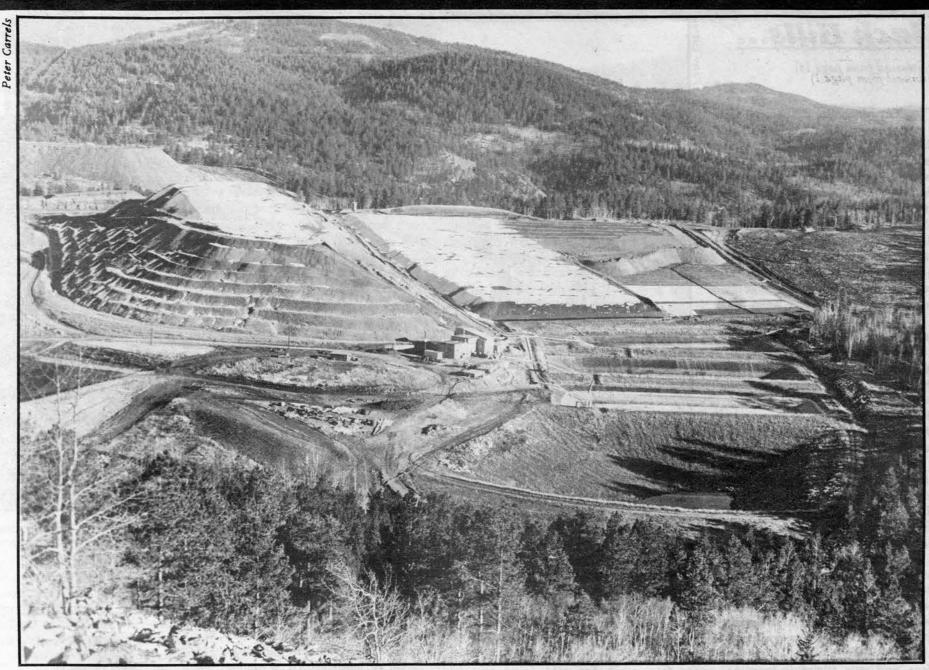
It was alleged that in May 1984 a holding pond leaked and the company failed to report the episode within 24 hours as required by its permit. Wharf had also failed to reduce water levels in its pregnant pond and had not installed the required plastic liner in an overflow structure. Wharf's facility was shut down for a short time; the company hauled contaminated water and clay from the site and paid a \$9,000 fine.

The company's permit to expand mining, however, was eventually granted, and today as excavation and heap leaching proceed, Foley Ridge slowly disappears.

A recent Environmental Protection Agency report on Black Hills heap leaching says the process poses no serious environmental threats if appropriate precautions are implemented. Despite EPA assurances,



Luther Russell



Part of Wharf's open pit mine in the Black Hills

the controversy over open-pit/heap leach gold mining has intensified.

Citizens have begun organizing; a group called the Strip Mining Awareness Coalition (SMAC) formed specifically to combat Wharf and any other heap leach operations. The Rapid City-based Citizens' Law Center has made the mining issue its top priority. Headed by Nick Meinhardt, the center led the successful effort to thwart a nuclear dump in the southern Black Hills. Meinhardt has already announced his group will pursue an initiative to ban heap leaching in the state.

Traditional groups such as the Sierra Club's Black Hills Group and the South Dakota Resources Coalition have supported and initiated legal challenges.

pponents point to documented cyanide leaks at other Western mines. Human error is most often the culprit, but there are other reasons for alarm. Heap leaching is usually accompanied by surface or strip mining. Such practices ruin landscapes, destroy wildlife habitat and in the case of the Black Hills, threaten recreational areas.

"Before Wharf showed up this was a peaceful and beautiful place. Now we hear dynamite and heavy equipment," says a resident whose home is near Terry Peak ski area. Wharf's operation is edging closer to Terry Peak and may one day include excavation from the ski slopes. The company owns the mineral rights beneath 70 to 80 percent of the slopes. For sale signs are appearing in front of ski area homes, but buyers are rare.

When asked about choosing between mining and skiing, Hank Scholz admits his company will have to make that eventual decision. Craig Hayes of nearby Deadwood, who owns several rental properties at

Terry Peak, is more succinct: "If the price of gold stays high -- watch out!"

Terry Peak manager Greg Acrop says the ski area has discussed mining impacts with the gold mine. Acrop says his main concern is not for the slopes, but for the visual impacts of strip mining on nearby ridges.

"I'm not sure how that would affect the ski experience," he says.

Scholz says if mining does occur on the slopes, a reclamation plan could actually improve skiing at Terry Peak.

(Continued on page 14)

# Groups take the initiative

ore than a year after it trounced the South Dakota Legislature and the nuclear power industry, a group of South Dakota residents are taking on the gold mining industry. The activists are modeling their new campaign on the successful one they fought against the establishment of a low-level radioactive waste dump (HCN, 11/25/85).

If they follow a similar path, they will spend the next year talking to people throughout the state about the threat to the Black Hills and to the region's groundwater and about an unresponsive state legislature. They will then collect about twice as many signatures as needed to put on the ballot a referendum banning heap leach gold mining. When the election comes, they will win big. (In the 1985 special election on the waste dump, 91,000 South Dakotans went to the polls and 83 percent voted against the dump. The state

has about 600,000 residents.) This time, the environmental coalition being organized by the Citizens' Law Center in Rapid City and by other groups faces a more powerful foe. Gold mining in South Dakota is very big business; the firms have cumulative assets in the billions, employ many people, and pay millions in taxes.

But Larry Mehlhaff, the regional

the Great Plains, says the heap leach foes have some strengths. "A lot of people in South Dakota care about the Black Hills while the low-level radioactive waste dump was planned for Edgemont -- a place few people knew about."

The Black Hills in western South Dakota is the state's vacationland. Mt. Rushmore is very heavily used, and the Black Hills National Forest is a popular day-hiking area. The National Forest also has a large number of people living in private enclaves within its external boundaries, many of them for the lifestyle.

According to Mehlhaff, nearby Rapid City, which he describes as lying in South Dakota's banana belt, has a well-organized and sophisticated environmental movement. The general area is also home to Deadwood, a resort town that depends on the beauty of the Black Hills, and Spearfish, which has a state college and an academic and artistic population.

The Black Hills is far from a virgin forest. Trees grow rapidly and the area is very heavily roaded and very heavily logged. In addition, the town of Lead in the Black Hills is home to Homestake Mining Co. and its 1,000 employees.

But heap leaching and Homestake's recent move to open pit representative for the Sierra Club in mining in Lead is disturbing the old

equilibrium. While roading, logging and underground gold mining are part of the Black Hills' past and present, the chewing up of ridges and the use of cyanide leaching solution are new.

Nick Meinhardt, head of the Citizens' Law Center and former head of the coalition that beat the dump, says the two fights are related. The nuclear waste fight, he says, was the first round in an effort to "keep South Dakota from being colonized for its natural resources. The heap leaching fight is the second round."

According to Meinhardt, "The economy has traditionally been agriculture and tourism in the western part of the state. This new gold rush could destroy the aesthetic value of the hills and jeopardize tourism. More importantly, it also jeopardizes our groundwater.'

Meinhardt says the issue interests people throughout South Dakota. "The eastern part of the state cares very much. They see the Hills as a state or national resource."

The Sierra Club's Mehlhaff, who grew up in eastern South Dakota, says the Rapid City - Black Hills area is a mecca for many South Dakotans. "Young people grow up looking forward to moving out of eastern South Dakota. But they don't want to leave the state. So they may move to Rapid City and be near the Black Hills." The appeal of the area starts young. "My first two vacations were in the Black Hills."

[Continued from page 13]

Deer Mountain, the second ski area in the Black Hills, is near Terry Peak and is also threatened with disturbance by gold mining. Rights to the minerals underlying that area's slopes are controlled by Golden Reward Mines.

South Dakota's mining code and reclamation standards are a target of open-pit/heap leach opponents. The law says an excavated, open-pit mine need only be reseeded with vegetation. Huge holes and sheer walls are left unchanged. Companies are allowed minimal reclamation because the law allows for minimal reclamation if mining could possibly resume some day. "Non-reclamation reclamation" is how the Sierra Club's Rick Walter describes it.

Mining opponents also worry about expansion at operating mines and the unknown scale of new mining development throughout the Black Hills.

In 1985, Homestake resumed surface mining in the historic Open Cut located within the city of Lead. It had been 40 years since Homestake last mined above-ground in the Black Hills. Over 100 households were relocated to accommodate the surface excavation. The company also began strip mining at a site above Spearfish Canyon. Homestake's involvement in surface and strip mining is seen as an indicator of mining activity to

What constitutes too much mining, or acceptable mining, or determines whether a mine is too large?

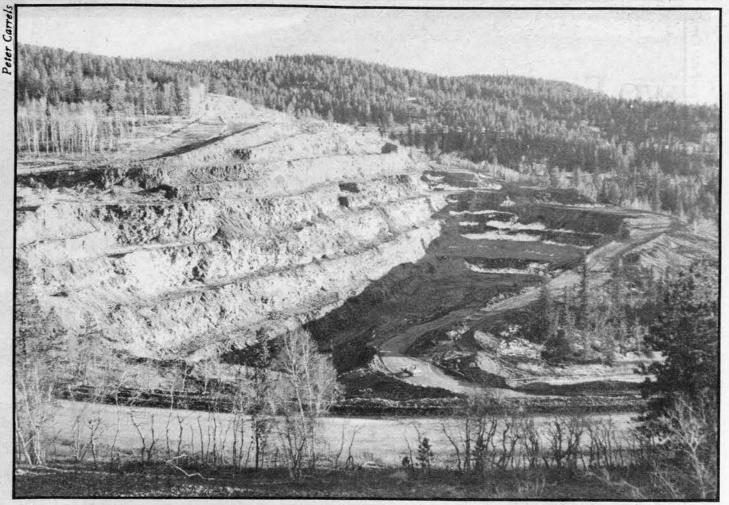
Luther Russell describes Wharf's mine as a small operation. But to see Wharf's open pits, roads, parking lots, heap leach piles, holding ponds and refinery through a non-miner's eyes is to view a vast, complex earth-moving enterprise smack in the middle of timbered mountains. Rick Walter's first view of Wharf's operation came during a plane flight.

"The site was clearly visible from 40 miles. If that's a small operation, the prospect of more so-called small mines is truly worrisome," Walter

Wharf's operation, relative to other gold mines, is not large. Wharf excavates about 1.8 million tons of rock each year; to date about 300 acres have been disturbed. The company owns mineral rights on 3,000 additional acres, including the Terry Peak property, and says it plans to expand.

Wharf's goal is to produce 100 ounces of gold daily. In 1985, the company produced 12,000 ounces at a production cost of \$224 per ounce. With gold selling for over \$400 per ounce, the mine is highly profitable.

Although Wharf and Homestake are the only open-pit operators now, another halfdozen mining companies are seriously considering open-pit/heap leach mines. Each of the companies has extensive holdings in the Black Hills. State records show that approximately 42,000 acres, all situated in the northern Hills, have been permitted to allow for exploration activity. New mining claims are constantly being filed and are not confined to the Lead area. Late last year, Homestake filed over 450



Wharf's open pit

claims involving 9,500 acres on public land in the central Black Hills, near Sheridan Lake and Pactola Reservoir, and historically gold has been mined as far south as Custer.

The rule of thumb that dictates how extensive gold mining can become is the metal's market price. The forecast is for gold prices to remain high enough to tempt greater mining investment.

Today's controversy over Black Hills gold mining is in many ways similar to the Indian-white clash over these same lands 110 years ago. Mining proponents talk about free enterprise, new jobs and more money in the local economy. David Nelson, a philosophy professor, speaking for himself and other mining opponents, sounds reminiscent of those Sioux chiefs who fought the earliest intrusion by gold miners. He says, "Surface mining for gold is incompatible with what the Black Hills mean to many of us."

Peter Carrels is a free-lance writer in Aberdeen, South Dakota.

# U.S. may make amends

New Jersey Sen. Bill Bradley, D, has introduced a bill to return Devil's Tower National Monument and Inyan Mountain in northeastern Wyoming to the Sioux Indian Nation. The bill would also give the tribes 1.3 million acres in the Black Hills of South Dakota. Bradley says this would make amends for the U.S. breaking an 1868 treaty and taking 7.3 million acres after gold was discovered in the Black Hills in the 1870s. Although the federal Indian Claims Commission validated Sioux claims to the stolen land in 1974 and awarded the tribes \$105 million, the tribes refused the money. Sioux leaders said they wanted the land instead, a move only Congress can make. A similar bill died in the last legislative session, but Bradley says this one may succeed because it has the backing of Sen. Daniel Inouve, D-Hawaii, who chairs the Senate Committee on Indian Affairs. Bradley says the Wyoming sites were add



Line Reference Target

Devils Tower

because of their religious significance to the Indians.

## LETTERS

HIS MAJOR DISAPPOINTMENT
Dear HCN,

In his letter captioned "Remembering an Achievement," William Voigt (HCN, 2/2/87) says that "only the partial inundation of Rainbow Bridge by an arm of Lake Powell has violated the agreement." He goes on further to question David Brower being given exclusive credit for this achievement.

I doubt David Brower would like exclusive credit. Seeing Brower speak on three occasions, I was struck by his sincere belief that Glen Canyon Dam as the compromise to not putting a dam in Echo Park was the major disappointment of his career. Calling it the "place no one knew," Brower realized in hindsight that the canyon country of southern Utah was part of a national heritage that dwarfs the few scattered parks that dot the Colorado Plateau.

Brower warned his audience that we should not "give away" our children's future because we lacked the first-hand knowledge of what was being lost. This message has obviously gone unheeded by many in and out of Utah.

> Robert Weed Escalante, Utah

HARRY AND YUBA

Dear HCN,

Arthur Roth's reflections on the tradition of sending unusual post-cards (HCN, 3/16/87) brought to mind the most memorable card I have ever received.

About 10 years ago I took a tour of the Northwest with my friend Harry and his dog Yuba. Traveling some 2,500 miles in my VW, we enjoyed getting to know one another better while engaging in one adventure after another. Upon returning home to Colorado after a few weeks,

I found a postcard from Harry in my mailbox. The card, mailed in Oregon, said, "Having a great time, glad you're here."

> Chet Tchozewski Boulder, Colorado

FERAL PEST

Dear HCN,

The wild horse is a feral pest in my book. To quote Hope Ryden, "but when animals have been living together for a long period of time, you get a very special breed of horse."

You sure do: The wild horses in the Laramie Mountain-Shively Basin area were real uniform in conformation: heads at least 3½ feet long, straight shoulders, very long backs and hips no larger than mine.

Jake Kittle Aspen, Colorado

# GUEST OPINION

# Two Forks Reservoir spawns a bad bill

by Tom Easley

The problem of mitigating development impacts on Colorado's fish and wildlife resources has gained increasing attention over the years. The issue deserves scrutiny as Colorado's once abundant natural habitat for fish and wildlife inexorably gives way to the needs of an

expanding population.

During this session of the Colorado General Assembly the debate has focused on mitigation of water projects, in the form of House Bill 1158 sponsored by House Majority Leader Chris Paulson. The main subject of the debate is the function of the Colorado Division of Wildlife (DOW), the agency charged with analyzing impacts and recommending appropriate levels of mitigation to state and federal agencies. DOW was forced to take a hard look at its mitigation standards when the Wildlife Commission, the citizen body appointed by the governor to oversee its operations, found in 1985 that DOW lacked a written mitigation policy to guide its personnel. Critics around the state asserted that some DOW field officers overstepped their authority in making mitigation recommendations.

The controversy came to a head last year when the DOW's initial mitigation estimate of about \$219 million (about one-half the construction cost) for the massive Two Forks water project on the South Platte River became known. It shocked the project's proponents.

Legislation was introduced during the 1986 session to severely limit the DOW's ability to make mitigation recommendations. The bill, in turn, produced a sharp reaction from the environmental community and the media.

At the suggestion of such legislative leaders as Sen. Tilman Bishop and Rep. Scott McInnis, the controversy was defused by referring it to a working committee of representatives of the development and conservation communities.

After thousands of hours of effort, the working committee produced a balanced mitigation policy and accompanying implementation guidelines, based on painstakingly negotiated compromises. Conservationists welcomed the process and the settlement that resulted. The policy was formally adopted by the Wildlife Commission in March 1987.

Unfortunately, the controversy has not abated. The apparent cause is the continuing conflict over levels of mitigation for Two Forks. Two Forks represents perhaps the most massively destructive impact on regional wildlife resources ever considered in Colorado. At stake is a trout fishery rated by the U.S. Fish and Wildlife Service as Category One, meaning irreplaceable and of national significance; over 10,000 acres of wildlife habitat, including elk, deer, and bighorn sheep winter range; and seven threatened and endangered species onsite, both in the Colorado River basin and on the Platte as far downstream as Nebraska.

The Corps of Engineers has estimated mitigation costs in a range from \$17 million to \$109 million, but the project applicant, the Denver Water Department, has not yet submitted its specific mitigation plan. Meanwhile, the DOW is re-calculating its original estimate in accordance with its new guidelines.

In its original form, H.B. 1158 would have:

eset an arbitrary cap of 5 percent of construction costs on fish and wildlife mitigation;

•funded all federally permitted water project mitigation by a \$25 million fund created through a rescission of a state income tax credit:

eassigned responsibility to the Colorado Water Conservation Board (CWCB) for determining appropriate mitigation levels for water projects.

Amid speculation that H.B. 1158 was an attempt to subsidize Two Forks and to restrict fish and wildlife mitigation for that project, the bill was moderated as it passed through the House of Representatives.

Largely due to the efforts of Department of Natural Resources Director Clyde Martz and Reps. McInnis and Carpenter, the bill that will next be considered by the Senate specifies that:

eproject sponsors will be responsible for mitigation costs up to 5 percent of the construction cost;

othe DOW can make its mitigation recommendations to federal agencies and to the

•The CWCB can apply the \$25 million fund, up to an additional 5 percent of construction costs, to water projects it determines to be deserving; and

oproject sponsors can apply for additional project enhancement grants to be split between the same \$25 million fund and DOW cash funds.

H.B. 1158 establishes startling precedents for wildlife management in Colorado. The following issues remain:

What happens when the CWCB runs out of the \$25 million? Will it come back to the Legislature for additional taxpayer monies, or will it mean that there will then be a de facto cap on mitigation of 5 percent of construction

Who should be responsible for determining levels of mitigation? Making the CWCB, the agency primarily charged with overseeing the development of the state's water resources, responsible sets an alarming precedent. Would it be equally appropriate for the Tourism Board to set mitigation requirements for ski areas, or for the Highway Commission to veto DOW mitigation recommendations?

Who should pay for development impacts on fish and wildlife? A sound answer is contained in the Wildlife Commission's new mitigation policy. It concludes that the cost of mitigation is the responsibility of a project proponent and project beneficiaries, but might be shared by the DOW to the extent that it receives net economic or wildlife benefits from the project.

Two public interests are at the root of these water project mitigation debates: Water development and the protection of our fish and wildlife resources. Regrettably, the immediate debate pits one against the other.

Both interests are important to Colorado's future, but conservationists believe that further polarization ill serves Colorado's future.

Outgoing Wildlife Commission Chairman Tim Schultz summed it up well when he noted that "Colorado is a dynamic state in which growth and development are taking place... wildlife interests are a part of -- not a barrier to -growth and development... wildlife resources and their use are a major economic asset of Colorado."

Tom Easley is legislative liaison for Colorado Audubon Council in Denver.

# Win fame and (a very small) fortune

YOU ARE INVITED TO enter your favorite black-and-white photographs in the first annual High Country News photo competition. Photos must be black-and-white prints -- no color slides or prints -- 8 inches by 10 inches, and devoted to any of these themes: 1. landscape, 2. rural, 3. wildlife, 4. Western people. Please identify your photo by theme and tell us something about the picture -- person, place, date.

Staff of High Country News will select one photograph to be the image for the 1987 Research Fund poster. This poster is sent to all subscribers contributing \$100 or more to the annual Research Fund.

Other winning photos will be published during the year in HCN's annual index, HCN ads or elsewhere in the paper. We value good photos and use a lot of them.

First, second and third place winners will be selected in each of the four categories. In addition to being published, all winners will receive a gift subscription to send to anyone of their choice.

Deadline for submitting photos is June 15. Send photos to: PHOTO CONTEST, High Country News, Box 1090, Paonia, CO 81428. All photos sent in become the property of HCN. Photos will not be returned.

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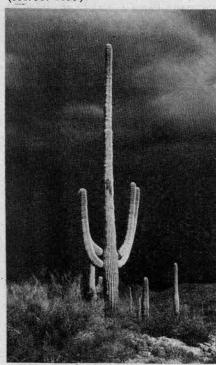
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Mail to: HCN, Box 1090, Paonia, CO 81428

FOUR CORNERS COURSES

The Four Corners School of Outdoor Education in Monticello, Utah, offers summer and fall research expeditions into the canyon country of Utah and Arizona, including three surveys of desert bighorn sheep. Co-sponsors of the research projects are the National Wildlife Federation, the Forest Service and the Bureau of Land Management. One survey begins in the Dark Canyon Wilderness Area and involves searching on foot and by four-wheel drive vehicle for the endangered sheep, noting their numbers, location and behavior. Another expedition will survey the South Rim of the Grand Canyon and a third involves a Colorado River trip focusing first on a study of plant ecology and later on sheep surveys. Participants work in teams of 8-15 people with one specialist and share the costs of food, transportation, insurance, equipment and experts. The principal researchers are biologists and ecologists from Northern Arizona University, and Dr. Jim Halfpenny of the University of Colorado's Institute of Arctic and Alpine Research. For more information, write Four Corners School of Outdoor Education, East Route, Monticello, UT 84535 (801/587-2859).



THE SAGUARO FOREST

"The Saguaro," according to Peter Wild in The Saguaro Forest, "holds out a key to the whole complex but delicate web of desert ecology." A professor of English at the University of Arizona in Tucson, Wild describes this uniquely adapted plant that blooms at night and is pollinated by the long-nosed bat. Although it lacks a map, the book contains a good deal of Papago Indian and desert history. Photos are by Hal Coss.

Northland Press, P.O. Box N, Flagstaff, Ariz., 86002. \$11.95, softcover, 65 pages. Illustrated.

CAMPING WITH AUDUBON

The National Audubon Society once again offers summer programs in ecology at the Trail Lake Ranch high up in the Wind River Mountains. One- and two-week sessions focus on birds, insects, mammals, habitat relationships, plants and geology, and include field excursions, research projects and hiking. College credit is available. The society offers a nature photography course at the ranch June 19-28, which includes visits to the Wind Rivers and Yellowstone and Glacier national parks. For more information contact Ann Avril, National Audubon Society, 4150 Darley #5, Boulder, CO 80303 (303/499-5409).

SPRING WILDERNESS VISITS

The Colorado Environmental Coalition is sponsoring spring trips to Bureau of Land Management wilderness study areas on weekends throughout April and May. An overnight backpack to Cross Mountain Canyon on the Yampa River will take place April 25-26, followed by a backpack into Cross and Cahone Canyons May 2-3. The latter is an eight-mile round-trip through rugged country and Indian ruins. Another overnight backpack to Gunnison Gorge on the weekend of May 9 involves a 1,500-foot drop to the Gunnison River. A day hike on May 17 will explore Grape Creek, once considered as a filming site for Rambo fight scenes because of its unusual topography. Outings May 23-25 will visit three BLM study areas near Dinosaur National Monument: Bull Canyon, Willow Creek, and Skull Creek. The Little Book Cliffs, known for wild horses and scenic Grand Valley, is the destination of a Memorial Day backpack, and finally, CEC will sponsor an overnight trip to the island-wilderness area of Oil Spring Mountain on May 20-31. Contact the Colorado Environmental Coalition, 2239 E. Colfax Ave., Denver, CO 80206 (303/393-0466).

A PINEDALE PLAN

A draft resource management plan for the Pinedale, Wyo., area is available for public review, with comments accepted until June 4. The plan analyzes options for 931,000 acres of public land and 1,185,000 acres of federal mineralestate administered by the Bureau of Land Management in southwest Wyoming. The BLM will choose between four approaches that prescribe management practices for oil and gas development, watersheds, wildlife, livestock grazing, wild horses, forest resources and recreation. The preferred alternative emphasizes neither resource utilization nor protection, but would be used to guide resource tradeoffs on a case-bycase basis. A public hearing will be held at the Pinedale Middle School on April 29, at 7 p.m. For more information call Jack Zilincar at 307/382-5350. For a copy of the draft or to submit comments write to Project Leader, Pinedale RMP, Bureau of Land Management, P.O. Box 1869, Rock Springs, WY 82902.

A PROPOSED PIPELINE

The Federal Energy Regulatory Commission recently issued a four-volume draft environmental impact statement on a proposed natural gas pipeline that would ship natural gas from Canada, west Texas or the Rocky Mountains to oil fields near Bakersfield, Calif. There, steam produced with the natural gas will be injected into the ground to enhance oil recovery. The Kern River alternative is the longest route, involving over 800 miles of newly constructed line. It would lay pipeline from Evanston, Wyo., through East Canyon to an area northwest of Salt Lake City; from there it would turn south to pass Filmore, Milford and Enterprise, finally entering Nevada. The other two proposed routes are considerably shorter and make use of existing lines. For more information contact Robert Arvelund, Federal Energy Commission Project Manager, Washington, D.C. (202/357-9043); Mary Griggs at the California State Lands Commission, Sacramento, CA (916/322-0354); or Jack Reed at Utah's Bureau of Land Management (801/524-3146). Written comments will be accepted until April 24 at the Office of the Secretary, Federal Energy Regulatory Commission, 825 North Capitol St. NE, Washington, D.C. 20426.

THREE PREDATORS

The Utah Museum of Natural History in Salt Lake City will present a series of lectures about predators who play strong ecological as well as mythological roles: the killer whale, coyote and shark. Called Animals We Love to Fear, the series features wildlife biologist-cinematographer Jeff Foott on April 20 talking about killer whales. Zoologist-photographer Franz Camenzind talks about his work on coyote vocalizations and group dynamics April 28; naturalistcinematographer Marty Snyderman's slide show on sharks is set for May 4. Lectures will be held on the university campus at 7:30 p.m. and are \$5 for adults, \$4 for children. For information call 801-581-6927.



RIVERS FROM THE SKY "Rivers from the Sky -- Watershed Awareness vs. Business as Usual," is the theme of the third annual Klamath-Siskiyou Bioregional Conference in Arcata, Calif., April 24-26. Residents of the bioregion formed by northwest California and southwest Oregon will discuss ways to create a sustainable economy that benefits both people and the environment. Last year's conference attracted scientists, educators, Native Americans, environmentalists, and national forest and other government officials. The conference is sponsored by the Siskiyou Regional Education Project and costs \$25 for members and \$35 for new members. Academic credit in several disciplines is available through Humboldt State University. For information, write Klamath-Siskiyou Bioregional Conference, c/o Campus Center for Appropriate Technology, Buck House 97, Humboldt State University, Arcata, CA 95521 (707/826-3551).

HOMESTAKE PUBLIC HEARINGS

Commissioners of Eagle County, Colo., are holding public hearings on the Homestake II water diversion project proposed by the front range cities of Aurora and Colorado Springs. The hearings will be at the Raintree Inn in West Vail from 6:30 to 8:30 p.m., April 20-24. Homestake II would be located in the 126,000-acre Holy Cross Wilderness southwest of Vail; it is the state's third most popular wilderness and spans five glaciated valleys, containing wetlands with a rare peat moss, and 25 peaks over 13,000 feet. The hearings are part of the commissioners' examination of the social and economic impacts of the project on the county. After the hearing they have 120 days to approve or deny the Homestake II 1041 permit, a decision the cities can then appeal.

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#### INTERNATIONAL \* WOLF SYMPOSIUM

WOLVES IN WASHINGTON

Defenders of Wildlife will sponsor an international symposium on wolf protection and recovery May 22 at the National Geographic Society in Washington, D.C. Panels will discuss the politics and potential conflicts of the re-introduction of the gray wolf to Yellowstone National Park, the recovery of the Red and Mexican wolf, and status of Minnesota's timber wolf. Luigi Boitani of the University of Rome will speak on the Eurasian wolf with panelists David Mech, U.S. Fish and Wildlife Service biologist, Robert Ream, director of the Wolf Ecology Project at the University of Montana, and Norma Ames of the Mexican Wolf Recovery Team. The symposium coincides with the opening of the traveling exhibit Wolves and Humans: Coexistence, Competition and Conflict at the National Geographic Society. Advance registration is advised and costs \$65 before April 15; \$75 after that date. Contact Dan Smith, Defenders of Wildlife, 1244 19th St. NW, Washington, D.C. 20036 (202/659-9510).

#### ACCESS

WORK

EXECUTIVE DIRECTOR: Responsible for dynamic program of outdoor work projects performed and managed by volunteers. Supervise paid staff of three (3). Qualifications: commitment to the outdoors, minimum two years of public or private management experience, demonstrated fundraising, publicity and organizational skills. Salary: \$16,000 to \$23,000, depending on experience. Excellent benefits. Closing date: April 25. Send cover letter, resume and references to: Volunteers for Outdoor Colorado, 1410 Grant St. Suite B105, Denver, CO 80203 (303/830-7792).

#### NEAT STUFF

MONTHLY NEWSLETTER on profiting from hunting and conserving wildlife. 12 issues, \$40. Sample, \$3. Write Hunting Ranch Business, Dept. HCN, 5214 Starkridge, Houston, TX 77035. (6x7p)

SINGLE? ENVIRONMENTALIST? PEACE-ORIENTED? Concerned Singles Newsletter links unattached like-minded men and women, all areas, all ages. Free sample. Box 7737-B, Berkeley, CA 94707.

GET YOUR TEENAGER into the wilderness! Backpacking, rafting, caving, rock climbing, mountaineering, low impact camping, love of nature. 18 days, \$690. EarthQuest, Box 682, Carbondale, CO 81623. (5x5p)

LEARN SOLAR RETROFIT: Colorado Mountain College's next "hands-on" Solar Training Program begins late August. Fully accredited. CMC Admission, Box 10001 HN, Glenwood Springs, CO 81602. Call 800/621-9602 or 945-7481. (mamj, p)

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