# High Country News

August 18, 1986

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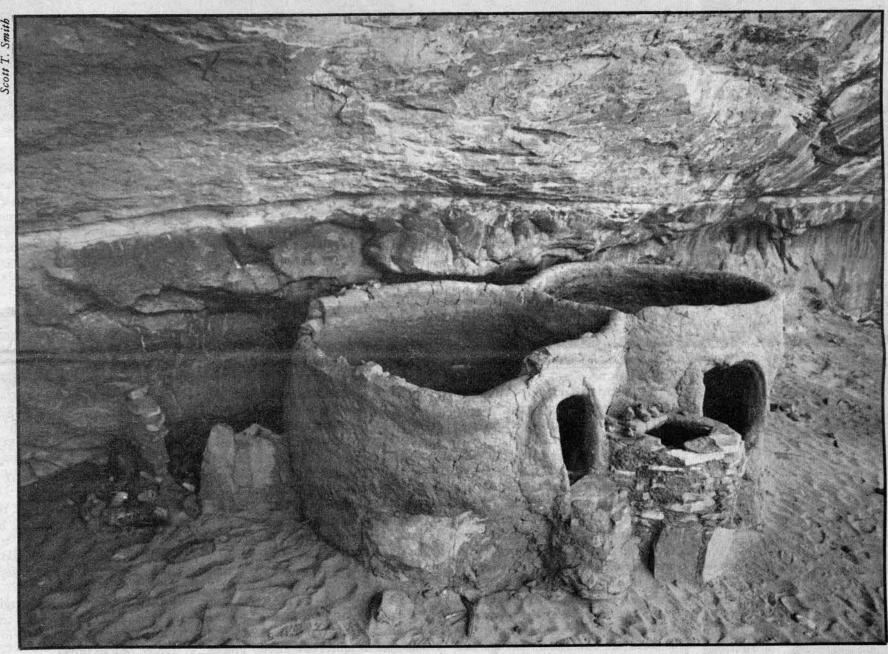
A Paper for People who Care about the West

One Dollar

they county West - august 18, 4985

## Graverobbers, agencies at work

## Sacking an ancient culture



Water Jar Cave in Natural Bridges National Monument has been vandalized since this picture was taken in 1985

\_by Jim Robbins

rom all appearances, Blanding, Utah, with some 3,000 residents, is like any number of small American towns. A theater, small grocery store and hardware store comprise most of the main street business district. Well kept homes line shaded side streets that are a measure of relief from the heat of the Utah desert.

On May 8 federal law enforcement agents from Wyoming, Idaho and Arizona broke the still of a Blanding morning. They searched seven homes and seized dozens of prehistoric Indian artifacts that the authorities claim were stolen from public land. In June, two men were indicted as a result of the searches; their cases have not yet come to trial.

"This is the most significant law enforcement initiative under the Archaeological Resources Protection Act," says U.S. attorney for Utah Brent Ward.

Long-time Blanding pothunter Devar Shumway, 65, whose home was not searched, sees things differently. "These people come in with flak jackets and intimidate women and children and frighten them," he says. "It's the worst form of -- what do they call it? -- Gaddafi terrorism."

Blanding sits on one of the richest archaeological regions in the United States. Throughout the countryside, where farmers grow hundreds of acres of pinto beans, are thousands of sandstone-rock homes and other artifacts left by the Anasazi, a prehistoric agrarian people who occupied the Four Corners region of the American Southwest roughly between the time of Christ and 1300 A.D.

Predecessors of the modern-day Hopi and Pueblo Indians, the Anasazi -- a Navajo term that means "ancient people" -- built an impressive civilization here, though they left no written language. They cultivated corn, cotton and squash using elaborate irrigation systems. They lived in apartment buildings, often built in large caves or wedged in crevices of the labyrinthine canyons that run through this country.

Their total territory was larger than the state of California, stretching from Nevada to just east of the Rio Grande and from central New Mexico and Arizona north into southern Colorado and Utah. But the heart of the culture was in the Four Corners region, the area marked by the northwest corner of New Mexico, the northeast corner of Arizona, the southeast corner of Utah and the southwest corner of Colorado.

No one really knows why the Anasazi culture disappeared. The best guess is that a 25-year drought beginning about 1275 coupled with the destruction of the land from intensive farming ended their way of life. But they left behind handsome pottery, turquoise jewelry, intricately woven baskets, fragile cotton clothing, stone tools and even mummified dead.

Anasazi relics are now valuable collectors' items, prized by museums, art dealers and Indian art aficionados both in this country and abroad. And

(Continued on page 10)

## WESTERN ROUNDUP



#### High Country News

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## Wolves recolonize Glacier National Park

Speculation as to whether the wolf pack that wintered in Montana's Glacier National Park would produce a litter of pups this year ended July 2 when biologist Mike Fairchild saw five gray pups while on an overflight of the North Fork of the Flathead drainage along the park's western boundary.

This was the first documented evidence of wolf denning known to have occurred in Glacier for over 50 years. According to Gary Gregory, the park's resource specialist, between 14 and 18 wolves, including one pack of 11, spent at least part of last winter in Glacier. The new litter of pups brings the total number of wolves known to exist in Glacier up to a minimum of 16 and perhaps as high as 23.

Before this winter most wolf activity was north of the border in Canada, with only infrequent forays south into the United States. Researchers managed to trap and radio-collar several members of the group dubbed the "Magic" pack before they moved more or less permanently into the park and have been using the collars to record and monitor wolf movements.

Gregory says the park policy is to minimize disturbing the wolves, which includes a ban on trapping or radio-collaring wolves within Glacier. In addition, when it appeared this spring that the dominant female had denned near Big Prairie on the park's western border, officials closed the area to all use.



Gray wolves about to mate

"We'd like to give the wolves every chance we can," says Gregory, Even howling, a favorite method for wolf researchers to locate the pack, may prove disruptive, according to Gregory. "It changes their travel patterns and may keep them from making a kill that in the winter may affect their survival," he says.

Biologists are hopeful that the

addition of this year's pups will ensure the recovery of wolves in the Glacier Park ecosystem. "The wolf is the missing link -- the only animal that was a member of the park's original fauna that was no longer a permanent resident of Glacier. With this year's pups it now appears we have it back," Gregory says.

-- George Wuerthner

## Dear friends,

On Tuesday, July 29, when intern Jane Coumantaros returned from the printer with 5,500 copies of the Monday, Aug. 4, issue of High Country News, she also brought along a copy of that day's Rocky Mountain News. The HCN, which would be labelled and sacked on July 30 and mailed on July 31 for Aug. 4 arrival in your mailbox, containing a celebratory article and editorial on the closure of the largest emitter of sulfur dioxide in the United States. The Rocky Mountain News contained a brief story indicating that the smelter would be allowed to reopen.

Staff let out small, strangulated cries and sank to the floor. One can, after all, yell, "Stop the presses!" It is much harder, and a damn sight less glamorous, to say, "Stop the labelling," especially when you have just spent \$600 to print the items to be labelled.

As is recounted elsewhere in this issue, the smelter's reopening is only for five months. A web of economics, circumstance, and local, national and international politics have tightened around Phelps Dodge's corporate throat. But the organization has sucked in another breath, and its smelter will continue to emit SO2 until just after Christmas.

In that same Aug. 4 issue, we failed to mention beneath the story on polluted groundwater in the Denver area that writer Dan Jones covers natural resources for the *Denver Post*. That miss allows us to add that Jones has since moved on -- to the *Hartfora Courant* in Connecticut.

Mike Kustudia has also moved on. A few months ago, the University of Montana grad was laboring in HCN's

front room as an intern. He is now a reporter for the *Hungry Horse News* in Columbia Falls, Montana. The paper is known for its spectacular photos of the landscape and wildlife in the surrounding Glacier country.

Articles by members of the Desert News Service in Flagstaff, Arizona, have appeared in HCN from time to time. Now that freelance operation has made a national splash. Writers Carol Ann Bassett and Sandy Tolan found the Arizona witnesses who testified that William Rehnquist, nominee for Chief Justice of the United States Supreme Court, had harassed members of minority groups at polling places.

Three years ago this month, when HCN moved from Wyoming to Colorado, some readers were upset. So in the Aug. 4 issue, we obligingly placed a large chunk of Colorado in Wyoming, in a "position" map.

Once again we are impressed with the people who read *High Country News*. We say that because we've been poring over hundreds of the returned two-page survey that was "far too exhaustive and nosy," according to one reader. We are still doing the numbers because some kept arriving after toting-up had begun, with one "cat-scratched" from Missoula, Montana, but still readable. In the meantime these observations:

Many of you urged HCN to stay small and independent, sticking closely to regional natural resource issues. "Don't become a little of everything or you will be a lot of nothing." Another reader said: "This is the only publication I can depend on for environmental news."

As for advertising, several urged HCN to keep that area small and local as well. "Don't succumb to uppy, Yuppie tourist drivel."

How long is the paper kept? The range was from forever to until the fire needs starting. What should reporters look into? "Find out if letters (to public officials) really make a difference" was one answer; boot-strap operations in economically depressed communities in the West was another. "Love, sex and rock 'n roll," was a third reply. Tune in next issue

-- the staff

### BARBS

On that reasoning, he should also deny them clothing.

Sheriff C.W. Ogburn of Carbon County, Wyoming, will be sued by the Laramie National Chapter Board of the American Civil Liberties Union for denying inmates in the county jail books, magazines and writing material. Ogburn defends the practice. He says inmates flush reading and writing material down the toilet, blocking the plumbing.

What about Nevada and Oregon?
Columnist Carolyn See in The New
York Times wrote that in doing
research for a novel about the
Midwest, "We have traveled through
Arizona, New Mexico, Oklahoma,
Kansas, Missouri, Illinois, Indiana,
Ohio, Kentucky, Michigan, Minnesota. We still have Iowa, the Dakotas
and Montana ahead."

What's the rush?

A strong movement to control growth in Los Angeles has begun among some residents and officials, according to *The New York Times*.

## Mixed signals on wilderness from Utah

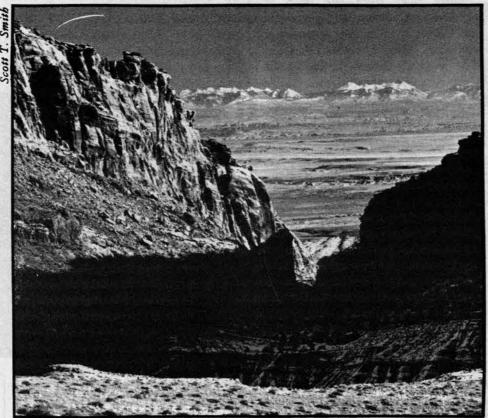
Although elected officials from 15 rural Utah counties announced earlier this summer that they oppose any wilderness designation on BLM lands under study, a recent state poll showed that public opinion is strongly supportive of wilderness preservation.

The survey found that an overwhelming majority -- 83 percent -- agreed that "environmentally sensitive areas need official designation as wilderness." The Bureau of Land Management has recommended that 1.9 million acres in 82 areas become wilderness out of 3.2 million acres studied.

The state-sponsored poll also revealed that rural Utah residents don't think wilderness helps business. Forty-three percent of people polled in western and southern Utah said wilderness creates negative economic or social impacts to nearby communities.

One of the 15 rural counties on record against wilderness is Emery County, which six months ago backed a San Rafael Swell Wilderness on the grounds it would boost tourism. Dick Carter of the Salt Lake City-based conservation group, the Utah Wilderness Association, said Emery County's switch resembled a "fairy tale."

There has been some good news for wilderness advocates in Utah, however. On July 22 a joint report from state agencies that had studied the BLM's wilderness proposals



Looking down an unnamed canyon on the San Rafael Reef

generally supported the BLM's recommendations. The technical report was issued by the wilderness subcommittee of the Resources Development Coordinating Council, a group that generates state response to federal plans.

Then on the following day, Gov. Norm Bangerter reversed himself, saying the issue was not whether there should be BLM wilderness, but how much and where. Back in June he

signed an anti-wilderness resolution passed by the Utah legislature and testified publicly against any further wilderness in the state (HCN, 6/9/86).

All public comments were due at the BLM by Aug. 15. The agency has received more than 1,000 letters so far, and has said that writing a final environmental impact statement may take 15 months.

-- Betsy Marston

## 75,000 acres of wild land closed to public

The public has been barred from a 75,000-acre wilderness study area in western Colorado by the Bureau of Land Management. The Aug. 5 ruling has permanently closed foot access to the Dominguez Canyon WSA via its sole practical right-of-way: a rickety bridge over the Gunnison River southwest of Grand Junction (HCN, 2/7/86).

BLM district manager Richard Freel permanently closed the bridge, abandoning the agency's public right-of-way across the privately-owned structure, because of danger posed by foot use. Freel also ruled that the Musser Brothers' ranching operation and holders of mining rights and other property on the south side of the Gunnison may continue to use the bridge. Such use includes driving

vehicles and cows across the bridge. The environmental assessment issued with the decision indicates that guests of these users will also use the bridge.

Freel also ruled that the BLM will build a public footbridge to replace the closed bridge when funding allows. The \$250,000 cost of a replacement bridge is approximately equal to the Colorado BLM's entire yearly recreation budget.

One goal of the closure, according to the EA, is to protect the wilderness characteristics of the Big and Little Dominguez canyons, which last year attracted over 5,000 visitors. The EA also states that grazing by the Musser Brothers' cattle (the family owns private land adjacent to its grazing allotment on the WSA) is damaging riparian habitat along the creeks.

The issue has been an emotional one, with the EA attracting 100 comments. Emotions were heightened by charges, some in writing to the BLM, that Musser foreman Don Young threatened and harassed hikers.

The decision represents a total victory for the Mussers. In addition to permanent ending of public access across the bridge, the BLM will keep closed a one-mile access road to the bridge. That means rafters and kayakers will have to carry their equipment a mile to put in near the bridge. The Sierra Club's Mark Pearson said the group, which fought the closure, had not decided if it will appeal.

--Ed Marston

## Black-footed ferrets are staging comeback

After nearly a year of nothing but bad news about the endangered black-footed ferrets, the discovery of two litters and several adults at the only known wild colony recently has strengthened hopes for the species' survival.

In mid-July, state and federal biologists began a month-long spotlight survey of prairie dog towns west of Meeteetse, Wyoming, where the ferrets were apparently decimated last fall by an outbreak of fatal canine distemper.

Two females with litters of three and five kits respectively, two elusive adults of undetermined gender, and one adult male were found during the first two weeks of the search for the nocturnal, masked animals.

The adult male was trapped and

placed under quarantine at a state veterinary facility in Laramie. If it shows no sign of disease after four to six weeks, it will join a captive breeding population of two males and four females at the Wyoming Game and Fish Department's Sybille wildlife unit northeast of Laramie.

Game and Fish ferret coordinator Dave Belitsky said the species' advisory team and federal and state agency officials will decide in August whether any more of the wild ferrets should be taken into captivity.

Construction is underway at Sybille on a new ferret building funded by \$235,000 from the U.S. Fish and Wildlife Service and \$50,000 from Game and Fish. Officials expect the building to be finished by November.

Nearly 60 specialists in reproduc-

tive biology from the U.S., England and Canada were expected to discuss ways to enhance the ferret recovery effort during a conference at the University of Wyoming last week.

Officials will give the ferrets a chance to breed naturally during the first part of the breeding season next spring, G & F officials say. But if mating does not take place, biologists may attempt artificial insemination using sperm removed by electroejaculation from anesthetized males.

The lithe, two-foot-long weasellike animals are North America's only species of ferret and have been called the rarest mammals on earth by an official of the International Union for the Conservation of Nature.

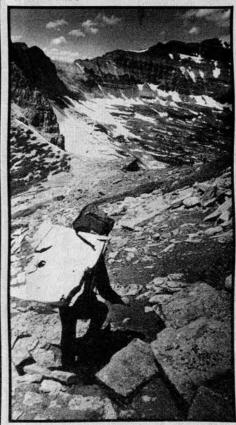
-- Philip White

### HOTLINE

#### Last Chance permit

The Colorado Department of Health has released for public comment a draft permit to a subsidiary of Browning-Ferris Industries for operating a hazardous waste disposal facility near Last Chance, a small community near Colorado's eastern border. Highway 36 Land Development Co. purchased the 5,600 acres for the landfill in 1980 and asked Adams County for a permit in 1982, which was refused (HCN, 9/5/83). The state subsequently increased pressure on counties to select landfills or have them selected by the state, and enacted state regulations controlling disposal of hazardous wastes that are stricter than federal regulations (HCN, 5/27/83). In August 1983, Adams County reversed its position and agreed to the facility. Now, after three years, and rejection of two previously submitted plans, the state is beginning a public comment period on the first such permit in the country since 1980, when stringent federal regulation of toxic wastes began. The site will have a total capacity for burying 2.5 million cubic yards of wastes, plus tanks and drums for another 1.6 million gallons. Public hearings are scheduled for Aug. 13, 7 p.m. at the Woodlin School auditorium, Last Chance, and Aug. 27, 1 p.m. at the Colorado Department of Health in Denver. Public comment will be accepted until Sept. 12 and should be addressed to Judith Dreith, Waste Mangement Division, Colorado Department of Health, 4210 E. 11th Ave., Denver, CO 80220 (303/320-8333).

Neal Palumbo



A piece of airplane wing on her back, Sydney Stevens of Rowayton, Conn., hikes down the mountain

#### High Uinta cleanup

Twenty-one Sierra Club members spent 10 days this summer chopping up a crashed plane on top of a 12,433-foot mountain, and then hauling out the debris on their backs. The volunteers came from all over the country to join one of the club's 25 "service trips." This one took them 60 miles east of Salt Lake City, Utah, to Mt. Agassiz in the High Uintas Primitive Area, where a twin-engine plane hit the mountain two years ago. The group carried out 72 loads weighing 2,400 pounds.

## **HOTLINE**



Marcia Rothwell

## A new leader at the Wildlife Federation

For the first time in its 40-year-old history, the Wyoming Wildlife Federation is headed by a woman. She is Marcia Rothwell, former director of the Platte County Chamber of Commerce, who became director of the 8,500-member wildlife group on Aug. 1. Rothwell says she'll try to increase membership in the state's largest citizen organization by another 1,000 this year. Rothwell says she will also work on improving relationships between landowners and hunters. Last fall the federation received 10,000 hotline calls from hunters complaining about access problems.



Lehman Caves, just off Highway 50

## The loneliest road in America

Nevada's Commission on Tourism was not happy when Life magazine picked its State Highway 50 as "the loneliest road in America" and quoted an AAA official as saying: "We warn all motorists not to drive there unless they're confident of their survival skills." The 287-mile stretch of road passes nine towns, two abandoned mining camps and just a few gas pumps between Ely and Fernly. Nevada's tourist group says part of Highway 50's charm is that "you can travel for stretches and see few other autos." There are more cattle than people, and this is an area where "cowboys are the genuine article," says tourist commission spokesman Richard Moreno. Off Highway 50 there are underground caves and Indian petroglyphs.

## The saga of Union Pass continues

Forty miles from the town of Pinedale, Wyoming, and 15 miles from the nearest phone, Joe and Stella Retel are quick to spot any vehicle. Their summer home in the upper Green River Valley is on the road to Union Pass.

In past years, the retired Rock Springs couple looked forward to visits of family and friends, but now they say they never know who's coming next. They know they don't want logging trucks. In June the Retels obtained a restraining order barring Louisiana-Pacific from using a 300-foot section of the Union Pass road that crosses their land. (HCN, 7/7/86 and 8/4/86). L-P wants the access to shorten the route from a timber sale in the upper Green River Valley to a lumber mill in Dubois.

Though the restraining order expired on July 3, L-P's chief forester Bob Baker told the *Pinedale Roundup* that he had no intention of crossing the Retel property until the legal questions were settled. But on Aug. 1, the Retels said they looked up from the breakfast table and saw two empty timber trucks heading across their property towards Pinedale.

Stella Retel says she drove the 15 miles to the only pay phone in the valley to contact their attorney, their son and the Sublette County sheriff, while her husband parked his jeep across the entrance to their property to prevent the return of the L-P trucks.

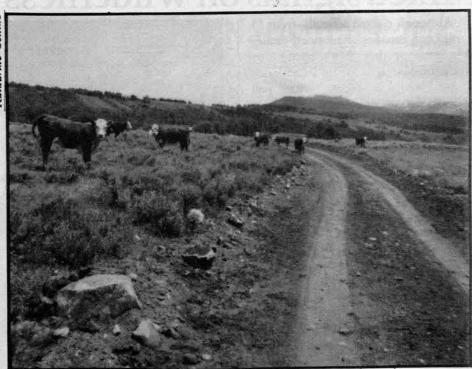
Joe says the loaded timber trucks reappeared at 11:30 a.m., "barreling like hell." He says Bob Baker accompanied the trucks in his own vehicle.

"I said to him, 'You're not going through.' He told me, 'I'm a public servant and I've got a right to go through.' "Baker is a Republican State Representative from Fremont County. Joe Retel told Baker he could go through "but the logs stay here." Retel says at that point he got back in his jeep and waited.

The stalemate ended after two hours. In response to Stella Retel's telephoning, a sheriff's deputy arrived, took names and license numbers and told the Retels they would have to come to Pinedale and sign a complaint before any further action could be taken. The Retels said the message from their attorney was to let L-P go through. The couple said they don't know what their next move will be. Their attorney, John Zebre of Rock Springs, could not be reached for comment.

Bridger-Teton National Forest spokesman said that the new position of the U.S. government and the Forest Service is that the public has the right-of-way across the Retel property. He said that the Pinedale District Ranger office had given L-P an "operating plan" on Friday, allowing them to begin hauling timber across Union Pass. He said Bob Baker had told him he was going to send two trucks across the pass to see whether the Retels would pursue the right-of-way question in court.

Dean Gardiner, legal counsel for the regional forester in Ogden, Utah, had given the earlier opinion that no one had a right-of-way across the Retel property. He now says that "it is quite important that the area was used as a trail by Indians, and that same trail was used by the Forest Service." He said the trail appears on an 1893 General Land Office map and on a 1911 Forest Service map. Gardiner



Cows on Union Pass Road

said the passageway was "segregated" from the land that was patented in 1918 and eventually sold to the Retels in 1960.

U.S. Attorney Richard Stacy in Cheyenne agrees that the legal evidence shows there is a public right-of-way across the land. He says, "We're waiting for the Retels' attorney to come down to Cheyenne and pursue their lawsuit." Stacy said that there are many nuances of legal arguments made by different people,

and only in a court of law can the right-of-way question be resolved. He added that access over private land to reach public land will be "the paramount legal question in the West for the next 20 years." He said the Retel case would be "one more little facet of that overriding question" and might set a precedent for other groups or individuals litigating access to public lands.

-- Katharine Collins

## Boise acts to clear the air

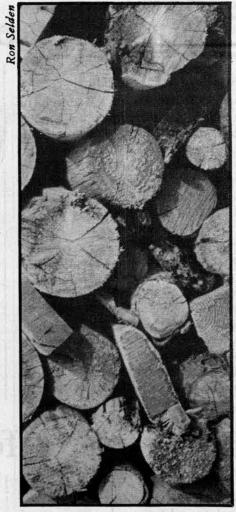
In the first action of its kind in Idaho, the Boise City Council has adopted an ordinance to ban wood and coal-burning during air pollution alerts. The ordinance passed unanimously. Aug. 5, the council also passed a companion ordinance setting emission standards for wood stoves sold or installed in the city.

The actions were sparked by a temperature inversion last winter that held a thick mass of gray muck over Boise for 21 days. Air pollution alerts (issued when particulate counts reach 200 or more micrograms per cubic meter of air) were issued for 18 straight days during the inversion; respiratory complaints to local doctors increased substantially.

The Boise Valley's topography guarantees inversions every winter, but last year's was the worst since 1977-78. In earlier years, automobile exhaust was the primary polluter during inversions, but a mandatory exhaust inspection system has much reduced that source. But over the same period, the number of installed wood stoves has zoomed. The problem is exacerbated because inversions hold cold temperatures in -- especially when snow is on the ground -- thus causing more stove use. Last winter the temperature 1500 feet above Boise was some 20 degrees higher than on the valley floor while the inversion lasted.

The ordinances were solidly supported in public hearings held earlier this year. Councilman Jay Webb, who proposed the burning ban, spoke for the majority: "The welfare of Boise citizens cries out for this. People are disgusted with the air in the winter in this city."

Exemptions to the burning ban are allowed for those whose sole heat source is wood or coal, or those who would suffer economic hardship as a



The emissions standards proposed by Boise Mayor Dirk Kempthorne are identical to those enacted in Oregon several years ago and will not apply to stoves already in place. Violation of either ordinance is a misdemeanor punishable by fines up to \$300 and jail sentences up to six months.

The ordinances cap seven years of public education by Boise conservation and health groups. In 1978 the political climate for either auto inspection or a burning ban was not good. But education coupled with terrible inversions changed the public mood.

-- Pat Ford

## A proposed dam succumbs to high costs and opposition

Developers of the proposed Hellsgate Dam on the Colorado River seven miles west of Glenwood Springs, Colorado, scrapped the project indefinitely last week. Developers said cost estimates had risen \$2 million and environmental studies would have added even more expense to the project.

The decision was hailed by recreationists, who said the dam would flood one of the most popular stretches of easier whitewater in the state.

A strong blow to the developers' hopes had already come in the form of a surprise letter to the Federal Energy Regulatory Commission from Garfield County Commissioner Bob Richardson.

Speaking for himself, Richardson condemned the project as "an intolerable blight" that would irreparably harm the county. Opposition also came from Colorado's Gov. Richard Lamm, the Colorado Highway Department and Department of Natural Resources.

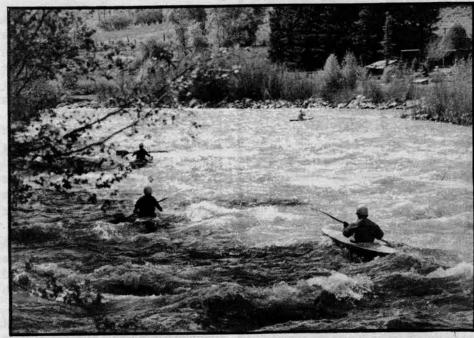
The most concerted opposition came from a triumvirate of commercial rafting associations -- Colorado River Outfitters Association, Western Slope River Guides Association, and Western River Guides Association. Outfitters stood to lose \$1.5 million a year to the dam. Private river runners joined the fight through Friends of the Colorado, a Carbondale group, and

The Confluence, a kayaking group based in Aspen. A number of conservation and river-protection groups also planned to intervene in FERC's licensing process.

The primary concern of the river runners was the 1.7-mile lake that would have formed above the dam. After the spring high water, the lake would have presented a major obstacle to river trips. Combined with characteristic upstream winds, the lake would not have been easily crossed, although mitigation by developers included the mention of motorized tow-boats.

The dam itself presented a different problem. At high water, the dam's gates were to be fully open and rafts would have apparently been able to float directly through the four 25-foot-wide slots. That presented the dangerous possibility of wrapping rafts on the pillars between the radial arm gates. At water levels below 14,000 cubic feet per second, rafts would have bypassed the dams by a concrete chute that also incorporated a fish ladder.

Glenwood Springs outfitter Bill Livingston, of Rock Gardens Rafting, said, "Residents and visitors to the area are not in search of a mechanized excursion past a man-made wonder." Glenwood Springs, often known as "The Spa of the Rockies," is a natural playground, and this is largely true of



Kayaking near Glenwood Springs

the neighboring resort towns of Aspen, Snowmass and Vail. The outlying resorts also send a high number of rafters and kayakers to this stretch of river.

Until the end, Hellsgate developers continued to tout the promise of reduced power costs to the local consumer, even though Glenwood Springs was in the last stages of negotiating a contract with the Holy Cross Electric Association. Hellsgate offered the city the chance to join Hellsgate Associates in a partnership that would have given Glenwood the

option of using Hellsgate's power for the city's electric system or selling power to Public Service Company of Colorado.

Selling power seemed more plausible since the Public Utilities Regulatory Policies Act guarantees a market at a rate currently 40 percent higher than the rate Glenwood would pay Holy Cross. But in a carefully worded memo, the city's utility consultant, Cecil Dunn, recommended that "neither of these proposals is attractive."

-- Sam Cox

## Two park officials say ecosystem approach needed

Superintendents of Glacier and Waterton national parks sided with a growing wave of voices that are calling for the recognition of national park ecosystems -- systems that include not only land within park boundaries, but also land outside of the parks crucial to the survival of the areas' natural systems.

Glacier superintendent Gil Lusk and Waterton superintendent Bernie Lieff told a gathering of wildlife and resource managers that important habitat zones outside national parks can be protected only through cooperative management that involves state, federal and private land managers.

The two made their statements at the opening of the annual workshop on grizzly bear and wolf management, held this year at the Belly River Campground in Canada's Waterton National Park. Individuals from as far away as New Mexico attended the three-day conference in late July.

Lusk, who took over the Glacier Park superintendency in March, said that park boundaries would have been drawn differently in the past if today's awareness of wildlife needs had existed.

Lusk added that the grizzly "will become a zoo animal if we close off the ecosystem. Until we get to a point where we can treat it as a creature of the ecosystem, the grizzly is not safe."

Lusk said that park superintendents have the same rights as a private citizen when it comes to companies, planners and others working together.

"We're not talking about drawing another line on the map outside of Waterton," Lieff said. Lusk suggested that managers "get our act together as individual managers so additional legislation is not necessary." Lusk added that few problems are solved by new laws and additional bureaucracy.

Much of the attention was focused on Waterton Park, an area surrounded by a number of development projects, expressing concern about wildlife and resource issues, but he hoped that the opinion of a person in his position would carry added weight.

Lieff said that cooperative efforts are needed to protect areas outside the park that are critical to threatened and endangered species during certain times of theyear. These efforts must involve foresters, energy and resource both in progress and in the planning stages, in Alberta and British Columbia.

-- John Holt

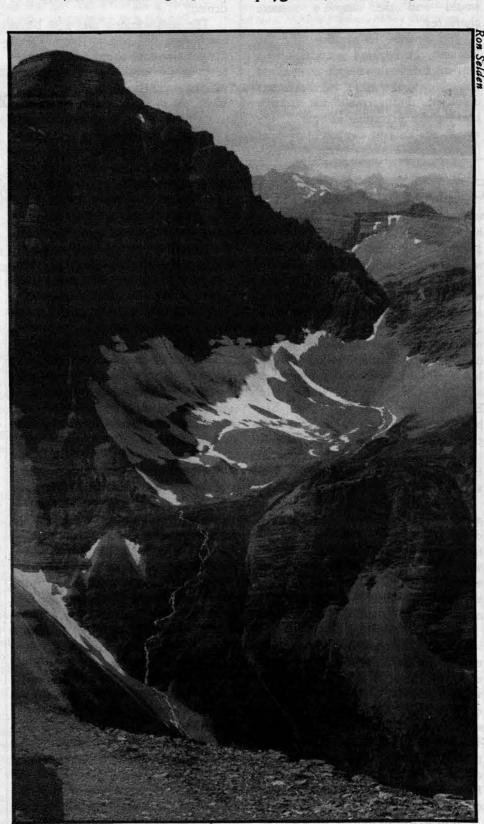
### BARBS

But, Frank, don't you want to be the one who gets to spoil it?

A for-sale ad in the July 25 Wall Street Journal read: "May be the last unspoiled high mountain valley in Colorado. Ideal for a profit-motivated buyer to build a golfing Vail or Aspen. 997 acres high in the Sangre de Cristos. Frank Connell, Thornton, Texas 76687."

Is that measurement with or without angels?

The Great Falls Tribune in Montana reports that 500 people can get rashes from the amount of urishiol (the active ingredient in poison ivy) that can fit on the head of a pin.



Kaina Peak, Glacier National Park

### HOTLINE

#### Kim Williams dies

Kim Williams, the witty, nononsense sage of Missoula, Montana,
died of cancer Aug. 6 at age 62.
Williams became nationally known for
her down-to-earth commentaries on
National Public Radio's daily "All
Things Considered." On that program
four weeks ago she announced that
she had terminal cancer and was
refusing chemotherapy treatments.
The author of four books, Williams
wrote of dying: "Don't go ahead of
time and don't go ignominiously."
She also said, "In the spring you
should eat a dandelion salad."

#### Mining beritage

The state of Colorado is suing to force Newmont Mining Co. to clean up major pollution problems the company caused near the resort towns of Telluride and Ouray during the 40 years its Idarado hardrock mine operated in the area. The lawsuit alleges that four decades of mining and milling in the San Juan Mountains have left a legacy of blowing dust, heavy metals in irrigation and drinking water, the destruction of fish in the upper San Miguel and Uncompangre rivers and contamination of the food chain, according to news reports. Idarado denies the claims, saying the state used bad data and made statistical errors in reaching its conclusions. The company takes responsibility for only 3 percent of the pollution that has left Red Mountain Creek lifeless and blames the pollution on hundreds of other abandoned and inactive mine sites in the area. Remedial action to be taken by Idarado will be decided in a U.S. District Court case that goes to trial in Denver next April.

## Uranium mining closes in on Grand Canyon

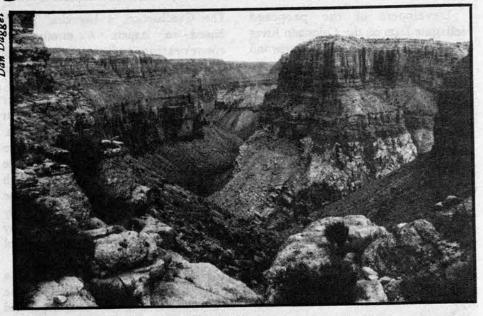
Uranium mine development on lands adjacent to Grand Canyon National Park moved closer to encircling that World Heritage Site recently, when Energy Fuels Nuclear filed two new proposals for mining in Cataract (Havasu) Canyon.

The proposals follow another South Rim project, the currently pending Canyon Mine. Energy Fuels has filed thousands of claims on the South Rim of the canyon and now has three mines operating on the North Rim. Since 1980 a handful of companies --including one owned by the French government -- have laid claim to over a million acres of remote deserts and rugged canyons on the canyon's North Rim.

Although the depressed price of uranium has caused a number of other mines in this country to close, land close to the Grand Canyon is sought after because of the richness of the ores found there. Formations called breccia pipes, which are associated with the canyon's famous redwall limestone, yield what Energy Fuels' engineer Bob Steele, calls some of the "richest-ever" uranium found in the United States.

Havasu Canyon is also a popular hiking area, whose azure pools and terraced waterfalls are famous around the world, and it is the home of the Havasupai Indians, the only permanent residents within the Grand Canyon. Of the two proposed mines one would be three miles up-canyon from the reservation; the other five miles

Because the two proposed mine sites are on land where the state of Arizona owns both the surface and mineral rights, they are outside the jurisdiction of federal environmental



Looking down into Cataract (Havasu) Canyon

law. They are not subject to requirements for environmental impact studies or mitigation procedures prescribed by the National Environmental Policy Act. According to Bob Larkin of the Arizona State Lands Department, however, "There's been a lot of public comment received opposing the mines," and "the department may decide to hold public hearings or even deny the permits."

Environmentalists have opposed the mines because of their proximity to the Grand Canyon and the threat of pollution they pose to its ecosystem. They also fear that access to the mines would end the canyon's remote character.

Joe Sparks, an attorney for the Havasupai tribe, says he anticipates a long and difficult struggle over these new claims, as well as the thousands of others that surround his client's homelands. According to Sparks, the two mines and the Canyon Mine near

the south entrance to Grand Canyon National Park would destroy sites of special religious significance to the Havasupai and Hopi people. The two tribes, however, refuse to explain that significance. Sparks says if they did, "The government would then just dig up the religious materials, carry them away and tell us our concerns had been 'mitigated.'"

Sparks says, "There is no possible way these mines can be operated without affecting the environment of the Havasupai people. This is a gamble that we as a nation cannot afford. The permits should be denied."

The applications are now being considered by Arizona State Lands Commissioner Robert Lane. Citizen comments can still be received at the Arizona State Lands Department, 1624 West Adams, Phoenix, AZ 85007.

-- Dan Dagget

## The largest SO2 emitter in the U.S. is back in business

The largest source of sulfur dioxide in the United States is back in business, sending its emissions northward to the acid rain-sensitive lakes in Wyoming's Wind River Range. The Phelps Dodge smelter at Douglas, Arizona, had been closed July 9 by the Environmental Protection Agency (HCN, 8/4/86), but was allowed to open July 29 as a result of a political compromise. Approximately 300 employees returned to work.

However, a consent decree agreed to by Phelps Dodge, the EPA and Arizona requires the smelter to shut down permanently Jan. 15, 1987, a year earlier than originally expected. In the intervening five months, it will emit up to 125,000 tons of SO2. Some of the SO2 will move north and fall out over the Rockies, hastening the day when the lakes may turn acidic and sterile. But the immediate threat is to the people in and around Douglas, especially to residents suffering from asthma.

The EPA shut the smelter down on July 9 because its SO2 is often concentrated enough in Douglas to bring on asthmatic attacks. The decision by the EPA and the Arizona Health Department puts asthmatics at risk for the next five months. The risk will be greater than in the past because a new smelter at Nacozari, Mexico, 56 miles from Douglas, is working out mechanical bugs and could go into full operation any time.

Nacozari will emit 500,000 tons a year (Douglas emits 300,000 tons) until controls are installed a year or two from now.

According to Dick Kamp of the Border Ecology Project, the reopening of the smelter was decided on at a meeting between the Arizona congressional delegation and the EPA. The compromise was built into a consent agreement signed by Phelps Dodge, the EPA and Arizona and submitted to U.S. District Court in Tucson.

The consent decree will not ban unhealthful levels of SO2. But it levies a \$400,000 fine on PD for past violations of air quality. And it sets a \$100,000 fine for each violation of air quality that occurs in the next five months. The critical standard requires SO2 levels to stay below two parts per million averaged over six minutes. But it is estimated that an 0.4 ppm level can trigger an asthma attack.

PD is also required to post a \$3 million bond, guaranteeing that it will close the smelter Jan. 15.

But regardless of how severe the violations, or how often they occur, nothing in the decree requires a closure of the smelter, although after four violations, EPA or the state may close it. PD is also required to post a \$3 million bond to guarantee that it closes the smelter Jan. 15, 1987.

According to Kamp, Arizona Gov. Bruce Babbitt, who had opposed reopening, extracted help for the

workers as a condition of state agreement. PD will pay \$1,000 to \$8,000 to each of the workers who will be laid off when the plant closes. The severance scale favors long-time workers, rather than those who arrived in 1983 to replace strikers. In addition, the firm will give workers time off to get training and relocation help. Kamp's Border Ecology Project has been working in southern Arizona against the smelter, while the Environmental Defense Fund has brought suit against them in federal court. Kamp says that while he can't speak for others involved in the fight, EDF and his group have decided to accept the settlement.

"It would take us until January to get into court. We're disappointed it didn't stay shut. But we're a lot farther along than we thought we would be a year ago. Back then, it seemed certain that PD would operate until 1988, and that Nacozari would be operating right along with it."

If Nacozari does get the bugs out, its SO2 will be joining with that emitted from Douglas. Kamp said that if the combination causes air quality violations, PD has to pay \$100,000 for each excursion, even though its SO2 was not the sole cause of the problem. The \$100,000, Kamp said, is two days' profit from the smelter. PD must also monitor emissions southward, into Mexico, and pay fines if it violates air quality standards in that nation.

Will PD push to have the consent

decree modified as January approaches? Kamp thinks it will, but that the effort won't succeed. He says formerly strong PD backers, like Arizona's Congressman Morris Udall, have cooled somewhat in their support. PD vice-president Richard Pendleton told the Bisbee (Arizona) Daily Review that he too doubted PD could keep the plant open beyond Jan. 15. That "is as far as we could negotiate it out." Pendleton also said it would take careful management and a reduction in capacity to avoid \$100,000 fines.

The plant was to close Jan. 2, 1988, because an exemption for copper smelters pushed through Congress was to expire in that year. The EPA has avoided granted PD an exemption, but until its July 9 action, it had also avoided forcing the smelter to meet air quality standards. Instead, the smelter had operated in a legal void.

The likelihood of a Jan. 15, 1987, closure was decried by Douglas newspapers and officials, who said the \$9.5 million annual payroll and the 350 jobs would be difficult to replace. Some workers told local newspapers they intended to move. But one, Jesse Lawson, refused his call-back to work and instead opened a long-planned plumbing business. "When the smelter closed (July 9) it made up our minds for us. It woke us up."

--Ed Marston

ENERGY CONFERENCE IN UTAH

The University of Utah campus will host the tenth annual energy and mining conference called "Economic and Technological Trends: Impact on Utah and U.S. Industries" Sept. 12. This year's conference will focus on both the impact of modern technologies on the local and national economies and the crisis gripping the energy and mining industries. Researchers, chemists, economists and writers will discuss topics ranging from synthetic fuels to new technologies and energy-efficient mineral processing. For more information write Utah Engineering Experiment Station, University of Utah, 105 Applied Science Research Building, Salt Lake City, UT 84112 (801/581-6348).

WESTERN FRONTIER'S CONFERENCE

The Western Legislative Conference will discuss "Frontiers of the West" at its annual meeting on Sept. 21-24 at the Broadmoor Hotel in Colorado Springs, Colorado. The conference will join state legislators, governmental officials and community representatives from 13 states and three Pacific territories to discuss Pacific trade, high technology and advanced communications, among other issues. The public is invited. The Western Legislative Conference is supported by the Western Office of the Council of State Governments, a nonpartisan organization providing research and technical assistance to state officials. For more information write Debbie Larson, Colorado Legislative Council, State Capitol, Room 029, Denver, CO 80203 (303/866-

#### JUDGMENT AT CHEYENNE: PROTESTING THE DEPLOYMENT THE FIRST MX



SUNDAY-AUGUST 31-1986-1:00 PM CHEYENNE, WYOMING

WALK TO AN MX SILO

Members of Ranchers for Peace and Western Solidarity plan to gather in Cheyenne, Wyoming, Aug. 31 to protest the deployment of the first nuclear-tipped MX in a Minuteman missile silo. The demonstration begins at 1 p.m. in front of the Capitol at 24th and includes an "MX pork barrel roast" after a procession to an underground silo. Western Solidarity can be reached at 303/355-5124.

PROTECTING PARKS

The Natural Resources Law Center of the University of Colorado's School of Law is sponsoring a conference on park management Sept. 14-16 at the Aspen Lodge in Estes Park, Colorado. The conference, "Incompatible Development Affecting the National Parks: Preserving the Best We Ever Had," includes case studies of development near parks that could harm important park values. For more information write Katherine Taylor, Natural Resources Law Center, University of Colorado School of Law, Campus Box 401, Boulder, CO 80309 (303/492-1286).

CAMPFIRE COOKING

A new book by J. Wayne Fears, Backcountry Cooking, recalls pioneer methods of cooking and tells backpackers how to build open fires and use lightweight stoves with minimum impact. Taste-tested recipes are included for the wilderness bread called bannock, sourdough bread, meat jerky, trail foods, dried foods, smoked foods and backcountry drinks.

The East Woods Press, Fast and McMillan Publishers, Inc., 429 East Blvd., Charlotte, NC 28203. Hardcover: \$11.95. Illustrated, 150 pages.

A COMING TOGETHER, OR AN IRONIC JUSTICE?

Historian Peter Iverson has an article titled, "Cowboys, Indians and the Modern West," in the most recent issue of the quarterly journal of history, Arizona and the West. Iverson discusses the historic relationship between the Indians and ranchers -- the role the latter played in pushing tribes off their lands, and the Indians' efforts to establish themselves in the cattle business. He then speculates as to whether this shared, though often hostile, history, and their common attachment to the land, might have laid the foundation for cooperation today. Iverson, who recently moved from the University of Wyoming at Laramie to Arizona State University West in Phoenix, suggests that the adversity now hitting white ranchers may cause them to reflect on the way Indians were dispossessed of their land 100 years ago. The quarterly's address is: Library C327, University of Arizona, Tucson, AZ 85721.

> IMPARTING THE TASTE OF THE COLORADO PLATEAU

The summer 1986 newsletter published by the Southern Utah Wilderness Alliance is not your typical organization publication. Instead of ringing bells of alarm and then urging action on its readers, the newsletter is literary in style, hoping to attain practical, political ends by first creating an understanding and love of the Colorado Plateau. The summer issue includes an article by Utah rancher Cecil Garland on hunting, or rather on not hunting; a comparison between Europe and the Colorado Plateau by wilderness writer Roderick Nash; and a front-page article by Edward Abbey taken from his introduction to Blessed by Light: Visions of the Colorado Plateau. Abbey discusses the way the preppie East Coast cliques and claques mock the extravagant style of Western writers. He then says:

'Maybe they know what they're talking about. But they don't know what we are talking about. We, that is, who live in the West, love the West, hate the West, and persist in trying to paint it, photograph it, and describe its disturbing shapes, colors and nature through the inadequate vocabulary of a language that was formed among the vapid bogs and insipid fuzzy hills of little England."

Membership in SUWA is \$20, although they say they are an "Equal Opportunity Conservation Group. We accept contributions of every size, no matter how large." Their address is: P.O. Box 347, Springdale, UT 84747.

A LONG WAY BETWEEN PARKS

As parents of young children know, it is a long ride from Yellowstone to Glacier, or from Rocky Mountain National Park to the Grand Canyon. But thanks to Marj Dunmire and her 48-page Mountain Wildlife, there is a way to shorten the psychic distance. This paperback contains accurate drawings of wildlife suitable for coloring, games and puzzles. In case your child hasn't yet seen pronghorn antelope or mountain goat, and therefore doesn't know which colors to use, the covers contain color drawings of the animals contained within. The book costs \$3.95 retail and is available at several national park bookstores. Or you can write to Dunmire at Pegasus Graphics, 1352 Marys Lake Rd., Moraine Rt., Estes Park, CO 80517.



MORE HAPPENINGS AT TELLURIDE

This August the resort town of Telluride, Colorado, will host a sixth annual mushroom conference and a thirteenth annual film festival. The mushroom gathering from Aug. 21-24 will focus on the study of edible and psychoactive wild mushrooms. For more information call 303/296-9359. From Aug. 29 - Sept. 1, it's the film festival, which traditionally honors major film artists. The festival office is based in Hanover, New Hampshire, at 603/643-1255.

MARCH FOR THE GRIZZLIES

Members of the Boulder, Colorado, based Campaign For Yellowstone's Bears plan to make a 23-mile trek in Yellowstone National Park this Labor Day weekend from Grant Village to Fishing Bridge. Participants are invited to assemble at the Grant Village Visitors Center between 8-9 a.m., Saturday, Aug. 30, to march all or just part of the route. Posters, signs, banners and flags calling for full protection for the bears are welcome, organizers say. For more information, contact Campaign For Yellowstone's Bears, P.O. Box 416, Boulder, CO 80306 (303/444-5824).

WYOMING ENERGY UPDATE

The current issue of Wyoming Geo-Notes gives an update on mineral, oil and gas exploration and production in the state. Oil production is expected to slowly drop from last year's high of 131 million barrels, and uranium is expected to continue its all-time lows. (Production in 1985 was 0.5 million tons, compared to 4.6 million tons in 1981.) But coal is expected to rise slightly and natural gas is expected to rise more substantially. Carbon dioxide is coming into production for the first time in 1986 and the state should produce 100 billion cubic feet by 1988, according to the report. Wyoming Geo-Notes is a quarterly publication available for \$5 per year from the Geological Survey of Wyoming, P.O. Box 3008. University Station, Laramie, WY 82071. For \$1.50 you can get a copy of this particular issue, No. 11, or any other single issue.

TAKING PRIDE

Individuals, citizen groups and business and government agencies that have shown outstanding stewardship and awareness of public land and resources will be recognized in a national awards program begun by the Interior Department. The competition is part of the "Take Pride in America" campaign which ends with an awards ceremony in January 1987. For nomination information write: Coordinator, Take Pride in America, Washington, DC 20240.

GENIUS GRANTS

The West is a huge region. But, if you remove California, which had three recipients, it was largely invisible to the MacArthur Foundation in its most recent award of 25 "genius grants." With the exception of John R. Horner, paleontologist at Montana State University and curator of its Museum of the Rockies, no grant went to a Westerner. And we are defining the "West" broadly, to include the Rocky Mountain states, the Great Plains, the Southwest, Washington and Oregon. MacArthur grants are no-strings \$164,000 to \$272,000 stipends intended to give recipients the financial security to continue to do creative work. Recipients are chosen by the foundation on the basis of recommendations from 100 anonymous nominators. The lack of Westerners may indicate a regional blindness on the part of the foundation; a lack in the West of outstanding thinkers and researchers; a lack of Western institutions to attract first-rate people; or the luck of the draw. Several recipients are known for their environmental work: Lester R. Brown, the founder of Worldwatch Institute in Washington, D.C., and an expert on various environmental and natural resource problems; Richard P. Turco, an atmospheric scientist with R & D Associates in California who has investigated the nuclear winter effect; and Thomas Whiteside, who has written for The New Yorker on dioxin and other environmental problems.

LEND A HAND

The Denver Water Department is seeking three new members for its Citizens Advisory Committee. The committee meets monthly to advise the Denver Water Board on policy matters. The Denver Water Board is a particularly important institution at this time because of its pivotal role in the coming decision on Two Forks Reservoir, on the South Platte River. The three positions are to be filled by a resident of Denver, a resident of western Colorado, and a representative of the Homebuilders' Association. Applicants must be five-year residents of Colorado and a U.S. citizen. Applications are due by Sept. 2. Contact: Maureen Flierl, Denver Water Dept., Denver, CO 80524 (628-6161).



BIOREGIONALISM

The North American Bioregional Congress will be held Aug. 25-29 at Camp Innisfree in the Great Lakes Bioregion. This meeting of those who see a need for a bioregional approach to the world will feature talks, panels, displays by bioregional groups and other events. A brochure announcing the meeting defines bioregionalism in part as "an awareness that bioregions are whole systems comprised of sets of diverse, integrated natural subsystems, and run by ecological laws and principles." For information on the Congress, contact: NABC II Office, The Bioregional Project, New Life Farm, Inc., Box 3, Brixey, MO 65618 (417/679-4773).

TAMING THE WILD MOREL

Commercial production of the rare, gnarled, nutty-tasting morel may be only two years from fruition. According to scientists James Malachowski and Gary Mills, two centuries of attempts to entice the morel mycelium (the underground part of the mushroom) to bloom in captivity, and produce the edible stalk and cap, or ascocarp, finally met with success in their lab at Michigan State University. Wild morels, the only kind now available, sell for \$20 to \$40 per pound, according to The New York Times. The outfit that owns the morel-growing process, Neogen, did not say how much its morels will cost, but a spokesman did assure morel-lovers that the domesticated version will taste as good as the wild version.

INSIDE THE BUBBLE

The Conservation Foundation has published Reforming Air Pollution Regulations: The Toil and Trouble of EPA's Bubble, which examines the Environmental Protection Agency's experiment with "emissions trading." That means placing an imaginary bubble over a plant with multiple points of air pollution so that emissions can vary as long as cumulative amounts of pollution fall within federal rules. Richard Liroff analyzed the results of a dozen bubbles mainly in Kentucky, Ohio and Pennsylvania, and found that a few reduced pollution more than required, a few sped pollution abatement, and many industries saved on pollution-control costs. Although Liroff says the expected tehenological innovations did not occur, he advises continuing the agency's experiment, with some suggested changes.

The Conservation Foundation, 1255 23rd Street NW, Washington, D.C. 20037. Paper: \$16.50.

NEW IN THE OUTDOORS

Colorado has had a new, 80-page outdoor magazine since April called Colorado Outdoor Journal. Based in the small town of Florence in the southern part of the state, it focuses on fishing, hunting, backpacking and wildlife photography. The magazine will be published quarterly in 1986, bimonthly in 1987. A year's subscription is \$13. Write Colorado Outdoor Journal, Box 432, Florence, CO 81226 (303/275-3166).

CELEBRATING 50

The National Wildlife Federation is celebrating its 50th Anniversary this year. Now 4.5 million members strong, the federation began in Washington, D.C., at a meeting called by Jay "Ding" Darling, who was appointed by President Franklin Roosevelt as Chief of the Biological Survey. These days the federation distributes its various publications to 2.3 million homes, it grants \$1.2 million per year to graduate students at universities across the country and it has established a research center called the Institute for Wildlife Research. The federation also lobbies against "swampbusting" wetlands, among other issues. The National Wildlife Federation is at 1412 16th Street NW, Washington, D.C. 20036 (202/637--3750).....

#### INDIAN HATCHET

The block is merely a square divided by a diagonal stripe. It gains its effect when four blocks are sewn together with the diagonals facing the same direction, and the eye is able to make out the "hatchet" blade. Indian Hatchet was a popular beginner's pattern.

The bright slash of red splitting the white block three times on the diagonal seemed the most of the story she could remember: "We was all of us working in the field, even the little ones, trying to bring in the last of the corn, when we heard them call. They's pretty calls, Indian calls, like the meadowlarks, and when I heard it the second time I could hear the raspy sound of the grass moving where there wasn't a soul, and Tom, your grandaddy, dropped his sack, waving his arms at me to run, and already they were upon him. I snatched up the baby and ran through the corn to the woods. When I couldn't run anymore I hid us under some bushes, pulling the leaves over me to bury my dress. The baby never cried. We lay there all night and I could see for a little while the glow of fire over the woods -I knew that was the house. At dawn I crept back and found them all lying in the burned fields — the three children were scalped, fallen together, but Tom's head was split clean open, he'd died that moment he heard the second call."

She fitted the blocks slash leading to slash in the center, the blows moving out in four directions, surrounding everything — the woods, the fields, her grandmother's small cabin and the family going about its chores inside — surrounding everything, even a young girl like herself seated by the fire piecing a simple quilt.

#### GRIEF QUILT

This is not a particular pattern but a genre in which the quilt serves as an expression of the seamstress' grief. No two grief quilts are alike but it was popular to applique fences along the quilt's borders, creating a cemetery in the center. Coffins and gravestones were cut from the garments of loved ones who had died.

Against this stark ground of white, the iron fence, webbing of bushes, and bare trees reach out from the meticulous order of death.

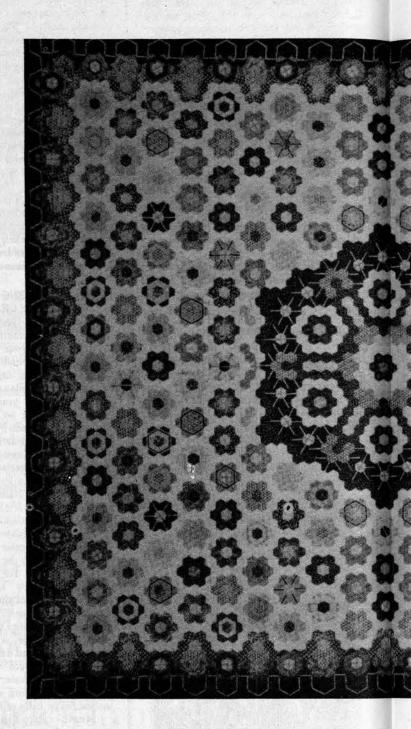
I keep them here — husband, children, friends away from the distractions of summer; the rank confusion of daylillies, ubiquitous weeds and wildflowers, cloying honeysuckle.

Nothing grows above the stones, losses are never blurred or worn from the heart, and with these stitches I make a kind of hybrid life, more stable and kind than any I have known.

At night my hands trace over the border of coffins and I read once more the stories of my days: the soft batiste of the baby's gown, a daughter's party dress crackles under my touch, and from my husband's best suit, the fragrance of his pipe.

Under the weight of my grief, I turn in the dark honing my losses like the scythe that will carry me, dreamless and vigilant, into their midst.

# A Treasury



#### WANDERING FOOT

A jagged triangle fills a corner of each Wandering Foot block. Four blocks are arranged so that the points of the triangles meet, and the jagged edges of the "foot" point out toward the corners of the quilt. Folk myth held that the Wandering Foot induced wanderlust in those who slept under it.

As powerful as wolfsbane, mandrake and nightshade, the charm of the jagged foot, set in the corner of the simple block, works its way into the dreaming sleeper.

Under the warmth of its spell, the boundaries of his world chafe, and he turns, restless and uneasy in his sleep, eager to follow the song of the unknown bird weaving through the icy night.

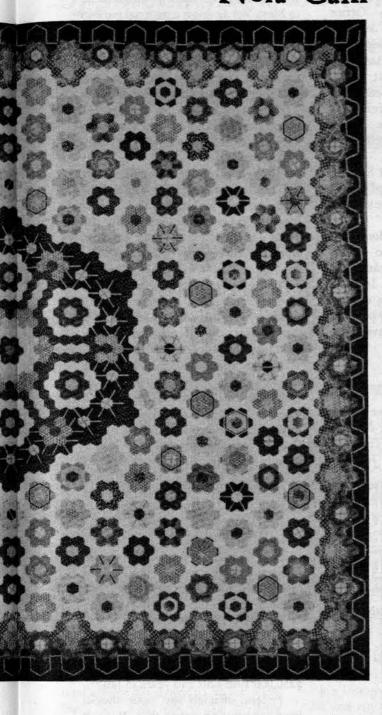
Where four blocks meet, the tracks point outward like the markings on a compass, and his heart pivots freely now, seeking another direction, a truer north. He hears the winds from the four corners of the earth, and from his boots rises the sharp smell of fresh earth and broken vines.

When you rise, he will be gone.

Be canny with this magic, protect what's dear — husband and children — and lay this spell gently over those who should be moving on, the unwelcome or tiresome visitor.

## y of Quilts

## Nora Cain



#### DRUNKARD'S PATH

This quilt creates a sense of lost balance and perspective by the interplay of curved and straight pieces, set against each other so that no curve is ever fully completed and no straight line meets another straight line.

She was familiar with the turns of the heart and mind - the intricate patterns of light and dark changing without warning and back again, as if the block were set straight to the edge and had never varied she could see them in her sleep. Cutting along the edge of a pattern, the familiar truths, manageable as cotton, shifted under her hand and the sharp angulations, difficult to piece, fell into place and were understood. She came to feel that only she could control the treacherous, snaking design, too full of curves and odd pieces for the beginner, the uninitiated.

She pierced it again and again, the needle, sharp as a tongue, glinted in her hand taming the chaos, making it all lay flat and calm and known as the world had once been.

#### STORM AT SEA

Although simple to piece, this block is complicated by many small squares, diamonds, and triangles. It thus creates, without curved pieces, an illusion of tumbling, swirling motion.

Prisms, points, blades, the triangular pieces seemed to dance in her hands like small patches of light reflected from the water. In endless repetition, point fitted to point, the sea rolled outward from her high window to the flat boundary of horizon unbroken by any ship.

Wedding suit and gown cut
and clipped into pieces, rose
and fell in the unexpected tumult
of a sudden squall. From his letters
she pieced the terror of their days,
"the water around me then became reversed
and confused: I could see nothing
but darkness, then a light coming through
the water grew brighter and brighter.
We saw that it was Owl's Point light,
and knew that we were saved."

The large white blocks, serene and empty of motion as her house and the summer's day, seemed set adrift in the quilt's stormy center.

The agitation of rising and falling triangles moved ever away from the calm resolution of the squares, the dizzying pattern almost sickened her, it seemed to go on forever.

#### DARTING MINNOWS

The minnows are actually small diamonds that run across the quilt in an open cross-hatch design. Tossed on a bed, or over a sleeping person, the pattern seems to move like small fish.

Sleep children, and dream of the rain, the steep whisper of the run-off, the heavy loam settling in the fields, and the unquenchable green of spring wheat filling the land.

Sleep, and forget the rasp of the thistle on the screen, the hopeless chant of the cricket rising above the scalded earth.

Sleep, and I'll spread over you this dream of water: the quilt's shifting patterns slide like the slow moving river, and in the darkest blue, under the shadow of the willow, where you hang your feet, the tiny diamonds, now white, now silver, flash like the minnows, and you feel their curious kisses before they move upstream.

NORA CAIN is currently a Resident Fellow at Robinson House, Stanford University, where she has been a Stegner Creative Writing Fellow and a lecturer in poetry writing. A collection of her poems is forthcoming from Hit and Run Press. "A Treasury of Quilts" appeared in Sequoia, Autumn, 1983.

#### Looters...

(Continued from page 1)



that has driven people who now live in Blanding and towns like it into the desert to unearth and remove the artifacts to sell on a lucrative black market.

In addition to theft, these ancient artifacts have fallen prey to vandals. Along the San Juan River in southeastern Utah last March, for example, orange paint was sprayed across the face of the Kachina Panel, one of the most significant collections of petroglyphs in the Southwest.

Many of the tens of thousands of Anasazi sites in the West are on land owned by the people of the United States. Only a small percentage are in private hands, mostly on farmlands. A handful of the public sites are protected and displayed by the National Park Service at such national monuments as Canyon de Chelly in Arizona, Chaco Canyon in New Mexico and Mesa Verde in Colorado. But the majority are on millions of acres of unprotected, undeveloped, far-flung public lands managed primarily by the Bureau of Land Management or the Forest Service, the area's two largest landlords. Although it is a violation of federal law to take or disturb these publicly owned artifacts, the law has proven extremely difficult to enforce.

As a result, the unbridled theft and vandalism of artifacts is rapidly destroying the vast Anasazi and other sites containing relics of prehistoric cultures dating as far back as 6000 B.C. "I would guess that 80 to 90 percent of the sites here have been destroyed," says Rich Fike, who oversees archaeology in Utah for the BLM. Unless thefts and vandalism are stemmed soon, some archaeologists predict the remaining unspoiled sites will be gone in three to five years.

But the thefts and recent crackdown on pothunters are only part of the story of the large-scale destruction of antiquities in the Southwest. There is growing criticism of the federal agencies who are charged to protect antiquities.

Among the major complaints:

•Federal agencies knew of pothunting in Utah, Arizona, Colorado and New Mexico for at least a decade but did not aggressively pursue the problem until recently. The present crackdown began just after several U.S. senators held hearings last October in Albuquerque and requested a General Accounting Office investigation of what one senator called "a problem with implementation and enforcement" of archaeological protection laws. That GAO investigation is in its sixth month.

•Federal law enforcement agencies continue to receive inadequate funding to pursue an effective law-enforcement campaign.

•The BLM and the Forest Service agencies have each damaged some prehistoric sites during resource development projects.

•Federal agencies have done few inventories of sites. No one knows what is being destroyed because no one knows what is out there. In New Mexico, for example, a state official estimates that perhaps only 10 percent of the total number of sites have been inventoried.

archaeologists believe that effective preservation of artifacts may not come in time. "The tide is turning," says the BLM's Fike in

Utah, referring to the problem of pothunting. "Is it going to turn in time to save what's left? I'm skeptical."

Pothunting has been a timehonored tradition in Blanding, although it has been illegal since 1906. It started in the late 19th century, when rancher Richard Wetherill came to Mesa Verde (now a national park in Colorado) and began the wholesale excavation of sites, shipping the material to private dealers and museums, including the American Museum of Natural History in New York. Ironically, one of the largest collections of Anasazi artifacts is in Helsinki, Finland, as a result of early artifact looting.

Though the 1906 Antiquities Act forbade taking artificats from public land, the law was vague and largely ignored, even by authorities. In the 1920s and '30s, for example, curators from the Universitory of Utah museum in Salt Lake City paid Blanding residents \$3 for every pot they dug up for the university collection. "My daddy was in tall cotton to make \$3 a pot during the Depression," says Blanding pothunter Devar Shumway.

Pothunting in the Four Corners has always been a mom-and-pop Sunday afternoon affair. Indeed, the people who had property seized during the recent searches included two San Juan County commissioners and other prominent citizens. Commissioner Calvin Black was livid. He filed suit, and his pots were returned on grounds that there was insufficient proof they had come from public lands. Meanwhile, Black's son, Alan "Buddy" Black, was one of two indicted in June by a federal grand jury. He was charged with two violations of federal antiquities law.

In 1979 the Archaeological Resources Protection Act was passed, stipulating that pothunting on federal land is a felony punishable by up to a \$250,000 fine and two years in jail.

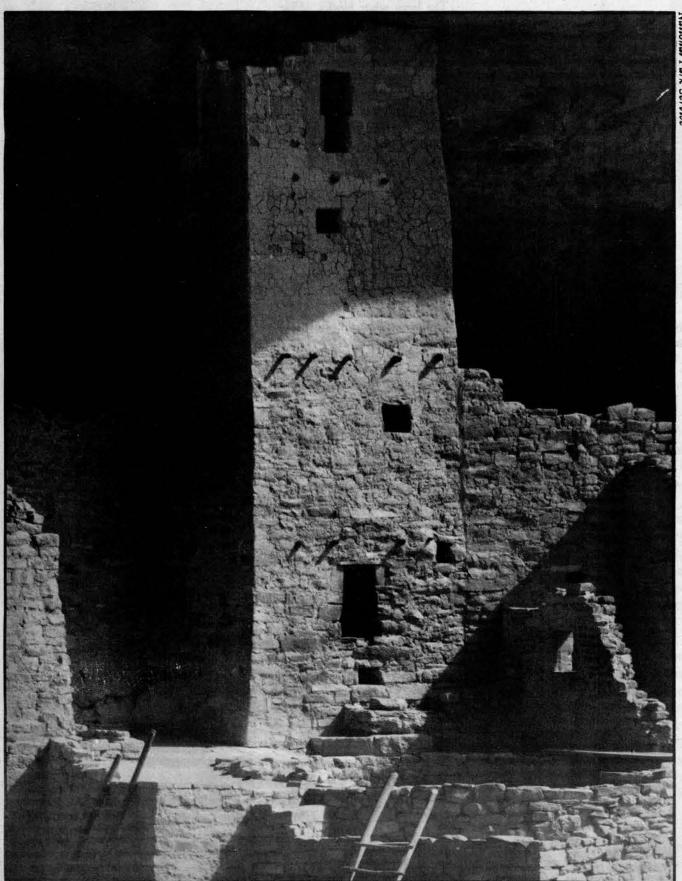
Federal officials say locals should have been put on notice then. But the price of the relics soared, creating a more sinister breed of pothunter. People who grew up digging pots for fun realized they now could make a pretty good living in economically strapped San Juan County by selling the relics.

If the right buyer is found, for example, a single olla (pot), a large round vessel, usually white or light gray decorated with intricate black geometric designs, can bring as much as \$30,000 by the time it reaches the final buyer, according to BLM officials. One basket brought \$152,000 at an auction at Sotheby Parke Bernet in London. More commonly, an intricately woven basket will fetch up to \$10,000. An unbroken mug can bring \$200. A human skull can bring \$50 or so.

Pothunters never see that kind of money, however. The most a digger ever gets is about \$1,000 for a top-of-the-line item. Middlemen reap most of the profits.

Slate-gray thunderheads are piling up on the horizon, and thunder rumbles softly in the distance. Red-rock formations on Cedar Mesa in southeast Utah slice dramatically through the rolling plains.

Pete Steele, a BLM law enforcement ranger in Monticello, makes his way through heavy brush until he comes to the mouth of a cool dark cave. The floor, covered with piles of



Protected: Cliff Palace at Mesa Verde National Park in Colorado

One of the saddest aspects
of pothunting is that in addition to
being thieves, pothunters often
defile burial sites. Law enforcement
officials often find the bones
of dried bodies, strewn about the
diggings, robbed
of their final dignity.

dirt and rubble, is pockmarked from digging. Pepsi-Cola cans are strewn among rocks, centuries-old ears of corn and broken pieces of pottery.

"It looks like somebody dropped some mortar rounds in here, doesn't it?" Steele asks, pushing his worn cowboy hat up on his balding head. "There's 25 caves in the canyon, and they all look the same."

Dry caves, which are rare, have provided a rich bounty for pothunters. Because the caves have been bone dry since they were occupied by the Anasazi, perishable items such as baskets, sandals, turkey-feather blankets and cotton skirts, which would have disintegrated in the open, have survived. The rarity of these items makes them valuable.

In a search-warrant affidavit, a federal agent described material one looter said he observed being dug from a dry cave: "a 30-inch-tall woven bag, yellow and white in color, approximately 15 inches around. Inside this bag were 17 other bags: One was full of turquoise necklaces; one full of gaming pieces; one full of red arrowheads; one full of multicolored orange, blue and red cloth; also seven baskets shaped like bowls."

One of the saddest aspects of pothunting, says Steele, is that in addition to being thieves, pothunters defile burial sites, for the finest Anasazi artifacts were buried as offerings with the dead. Law-enforcement officials often find the bones of dried bodies, mummified naturally by the sand and the arid climate, strewn about the diggings, robbed of their turquoise jewelry, their pots and, after several hundred years of repose, their final dignity.

Pothunters are savvy to law enforcement, Steele says. They work at night, covering their digs with floorless tents so their lights won't be seen. They wear filters like those worn by uranium miners to keep the dust out of their lungs.

Such hunting has somehow become steeped in romance and mystery, embodied in the movie character Indiana Jones, the swashbuckling artifact-grabbing archaeologist in the movie "Raiders of the Lost Ark." And indeed, there still are those who defend their right to carry shovels into the desert to dig artificats. "There's so many of these ruins that archaeologists couldn't excavate them in 1,000 years," Shumway says. He says he has found more than 1,000 pots.

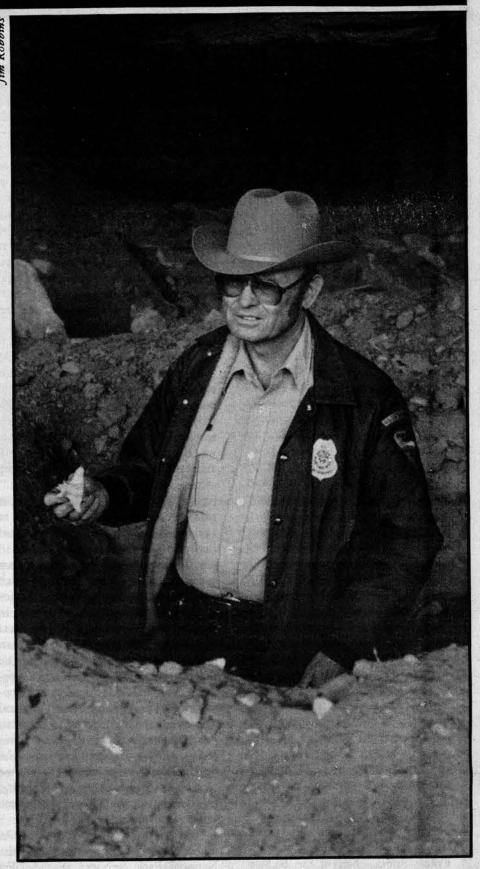
Giving up pothunting is difficult, Steele says. He should know -- he pothunted on public land for years in southeastern Utah before reforming. "It's that thrill of discovery," he says. "It's so hard to give that up. So hard."

Steele says catching the pothunters in the act is virtually impossible. "It's like guerrilla warfare. They can hit and run. They don't have to hit in any particular pattern. They aren't well organized -- they'll hit a site here or there. And they're well ahead of you all the time because they know where they're going to be, and you don't." There are an estimated 200,000 prehistoric sites in Utah alone.

The major hitch in enforcing archaeological law is that it is perfectly legal to dig and traffic in artifacts taken from private land. To have a solid case agents must observe pothunters removing the artifacts from federal land. New techniques are beginning to make law enfocement somewhat easier, however. Agents are using remote hidden cameras to photograph hard-hit sites at regular intervals. Remote sensors buried in the ground that detect human movement and send the signal back to headquarters have also come into play.

Soil testing also seems to hold a good deal of promise for successful prosecutions. Soil is taken from an artifact and from the site where agents suspect the pot was removed. Through laboratory analysis the soils are "finger-printed." If the "prints" match, officials claim they can tell with certainty where a pot came from. The method has yet to be tested in court.

To date, however, the best method for law enforcement, most officials agree, is to have someone testify that



BLM ranger Pete Steele holds Anasazi artifact left by looters

they've seen others steal federal antiquities. In the case of the recent search warrants, Earl Shumway (a distant relation of Devar Shumway), a convicted Blanding pothunter, agreed to provide information against others in exchange for two years' probation instead of a prison sentence. Federal agents also have launched another undercover "sting operation in southeastern Utah.

White Mesa Institute, in Cortez, Colorado, an auxiliary of the College of Eastern Utah. In the late '70s he was the BLM's chief ranger at the Grand Gulch Primitive Area, an archaeologically rich canyon popular with visitors. He was responsible for patrolling the entire

(Continued on page 12)

## Weather also attacks ruins

In parts of southwestern Colorado, where there may be up to 80 archaeological sites per square mile, protecting ancient Anasazi ruins from the elements -- not to mention pothunters -- has been a formidable challenge for Bureau of Land Mangement archaeologists recently.

According to Kristi Arrington, an archaeologist in the BLM's San Juan District, budget restraints may limit the scope of future programs to shore up buildings. Stabilizing a structure such as the Escalante Ruins outside Dolores has been an ongoing process. Because the ruins sit on an impermeable layer of Mancos shale, drainage is insufficient and waterladen walls gradually fall apart. Without periodic maintenance and

stabilization, which in this case involves taking walls apart and putting them back together, the great kiva at Escalante will eventually be nothing more than a pile of rubble.

"We have probably 250 to 300 sites in our resource area that require stabilization," Arrington said. Rather than contracting with independent archaeological firms, the San Juan District has developed an "in-house" stabilization program to save money.

"If we could do four or five ruins each year, we could take care of the priority sites," Arrington said. But even with the money saved by doing the work themselves, the agency can't keep up, she added.

--Peter Anderson

## Looters...



Anasazi pots from Clara Lee Tanner's Southwest Indiana Craft Arts, published by University of Arizona Press

San Juan Resource Area, 2.2 million acres that includes San Juan County (and the town of Blanding) in southeastern Utah. He claims that while he was a ranger he repeatedly pointed out the need for two things: increased law-enforcement funding to stem pothunting and a program to educate people about the value of what is being lost to vandals and looters. His memos from that time bear him out.

"We were there to make it appear as if we were doing something," he says. "But the BLM constantly undercut our effectiveness by telling us there were places we couldn't go or things we couldn't do."

It was only in 1984 that the two BLM rangers who came after Blackburn in the San Juan Resource Area received law-enforcement authority that allowed them to make arrests. Even the U.S. attorney for Utah, Brent Ward, says the problem came to his attention only in 1984 after he saw newspaper articles on it.

In spite of the recent attention paid to enforcement of federal antiquity laws, Blackburn says the BLM still is doing relatively little to enforce the law. "They simply have not budgeted enough money," he says.

Frank Snell, chief of the BLM's Division of Recreation, Cultural Resources and Wilderness in Washington, says Congress is partly to blame. "The BLM has only had law-enforcement authority for 10 years," he says. "We couldn't have done anything before then." Since that time, he says, however, "There has been a great reluctance to go overboard with law enforcement. It's easy to sit back now and say, 'Why don't we have more agents?' The fact is, there was great reluctance to do even what we were doing with regard to law enforcement." He says officials do not feel that the BLM should be a law enforcement agency. However, he agrees that other arms of the federal government should be given more money for law enforcement.

Winston Hurst, an archaeologist in Blanding who works at the Edge of the Cedars Museum there, says the recent searches were merely window dressing. Moreover, he thinks heavy-handed police action may cause residents to damage sites out of anger. Indeed there were threats to dynamite the sites shortly after the raids; meanwhile, other arrests were made in Arizona and New Mexico.

Though Blackburn and others are pleased with the recent crackdown, they agree that the effort will have little lasting effect on the overall black market. They say a long-term undercover investigation is needed to ferret out major antiquities dealers, who, because of the prices they pay, are the people who make looting a lucrative pastime for local pothunters.

Brent Ward and San Juan County sheriff Risby Wright, who also enforces laws against pothunting, acknowledge the need for a major undercover operation. The problem, however, is a familiar one. "Who's got half a million dollars laying around?" asks Wright.

Ronald Weber of the Field Museum's anthropology department, says, "I think it's very difficult for the government. It would be like stopping the cocaine trade. It would be extremely expensive. The most important thing is to get to the museums (that are buying the illegal pieces) and discourage their purchases. You have to eliminate the market. As long as there's a market, it will be supplied."

Whatever the criticism, BLM archaeologist Rich Fike insists that his office is committed to the protection of archaeological resources. "We definitely have a committment to the resource," says Fike. "Our problem is we have 23 million acres and 12 archaeologists. We just don't have the money and the resources to do it." Similarly, the federal Office of Surface Mining has only two archaeologists to oversee cultural resources in coal mines in 22 Western states.

But some critics say that law enforcement is only one area in which federal land management agencies have neglected cultural resources. In some arms of the BLM and the Forest Service there seems to be an unwillingness to recognize the importance of archaeological resources when carrying out development projects, they say. Federal agencies, by their own admission, have undertaken development projects that have destroyed or led to the destruction of large numbers of sites in the process, although pothunting, by all accounts, takes the most serious toll on artifacts.

Chris Kincaid, a former BLM archaeologist who now works for the National Park Service at the Glen Canyon National Recreation Area in Utah, says: "(Cultural resources) are one of those esoteric resources that most managers have a difficult time dealing with."

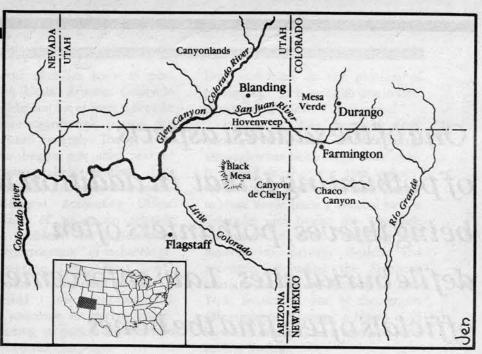
"There's a real 'they're only Indians' attitude that prevails toward toward cultural resources," Blackburn says.

Utah BLM director Roland Robison disagrees. "There are thousands of these sites," he says. "If we were to attempt to conserve and preserve and watch out for all of them, why, there isn't enough money in the treasury to do all that."

common land-clearing technique in the cedar, sagebrush and juniper-studded plains of the Southwest is called "chaining." A chain with large links is fastened between two D-9 caterpillar tractors. Dragged over the ground, the chain removes anything in its path -- trees, shrubbery, and in the case of Alkalai Ridge in San Juan County, Anasazi ruins.

In 1985, a firm called Woods Canyon Archaeological Consultants prepared a study for the BLM on cultural resource damage on Alkalai Ridge in southeastern Utah. The area is important archaeologically, as well as for energy and livestock development.

The consultants identified 99 sites in a 400-acre sample area, the majority of which were Anasazi. Forty-seven of those 99 sites, according to the report,



Anasazi culture flourished in the Four Corners Region

had been disturbed to some degree. Fourteen of the sites were disturbed by energy development, including seismic-line construction and road building. Most disturbances were from chaining, the report says, 34 of 99 sites having been damaged to create livestock grazing, which is marginal at best in this dry, spare country. Twelve sites on the Alkalai Ridge study area were damaged by vandals.

Jerry Fetterman, one of the two archaeologists who did the Alkalai Ridge study, says destruction of the sites from chaining is not unusual. "Alkalai Ridge was one of many mesas they chained," he says, "and they disturbed quite a bit of stuff." Alkalai Ridge was chained in 1969 before a moratorium was declared on the practise there.

BLM archaeologist Rich Fike points out that chaining is still practiced in Utah although the technique "is not near the problem it used to be because they leave islands of trees (around the sites to protect them)," he says.

Utah BLM Director Robison agrees that the BLM has come a long way since it chained land indiscriminately. "In the earlier days there wasn't the concern, sensitivity and awareness of cultural resources," he says. But the protection of sites is only as good as the archaeological survey before the project.

Adele Smith works with the Southern Utah Wilderness Alliance in Springdale, Utah, a public interest group that monitors and lobbies for the protection of wilderness and cultural values on public land. She believes surveys are all too often hasty and incomplete.

"Because (areas to be chained) are in dense pinon forest, the sites are difficult to count," she says. "So surveys are difficult to do prior to chaining. And there's no way you can go in afterward and get an accurate count." She believes many surveys are cursory and that as a result many sites end up being destroyed.

Even if the sites are properly marked and preserved, there is still a problem, however. "In a country as sophisticated as San Juan," she says, leaving a site with an island of trees around "is an open door for vandalism." The solution is to leave "decoys," she says -- islands of trees in areas with no sites to confuse the pothunters.

On the Arizona Strip, a large area north of the Grand Canyon and south of St. George, Utah, vandalism and theft of prehistoric material have escalated recently -- largely, some speculate, because of the crackdown in San Juan County. Pothunters have moved west.

Greg Woodall, of Hurricane, Utah, who has worked for the BLM in the past and as an archaeological consultant, is now working as a volunteer to try to stem some of the vandalism in the area. Provided with a federal truck, meal money and a credit card, he has patrolled some of the hardest-hit sites. One of Woodall's biggest complaints is that after the sites have been looted, they are left to deteriorate further. Even after numerous memos to superiors, Woodall says, nothing has been done to mitigate the loss. "Disturbed sites have not been reclaimed at all," he says. "Human remains have not been reinterred. And it's all subject to erosion." The situation is the same throughout the Four Corners, archaeologists say.

Woodall adds that there has been no baseline study of what Anasazi sites exist. And since the vandalism started in earnest -- which he thinks is linked to an influx of people following a uranium boom on the strip -- much of the stuff will disappear. "No one will ever know what was there."

"That's correct," says Jennifer Jack, resource area archaeologist for the Arizona Strip, and Woodall's superior. "There's no money to do any of that. Period. It's frustrating for all archaeologists." Responsible for 2.7 million acres, Jack has a budget of \$50,000 this year, excluding her salary. She says it is the highest budget ever.

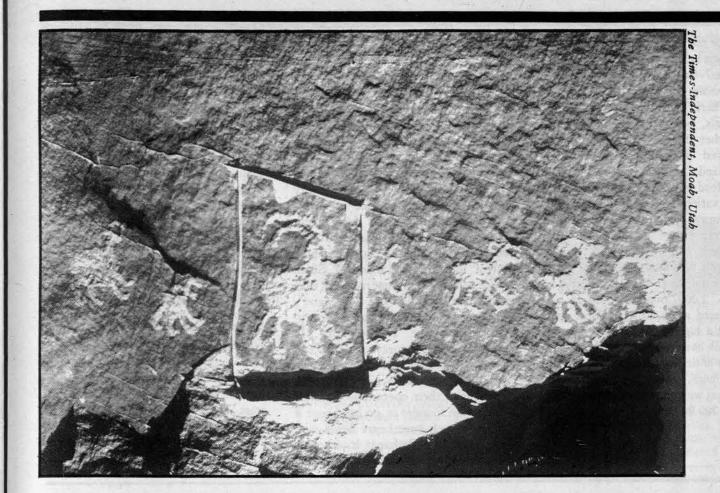
In 1984 the New Mexico State Historic Preservation Office, which monitors and protects historic sites, including those on federal land, filed suit against the Forest Service. The suit alleges that Region III forests in New Mexico, Arizona and Texas violated federal law by failing to prevent the destruction of cultural resources during logging and replanting operations.

After filing suit, according to Director Thomas Merlan, the state agency uncovered even further abuses by the Forest Service during the

discovery process.

"There were hundreds of procedural violations - failure to consult with us before projects were undertaken," Merlan says. "And there were dozens of actual cases of site damage and destruction." Many of the sites damaged, he says, were thousands of years old. He says the abuses took place throughout Region III.

As a result of the suit, the state and the federal government in 1985 reached a detailed out-of-court settlement that set down guidelines for the Forest Service to follow in the



After this large petroglyph near Moab, Utah, was chiseled out in preparation for removal and theft, federal officials and others began keeping a close watch. This photo of the damaged rock art recently ran on the front page of Moab's Times-Independent, which said that "vandalism to a precious cultural heritage" hurts Utah's image and tourism. The newspaper asked citizens to report any theft of Anasazi artifacts.

future. The document was sent to the Department of Justice for approval. In June the Justice Department rejected the agreement, claiming that it "impinged upon exercise of agency (Forest Service) discretion" and also objecting to the provision that the court would serve as arbiter of any disputes arising from the agreement. In July, however, the Justice Department indicated that a compromise was possible.

Region III archaeologist Judy Proper admits that there were problems on the national forests. "There was no doubt there were numerous procedural compliance violations and some sites had been damaged," Proper says. "I don't know how many." She adds, however, "Since 1984, the Region has taken a lot of steps to improve its program. We think we've made a lot of progress."

Another case of federal negligence, says Utah state archaeologist Dave Madsen, is that the U.S. Housing and Urban Development office in Utah does not survey where homes it is funding are being constructed, a violation of federal law. "They refuse to do anything," Madsen says.

Dick Bell, manager of Utah's HUD office, acknowledges that his office does no archaeological survey work. "We've never been required to talk to people about these kinds of things," he says.

Madsen says his office has no plans to file suit to stop the damage, however, because of an unwritten state philosophy. "That's not the way we do things," he says. "We've been told that's up to the public."

The real damage from the theft of archaeological artifacts and the destruction of ancient cities and villages is not the disappearance of the artifacts, but the damage to the myriad clues archaeologists put together to interpret history.

Take the case of Bighorn Cave, deep in the Black Mountains of the Mojave Desert, outside of Kingman, Arizona. Cut in the rock of a narrow canyon, the large cave, cool in spite of 100 degree temperatures outside, long served as a home to the Mojave Indians, perhaps as long as 5,000 years ago.

The Mojave, who were contempor-

aries of the Anasazi, probably stayed in the cave while hunting mule deer and bighorn sheep. Because the cave has been vandalized in recent years, the BLM, which owns the cave, along with archaeologists from Northern Arizona University and the Museum of Northern Arizona, both in Flagstaff, decided to excavate the cave before more material was lost.

It is a dry cave, and artifacts discovered in the cave after only a small amount of excavation have begun to shed light on the Mojave culture, says Don Simonis, BLM archaeologist in Kingman. Researchers found a roasting pit in the cave where the hunters cooked and ate their game, along with thousands of bone fragments. They also uncovered a delicate bird-bone necklace, a bone awl, a yucca sandal with a buckskin toe and a host of small split-twig figurines fashioned out of desert willow trees. "The Mojave had put these figurines, which were representations of mountain sheep, under rocks in the back of the cave," Simonis says. "We think it was part of a ritual which guaranteed them success in hunting."

Simonis says it is fortunate that archaeologists got to the cave before vandals. "There's a chance here to really fill out the culture of these archaic people who were hunting here 3,000 to 4,000 years ago," he says.

If the looting had continued, interpretation of the cave materials would have been impossible. The result, says Utah archaeologist Winston Hurst, is chaos. "All of the soil matrix that contains vast amounts of information -- how these people were living, what kinds of foods they were eating, the environment -becomes mixed and randomized (when a cave is vandalized). It's gone, it can never be recovered, and no one will ever be able to unscramble it. And it's even more tragic when you realize that there is no other record for some of these cultures. In fact, we have written records for less than 1 percent of the human experience. The rest of it we can only understand through archaeology. And these guys (pothunters) are out destroying that record. It's terminal."

What is the answer to what appears to be widespread destruction and theft of America's little-known past? Perhaps the most critical

element in a policy of protection would be a change in federal law, says Utah state archaeologist Madsen. "We have to deal with the problem directly. If you can document that it came from private land, fine, you can sell it. But it should be incumbent on the seller to prove that it came from private land." Currently, it's up to the authorities to prove it came from federal land.

Many museums won't buy objects that have not been properly excavated. David Hurst Thomas, the anthropological curator at the American Museum of Natural History in New York, says the museum purchases very few pieces. When it does, he says, "It would have to be established that the piece was removed from the site according to scientific and legal guidelines."

The real problem, according to Madsen, are small private museums that do not adhere to the code of ethics that govern the conduct of the larger museums. Madsen says there are even some private museums that have been set up to receive artifact donations and then provide the donor with inflated tax write-offs. Though he refused to cite any museums specificially, he says, "There are a great many museums that do that." Even more than the museums, however, it is the private collectors that are keeping the black market healthy, officials say.

Most major museums in the country have Anasazi collections, says New Mexico state archaeologist Kurt Schaafsma, but almost all were acquired in the early part of the century.

Weber at the Field Museum says the vast majority of the museum's Anasazi collection was excavated between 1930 and 1950 by the then-curator David Martin, who received government permission for the digs. "Our collections are all documented," he says. "We would not acquire any object that was removed from an archaeological site in the U.S. or the world illegally or detrimentally." Today, he adds, the museum has little interest in expanding its Anasazi collection, preferring, given the museum's limited acquisition budget, to acquire pieces "with more scientific value."

Nevertheless, he says he finds the looting of the sites in the Southwest and purchase by museums of illegal

pieces, "just disgusting to us. We're vehemently opposed to it."

The answer in the long term, many observers believe, is education: making people aware of the value of what they are destroying. "Law enforcement makes people stop digging," says Blackburn. "It makes them paranoid. But it doesn't make them appreciate the resource." He would like to see a comprehensive program to educate area school children about cultural resources.

Understanding and appreciation could come about by involving people who live in the Southwest in the archaeological process and the knowledge that can be gained from proper techniques, says Hurst. It should also include making the people who buy pots, baskets and other items aware of what they are doing.

"People who buy to collect are fairly innocent about the implications," says Hurst. "They lack the concept that when they buy a pot for \$300, they're financing the destruction of a piece of the cultural record of mankind."

Jennifer Jack agrees. On her own, she has been talking to schoolchildren in St. George, Utah, and elsewhere on just what analysis and interpretation of these artifacts can reveal. She also believes that a public-interest group for archaeology should be formed. She has taken steps in that direction herself. "There's no National Friends of Archaeology or anything like that," she says, "and the BLM responds to public input. We're trying to build these little groups up."

Swinston Hurst believes that the very fact that these resources are now so rare may be their undoing. "There's a sense of calm, eye-of-the-storm situation here," he says of Blanding. "People waiting, a sense of imminent explosion simply because everyone wants to have participated in the great sport it is to go out and find artifacts."

Jim Robbins is a writer in Helena, Montana. The article was funded in part by the Washington, D.C.-based Fund for Investigative Journalism and High Country News Research Fund.

#### LETTERS

#### BOTH FISH AND FOWL

Dear HCN,

I have been enjoying your recent articles on agriculture... except for a couple of things with regard to Tom Wolf's article in the June 25 issue.

I am continually amazed and appalled by the print media's concentration on beef as the food that's killing us all. Wolf fuels this fire by concentrating on just beef, and starting out his article on "Ranchers ask: Where's the Market' with paragraphs on muckraking and drug additives. His sentence, "The chemical industry has a major stake in keeping the beef business hooked" is a joke and an overstatement. Good grief, visit a poultry operation one of these days and then tell me how great and pure chicken is. The recent emphasis on eating chicken and fish

has to be one of the biggest marketing successes in this century. You want a fish diet? Go ask doctors in Japan about some chemical imbalances in folks there. Yes, beef has some chemicals, but the point is, so does any other food -- even Cattlean grass-fed beef that have been immunized.

No food is perfect. The idea is to have a variety of food. So tell us the whole story -- there's more to food than beef.

Second, Mr. Wolf is in serious error with his statement that "the conventional steer is slaughtered at 1,500 - 2,000 pounds." Most are slaughtered at about 1,050 lbs. with some at a bigger size only when the market is bad and feedlots hold onto them in anticipation of better prices. Furthermore, most feedlots prefer cattle that weigh around 600 lbs., and not the 700 lbs. quoted by Tom.

Ron Jepson Denver, Colorado

#### OIL SHALE CONTEXT

Dear HCN,

Your Hotline reports (8/4/86) on Great Plains coal gasification and Unocal's shale plant need some context. If indeed Unocal's plant does "work" on a sustained basis, it will do so at what Energy Secretary Herrington says is a price of \$72 a barrel. Compare that to the current \$12 a barrel for world standard light Saudi crude, which is produced at a cost of 50 cents to \$2 a barrel. Small wonder that Unocal's operation is thus to be one more of the Pentagon's corporate warfare/welfare clients, along with the makers of \$44 lightbulbs, \$600 ashtrays, and \$9,600 allen wrenches. Lots of farmers, craftsmen and small businesses today could make their operations "work" rather than founder or go bankrupt if they had such sweetheart deals with the Pentagon. Perhaps it is only coincidental -- or maybe it isn't -- that Unocal's Fred Hartley is a good old boy member of the all male upperclass Bohemian Club of California with Caspar Weinberger, George Schultz and Ronald Reagan.

Apparently the Pentagon boys have yet to conjure up a use of Great Plains syngas produced at twice the wholesale price of natural gas. Or maybe the Great Plains boosters just aren't as well connected to the current ruling group as Fred Hartley, and thus can't dip into the Pentagon's deep pockets for out-of-this-world deals.

With more than \$400 billion in annual outlays, the Pentagon is the world's second largest state-controlled economy. Add several trillions for the Star Wars fantasy and it will leapfrog over the entire U.S.S.R. economy to become the largest. Anybody want to start a Pentagon allen wrench or ashtray business with me?

Chester McQueary Parachute, Colorado

## Put HCN in the region's classrooms

High Country News has received a grant to send 100 two-year gift subscriptions to high school classes in our five-state region. To locate recipients, we wrote to each school district and private school in Colorado, Idaho, Montana, Utah and Wyoming. We sent them samples of the paper and asked the districts for the names of teachers interested in using HCN in the classroom.

The response has been good. In fact, we have

received 193 requests for subscriptions -- 93 more than the grant covers.

We think getting HCN into the region's classrooms and to its teachers is an efficient way to spread the word about roading and logging, wilderness, the grizzly, noise in the Grand Canyon, and the other issues this paper covers.

We are therefore turning to you to help fund those additional subscriptions. We can't think of a gift that would have more leverage. Listed below are the 93 schools in four states (all of Utah's requests were filled) that, as of now, are not going to receive HCN. We hope you will fill in the form below, specifying which class you wish to receive your gift. We intend to send each class a letter, introducing them to High Country News and telling them who sent them the paper. If you wish to have your gift remain anonymous, please let us know.

#### COLORADO

Anton High School

Gateway High School

Hinkley High School Aurora

Rangeville High School

Chemistry

Brush High School

U.S. History Brush High School

Conservation and Outdoor Life McGinnis Middle School Buena Vista

Earth Science Calhan Public School

11th Grade American History Campo School

Earth Science
Plateau Valley School
Collbran

Science/Environmental Outreach Center Academy District #20 Colorado Springs

Environmental Science Colorado High School Colorado Springs

Environmental Science Mitchell High School Colorado Springs

Biology Cotopaxi High School

Sixth Grade Science Cripple Creek/Victor Schools Cripple Creek

Environmental Education Abraham Lincoln High Denver

Environmental Education John Kennedy High Denver

Earth Science Durango Public Schools Geography Durango Public Schools

Geography Smiley Junior High School Durango

Earth Science Eads

Global Science Englewood

Evergreen High School

Life Science Flagler High School

Science

Flagler High School

Earth Science/Environmental Studies

Summit Middle School

Life Science Blevins Junior High School Ft. Collins

Life Science Boltz Junior High School Ft. Collins

Environmental Ed./Kutzle Ignacio Elementary School

Environmental Ed./Wheelock Ignacio Elementary School

Biology Kremmling High School

Senior Field Studies Lakewood High School

Seventh Grade Life Science LaSalle

Science/Biology Class Minturn Outdoor Education

Naturita

Biology Pagosa Springs High School

Pagosa Springs High School

Conservation

Cedaredge High School

Environmental Science

Conservation
Delta Middle School

Biology Grand Valley High School Parachute

Biology Rangely High School

Outdoor Science and Social Science Seminar Rifle High School

Biology II Simla High School

Agriculture Custer County High School Westcliffe

Basic Biology Woodland Park High School

Seventh Grade Life Science Woodland Park

#### **IDAHO**

Fifth Grade Earth Science Cascade School

Teton Middle School Driggs

High School Library Glenns Ferry

Life Science Junior High School Glenns Ferry

Ecology Middleton High School

Biology Meadows Valley High New Meadows

Environmental Education/Ecology Lakeland Junior High Rathdrum

Wilder Junior High

#### MONTANA

Science Elder Grove School Billings Environmental Science Education Bozeman

Geology Colstrip High School

Denton Public Schools

Eighth Grade Fort Shaw Elementary School Great Falls

Biology Highwood Public School

Earth Science Rosebud High School

Social Studies Benzien School Sand Springs

Winifred Public Schools

#### WYOMING

Wyoming History Big Piney High School

Biology Evanston High School

Life Science Evanston High School

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Ecology

Botany

Hulett High School

Earth Science

Medicine Bow High School
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Wind River Ecology Starrett Junior High Lander

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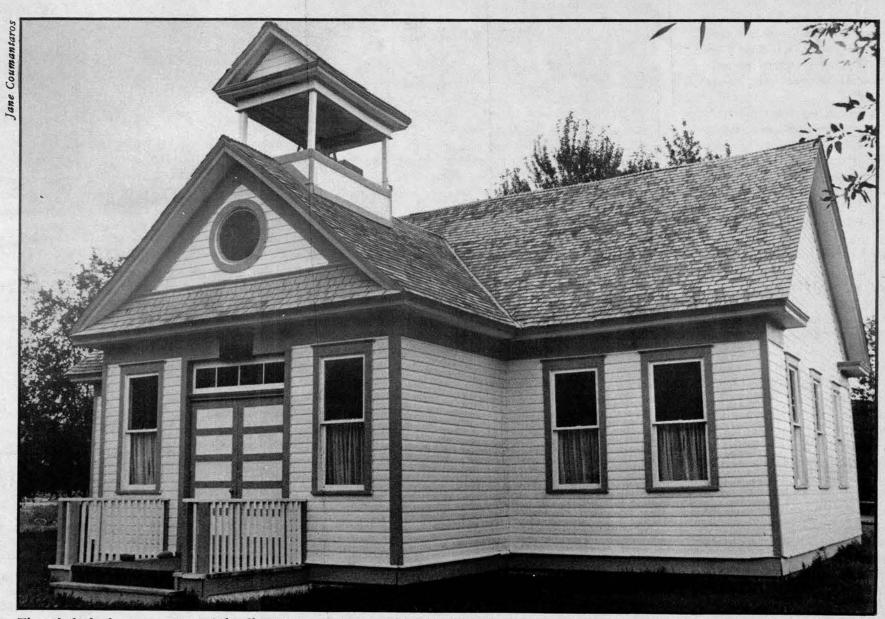
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## afield and a second

## The adaptable coyote comes in three temperaments

by Peter Sheldon

I'm your typical wildlife blunderer, a wildlife enthusiast who every now and then by sheer luck actually sees some wildlife. I'm the type that shambles down a backcountry trail as an eagle wings along the tree tops above. Of course I'm oblivious, focused on the trail in front of me and on the dust raised by my plodding feet. Hearing a twig snap nearby I usually look up just in time to see the rear end of an animal as it bounds away into the brush.

I've blundered onto all sorts of wildlife: deer, elk, a moose or two, bears, a cougar once, but especially coyotes. In fact, my most interesting encounters have been with that hardy and prolific bunch. I've come to identify coyotes by the moods they're in when I see them or by the "lifestyles" they seem to have. First is the hair-trigger-what-the-hell-was-that coyote. Next is the don't-bother-me-I'm-busy coyote and last is the "sellout," or as I prefer, the let's-make-the-best-of-a-good-thing coyote.

The tip of a tail bolting into the brush as you become aware that a coyote had just been in front of you is the best way to describe an encounter with a hair-trigger coyote. I blundered upon one of these last year during a backpack trip in Montana's Bob Marshall Wilderness.

I was hiking up the South Fork of the Flathead River valley just below Salmon Forks. The valley was wide and I ambled along through parks of ponderosa pine. The big trees had their needles splayed out like light from sparklers on a warm fourth of July night. The river gargled hearby with its mouth full of rocks, and just over a small rise in front of me I glimpsed a shadowed movement. A covote stepped suddenly into a spot of sunlight right in front of me. I surprised him too, because he leaped into the air and then in two soft-padded bounds vanished across the meadow. All I glimpsed was a stretched-out body hurtling over the tall grass and blending immediately into the mottled shadows of the trees he'd come from.

During one of these encounters your brain recognizes coyote but what comes out of your mouth is, "What the hell was that?" You may think the hair-trigger name of these coyotes refers to their fast reflexes. This is true, but mainly the name means that these coyotes have learned that some people use guns. They know they had better be quick if they don't want to end up hanging on someone's wall and are ready to blast off at even the most innocent of encounters. This coyote is a survivor.

The next type of coyote isn't so worried about being seen in the open because he's busy, occupied with something important, and that's how you see him, going about his business. You can see this coyote in the backcountry, but I saw one once as I was driving down a highway. Two hundred yards ahead I saw it come out of the brush and lope up the ditch onto the road. It nonchalantly trotted across the road, glided down the opposite ditch and like an elf disappeared into the woods as I pulled to a stop.

I got the lens cap off my camera,



but he was gone -- heading to a howling session, back to the den or maybe on his way to his mate. He wasn't about to stop for me so I have no pictures of him. I have no pictures of the hair-trigger coyote either.

The third type of coyote is not camera shy. These coyotes live mostly in national parks, lie about in plain view and let you look at them as long as you please. I think the term "sellout" is a little harsh though, and I prefer to call them the let's-makethe-best-of-a-good-thing coyotes. They know they're safe and are willing to trade a good profile or action camera-shot for a leisurely life.

I saw two of these coyotes several years ago in Canada's Banff-Jasper National Park. They sat and lulled in a meadow just off the road and under a couple of trees. The day was crystal blue and big blocks of mountain shouldered their way into an immense sky behind the two coyotes.

As I stopped the car on the shoulder of the road to take some pictures, one coyote immediately showed off by perking his ears up, springing to his feet and diving into a nearby clump of tangled brown grass. Then he stood up with a mouse in his jaws. With the mouse dangling, the coyote turned directly towards me and posed while I snapped a picture. He then walked back to the shade, gulped the mouse down and rolled over to take a nap.

These coyotes aren't really selling out on their claim to wildlife. They are just like everybody else -- if you have a good thing going, take advantage of it. If they give a couple of rousing howls they seem to expect you to drop a piece of jerky or some gorp on the ground in return.

The only pictures I have of coyotes are the ones I took in Banff. I keep them to show my relatives back East how wild the West still is and how good I am at sneaking up on critters. I don't have any pictures of the busy coyote that casually crossed the road in front of my car. Even if I had gotten a picture of him I don't know if it would have been a good one. He had his mind on some important coyote

matters and lacked that sharp-eyed flash that makes a wild-life photograph good. The hair-trigger coyotes? Nobody, I don't care how good they are, ever gets their picture. I have only memories of them, but memories are what is important to the wildlife blunderer.

Sharp-eyed Peter Sheldon lives in Missoula, Montana.

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### LEMERS

#### WILDERNESS CAMPS

Dear HCN,

Perhaps it is not surprising that the Idaho Conservation League chooses to stay out of the conflict over the Forest Service allowing permanent outfitter camps in the Frank Church-River of No Return Wilderness. But gratitude to outfitters may go too far. Although outfitters may have supported the creation of the wilderness, their continued strangle-hold on camping sites and special treatment through exclusive use permits is an insult to everyone who enters this wilderness and camps on their own.

The conservation community should take a firsthand look at the conditions of these camps and ask why the Forest Service allows this double standard: a suggested four-day stay for the citizen who camps on his own and an unlimited number of days for the commercial camper.

That is why I entered the Idaho Outfitters and Guides appeal to the management plan for the Frank Church Wilderness. I consider the area the most magnificent piece of real estate in the country. Unlike outfitters, I have no commercial interest in this wilderness.

Howard Spaletta Idaho Falls, Idaho