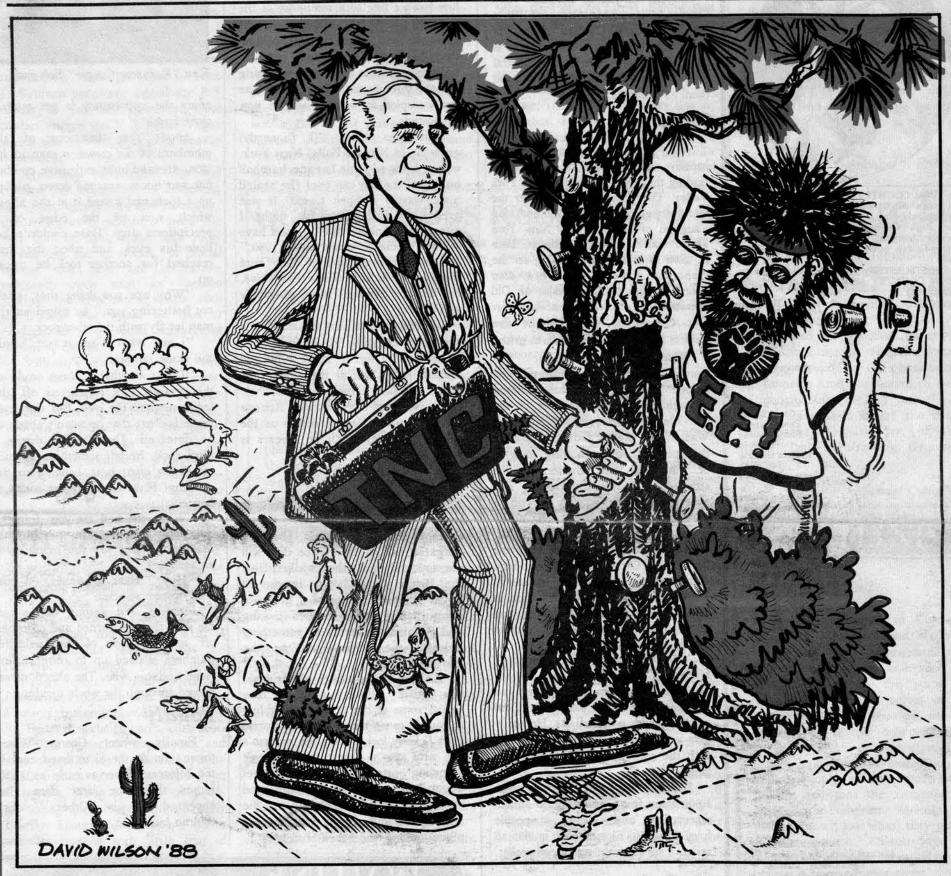
# High Country News

April 25, 1988

Vol. 20 No. 8

A Paper for People who Care about the West

One Dollar



Ecotage versus infiltrage

A tale of two environmental strategies

The Nature Conservancy \simes See page 8

Earth First \simes See page 14

## Dear friends,



HIGH COUNTRY NEWS (ISSN/0191/5657) published biweekly, except for one issue during July and one issue during January, by the High Country News Foundation, 124 Grand Avenue, Paonia, Colorado 81428. Second-class postage paid at Paonia, Colo-

POSTMASTER: Send address changes to HIGH COUNTRY NEWS, Box 1090, Paonia, CO 81428.

Tom Bell Editor Emeritus

Ed Marston

Betsy Marston Editor

Rocky Barker Craig Bigler Peter Carrels Bruce Farling Pat Ford Patricia Guthrie Jim Stiak Regional Bureaus

> C.L. Rawlins Poetry Editor

Steve Hinchman Editorial Research

> Judy Moffatt Development

Michael Crawford Tara Lumpkin Linda McCauley Michael J. Robinson Interns

> Ron Sunderland Darkroom

C.B. Elliott Circulation/Production

Peggy Robinson Graphics/Typesetting

Claire Moore-Murrill Becky Rumsey Production

> Donna Gregory Business

Tom Bell, Lander WY Michael Clark, Washington D.C.
Lynn Dickey, Sheridan WY
John Driscoll, Helena MT Michael Ehlers, Boulder CO Jeff Fereday, Boise ID Tom France, Missoula MT Sally Gordon, Kaycee WY Bill Hedden, Moab UT Dan Luecke, Boulder CO Adam McLane, Helena MT Herman Warsh, Emigrant MT Andy Wiessner, Denver CO Robert Wigington, Boulder CO Board of Directors

Articles appearing in High Country News indexed in Environmental Periodicals Bibliography, Environmental Studies Institute, 2074 Alameda Padre Serra, Santa Barbara, California 93103.

All rights to publication of articles in this issue are reserved. Write for permission to print any articles or illustrations. Contributions (manuscripts, photos, artwork) will be welcomed with the understanding that the editors cannot be held responsible for loss or damage. Enclose a self-addressed stamped envelope with all unsolicited submissions to ensure return. Articles and letters will be published and edited at the discretion of the

Advertising information is available upon request. To have a sample copy sent to a friend, send us his or her address. Write to Box 1090, Paonia, Colorado 81428. Call High

Country News in Colorado at 303/527-4898. Subscriptions are \$20 per year for individuals. \$28 per year for institutions. Single copies \$1.00 plus \$1.25 postage and

### Mangoes/peppers

It turns out, as we affirmed in the April 11 issue, that The New Yorker magazine is correct: mangoes grow in Colorado. Subscriber Cordell Brown called to say that in the Pueblo-LaJunta-Lamar area of the Arkansas Valley, mangoes is the name given to bell peppers.

We got the same message from Charles Miller of Mt. Prospect, Ill., a few miles from O'Hara Field. He writes that although green peppers is now the usual name, his central Illinois ancestors knew and loved them as mangoes.

#### **Visitors**

With the snow line creeping rapidly uphill, visitors are again finding their way into the North Fork Valley. They have included over the last fortnight freelance writer Doug Vaughan of Denver and New York Times staffer Lindsey Gruson, both in town to investigate rafting on the Gunnison River. We were also visited by Sandy Kozlowski, an Old Snowmass, Colo., resident and former Chicagoan, who bought five t-shirts at our cut-rate, walk-in price.

Ken "Rainbow Cougar" Edwards, a six-foot-six, multi-talented Native American recently passed through Paonia. A member of the Colville Confederated Tribes of Washington state, Edwards travels the country communicating insights of traditional and modern Indian culture to schools, groups and everyone he comes in contact with.

HCN intern Linda McCauley knew Ken from Santa Fe, N.M., where they both graduated from the Institute of American Indian Arts. After running into him at an annual Denver pow-wow, she arranged a school visit, night performance and interview on Paonia's public-radio station, KVNF.

"His knowledge is amazing," Linda says. There's not many Indians who precisely memorize stories and songs from all tribes and share them so openly with non-Indians. He really gets into telling the stories, interacts with the audience and makes them laugh."

Edwards says he knows some 1,000 tales from traveling to Indian reservations and talking to people from Alaska to Florida. He is also an artist, a silversmith, and beadworker.

#### No fools

We got only light reaction to our April Fools issue. One reader called from Washngton, D.C., to ask if we were really moving to his city. Another wanted to check on the BLM telephone story -- "It sounds crazy, but it also sounds believable." And author Edward Abbey wrote to thank us for publicizing his coyote-loving organization: "Sometimes we coyotelovers do feel neglected, even out here in the West, among all these fine, honest sheepfolk and cattlepersons."

Columbia University journalism professor Melvin Mencher writes to complain about HCN: "I enjoy every issue, except for the unrequited craving it sets up to get back to the West.

Although HCN prides itself on being non-commercial, and on having a vanishingly small amount of advertising, we were pleased to receive the following note from Suzanne MacDonald of Creekside Books, Arts and Gifts in Buena Vista, Colorado:

"You might be interested to know got responses to my ad from California, Idaho, Massachusetts, South Dakota, Oregon, and Washington, as well as Colorado."

#### An octuplet

Jim Robbins, whose article on Earth First! appears in this issue, has been a freelance mainstay of the paper for some time. Twenty months ago, we announced in this column that he had a new child, Annika, born two months early and weighing a mere three pounds. Since then, she has octupled in weight, and is now 25 pounds.

Jim also writes: "I (honestly) grew up in Niagara Falls, New York, where I played Little League baseball on top of the clay cap over the sealed toxic wastes in Love Canal. It was great; the ball glowed at night. I moved to Montana in 1976, and have been a freelance writer since 1980." His work appears in The New York Times, The Boston Globe Magazine, the London Sunday Times Magazine and others.

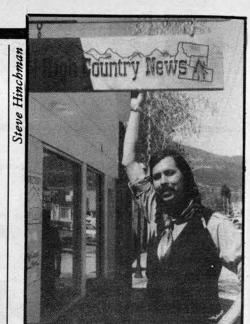
In response to our request for a sentence wrapping up Earth First!, he wrote: "They do some silly and stupid things, but at the same time there is genius to their madness."

Speaking of direct action, Arizona freelancer Dan Dagget sends us the following story, which he swears is

#### Inspired act

While celebrating their wedding anniversary recently at the Grand Canyon, Gary and Terri Hase of Flagstaff had an experience they will not soon forget. As they walked from the Bright Angel Lodge to the El Tovar Hotel, they noticed a group of about half a dozen tourists looking and gesturing excitedly at something beyond the stone wall at the canyon's edge.

As they moved closer to see what was causing all the commotion, they heard some of the people mumbling in muted tones about the "mountain goat." Gary looked over the canyon's rim and saw a desert bighorn ewe standing just a few dozen feet beyond the crowd. As a hunter and student of wildlife he recognized the rare animal immediately and took his place among the other watchers to



Line Reference Target I

Ken "Rainbow Cougar" Edwards

enjoy the opportunity to get such a close look.

About that time one of the members of the crowd, a man in his '50s, dressed in an expensive cowboy hat and boots, reached down, picked up a rock and tossed it at the sheep which was on the edge of a precipitous drop. Hase couldn't believe his eyes, and when the man reached for another rock he spoke

"Why are you doing that, she's not bothering you," he asked as the man let fly with the other rock.

"I just want to see it run," said the stone-chucker.

"Don't do that," Hase said, as the second rock ricocheted off the ledge next to the ewe. But the man made it clear that he wasn't about to be deterred. Then, as he threw a third rock, he felt something bounce off of his own chest. Looking up he saw that Hase was throwing rocks at him.

"What the hell are you doing?" the man yelled, "I'm not hurting that thing. Why are you being such an asshole?"

"Hey," Hase answered. "I just want to see you run."

Fuming, but getting the point, the rock thrower turned and stomped off as the rest of the wildlifewatchers walked up to congratulate Hase and his wife. The sheep never moved through the whole incident.

#### **Finally**

Finally, writer George Wuerthner tells us the Sioux lived east of the Missouri River as early as 1750, rather than the later date that appeared in his "Other Voices" column last week.

-- the staff

#### Radiation park

The Park Service says abandoned uranium mines in Utah's Canyonlands National Park are dangerous and should be avoided because they are highly radioactive. In the 1950s and '60s, before Canyonlands became a park, the area was intensely prospected for uranium. Mines were later abandoned, especially in the Island in the Sky district, the agency says. Signs have been posted warning hikers not to explore the mines, not to drink water in the area and to stay on the trail, since the tailing dumps are radioactive. Samples of water and soil taken from mine tailings have been found to be above federal standards. "Why it took so long for these mines to be discovered, who knows?" says Larry Thomas of the National Park Service.

"It's not an easy area to get to. Only a handful of people go through there each year." But Thomas says people reported smelling gas and becoming dizzy after passing through Lathrop Canyon. More water and soil samples will be taken in April after which the Park Service plans to clean up the mines and tailings.

Gallery-hopping is a tough job but someone has to do it.

A Los Angeles Times ad for an Ansel Adams photographic exhibit suggests that the ideal way to see the desert is photographically: "Imagine viewing the grandeur of the American Southwest without the threat of dust storms, heatstroke or rattlesnakes."

## WESTERN ROUNDUP

## Bridger-Teton plan is put under microscope

While the Forest Service works on its forest plan for Wyoming's vast Bridger-Teton National Forest, Wyoming's Gov. Mike Sullivan, in an unusual move, has asked an independent forestry expert to evaluate the Forest Service's timber data.

Professor Dennis Knight, of the University of Wyoming at Laramie, has agreed to study the Bridger-Teton National Forest's methods of deciding which areas can produce a sustained timber yield. He plans to report back to the governor by June 1. Sullivan previously urged the B-T forest to consider increasing the timber harvest (HCN, 3/30/87), upon which the town of Dubois is heavily dependent.

According to Knight, he will confine his evaluation to reviewing data from agency files and examining the tree-growth models it uses. He will not, he said, make any judgments on the economic or social issues that have set recreationoriented towns such as Jackson against timber-oriented towns such as Dubois. Nor would he look at environmental or social impacts of timber decisions.

Sullivan's selection of an outside expert so early reflects the importance he attaches to the Bridger-Teton. According to Dennis Curran, Sullivan's press secretary, the governor "wants to make sure ... the numbers are accurate." Curran said Sullivan is concerned about both jobs and wildlife on the B-T, and that Knight was selected because of his expertise and his independence in a highly charged issue.

The issue of the B-T's timber cut has spawned a lawsuit by the Mountain States Legal Foundation and Louisiana-Pacific, which maintain that until the new forest plan is released, the Forest Service is obliged to continue the current level of cutting agreed upon in 1979. L-P closed its Dubois and Riverton mills earlier this month, citing a lack of timber, and urged 165 employees to seek work elsewhere, according to the Casper Star-Tribune. Jim Kaplan, a B-T forest planner, said the current cutting level allots around 710,000 acres for timber production out of the 3.4 million acre forest.

While environmentalists praised Sullivan's decision to seek expert advice, some expressed reservations about the limited scope of Knight's examination. John Barlow, president of the Wyoming Outdoor Council, said he was concerned that Knight's background was primarily in timber, and that he would not be looking at other uses of the forest. Barlow said the governor "should be hiring someone to evaluate the benefits of recreation and wildlife. He's only getting one side of the formula.'

In another development on the Bridger-Teton, forest planner Kaplan said that, at the request of the oil and gas industry, the Forest Service was consulting with other agencies on the possibility of allowing oil and gas drilling in situation one grizzly bear habitat. "Situation one" refers to 70,000 acres on the forest considered the most vital habitat for grizzly recovery.

A February Forest Service document recommended leasing all but 1,327 acres of the West Bridger's 977,611-acre portion of the forest. Kaplan said the discussions were preliminary and the result of industry concerns that they were unnecessarily excluded from drilling. He said if a decision is made to allow drilling in critical habitat, it will be reflected in the upcoming forest plan and no separate environmental assessment would be necessary. Gov. Sullivan has said he thinks some drilling would not hurt grizzly recovery efforts (HCN, 3/30/87).

-- Michael J. Robinson

## Utah develops resistance to germ warfare lab

An Army plan to upgrade a germ warfare lab at Dugway Proving Ground in Utah's west desert may have poisoned Utah's normally benign relations with the military. The Army says it needs a new Biological Aerosol Test Facility to test biowarfare agents and wants to turn an older lab into a modern one at biosafety level 4. A BL4 lab tests viruses that have no antidote.

In its draft environmental impact statement released in January, the Army said it sees "no cause for concern" about any accidental releases into the dry, hot Dugway

environment since most viral agents would be killed by the sun within 4.5 miles of the facility.

Utah Sen. Orrin Hatch, R, Utah Rep. Wayne Owens, D, and Gov. Norm Bangerter, R, disagree. They say the Army did not address safety concerns adequately and ask why the Army needs a BL4 lab if, as they say, only BL3 viruses will be tested

Owens told the Deseret News he "not opposed to building the lab in Utah under any circumstances," but he is opposed until questions about safety and the 1972 biological warfare treaty are answered.

Hatch and Owens have called for the lab to be built on Johnston Atoll in the Pacific Ocean, 800 miles southwest of Honolulu. The Army says a lab there would be uneconomical to operate.

Surprised by vigorous local opposition in a usually receptive state, the Army is said to be considering the Johnston Atoll alternative as well as constructing a BL3 lab.

For information about the draft EIS, write: Department of the Army, Dugway Proving Ground, Dugway, UT 84022.

-- Michael Crawford

## An ancient slate is being looted clean

Federal agencies are lax in preventing looting or making sure that priceless Indian artifacts are properly stored in Colorado, New Mexico, Utah and Arizona. That is the conclusion reached by the General Accounting Office in its 131-page report, Cultural Resources: Problems Protecting and Preserving Federal Archaeological Resources.

Federal agencies can't curb looting or keep track of the extent and seriousness of the problem, says the GAO, which acts as watchdog to Congress. When agencies do patrol an area, thieves are deterred only briefly: Looters simply move on to another location with little fear of arrest, the agency says. The result of low arrest and conviction rates coupled with ever-higher prices for artifacts is a dramatic increase in commercial looting in the southwest.

One dealer, for example, sold an Indian basket and its contents recently for \$180,000. The agency recommends adopting a system of certifying the origin of artifacts as one way to deter sales.

The vastness of the West contributes to the looting problem, the

Wyoming petroglyph, gravid goat

GAO points out. Less than 6 percent of the 184 million acres of land in the Four Corners states has been surveyed for artifacts, and that was done to obtain clearances for development projects. With open land and inadequate manpower, looters have the advantage.

When a federal agency removes artifacts for preservation, GAO researchers found that no complete record exists of where objects are stored. The National Park Service says it has some 15.5 million uncataloged artifacts. At current funding levels, it would take 70 years to upgrade curatorial facilities.

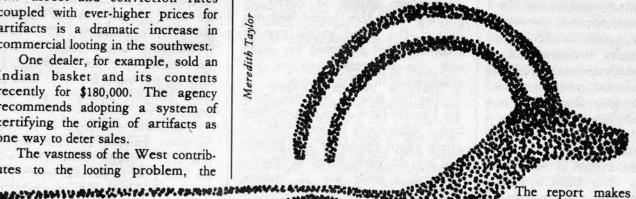
In Utah, for example, artifacts are stored in a barracks constructed during World War II that has a partially collapsed ceiling. In Colorado, the agency found artifacts stored in a pre-World War I building that had a leaky roof.

Still another problem occurs when a federal agency allows a state or local agency to store and exhibit artifacts. The GAO says Indian art has been loaned without reporting the whereabouts to the responsible caretakers. That means objects get

A non-federal agency in Utah found a collection it had loaned 10 years earlier in the basement of a Wyoming residence -- but only after spotting an address on a note in the facility's collection records.

#### Big Sky, Big Sell

Television viewers in Colorado, Wisconsin, Minnesota and Washington state will see a concentrated dose of Big Sky Country on television this spring. AP reports the state has spent \$682,000 for a series of ads touting Montana's canoeing, fishing, geysers and several other Western attractions. State tourism chief John Wilson said the ads will reach 31 million people in the four states chosen, and that the campaign is designed to imprint Montana people's minds just when they plan a summer vacation. Wilson says the state has never spent as much money before on tourism promotion.



The report makes it clear that centuries-old artifacts of a vanished Indian culture are being stolen, destroyed and lost. Tougher laws, more attention and organization, and increased funds are needed if we are to be able to study a part of the continent's past.

The report is available free from the U.S. General Accounting Office, Box 6015, Gaithersburg, MD 20877 (202/275-6241).

-- Linda McCauley

See -- not all landlords are bad guys. Some of them are quite

Associated Press reports that the federal government signed a \$50 million lease to provide office space for the Justice Department after the landlord arranged to pay a \$40,000a-year salary to Attorney General Edwin Meese's wife, Ursula.

Things don't always go better.

Army safety officials are warning soldiers not to treat recalcitrant soda machines too roughly when getting a soda, reports the Denver Post. Since 1983, seven soldiers have died and 39 have been injured when soda machines toppled over as the soldiers shook them.

## HOTLINE

#### Mecham convicted

The Arizona Senate voted 21-9 April 4 to convict Gov. Evan Mecham of high crimes, misdemeanors and malfeasance in office, making him the first governor removed since 1929. Acting Gov. Rose Mofford, D. was sworn in April 5, and in her first action as governor dismissed all of Mecham's top aides. Mecham was convicted of illegally loaning his car dealership \$80,000 in government funds and obstructing a state Justice Department investigation into a death threat made by a Mecham aide against a grand jury witness investigating Mecham's campaign finances. A third charge of concealing a \$350,000 campaign loan was dismissed by the Senate on the ground that it would constitute "double jeopardy" for Mecham. He faces a criminal trial on that charge. While the Senate voted 17-23 to allow Mecham the option of seeking or holding office again, the Arizona Supreme Court cancelled a recall election originally set for May 17.

#### Cave bill advances

A bill to protect caves on federal and Indian lands has passed the House of Representatives and moves on to the Senate (HCN, 12/21/87). The bill would require the Bureau of Land Management and Forest Service to consider impacts on caves in their planning documents and to initiate a permit system to control removal of items from caves. The bill has widespread support and no discernable opposition after sponsors changed technicalities opposed by the Reagan administration. The Senate Energy and Natural Resources Committee is expected to consider the bill in May or June.

Wall Street: hire this man!

The Rocky Mountain News reported that a Colorado inmate defrauded a New York securities firm of \$279,000 by using the prison

## So-so rivers bill passes Idaho Legislature

Four times in the past decade, Idaho conservationists have tried to establish a wild and scenic rivers system through state law. The just-ended 1988 Legislature finally did it -- sort of.

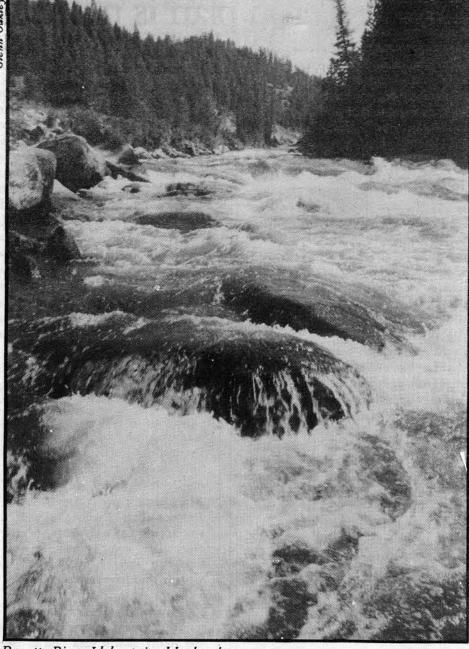
Sen. Karl Brooks, D-Boise, was the chief conservation advocate in the extended drafting which produced a bill with the votes to pass. "It's obviously short of the Natural and Recreational Rivers System we wanted," he says. "But it's a lot more than we had."

The law gives the Idaho Water Resources Board, whose main constituency is agriculture, wide discretion over designation of natural or recreational rivers. "Natural" status will prohibit dams, diversions and dredge mining; "recreational" status is whatever the board says it is.

Immediately threatened rivers can receive two years' interim protection. Seven river stretches are given instant interim status: the North and South Forks of the Payette, the Snake River near Bliss, and parts of the South Fork of the Boise River, Priest River, Henry's Fork and the main Payette. To the dismay of conservationists, citizens cannot nominate rivers for designation, cannot appeal rejection of interim status, and a river designated by the board must then receive an affirmative vote in the next session of the Legisla-

Even so, this bill passed only in reaction to outside actions. Last summer, a few non-Idaho utilities filed federal applications to dam two popular rivers and ship the electricity out of state. Then, in October, the Northwest Power Planning Council, a regional energy/fish planning body, recommended that 12,000 miles of Idaho streams be off-limits to hydropower. Finally, in January, the Federal Energy Regulatory Commission reserved to itself apparent authority over future upstream water rights. (See accompanying story.)

The Idaho water interests saw themselves losing control of the rivers. Gov. Cecil Andrus, D, and Attorney General Jim Jones, R,



Payette River, Idaho, prized by kayakers

found that Idaho's way into the ballgame was through the fact that FERC must "seriously consider ... comprehensive state water plans" when deciding hydro applications. Idaho's existing water plan didn't qualify because it lacked river protection and hydro-siting mecha-

The new law, which also requires the Water Board to prepare a complete hydro siting plan, asserts Idaho's sole control over water rights, and asks the Northwest Power Planning Council to adopt Idaho's hydro plan rather than its own.

"Conservation or protecting rivers was the least important factor in passing this bill," Sen. Brooks says. "The two big persuaders were Idaho Power Company's support'' (the utility opposes dam building by anyone but itself) "and the states" rights convictions of Idaho agriculture, which wanted to assert its primacy over both hydro and the feds." The water establishment accepted rivers protection but made sure the designation process was arduous and in friendly hands.

The first practical test will be on the Payette River forks, which have hydro applications before FERC. A group called Friends of the Payette will ask the Water Board to begin a designation study and to prohibit dams in the interim.

The session's other conservation highlight was round eight in Idaho's battle over non-point water pollution. That mainly involves the timber industry, and the sediment which runs off from its roading and logging activities. An industry bill passed the 1986 Legislature easily, but was vetoed by then Governor John Evans. Subsequent negotiations broke down in August 1987, when the timber industry walked out after 16 months of halting progress.

When conservation groups then filed a Clean Water Act lawsuit to force issuance of state standards, Gov. Cecil Andrus reconvened the negotiations under his aegis. The industry again went to the Legislature, which passed its bill with support from both parties.

Andrus vetoed it as too weak, and then spent five hours behind closed doors convincing 15 of 16 Senate Democrats to help sustain his veto. Industry lobbyist Joe Hinson promised electoral revenge against the 15, and said he wouldn't participate in round nine: six-months of negotiations. If talks don't work, Andrus said he would write the standards himself. In the interim, Andrus got conservationists to drop their lawsuit.

In other matters, a lake protection bill sponsored by Coeur d'Alene Democrat Mary Lou Reed was rejected in Senate committee and off-road vehicle interests increased the state gas tax revenue available for ORV trailbuilding. The Idaho Conservation League fought the bill, but could only insert language allowing the extra money to also be spent on ORV damage repair and enforcement.

The lead, and often only, conservation lobbyist on these issues was ICL's Maggie Coon. This was her first year at the Legislature. "It struck me how the support for conservation among legislators is well short of the support it has among the people." Her other eye-opener was the role information plays in the process.

"I started over there with a briefcase full of information, and as the session went on it got heavier and heavier. But at the same time, I was noticing that the other lobbyists didn't have briefcases full of information."

-- Pat Ford

## Agency provokes senator

the federal agency responsible for declared war on the West.' licensing hydroelectric projects has declared war on the West. He is license on a California project called urging the Federal Energy Regulatory Commission to back off unless it a state-adopted minimum flow for wants to fight Congress too.

The issue, of course, is water -specifically, whether states control water allocation within their borders. In January this year, FERC licensed a hydro project on Idaho's Payette River near Horseshoe Bend. The project's state-granted water right, like all hydro rights in Idaho, is expressly subordinated to future upstream appropriations the state may choose to allow. The FERC license rejected that condition, and says the project's use of water is not subordinated to potential future water. That language is also the rights upstream.

"When you assert," McClure lenge. told FERC Chairwoman Martha Hesse at a Senate Energy Committee licenses with these assaults on state hearing, "that once a federal license water rights, McClure told Hesse it is issued on any water project, you would provoke legislation in Conthen have exclusive control over gress to curtail FERC's authority. every water upstream from that

Idaho Senator Jim McClure says federally-licensed project, you have

McClure also cited a recent FERC Rock Springs. There, FERC rejected the project, and imposed its own lesser one. FERC ruled California did not have authority to impose minimum flows (which are water rights) on federally-licensed projects. California is challenging that ruling in the 9th Circuit Court of Appeals; Idaho has filed an amicus brief supporting California.

McClure told Hesse to read the Federal Power Act, FERC's basic charter, which he said prohibits FERC from interfering with state water laws governing the control, appropriation, use or distribution of grounds of California's court chal-

If FERC continues to issue

-- Pat Ford

## Court tells Bureau of Reclamation to stick to irrigation

The Interior Department has suffered a setback to its plans for a greater role in marketing Missouri River reservoir water. A Feb. 23 U.S. Supreme Court decision limits Interior's Bureau of Reclamation to irrigation projects. Interior wanted to market Missouri River flows for industrial purposes.

The High Court's ruling affirmed an earlier judgment by the 8th U.S. Circuit Court of Appeals that had blocked Interior from permitting a 1982 Missouri River water sale between South Dakota and Energy Transportation Systems Inc. (ETSI). Both courts agreed the water to be sold was for an industrial application, a use outside Interior's legal authority.

Waters impounded by six Missouri River dams, four in South Dakota and one each in North Dakota and Montana, fall under development regulations authorized as part of the 1944 Flood Control Act that established the Pick-Sloan Project. That act gave the Bureau of Reclamation power over reclamation (irrigation) and the Army Corps of Engineers over flood control, navigation, recreation, hydropower and industrial water use responsibilities.

There had been an exception to this arrangement. A memorandum of understanding between the two agencies allowed the Bureau to market unallocated irrigation river flows for industrial or municipal purposes. But that agreement expired in 1978.

ETSI intended to purchase 50,000 acre-feet of Misouri River flows each year from South Dakota for fifty years. The water would have been piped from the Oahe Reservoir to Gillette, Wyo., where ETSI planned to slurry Powder River Basin coal to southern states.

South Dakota initiated the reservoir sale idea to defend ground water in the Black Hills region. ETSI originally intended to get water from the Madison Formation, an aquifer underlying Wyoming and western South Dakota. The company had been issued a permit by Wyoming to pump what it needed from the aquifer.

Former South Dakota Gov. Wil-

liam Janklow fought ETSI's aquifer plan, contending serious drawdown would result. Janklow proposed the Oahe Reservoir sale as an alternative, and also as a lucrative opportunity for his state. The contract was worth \$1.4 billion to South Dakota.

ETSI approached both the Bureau and the Corps about the contract. Apparently, the company was referred to Interior to gain approval for the diversion.

When Interior Secretary James Watt approved the contract, the states of Iowa, Nebraska and Missouri challenged his authority. The sale itself involved an almost immeasurable fraction of the Missouri River's flow. But the three states claimed the sale would set a precedent for other water diversions that would threaten river uses in lower basin states.

The Supreme Court decision is bad news for the Bureau of Reclamation, which is seeking to become involved in non-irrigation projects.

Presently, very little Missouri River water is used for irrigation, and the outlook for more irrigation projects is not promising. In North Dakota, the unfinished Garrison Diversion Project continues to founder in controversy. Wildlife interests argue over project features and there are even questions about how interested the farmers are in the water.

In South Dakota, the embattled Oahe Irrigation Project was deauthorized in 1982. A second major project, CENDAK, appears to have been abandoned before moving out of the planning stage.

The Bureau itself recognizes waning public interest in large irrigation development and is attempting to find new missions to maintain for itself a presence in the West. Conspicuously missing from the agency's recommended priorities for the coming decade is the construction of new irrigation projects. Instead, the agency hopes to concentrate on maintenance of existing operations, ground water management, toxic cleanup and water quality issues. New construction is relegated to a "medium" priority in the plan.

South Dakota continues to be angry about the Pick-Sloan Project. The state claims it has never been adequately compensated for the 500,000 acres that were permanently flooded behind the four Missouri River dams within its boundaries. In exchange for the flooded land, the federal government, under the Flood Control Act, proposed irrigating nearly one million acres in South Dakota. Less than 25,000 acres have been developed.

South Dakota Gov. George Mickelson is preparing a package he hopes will resolve the economic inequities that have characterized Missouri River development. Included will be a list of water projects

#### Guilty of conspiracy

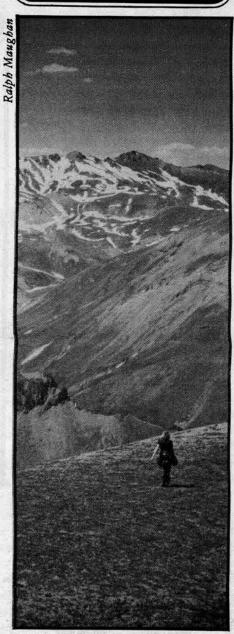
A federal court jury has awarded South Dakota \$200 million in the state's antitrust lawsuit against Kansas City Southern Railway. The state had sued the railroad, charging conspiracy with other railroads to stop the ETSI (Energy Transportation Systems Inc.) coal slurry project. Former South Dakota Gov. William Janklow called Kansas City Southern 'the quarterback'' in the railroad's efforts to thwart ETSI. ETSI planned to pipe crushed coal from the Powder River Basin near Gillette, Wyo., to southern states using water from a Missouri River reservoir in South Dakota. The company had contracted with South Dakota for the water, and it would have meant \$9 million a year for 50 years to South Dakota. Plans to construct the slurry were scrapped in 1984. Kansas City Southern admitted opposing ETSI, but contended it did nothing illegal. It said ETSI was killed by internal financial and technological problems. South Dakota lawyers said the rail company acted illegally to protect its \$618 million in gross revenues received from hauling Powder River Basin coal between 1978 and 1987. Under federal antitrust law, the jury award will be tripled. Kansas City Southern, with a net worth of approximately \$500 million, has indicated it will appeal the case to the 8th U.S. Circuit Court of Appeals.

and the income from some Missouri River hydropower. The list will be presented to the U.S. Congress.

But the overall prospect is for continued confusion and conflict in the Missouri River basin. A telling sign is the scheduled end of the Missouri Basin States Association, a non-profit organization that tried to examine and formulate river policies. The association never achieved harmony among the ten Missouri River states and its office in Omaha, Neb., will close April 1. No other vehicle to promote agreement among the states is expected to materialize in the near future.

-- Peter Carrels

### HOTLINE



Washakie Wilderness, Wyoming

#### A bazy future

Wyoming's Environmental Quality Council rejected nominating "integral vistas" for special protection under its new air quality regulations. Under the proposal, viewpoints in parts of national parks and wilderness areas would have received special protection to prevent deterioration of visibility. The decision was made after hearings in which coal, oil and gas industry representatives opposed the special designation as economically damaging, and in which National Park Service representatives lauded the proposal. According to the Casper Star-Tribune, one environmental council member said industry opposition was responsible for rejection of the idea. But Department of Environmental Quality director Randolph Wood said the decision was due to the difficulty of defining integral vistas. The move follows Utah's similar rejection of special protection for air quality from scenic viewpoints (HCN, 12/21/87).

## Gushers predicted for Wyoming's Absarokas

Wyoming geologist Kurt Sundell has discovered an oil field near Yellowstone National Park that he believes could get "Wyoming's oildriven economy back rolling again."

The field is in the Absaroka Range, one of the last large untouched areas left in the lower 48 states, and in which 1 million acres are open to oil exploration. The other 3 million acres are forest land, national park and wilderness. Jim Schmitt, Greater Yellowstone Coalition vice president and a geology professor at Montana State University, says even preliminary steps to drilling in the Absarokas could harm grizzly bear and big game habitat. According to Schmitt, the Forest Service and Bureau of Land Management have yet to draw up "sound" environmental plans dealing with possible oil development.

Pat Harrison, minerals specialist for national forest land in the Absaroka Range, disagrees, "We have a very well-crafted forest plan requiring oil companies to take environmental precautions." In any case Harrison says, full development is unlikely.

But geologist Sundell of Ram Oil Co. thinks there are at least a half-billion barrels of recoverable oil in the area he calls the "Absaroka Volcanics." David Love of the U.S. Geological Survey agrees with Sundell's basic theories about Absaroka Volcanics, but says, "Sundell is a promoter in the better sense. He discovered oil saturation in volcanic rock, but it doesn't mean there's recoverable oil in commercial quantities."

Louisa Willcox, program director for the Yellowstone Coalition, says Exxon has applied for Forest Service approval to drill an exploratory well on Carter Mountain, a bighorn sheep-lambing area only a quarter-mile from the Absaroka Wilderness. "These high altitude wells are

unreclaimable," Willcox says. "They punch roads into these areas, cut switchbacks and then there are land slides." The coalition, representing 10 environmental groups, has appealed the Shoshone National Forest Plan, saying the plan does not take into consideration how oil and gas development will affect sensitive high-elevation areas.

Geologist Love, however, says wells drilled at high-elevations aren't necessarily destructive. A dry well drilled by Richfield Corp. at 11,000 feet on the south side of Carter mountain 20 years ago "didn't seem to do a bit of damage to the area." But if that well had been drilled on the slide-prone flanks of the mountain the results would have been disastrous, he adds. "There would have been enormous slides." The debate continues as Exxon and Ram Oil Co. plan to drill exploratory wells this summer.

-- Tara Lumpkin

## **HOTLINE**

#### Nuclear cleanup asked

The Department of Energy told a congressional hearing it is considering closing the Rocky Flats Nuclear Weapons Plant 16 miles northwest of Denver, Colo. The controversial plant makes plutonium triggers for nuclear warheads. Tom Rauch, a member of Citizens Against Rocky Flats Contamination, says unless the government provides money for cleaning up the 6,500 acre site, "Rocky Flats could become a national sacrifice area." Rocky Flats has been rated the third most contaminated weapons facility in the nation, according to Dr. Harvey Nichols of the Sierra Club. On April 12, the citizens group and Sierra Club urged that \$370 million budgeted for upgrading an existing plutonium-processing building be used instead to clean up Rocky Flats. The groups also want production jobs to become cleanup jobs as the plant slows and then closes. "DOE facilities are aging -most are 35 or more years old -- and the DOE is thinking about building new facilities and consolidating plants, rather than putting money in old, decaying ones," Rauch says. The DOE says it makes economic sense to build safer, new, modernized plants rather than patch up old ones. On another front, a planned "test burn" of a mixture of radioactive and chemical hazardous wastes at Rocky Flats (HCN, 7/6/87) has been delayed until 1989. In 1987, the Sierra Club and citizens group filed a lawsuit forcing an assessment of its environmental and health impacts. The latest delay is "the result of ordinary citizens coming together and taking action," says Rauch, pointing out that over 18,000 people signed petitions in opposition. Denver Representative David Skaggs also pressured Rocky Flats for an independent panel of scientists to review the proposed burning.



LEARN ABOUT

the natural beauty of the Colorado Rocky Mountains at the KEYSTONE SCIENCE SCHOOL adult workshops (graduate credit available)

- •Alpine Tundra of Colorado
- May 13-15
  •Rocky Mountain Field Ornithology

June 12-17

•Stalking the Wild Mushroom

August 19-21

•Introduction to the Stars



For more information: Call [303] 468-5824 or write: KEYSTONE SCIENCE SCHOOL Box 606-H Keystone, Colorado 80435

#### Parks budget fight

Park Service Director William Mott was embarrassed at a February committee hearing examining the 1989 National Park Service budget. Rep. Bruce Vento, D-Minn., chair of the House Parks and Public Lands Subcommittee, accused Mott of defying a congressional mandate by using higher recreational fees for the general budget. Congress had previously insisted, over the Interior Department's opposition, that higher fees augment, rather than replace, regular appropriations. Under pressure from the committee, Mott conceded the point, leaving the impression he was unhappy with the budgetary gerrymandering. But when Interior Secretary Donald Hodel appeared a week later before the same committee, he was unrepentant, and said the committee had

intended the Park Service budget to stay essentially static, taking into account the extra revenues. Committee members from both parties said they were disappointed and concerned by the "administration's attempt to supplant rather than supplement the (Park Service) budget," according to Rick Healy, a staff member of the parks subcommittee.

#### The penultimate culling

A Park Service plan to shoot 50 bison roaming the National Elk Refuge near Jackson, Wyo., has aroused local opposition (HCN 2/29/88). At a public meeting in Jackson, several residents and biologists said the culling would so reduce the bison's genetic pool it was likely they would become extinct in less than 50 years. Joel Berger,

biology professor at the University of Nevada, warned, "Once a population loses genetic variability, it can be wiped out by disease or climactic events." Ron Walker, a forest and range specialist from Custer State Park in South Dakota, suggested fencing the bison and placing cattle guards on roads leading from the Elk Refuge into town to keep the buffalo off private property. The Jackson Hole Alliance for Responsible Planning said the federal environmental assessment arbitrarily decided 50 bison should be killed. Three Jackson wildlife biologists -- Tim Clark, Bill Barmore and Tom Campbell -- asked that the EA and management plan be withdrawn and reformulated, reports the Jackson Hole Guide. The deadline for public comment is past, and those opposed to the shooting await the Park Service's decision.

## BULLETIN BOARD

MCPHEE RESERVOIR HEARINGS

The Bureau of Land Management will hold four hearings from April 25-28 in southwest Colorado to solicit public comment on administering the Dolores River below McPhee Reservoir. The hearings are designed to identify and rank issues to be treated in the upcoming Dolores River Management Plan. Issues already identified include the effects of boating on peregrine falcon nesting sites, and the effects of water diversions from McPhee Reservoir on fisheries and rafting. The area to be considered includes the 22,464-acre Dolores River Special Recreation Management Area and 28,539-acre Dolores Canyon Wilderness Study Area. For location and time of hearings, call 303/247-4082. Send written comment on the Dolores River Management Plan to Tom Christensen, BLM, San Juan Resource Area, Federal Building, 701 Camino del Rio, Durango, CO 81301.

NEW KID ON BLOCK

Water information junkies can now subscribe to a new newsletter -- the monthly Water Rights. Published by the American Society of Civil Engineers and edited by Howard Smallowitz, the letter debuted in January. Its scope is national, but the first few issues emphasized the West, and the editor is based in Texas. It is distinguished by a welcome lighter tone than most newsletters. A Bureau of Reclamation toll-free number (800/424-5081), designed to allow citizens to report agency fraud, waste, etc., is labelled dial-a-fraud in the newsletter because a call the editor made was not returned after two weeks. The newsletter has good scope and es a balance between depth and brevity. Subscriptions are \$95 for 12 issues. Samples from: Water Rights, 1906 Pearl St., Ste. 303, Austin, TX



"LOVE YOUR MOTHER" T-SHIRTS

for all sized earthlings in full 4-color art on sky blue or rich ivory high quality shirts

Adults - 100% cotton - \$9 S (32-34), M (36-38), L (40-42), XL (44-46) Kids - durable 50/50 - \$7 S (6-8), M (10-12), L (14-16) Bables - Yellow or Sky Blue - \$6 12 or 24 month, lap shouldered

Please enclose \$1 for 1st shirt, and 50¢ for each additional shirt.

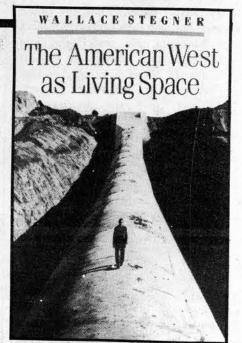
Environmental Gifts P.O. Box 222-HCN, Helena, MT 59624 Send for Free Catalog! ANOTHER LOOK AT SAN JUAN PLAN
After Utah's governor and four of
the state's congressional delegation
protested the Bureau of Lond Management

protested the Bureau of Land Management's final plan for 1.8 million acres in southeast Utah, the agency relented. It will now allow public comment until June 13. This BLM's resource management plan covered all of San Juan County, an area known for its rich archaeology. "The additional 60 days should give everyone who is interested the opportunity to learn more about the plan and provide comments," says Kemp Conn, Utah state BLM director. The present resource management plan designates 536,000 acres as Areas of Critical Environmental Concern, but that is too little, says Fred Swanson, spokesman for the Southern Utah Wilderness Association. As an example, Swanson points to Cedar Mesa, an area known for its Anasazi ruins. Although the BLM designates it as an Area of Critical Environmental Concern, the agency would continue to allow mineral leasing, disposal of minerals, restricted off-road vehicle use, range modification, and mining with only minimal restrictions, Swanson says. Overall, the BLM plan would allow oil and gas leasing throughout the San Juan Resource Area, including 155,000 acres that had previously been off-limits, and also allow grazing and firewood gathering in most of the area. State BLM director Conn says it is truly a multiple use plan that protects the area's scenic and archaeological resources. Comments should be directed to District Manager, Moab District BLM, 82 East Dogwood, P.O. Box 970, Moab, UT 84532. Copies of the proposed plan and EIS are available

GORGED AT THE GORGE

from the same address.

Because the Gunnison Gorge in Western Colorado has become a popular river-running and fishing area, the Bureau of Land Management has proposed new regulations for commercial and private users. A draft addition to the recreational area management plan set recreational and wildlife guidelines for the 21,038-acre Gunnison Gorge, right below the Black Canyon of the Gunnison National Monument. Although the Gunnison River Gorge attracts hikers and four-wheelers as well as rafters, John Sering of the Bureau of Land Management says the plan is more concerned with "wildlife, and especially the bighorn sheep population, than recreation." Until the final plan is approved in late May, limits are frozen for commercial and private users. The draft addition establishes a carrying capacity for recreational users of the gorge as well as detailing the number of commercial launches per day, off-road vehicle uses, non-impact camping requirements such as a porta-potty for all overnight trips, and the reintroduction of Rocky Mountain bighorn sheep. To obtain a copy or send comments contact John Sering, BLM, Uncompangre Basin Resource Area, 2505 South Townsend Avenue, Montrose, CO 81401 (303/249-7791).



THE WEST AS LIVING SPACE Readers of Stegner will recognize The American West as Living Space, from a series of lectures dealing with the West-as-it-is, as a careful condensation of large themes into measured space. Two beauties coexist in this slim volume; it gracefully documents a lifetime of study and thought on the American West, and it conveys harsh truths in a voice that is calm and direct. Trying to describe the West in the broadest terms he never loses his grip on specifics in favor of self-indulgent myth -- a fault of many writers. Reading this book, you sense that integrity is the starting point for Stegner's sense of aesthetics; he never sacrifices truth to a sense of form or to self-glorification. This is an essential work, not just for literary readers but for anyone with environmental and social hopes for the West. In three parts, it covers a vast sweep of environmental, social, literary and moral territory. Stegner's discourse is always profound, often bitter and full of accurate observation that's guaranteed to make most native Westerners, as well as pilgrims, think twice before serving up any more easy myths.

Wallace E. Stegner. Ann Arbor, Michigan, 1987. 89 pages. \$10 paper, \$18 cloth.

-- C.L. Rawlins

WHO OWNS
THE NATIONAL FORESTS?

The Western Colorado Congress will hold its eighth annual meeting May 13-14 in Paonia, Colo., with speakers Randal O'Toole, director of Cascade Holistic Economic Consultants, and University of Colorado law professor Charles Wilkinson. The theme of the conference is "National Forests: For Whom and For What?," with workshops planned on water issues, public participation in the Forest Service's planning process, and conflicts over resource use on the Grand Mesa, Uncompangre and Gunnison National Forest in western Colorado. Registration is \$10 for individuals, and \$18 for couples. Lunch is an additional \$4 per person, and a banquet \$7 extra. If registration is received after May 12, the cost is an extra \$2 per person per item. For more information contact WCC, Box 472, Montrose, CO 81402 (303/249-1978).

## L-P mills in Colorado leap one hurdle but face others

The Louisiana-Pacific Corp. claimed an important court victory over the U.S. Environmental Protection Agency last month in Colorado. but the giant timber company is not yet out of trouble.

Last year, the EPA filed suit against Louisiana-Pacific for building two waferboard lumber mills in western Colorado without the required federal air quality permits, and then operating those plants for four years without federal permits. The agency asked for \$4 million in penalties and an injunction to shut down the Kremmling and Olathe, Colo., mills until L-P received the correct permits and installed the best available pollution control equip-

On March 22, U.S. District Judge Alfred Arraj found L-P guilty of "willful and deliberate" violations of federal air quality standards at its Kremmling waferwood plant. However, Arraj only cited L-P for a limited period -- November 1986 to July 1987 -- and imposed a minimal fine of \$65,000. And because of faulty smokestack tests by the EPA, Arraj dismissed all charges against

L-P's second waferwood plant in Olathe.

L-P emerged from the trial with other victories. The Denver judge refused the EPA's request to shut down the two mills pending permits. Moreover, in his written comments, Arraj essentially pardoned L-P of any major wrongdoing. Arraj limited L-P's liability because, he said, the company did not delay in conforming to federal regulations once notified of violations. The company also spent \$1 million to pioneer a new technology to control its pollution, reaped no economic benefits from the violations and did not cause measureable environmental damage, he added.

Vern Talcott, general counsel at L-P's Portland, Ore., headquarters, called the ruling a "vindication" of L-P's beleaguered waferwood plants and proof that, "we are not, as some people would paint us, some company out to destroy environmental values."

Colorado environmentalists responded that L-P may have won the most points in the court battle, but that it is about to lose its long-term effort to avoid federal regulation of its waferboard plants -- and that means they've lost the war.

In his verdict, Judge Arraj ordered L-P to complete its application for a federal "Prevention of Significant Deterioration" permit for its Kremmling plant. While Arraj did not order the Olathe plant to apply for the permit because the EPA's evidence against Olathe was thrown out of court, Colorado health officials say they now have the proof to require L-P to get a PSD permit for Olathe, too.

The PSD permit was added to the Clean Air Act in 1977 by Congress to protect areas of the country where the air is much cleaner than national ambient air standards. More stringent and more costly than normal EPA air regulations, the program requires industrial plants that emit more than 250 tons per year of air pollutants to apply for and receive a PSD permit before beginning construction. The critical component of the permit is the "best available control technology" review process, in which the EPA, state officials and the company involved negotiate over

what is the best technology to control the most pollutants at the least cost.

According to Jim Geier, the Colorado Health Department official responsible for investigating new sources of air pollution, L-P will have to go through the best available control technology review process even though it has already spent \$1 million on pollution controls.

Geier warns that the equipment it now has may not pass the test. Geier says L-P is currently unable to control toxic chemicals emitted from glues used to cement wood chips together to form waferboard. Those chemicals have caused health problems for L-P workers and neighbors to the Olathe plant. Geier says his agency would like to see the toxics controlled, and if the EPA doesn't force L-P to go through the review then the state Health Department

In the meantime, L-P will be back in court, facing charges from Olathe residents that its pollution caused them nausea, headaches and, ultimately, to move away from their homes.

-- Steve Hinchman

## Steve Fuller has made excellent use of quiet and isolation

YELLOWSTONE of semi-isolation, Fuller won't trade winter. it for anything.

NATIONAL "company man" at Canyon. He PARK, Wyo. -- When Steve Fuller carries the keys, watches the came to Canyon Village in 1973 as grounds and, most important, shovwinter-keeper he took a job that no els snow off the roofs of the more one else wanted. But after 15 winters than 100 buildings closed for the

The job combines a healthy dose

And it places Fuller in the middle of one of the most beautiful places in the world.

'In a way this is living a dream," said Fuller. He and wife Angela have raised two daughters in the large cabin, built as a winterkeeper's residence in 1910, that overlooks the Grand Canyon of the Yellowstone. They tutored them in their younger years, but now Emma, 15, and Skye, 13, attend school in Gardiner, Mont.

Mrs. Fuller, who manages the Canyon Lodge for TW Services in the summer, manages the Mammoth Hotel in the winter and lives with the children. The family spends the weekends together.

"When we came here our closest neighbor was at Lake," said Fuller. "We'd get our mail every six weeks and sometimes we wouldn't see other people for six weeks." That isolation gave Fuller his opportunity 15 years ago.

"I was the only applicant," he recalled. "Nobody else wanted the job. The pay was bad and you were expected to buy supplies for the entire winter."

With winter use up in Yellowstone, Canyon is no longer so isolated. He has several neighbors, rangers and their families, and a steady flow of visitors on snowmobile and snow coach.

But Canyon remains a quiet winter reserve, away from the pace of the outside world. It contrasts with the relatively busy summers, when Fuller works as Canyon's maintenance manager, directing a crew of 15 to 20 people.

In winter, Fuller keeps ahead of his snow-shoveling job by knocking cornices off smaller buildings and clearing the larger roofs several times during the season. His technique is methodical. His tools are a shovel and a snow saw and he wields them with effort-conserving motions that mimic a dance.

"I like to think I make it look

easy," he said. "It would take a novice four times longer."

The work is good exercise that keeps Fuller in shape. He approaches it philosophically and considers it one of the best parts of his

"I think of it as a meditation," he said. "Up here you can think about things or you can block them out -- a Zen nothingness. Or you can work things through."

What made it easy for Fuller to take the position no one wanted was his other love, photography.

"I wanted to live in a place like this and intimately photograph it," he said. "It was to be a long term project."

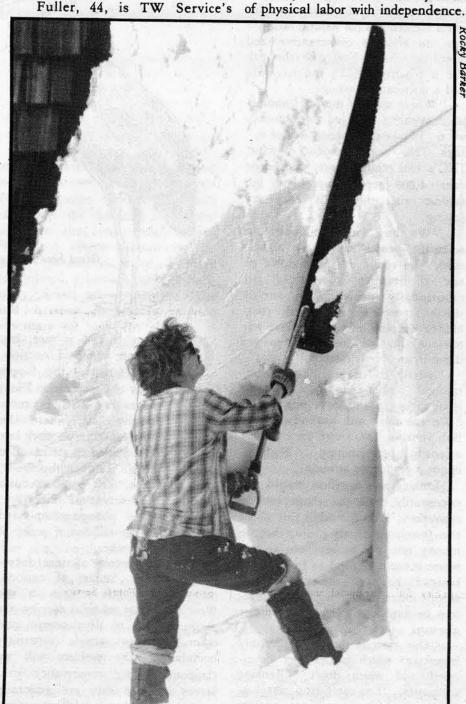
His photographic landscapes of Yellowstone and the story of his winter life caught the attention of National Geographic in 1978. It was the first in a series of publications touched by his personal view of life in Yellowstone. His work is found regularly in such publications as National Wildlife, Audubon Magazine, National Geographic Traveler, Reader's Digest and many European publications. He recently traveled to South Africa to photograph its national parks and has found the time to travel extensively. Prior to taking the winterkeeper position he had lived in Europe, Africa and the Middle East.

His publications and appearances have made him one of Yellowstone's best-known residents. He has had many people tell him how they wish they had his job.

"In a way I have created my own myth," he said. But Fuller adds that "the vast majority of people who even might think they'd like it would hate it," he said. "This is not a job for someone who is restless.

"In our brief time on earth we've got to tend to our souls," he said. "You can't do that and climb the ladder."

-- Rocky Barker



Steve Fuller saws some snow

## Tale 1: The Nature Conservary

# The fine art of i

In Colorado, environmentalists have been fighting for years to stop the proposed Two Forks dam from destroying a blue ribbon trout stream. This winter, behind the scenes, a conservation group in three-piece suits closed a \$2 million deal to buy a similar untouched canyon nearby.

In Montana, biologists and environmentalists alike are struggling with the U.S. Fish and Wildlife Service's unwieldy, time-consuming approach to placing a rapidly disappearing aquatic wildflower on the endangered species list. While the Howellia aquatilis was ensnared in a

by Steve Hinchman

litical, silent almost to the point of

secrecy, friendly with corporate

America, and run more like a

successful business than a non-profit

group has concentrated on identify-

ing and preserving North America's

most endangered plants, animals and

unique ecosystems. The conser-

vancy's efforts to save species may

mark the private sector's greatest

contribution to the greening of

America. TNC is one of the top

fundraisers of all conservation

private system of nature preserves in

the world. Last year the conservancy

added an average of 1,000 acres a

It also operates the largest

For more than three decades, the

organization.

The Nature Conservancy is an

anomaly in the environ-

mental movement. It is apo-

paper war. The Nature Conservancy quietly bought a 400-acre preserve containing the largest known population of the rare flower, and then convinced several local landowners to manage their property to protect the

On the Navajo reservation -- an area dominated by extractive industries and generally lacking in tribal, state or federal environmental protection -- the conservancy and tribal officials have compiled a computerized inventory of the reservation's flora and fauna. The tribe is now beginning to adopt codes to protect endangered species.

The secret of its success, say TNC staffers, is specialization. Like many of the plants and animals it protects, TNC has thrived by carving out its own niche in the environmental movement. The group doesn't lobby Congress, doesn't file suit or engage in other litigation, and doesn't tackle the tough public policy issues.

ness," says Vice President David Morine, head of TNC's land acquisition staff. "We buy land and protect

TNC's other secret is its choice of weapons -- cash instead of confrontation. Says public relations officer Ron Geatz, "We don't throw ourselves in front of bulldozers; we work within the free enterprise system to acquire

In 1986 -- its best year ever --TNC raised \$73.4 million in cash and received more than \$52 million in donated property. It put that money to use with an efficiency a for-profit corporation would find it difficult to match. On an operating budget of \$40 million, the conservancy bought or acquired conservation easements on land valued at \$166.6 million. The rest of its income went into its \$79 and long term projects.

With assets in excess of \$400 million, the conservancy is already the richest group in the environmental movement, even as it attracts an ever-increasing pool of supporters. TNC appeals especially to business and industry, which not only sell it coveted parcels of land, but also donate millions of dollars. In

Bald eagle

'We run a very simple busi-

the land."

million revolving fund, endowments

1986, 450 corporations gave the

conservancy unrestricted gifts of \$1,000 or more, plus grants and land worth \$10.6 million.

In the last decade, TNC also successfully tapped foundations such as the Richard King Mellon Foundation, which has donated more than \$65 million, 3M heir Katherine Ordway's Goodhill Foundation, the Winthrop Rockefeller Foundation and the John D. and Katherine T. MacArthur Foundation. Total 1986 foundation contributions equalled \$30.8 million.

TNC's third and strongest leg is its 390,000-plus individual members, who in 1986 donated \$37.2 million, or 51 percent of the conservancy's income. A conservancy membership can cost anywhere from \$10 for first-time members to \$1,000 for a lifetime card. While a TNC survey shows its membership cuts across political and economic lines, it also shows the average age of a conservancy member is 55 years old. Although TNC's members are not all wealthy, they are, on the average, well educated. Members get TNC's quarterly magazine as well as regional and chapter newsletters.

The Nature Conservancy describes itself as "an international conservation organization committed to preserving natural diversity by finding and protecting lands and waters supporting the best examples of all elements of the natural world." But its style is conservative and scientific -- as if Noah ran the Ark like a pinstriped CEO and his wife had a doctorate in zoology.

"Where much of the environmental movement is based on emotion, we try to take the emotion out of it,' says TNC vice president Morine. TNC's real estate experts have done over 4,000 separate projects but seldom visit the lands they are saving.

"We buy land because our scientific people say it is significant," he continues. "We don't go see it because we would get emotionally involved. To see it wastes people's time and costs money we can't afford. We have our mission, but we are going to get there in an orderly fashion.'

Orderly also means non-confrontational. Rather than fight over an issue, the conservancy negotiates. "We can work with anybody," says Bob Jenkins, TNC's vice president of scientific programming. "Fighting is not a productive attitude."

Jenkins says conflicts would unnecessarily drain the conservancy's resources. "You shouldn't put all of the (environmental) philanthropic money into the pockets of lawyers when it could be used to buy land." Instead, he says, the conservancy works incrementally within the system because from there it can direct growth.

"Our view is that it is terribly important which places get developed and which don't," Jenkins continues. "You can't stop development just because you are against development. You never actually stop



it, you just deflect it away from battles you've won and into places you've lost. We don't have a fight with the mining interests per se. It seems fruitless to have a fight with the mining interests per se. The question is: Which mines where?"

Despite its unemotional, busi-

nesslike approach, The Nature Conservancy gets high ratings from many in the environmental community. Dave Foreman, editor of the Earth First! Journal, rates TNC among the top environmental groups in the country. Foreman says, "While other groups are interested in the protection of natural resources for human use, TNC and Earth First! are the only ones interested in wild nature for its own sake."



riticism of TNC is rare, but there are notes of caution. Bruce Hamilton, the Sierra Club's Director of Conservation Field Services, says that TNC is most effective in the East, where the majority of the conservation work has to occur in the private sector because of lack of public land. In the West, says Hamilton, TNC's 10,000 and 15,000-acre preserves are important, but they are postage-stamp-sized compared to the millions of acres of public land at stake.

Size could become a critical factor in the future. Studies of national parks and wildlife refuges in the West show that mammal species are declining due to development and other activities outside sanctuary boundaries. The problem will be compounded for conservancy preserves because they are generally much smaller than federal preserves.

Other activists are uncomfortable

day to both its system and to public preserves in the U.S. and Canada. Recently, it extended operations into the Caribbean, and central and South America. The group's holdings include over 1,100 sanctuaries. Overall, it has protected more than 3 million acres and thousands of endangered plants and animals. Several hundred of those preserves and endangered species are in the Rocky Mountain West. At first glance, TNC's 3 million acres pale compared to the 90 million acres protected by the U.S. Fish and Wildlife Service's 437 national wildlife refuges. However, only 13

million acres of the national wildlife refuge system are in the continental 48 states. In this decade TNC has purchased twice as much endangered species habitat as Fish and Wildlife -- 1.3 million acres to .6 million acres -- and has also spent more per acre

to maintain its preserve system.

# infiltrage

with TNC's ties to the American corporate establishment. Mike Clark, head of the Environmental Policy Institute in Washington, D.C., says TNC is the most sophisticated fundraiser in the environmental community, but he wonders if there is more guilt than philanthropy at work.

"(The conservancy) gets corporate sponsors and individuals who get some of their money from exploiting the environment. (They) give to TNC as a way to repatriate that," Clark says. "In the last 10 years there is a pattern of large corporate gifts from those industries which are the greatest despoilers in the world."

The conservancy isn't squeamish about telling where its money comes from. Among its list of corporate donors of \$1,000 or more for 10 consecutive years are AMAX, AT&T, Chevron, Du Pont, Georgia-Pacific, I.B.M., International Paper, Mobil, Scott Paper, Southern California Gas, Tenneco, Texaco and Union Oil.

That financial support does not affect the conservancy's mission, but it does influence its style. In fact, the conservancy's operation is run much like those of its corporate sponsors. The Nature Conservancy staff, who number nearly 800 and operate in every state except Alaska, are "button-down business people."

Says Morine, "You don't find people with L.L. Bean outfits and beards." He says the nonprofit corporation may be one of the few conservation groups run by scientists, tax lawyers, MBAs, corporate fundraisers and computer experts.

The conservancy's operation is decentralized. Each state office has its own complement of scientific and real estate staff, and projects are directed from those offices to increase the participation of local governments and businesses.

Like its fundraising, TNC's scientific programs are streamlined and efficient. Land projects are based on its Natural Heritage data base: a state-by-state computerized list of rare flora and fauna, which, added together, is the closest thing we have to a national inventory of endangered, threatened and slowly declining species.

The Natural Heritage program has quickly become TNC's most strategic tool. From each state's data base the state field office compiles a hit list of the rarest and most valuable species and that determines priorities for land acquisition. The program is also used to track the progress of extremely rare and rapidly declining species, such as the Colorado River squawfish, which cross state boundaries. The link

Dang was 9

between the Natural Heritage program and land purchases works so well that TNC officials are tight-lipped about what is currently at the top of the list. Those places are usually involved in purchase negotiations.

Every state in the West has a Natural Heritage data base except Utah, where TNC only recently opened its Great Basin field office. One of the older Natural Heritage programs in the West is Wyoming's, which was set up by TNC and the state in 1979, using federal money. It is now run by the Wyoming Department of Environmental Quality's Lands Division, although TNC biologists still feed the state new

(Continued on page 11)

## The conservancy - down by the (Southwest's) riversides

The Gila Riparian Preserve in southern New Mexico is one of The Nature Conservancy's premier preserves in the Southwest. It protects over 230 acres of rare desert riparian woodland habitat alongside the longest undammed river in the continental United States. A diverse ecosystem, the trees -- Arizona sycamore, Fremont cottonwood, velvet ash, netleaf hackberry, desert willow, Arizona alder and Arizona walnut -- provide sanctuary for over 265 species of birds, one third of which are listed in critical condition by the conservancy. They include the federally-endangered bald eagle and stateendangered black hawk, Gila woodpecker and Abert's towhee. The waters of the Gila River sustain the state-endangered roundtail chub and federally-threatened spikedace and Loach minnow.

Riparian areas are the most critical ecosystem in the Southwest, according to conservancy surveys. They are also the most threatened. Over 90 percent of riparian zones in Arizona have fallen to development, and as a result the remaining desert willow-cottonwood woodlands may be one of the rarest forest types in the U.S., says Cassandra Krause of TNC's Arizona field office.

The Arizona Conservancy has spent \$2 million in the last five years on riparian habitat and is now in the midst of a three-year campaign to

THE SOUTHWEST New Mexico River Preserve Muleshoe Ranch Preserve \* Patagonia-SonoitaCreek Canelo Hills-Riparian Cienega reserve Preserve . • TNC Preserves \* Transferred Lands

raise another \$3.7 million to buy more streamside acreage. Almost all of the Arizona preserves are dedicated to riparian habitat. Such sites as the Hassayampa River Preserve, the Patagonia-Sonoita Creek Sanctuary, the Canelo Hills Cienega Marsh, and the Muleshoe Ranch protect a wide range of species. They include the zone-tailed and Harris hawks, the extremely rare gray hawk and rose-throated becard, the endangered Yaqui and Gila chub, the Sonoran topminnow, the Gilbert's skunk lizard (which exists globally only in one site in Arizona), and a wide variety of cacti, flowers and

Away from the river banks, the Southwest harbors a number of rare desert species. The New Mexico Conservancy has a 25-acre preserve at a secret location in northern New Mexico containing what TNC calls the most endangered cactus in the world. The tiny Knowlton's cactus is a penny-sized cactus that produces beautiful pink and yellow flowers every May. Its preserve was donated by the Public Service Company of New Mexico.

Another southwest preserve not open to the public contains the federally-endangered Kuenzler's cactus. The leased one-acre site somewhere in central New Mexico is kept secret by the state field office and is closely guarded by a newly-converted environmentalist rancher. Over the next 10 years the conservancy hopes research and greenhouse propagation at the site will result in new populations for reintroduction.

The New Mexico Conservancy also protects grasslands and desert bighorn sheep habitat along the Arizona border as well as the state's largest breeding colony of Mexican free-tail bats.

In all, TNC operates 15 preserves in New Mexico and Arizona, protecting more than 60,000 acres. The two state offices have also acquired more than 256,000 acres for federal and state agencies, museums and universities. In New Mexico, the conservancy's public lands specialists have participated in the protection of no less than 36 special management areas on Forest Service and BLM lands.

The national conservancy has also begun work on the Navajo reservation. A TNC sponsored survey of animal and plant life on the reservation turned up one species previously unknown to science, Astragulus humillimus, and several others (a cactus, sedge and saltbush) endemic to the reservation. The conservancy has no preserves on reservation land, but with grants from the Ford Foundation will continue to help the tribe inventory and update its list of rare flora and fauna.

--S.H.

# TNC in the northern Rockies

ast summer, neighbors to the Pine Butte Swamp Preserve on Montana's Rocky Mountain Front accused The Nature Conservancy of building a grizzly bear farm and maintaining a nature sanctuary for the idle rich. Some residents of nearby Choteau, Mont., worried that TNC would take the 20,000-acre preserve off the county tax rolls and complained of Easterners using Arab oil money to lock up

the land. The idea that the West is being developed so fast that it needs private as well as public protection of its exotic wildlife and plantlife may be as hard to accept for some as the realization in the last century that the frontier was no more. Bob Kiesling, director of the Big Sky Conservancy field office, says that in the West TNC is waging a delicate fight against old prejudices, as the Choteau example shows, but is steadily winning converts to its theory of biological diversity.

The Big Sky field office has helped convince 13 Montana and seven Wyoming landowners to grant conservation easements on 34,500 acres. The legally binding easements prevent development in riparian zones, swamps, prairie grasslands and wetlands, big game winter range and migration paths, and open space, as well as habitat for bald eagles, grizzly bears, bighorn sheep, great blue herons and whooping cranes, and a falcon and hawk eyrie.



Young Columbian sharptail grouse chick, an extremely rare bird in the

Pacific Northwest. The Idaho Conservancy recently acquired 12,000

acres that are home to these birds

Kiesling says another goal is to show communities the benefits of preservation. In Choteau, attitudes toward TNC changed after it added the Egg Mountain Dinosaur Digs to the Pine Butte Preserve. Kiesling says people started asking about plans to promote the site's natural and archeological features to lure tourists en route to Glacier National Park and other Montana destina-

Working with state and federal land managers, the Big Sky field office has helped develop special protection plans for nearly 130,000 acres of endangered species habitat on Montana's public lands and on another 1,300 acres in Wyoming.

Some habitat, mostly prairie and wetlands, is considered so critical that the conservancy manages the land itself. The new 390-acre Swan River Oxbow Preserve adjacent to the Swan Lake National Wildlife Refuge in western Montana is in the migration route of the whooping crane and numerous other waterfowl, and is home to the federallyendangered piping plover. The preserve also includes water rights to keep the wetlands wet, and may soon be expanded by further conservation easements and land purchases.

Also in western Montana is the Dancing Prairie Preserve: 160-acres of rare bunch grass prairie containing the last known dancing (mating) grounds of the Columbian sharptailed grouse in Montana and a rare prairie plant, the Spalding's catchfly.

Wyoming has no conservancyowned preserves, but it has some spectacular sites where TNC helps coordinate management. The Jackson Canyon Eagles Preserve in Natrona County contains key bald eagle wintering grounds. The 9,000-acre preserve was put together by conservation easements and cooperative management plans. While the preserve remains in private hands and is closed to the public, the protection agreements are recorded in the title to the land and will stand in perpetuity.

Another unique Wyoming preserve is a fenced 20-acre site containing the last known example of the Laramie false sagebrush -- a species thought to have gone extinct back in 1907. The site stands like an island in the midst of a limestone quarry and was voluntarily protected by the Monolith Cement Co. of Laramie.

Like the other states, the Idaho conservancy has focused on protecting the lifeblood of the West -water. The first Idaho project was the 1975 purchase of 1.5 miles of central Idaho's Silver Creek. It was, historically, one of the most productive streams in Idaho and internationally famous among fly fishing experts. However, the creek fell into dire straits due to aerial spraying of herbicides, drained and channelized tributaries, instream cattle grazing

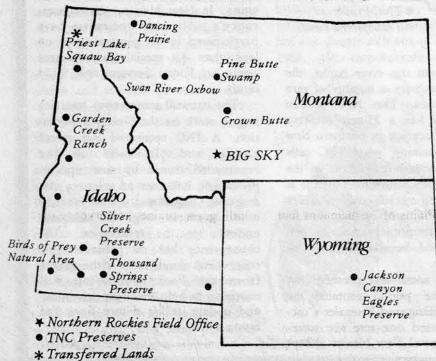
and farming on stream banks. Today, over 14 miles of Silver Creek and its tributaries have been preserved and \$40,000 worth of stream research has led to restoration of almost the entire watershed. Silver Creek draws over 5,000 visitors a year. Fishing enthusiasts among the visitors must abide by TNC's catch and release and barbless hook fly fishing rules.

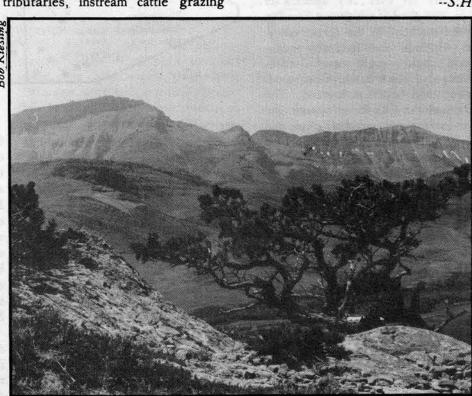
Title to water rights has proven to be as critical to preservation as title to the land. The new Thousand Springs Preserve on Idaho's Snake River near Hagerman includes rights to 1,500 cubic feet of 50 degree crystal clear spring water. The preserve's springs are the only remaining outlets of the 150-mile long Snake River aquifer not used for commercial trout production. Instead, they support a large population of the federally-endangered Shoshone sculpin and three species of endangered snails.

The Idaho Conservancy also maintains a 290-acre preserve on Priest Lake in northern Idaho; two ranches in the BLM's Birds of Prey Natural Area in the Snake River canyon; and a 6,000-acre preserve on the Snake River breaks south of Lewiston. In all, the Idaho field office manages 23,000 acres of preserves, is negotiating for 2,000 more, and has helped gain special management for 4,000 acres of Forest Service and BLM land.

--S.H.

#### THE NORTHERN ROCKIES





TNC's Pine Butte Preserve

TNC...

(Continued from page 10)

information. The full program takes up three IBM PC computers and the plant data alone fills 10,000 megabytes, says operator Paige Smith.

In Wyoming's case, like most others, initial data was compiled from published research. Once second hand sources were exhausted, TNC sent biologists into the field to confirm the information, says Hollis Marriott, the conservancy's Wyoming staff biologist. Together, the Wyoming and Colorado inventories led to the discovery of 12 species previously unknown to science.

The inventory is still far from complete. Marriott says even with 10,000 megabytes and nearly a decade of work, much of Wyoming is still poorly botanized. The data base is continually updated from field reports, both from Marriott's research and from an informal network she maintains among the state's other biologists.

The information is open to the public and to state and federal land managing agencies. The Wyoming data base has been used by the Bureau of Land Management to designate two Areas

TNC Preserves

\* Transferred Lands

Otter

of Critical Environmental Concern near Lander to protect a rare cushion plant community and the endangered Porters sagebrush. The Wyoming field office is now under contract to make recommendations to the Shoshone National Forest on sensitive species in that forest. It is also used by developers and industry to avoid areas where they might encounter environmental opposition because of sensitive species.

The Nature Conservancy uses the Natural Heritage data bases on a "coarse filter/fine filter system." The system works on the theory that 85 to 90 percent of all species in a given state occur as a member of one or more natural communities. By protecting at least one example of each community type, TNC is assured of preserving most of a state's flora and fauna, and often some species that have never been described, says Ben Brown, director of the conservancy's Rocky Mountain region Natural Heritage program consulting office.

That is the coarse filter. The fine

filter is used to identify and save rare species that occur in unique and uncommon habitat. The conservancy is also careful to list thriving species so it can divert its resources elsewhere, says Brown.

Once the scientific staff identifies the priorities, the real estate and fundraising specialists in the state field offices take over. Concentrating on preserving the greatest biological diversity possible, sanctuaries are pieced together in many different

TNC usually starts with the cheapest method, says Jenkins. It contacts owners of lands with endangered species and informs them about biological diversity and habitat management. Often that leads to voluntary conservation easements (a legally-binding promise not to harm the biological integrity of the land, which generally precludes development) and management of the habitat by TNC.

The conservancy encourages people to give land or deed it to TNC in



their wills, and the group's tax lawyers show givers how to deduct it as a charitable contribution.

The conservancy often buys rightof-first-refusal on critical habitat not currently for sale. When desirable property hits the market and the conservancy doesn't have the money, it signs options to buy, protecting the land until the state field office has time to complete the transaction. To act even faster, state offices can borrow against the national office's \$79 million revolving fund and repay it later.

TNC almost never offers full market price for property it has decided to acquire outright, says Morine. Instead, it will negotiate a purchase at below cost and let the owners take the tax write off. Using the below cost-tax break technique on behalf of government agencies (which are required by law to offer fair market value), TNC has purchased land valued at \$12.5 million for an actual cost to the government of \$9.8 million.

In Western states, the conservancy has bought out bankrupt ranchers by paying off back taxes and loans to the Farmers Home Administration. The decline in land prices in the West has enabled TNC to buy more and better lands in the 1980s, Morine says.

(Continued on page 12)

# THE PRAIRIE North Dakota · Cross Ranch Samuel H. Ordway, Jr. Memorial Prairie Crystal Springs South Dakota Preserve • Niobrara Valley Preserve Nebraska \*Konza Prairie Kansas

KONZA Prairie, Kansas

## Preserving prairie remnants

On the Niobrara River in central Nebraska, six major habitat types meet in one valley -- one of very few such places in North America. The Nature Conservancy's 51,000-acre Niobrara Valley Preserve includes three forest ecosystems: ponderosa pine, eastern deciduous and northern boreal forest; and three grassland ecosystems: mixed grass prairie, tall grass prairie and sandhills prairie. The preserve, one of the largest in the nation, is also teeming with wildlife and migratory birds.

On the Great Plains, the most endangered habitat is the original prairie ecosystem, says Lynn Alexander of the conservancy's Great Plains field office in Minneapolis, Minn. In addition to the Niobrara Preserve, the Great Plains office maintains four other large preserves protecting remnants of the once great grass-

North Dakota contains the 6,000acre Cross Ranch along the Missouri River, a mixed grass prairie. The preserve was bought from a family whose ancestors homesteaded the site in the 1800s; the fundraising effort was spearheaded by then Gov. Arthur Link.

North-central South Dakota contains the 8,000-acre mixed and tall grass Ordway Prairie Preserve. The conservancy has re-introduced bison to the preserve and maintains it as a research center. Numerous masters and Ph.D. candidates from universities across the nation research their theses there. At the Crystal Springs Preserve near Brookings, S.D., TNC has preserved 2,000 acres of some of the best tall grass remaining in the Dakotas. The preserve also shelters an extremely rare fish, the northern redbelly dace, as well as the endangered Dakota skipper butterfly.

The 8.600-acre Konza Preserve near Manhattan, Kan., is the fourth tall grass prairie preserve. Konza, maintained by Kansas State University as a field research station, is a mix of the rare big blue grass, little blue grass and wheat grasses. It shelters both the large mammals -antelope, deer and reintroduced bison -- as well as numerous prairie birds and thousands of insects.

--S.H.

### TNC...

(Continued from page 11)

The third component of TNC's mission is preserving the lands it saves. The conservancy's largest operating expense is stewardship and maintenance. As a result, TNC seldom buys a preserve without also simultaneously raising the money to fund an endowment to cover stewardship costs. Whenever possible, TNC preserves are turned over to a federal, state or local institution that can better afford to manage the land and will do so carefully, says Morine.

Stewardship of the preserves it retains -- nearly 1 million acres -- is a thorny question. Preserves often need reclamation, streambank stabilization and wildlife studies. They must also be managed carefully so that visitors don't interfere with the endangered species. Conservancy studies show the group should be spending over \$100 million a year to properly care for endangered species on its preserves. But the current budget is \$10 million and is only slowly increasing, Morine says.

Conservancy preserves are open to the public, except for sites that are too fragile to withstand the

traffic. However, TNC doesn't advertise for visitors. Often the only way to locate a preserve is to call a state field office and ask for directions, or to join the conservancy and follow maps in its newsletters.

The conservancy also allows, where it doesn't interfere with its mission, traditional uses such as hunting and fishing, gathering of herbs and livestock grazing. In cases where it doesn't own subsurface mineral rights, or where the preserve can earn money without disturbing endangered species, TNC allows oil and gas drilling.

s TNC's stewardship difficulties show, success brings new problems. What was a simple land purchasing operation that worked best quietly and unobserved, has become a major broker of critical habitat for endangered species. But those species and preserves are more often islands of temporary security in the midst of unbridled development and economic

Ultimately, the need to protect its huge investment in endangered species habitat may propel TNC out of its protected niche and into the

Canada geese battles over public land management and development on private lands. Going public will be tricky for the

conservancy, which has done so well in the past by staying out of the spotlight.

The conservancy has sidestepped the issue for the moment by broadening its activities while still maintaining a low profile. It has done that by again refining its science. Using information from the Natural Heritage data base, TNC scientists have begun research into how large preserves should be, and how size and activities outside preserves affect species survival. The Nature Conservancy's president, Frank Boren, says, "We're thinking bigger. We're

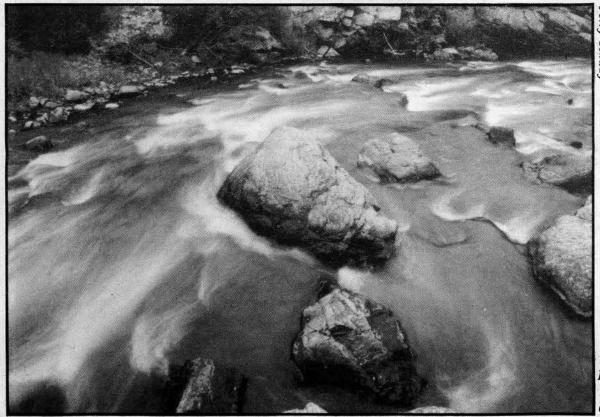
thinking in terms of ecosystems." To build what Boren calls "megasites," TNC is going back to buffer

preserves with new lands. New sanctuaries are designed to include the full biological boundaries of endangered species, often including buffer zones. Other conservancy projects are designed as additions to national wildlife refuges and other public preserves, to reverse species decline there.

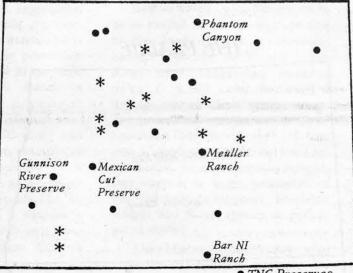
TNC has also begun to actively involve local communities in protection of preserves, encouraging them to pass zoning laws that buffer preserves from development.

Boren says, "Once a community

(Continued on page 13)



#### COLORADO



• TNC Preserves \*Transferred Lands

North Fork of the Poudre River through Phantom Canyon, Colorado

## In Colorado, TNC goes after the water

n its race to protect wild lands and endangered species from development, The Colorado Nature Conservancy may be the underdog in a marathon. Colorado is one of the most intensely developed states in the West: According to the state Division of Wildlife it loses 175,000 acres of wild lands a year, and that figure is growing.

In 1985 the Colorado field office, then 10 years old, launched a multi-million-dollar campaign to save 20 species on the verge of extinction. Based on its computer inventory, TNC targeted native prairies and riparian zones, foothills forests and grasslands, mountain parklands, high alpine lakes and desert rivers, canyons and plateaus. Species in danger within those ecosystems ranged from the endangered greater prairie chicken to the rapidly disappearing razorback sucker fish.

Three years later, TNC is still running neck and neck with developers, but with some major

victories along the way. The jewel in the crown is Phantom Canyon, a 16,000-acre rim-to-rim preserve stradling the North Fork of the Cache La Poudre River. The pristine canyon, only 11/2 hours from Denver, is "extremely rare on the Front Range," says Colorado Conservancy Director Sydney Macy. It is home to black bear, mountain lion, golden eagles, deer, bobcat, beaver and fox, as well as numerous plants including a rare member of the parsley family Aletes humilis, that exists only in three other places on the globe.

Other preserves in the midst of Colorado's developed areas are Greenland Ranch between Denver and Colorado Springs near Interstate 25 and the 12,000-acre Mueller Ranch on the side of Pikes Peak. Just south of Walsenburg is the 27,000-acre Bar NI Ranch, which protects lands ranging from 8,000 to 13,000 feet in elevation. The conservancy has also won conservation easements from private landowners

throughout the state to protect rare plants, and is negotiating for 5,000 acres of mixed grass prairie on the eastern plains in Weld County.

High in the Rockies is the Mexican Cut Preserve at Gothic Valley, a series of high-altitude ponds managed by the Rocky Mountain Biological Laboratory, and 90 acres of high alpine tundra near Caribou managed by the University of Colorado's Institute of Arctic and Alpine Research.

The Colorado field office has now turned its focus to the West Slope's rivers and desert riparian zones. The group scored a major coup just last month when Chevron Corp. donated to TNC rights to 300 cubic feet per second of water flowing through the Black Canyon of the Gunnison River. Those rights, valued at \$7.2 million, took nearly four years to acquire and may break a political deadlock over wild and scenic designation to the Gunnison (HCN. 4/11/88). It is the first large-scale

use of water rights as a conservation tool in the West. It will guarantee minimum instream flows to help protect the federally endangered river otter and a gold medal trout fishery.

The Gunnison water rights are part of TNC's new Upper Colorado River Basin project. According to TNC water lawyer Robert Wigington, the goal is to acquire water for instream flows in the Gunnison, Yampa and Colorado rivers that will protect critical riparian zones and a whole slew of rare fish found only in the region's muddy, slow moving desert rivers. Those fish, which lose habitat with every dam and diversion project, include the Colorado squawfish, the humpback chub, the bonytail chub, and the razorback sucker. Wigington says negotiations are underway to purchase water rights on the Yampa, which will be added to 315 riparian acres in the conservancy's Yampa River Preserve.

Looking ahead, the Colorado Conservancy hopes to establish preserves or conservation easements on most rivers in the state. Kicking off a new \$3 million, three-year campaign, Macy says, "Where you find water you find biological diversity."



## TNC...

(Continued from page 12)

is aware they have something special -- in this case a biological preserve -- they help us protect it." More and more protection is occurring in the

private sector, adding to the overall well-being of parks and preserves. Ed Lewis, head of the Greater Yellowstone Coalition and ex-chair of the Arizona Conservancy, says TNC's projects in the Yellowstone area have addressed critical problems on private land, such as protecting riparian zones, winter range and calving grounds that Park Service officials are powerless to control.

Where necessary, TNC steps in with hands-on management such as controlled burns, stream reclamation and reintroduction of species, says Jenkins. In the future, he adds, TNC will spend much more of its time and money on stewardship and ecosystem restoration.

The conservancy has even begun to take tentative steps into the public limelight. TNC staffers are submitting comments to Forest Service and Bureau of Land Management officials for protection of rare and endangered species on federal land. That sometimes results in the designation of Research Natural Areas and Areas of Critical Environmental Concern.

Public education is also becoming more important to the group. On its own preserves, the conservancy has begun nature tours and educational programs. Boren says hardly a weekend goes by without a TNC field trip outside a major metropolitan area. The conservancy is also a sponsor of and a consultant to the Public Broadcasting Service's Nature series. Morine says in the future The Nature Conservancy will be even more outspoken about its mission. "If we can't make people understand that biological diversity is important, then we're not doing our job."

But until it's gone, the purchase

of pristine lands will remain the main focus of the conservancy and perhaps its best answer to the pressures on its existing preserves. The Nature Conservancy set aside 3 million acres in the last 38 years, and Boren says the conservancy plans to double that in the next 60 months.

"The two enemies we have are time and acreage," he says. "We're saving 1,000 acres a day, but 5,000 to 10,000 acres that should be preserved are being developed. That's our race."

Steve Hinchman is a staff reporter for *High Country News* in Paonia, Colorado. His story was paid for by the High Country News Research Fund.

## Colonizing the Great Basin

Porty-eight species in Nevada and 31 in Utah qualify for The Nature Conservancy's "most endangered species" list—they occur at five or fewer places on earth. Over 150 other species in both states are ranked as "sensitive" or "threatened."

That makes Nevada and Utah the fourth and fifth most biologically diverse states in the nation, by TNC records. Unfortunately, the two were among the last states to get a permanent Nature Conservancy field office.

Although the recently opened Great Basin field office in Salt Lake City was a long time in coming, staffers in the conservancy's Western regional headquarters in San Francisco have been laying the groundwork for years. That has included lining up corporate sponsors, building a local membership of 1,750, and sponsoring legislation to get laws for conservation easements on the books in both states. A computer inventory of rare species was set up last year in Nevada and negotiations are currently under way with the Utah Department of Natural Resources to start a cooperative program there.

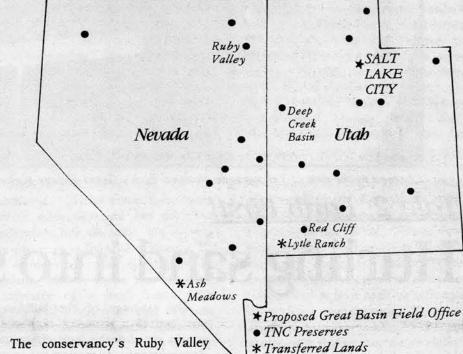
The Great Basin Conservancy and western regional office have also managed to protect more than 23,000 acres, mostly marshes and oases in the region's deserts. The 13,000-acre Ash Meadows oasis near Nevada's

Death Valley is the largest oasis in the Mojave Desert. It includes 12 spring systems and 20 endemic species. One of those, the endangered Ash Meadows pupfish, is a 10,000-year-old relic of the Pleistocene. The conservancy bought the oasis in 1984 for \$5.5 million, stealing it out from under a Las Vegas developer who was planning to turn it into "the next Palm Springs," complete with 20,000 homesites, golf courses, casinos and spas. It is now a national wildlife refuge.

Another Mojave oasis, the 462-Lytle Ranch near St. George, Utah, was bought by the conservancy in 1984 and turned over to Brigham Young University for use as an outdoor laboratory in 1986.

The group soon hopes to add 3,200 acres of private land to the Bureau of Land Management's proposed Deep Greek Mountains wilderness area on the Utah-Nevada border. The Deep Creek range soars high above the surrounding desert and, because of its biological isolation, has developed a distinct ecology, says Dave Livermore, head of the Great Basin office. The site supports five sensitive wildflowers, an endemic species of blue grouse and is a critical addition to a planned bighorn sheep reintroduction project, he adds.

#### THE GREAT BASIN



The conservancy's Ruby Valley Preserve on Franklin Lake near Elko, Nev., is one of the most productive wetlands in the Great Basin, harboring sandhill cranes, white faced ibis, tundra swans, avocets, stilts, redhead ducks, Canadian geese and other migratory species. TNC's initial 6,000-acre preserve in Ruby Valley was expanded by 3,500-acres this year with the joint purchase of a bankrupt ranch with the American Farmland Trust. The ranch has been leased back to its original owners with an option to buy, provided they abide by conservation easements to protect the wetlands and forego the use of chemical fertilizers and pesticides.

The Great Basin field office has also protected 1,192 acres of marshlands along the Great Salt Lake and a 700-acre riparian zone along the Wild Strawberry River in the Wasatch Mountains.

Other projects on the Great Basin Conservancy's drawing boards are protection of Red Cliff, a 660-acre site north of St. George, Utah, that supports a peregrine falcon eyrie and the desert tortoise; and a greenbelt expansion of the Red Rocks Recreation Lands west of Las Vegas.

--S.H.

#### ACCESS

#### HELP

JOB ANNOUNCEMENT: Executive Director for non-profit public policy institute. Responsibilities include organizational planning, fundraising and program oversight. Requires strong background in public policy issues, skill and experience in all aspects of non-profit management and direction, fundraising, written and verbal communication, longrange planning, and board relations. Ability to employ team-management approach. Familiarity with Northern Rockies strongly preferred. Location: Missoula, Montana. Salary range \$28,000 - \$33,000. For complete job description, write to Northern Lights Institute, Box 8084, Missoula, MT, 59807-8084. No phone calls. Application deadline May 16, 1988. (1x8B)

#### NEAT STUFF

WESTERN WATER MADE SIMPLE, by the editors of High Country News; \$15.95 plus \$2.75 shipping (\$1.25 each additional book) from Island Press, Box 7, Covelo, CA 95428; 800/628-2828, ext. BOOKS -- Let Creekside Books, P.O. Box 1234, Buena Vista, Colo. 81211, be your personal bookseller. We carry books for every age and interest, including a large selection of books on Colorado history and nature. Glad to order any book in print for you or to search out-of-print books. Visit, write or call 719/395-6416. Sorry -- no catalog. (2x8p)

#### Design & Devices for High Quality, Low Impact Living

- Home energy systems
- Educational workshops
- Kalwall solar components
- Clivus Multrum
   Greenhouse designs
- Helping you solve your technical

problems

NATURAL RESOURCE COMPANY Box 91 • Victor, ID 83455 (208) 787-2495 HCN T-SHIRTS make great gifts! Royal blue, kelly green, fuschia, burgundy or turquoise; small, medium, large, extra large. \$10. 100 percent cotton. Send your checks to HCN t-shirts, Box 1090, Paonia, CO 81428.

WESTERN ENVIRONMENTAL JOB-LETTER is a monthly publication listing job openings throughout Western North America, including Canada. For a back issue, send a 25 cent stamp; for subscription information write: WEJ, P.O. Box 800H, LaPorte, CO 80535.

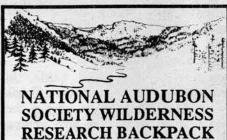
SMITH'S NATURAL NEWS: Health and nature for people, plants and pets. Free sample copy: Box 9038, Denver, CO 80209-0038. (4x5p)

FOR RENT -- 2 bedroom, pre-1908 house in Buena Vista, Colorado. Fire-place, gas heat, carpeting. Bordered by creek, horse corral, train tracks and bookstore. Willing to exchange part of rent for work. Call 719-395-6416 afternoons. (1x8p)

noons. (1x8p)

FOR SALE IN UTAH CANYON COUNTRY: 12-acre mini-ranch with Green River frontage. Two bedroom house nestled in large cottonwood grove. Owner financing. 801/564-3369. (4x7p)

CONSERVATION-MINDED BUYERS WANTED for Large Mountain Valley Parcels in Prime Four-Season Recreation Area. Tax Incentives Available. Contact Mary Jensen, Broker, ALPINE VIEW REALTY, Route 2, Box 6, Twisp, Washington 98856 (509/997-6562). (6x6p)



Join Audubon biologists in scenic northwest Wyoming (Wind River or Absaroka Mtns.). Learn research skills - bird, mammal, plant and insect survey. Contribute to scientific knowledge and enjoy this magnificent wild country.

4 12-day trips, June - August.

Contact: Registrar, Nat. Audubon Society 613 Dept. B Riversville Rd. Greenwich, Ct. 06831 203-869-2017



Chained to the door of Yellowstone National Park's Grant Village visitor center, Dave Foreman greets the officer who arrested him

## Tale 2: Earth First!

# Hurling sand into society's gears

\_by Jim Robbins

ate last fall nine bulldozers were widening the Burr Trail, a narrow dirt road that winds through the twisted outcrops, house-sized boulders and distant horizons of some of southcentral Utah's most beautiful red-rock desert country.

Garfield County officials were hoping a paved Burr Trail would attract more tourists, while conservationists were saying that a paved road would invite off-road-vehicles and mining companies to invade what is now wilderness.

After a long legal battle, in November 1987, government officials won the right to begin paving the road. They wasted no time getting started.

A day after the widening began someone crept silently among the boulders and sagebrush at the construction site and poured a silicone grinding compound into the gas tanks of four of nine silent Caterpillars. The next morning when workers started the bulldozers the gritty material ruined the engines; repairing them cost \$87,000.

The sabotage of the bulldozers was one of a growing number of attacks aimed at the tools of resource development, a movement some environmentalists call a campaign of resistance. Chief among the organizations advocating such tactics is Earth First!, a group of environmental vigilantes that views itself as a warrior society arrayed against the destruction of the planet. While Garfield County authorities don't know whether the vandalism in Utah's Garfield County was done by a bona fide Earth First! member, it certainly was inspired by their use of a widely-publicized tactic called "monkey-wrenching".

"It's not terrorism, it's not vandalism," says Earth First! cofounder and war chief Dave Foreman. "It's something very deliberate, very thoughtful, that is undertaken as a last resort with full
appreciation of the consequences.

It's non-violent, because it's directed toward inanimate machines. And monkeywrenching has to be looked at as being fun. We always believe in having fun. Yet it's very serious. It's a form of worship toward the earth.

It's really a very spiritual thing to go out and do."

There are many who fail to find reverence in the acts of Earth First! "They're a bunch of anti-American rebels," says Del Lefevre, spitting out the words as if they had a bitter taste. A rancher and former Garfield County commissioner, Lefevere staunchly backs a paved Burr Trail.

"They've got the courts and the money," he says. "They don't need to do this kind of thing. We're the real environmentalists. They could care less about this country."

Earth First! was born in the spring of 1980. Between tequila and beers and camping beneath the stars in the desert near a tiny Mexican border town, four men dedicated to the preservation of biological diversity hatched the notion of a group that was part Sierra Club, part Hell's Angels, part Yippie.

Dave Foreman, Howie Wolke, Bart Koehler and Mike Roselle, former mainstream environmentalists and anti-war protestors, believed that in spite of efforts by well-intentioned but "wimpy" conservation groups -- such as the Audubon Society and the Sierra Club -- wildlands, wildlife and a healthy environment were being destroyed in a pell-mell rush called "progress." It was a time for a new approach, time to push the environmental movement to its limits -- and test new ones.

Much of the inspiration for Earth First! came from The Monkey Wrench Gang, a funny, highly irreverent 1976 novel about a small, motley band of eco-saboteurs who travel around the southwest sawing down billboards, blowing up the Glen Canyon Dam in northern Arizona, evading the forces of law and order and having a rousing good time. The author is Edward "Cactus Ed" Abbey, a self-described misanthrope who is a godfather of sorts to the Earth First! movement.

"What's more American," says one of Abbey's protagonists, "than violence?"

Earth First! has found its wings, and has become a movement. It has resurrected the radical wing of conservationism, which was born in the rebellious 1960s and 1970s and then died out as the environmental movement institutionalized. Earth First!'s membership -- estimated at between 10,000 and 15,000 -- includes everyone from professionals to hippies to students to blue collar workers.

Integral to its strategy is direct action -- chainsawing and burning billboards, decommissioning bulldozers and pulling up survey stakes. Ecodefense: A Field Guide to Monkeywrenching is the gospel according to Foreman, an exhaustive guide to ecosabotage. Consequently the view from behind bars is familar to some Earth First!ers.

First!ers. Guerrilla theatre is another favorite tactic, and one the press seems to love. They've protested development on important grizzly bear habitat in Yellowstone by dressing as bears, blocking traffic, and handing out literature to gawking tourists. In the spring of 1981, they rolled black plastic down the front of the Glen Canyon Dam to simulate a giant crack. (The dam flooded one of the West's most beautiful slickrock canyons with huge Lake Powell, which Earth First! calls Lake Foul.) Later, on the same lake, they sailed a houseboat rented from the much-hated Del Webb Inc. -- a large company that develops tourist attractions in the southwest -- past a group of dignitaries celebrating the birthday of Lake Powell. While officials conducted their ceremony, Earth First!ers conducted theirs, yelling obscenities, waving signs and carrying a casket ashore to symbolize the death of the river. With other groups in September of 1986, they hung a huge banner on the World Bank Building in Washington, D.C., to greet bankers arriving for a conference. "World Bank Destroys Tropical Rainforest," the banner

Running through Earth First! is a strong sense of ribald humor. They raise funds, for example, by selling bumperstickers with such slogans as "Neanderthal and Proud" and teeshirts that read "Fuck Bechtel" (a giant global construction company). They sell posters that say "Be Careful with Chainsaws" on top and show Smokey the Bear with a decapitated head. Underneath the caption reads, "Only you can prevent clearcuts."

He worked for the Wilderness Society for 15 years, during which time, he says, he watched as environmentalists created a bureaucracy of their own, leaving behind the counterculture spirit, forgetting the grass roots back home and becoming part of the Washington scene, with fat salaries, plush offices and cocktails with congressmen. The fire in the belly has been dimmed considerably by this cozy relationship with the power structure, Foreman says.

"While we were getting more access, more supposed influence, we were actually getting less," Foreman says. "We were being co-opted. We were developing a vested interest in the system, and had given up the ability to do a fundamental critique of the system." Part of EF!'s role, according to Foreman, is to be so radical the rest of the conservation movement looks like a product of the Reagan years.

Foreman's a tall man, with brown hair, a receding hairline and a wiry beard shot through with veins of grey. A former professional farrier, his hands are not unaccustomed to heavy work. He speaks slowly in a deep, measured way, a drawl from his adopted New Mexico, and his conversation is spiced liberally with expletives and irreverent humor. Foreman, until the last presidential election a registered Republican, proudly lays claim to the redneck label.

In the fall of 1981, after the seminal trip to the Mexican desert and the simulation of the giant crack down the face of the Glen Canyon Dam, Foreman, Roselle and Koehler traveled around the country in a VW microbus, sleeping on floors and couches, speaking and singing at colleges and wherever they could find a crowd, and carrying the Earth First! message to the masses. They communicated with the faithful by sending out a Xeroxed newsletter. Today, Earth First! has become a much larger anti-establishment novement than any of its four founders ever imagined.

arth First! is anti-hierarchy and has no national leader or national office. Foreman calls it a tribal structure. A leader emerges locally on a certain issue because his or her ideas are respected. There are no elections. No titles. No dues. No national group.

The group has 72 chapters throughout 24 states and chapters as well in a number of foreign countries, including Mexico, Australia, Canada and England. Each local chapter is autonomous, raises its own money, and carries out its own acts of sabotage and civil disobedience. If, that is, it participates in such things. Earth First!ers are not unanimous in their support of monkeywrenching, but everyone has agreed not to condemn such acts.

There is no sure way to measure membership. The closest estimate of the number of Earth First!ers is the roughly 12,000 people who get the newspaper. "There's all these little currents within the river," Foreman says. "They're all connected but they're all autonomous."

Working out of Foreman's small, single story home in an old subdivision outside of Tucson, Foreman and a staff of four put out the Earth First! newspaper, called Earth First! The Radical Environmental Journal. Environmental posters and cartoons cover most of the wall; books, pamphlets and tee-shirts are stacked on shelves in an adjoining room.

The newspaper is an eight-timesa year, 30-to-40-page tabloid jammed with articles about civil disobedience Earth First!ers around the world have participated in, about direct action such as trashing dozers or painting symbolic cracks on dams, about global environmental problems, an opinion column titled "View from the Outhouse" and a Letter-tothe-Editor column that has a picture of a construction worker starting a letter with the salutation "Dear Shitfor-brains."

Headlines rival the National Enquirer, screaming such things as "Murder on Key Largo," which refers to destruction of natural diversity, and "Earth First! Confronts Virginia Tree Nazis." There is also a "Dear Ned Ludd" feature which discusses sabotage of the resource industries by raising such issues as whether ceramic spikes are better than metal for tree spiking, because they can't be detected with metal detectors. (Earth First! patron saint Ned Ludd was a mythical 19th century British weaver. When the industrial revolution began replacing weavers with machinery, the Luddites rioted and smashed equipment.)

Foreman runs Ned Ludd books, the publishing company that produced his Ecodefense: A Field Guide to Monkeywrenching. Sections of the 308-page book are titled variously "Burning Machinery," "Flattening Tires," "Billboard Burning," "Fence Cutting," and finally, "If You Are Arrested." It has sold 9,000 copies. Foreman says he destroys all orders for the book after they're sent, in case the FBI is going through his trash.

One of the missions of the Earth First! newspaper is to provide a forum for the philosophy of the movement -- something called "deep ecology." Earth First!ers call them-selves "biocentrists"; they believe that the biosphere, or all life on the planet, has an intrinsic right to existence. "In light of the fact that there are so few grizzly bears and so many people, we think grizzly bears are more important than people," Wolke says. Other forms of life should not continue to be measured according to their worth to humans, for that mentality has taken us to where we are today.

The deep ecology approach says that the planet is a spiritual aquifer for humans -- a cool, clear drink for a society dying of thirst. Some call the planet "Gaia" after the Greek goddess of the earth, and believe it has a consciousness. Earth First!ers see themselves engaged in a holy war.

Earth First!'s vision of an idyllic planet includes drastic reduction of the number of people on the earth through birth control, setting aside 50 percent of the earth as off-limits to resource extraction, dismantling of places like Los Angeles, New York and Denver, and eventual creation of small, sustainable communities designed according to the environment

in which they're located. But Foreman warns, "You can't get there from here. The system has to collapse first."

In the short term, to provide immediate protection for the gene pool that remains and a place for the genes to live, Earth First! advocates protection for the wilderness that remains through legislation or lug wrenches -- whatever does the job.

A number of socialists joined Earth First!, Foreman says, believing that they shared a common vision for a more just society with Foreman, Wolke and the others. Differences over such things as immigration philosophy (Foreman wants Latin American refugees seeking entry into the U.S. to stay home and force a revolution), however, resulted in a bitter split. Leftists have left and angrily denounced Earth First!, Edward Abbey and Foreman as "eco-facists".

Some of the harshest criticism of Earth First! comes from mainstream environmental groups. Michael McCloskey, chairman of the Sierra Club and a 26-year veteran of the environmental fray, says Earth First! has no monopoly on commitment.

"We are the original grass roots organization. We have the highest number of grass roots activists of anyone," McCloskey says. As for backbone, "We're pushing for every bit of wilderness we can get. The movement has no limit. It's moving on whatever is feasible to protect."

Conservationist Ed Madej of Helena, Mont., is on the executive committee of a local Sierra Club group and a board member and past president of the Montana Wilderness Association. Earth First! has sharply criticized MWA, calling them the Montana Wimps Association, and launched an unsuccessful takeover attempt by trying to elect EF! candidates to the board.

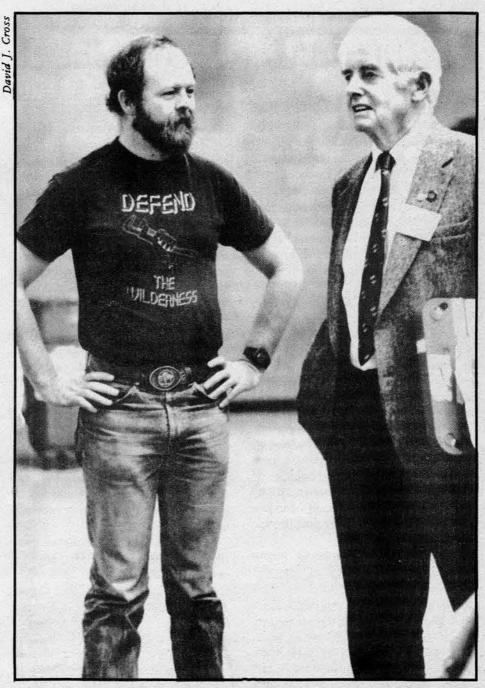
"We're beat on because we didn't endorse 6 million acres (in Montana), but we're working to get 3 million. Philosophy is fine, but you've got to make progress on the ground," Madej says. "Demonstrations and monkeywrenching don't save it."

Earth First!'s ecotage, especially tree-spiking, has come under the harshest criticism. A logger in a northern California sawmill was seriously injured when the saw he was working with hit a spiked log. He barely survived. The spiking, as it turns out, was not done by Earth First! But it's the kind of thing opponents are concerned about.

Peter Steinhart, a contributing editor to Audubon Magazine, wrote an essay condemning Earth First!'s brand of environmental rebellion. "Ecotage is becoming conservation's equivalent of Ollie North, the cowboy colonel who, in the name of patriotism, decided the laws were wrong," Steinhart wrote. "One form of lawlessness invites the other."

The Forest Service downplays Earth First! ecotage. "We don't consider them a threat," says Jay Humphries, public affairs specialist for the U.S. Forest Service in Washington, D.C. The agency, under the Department of Agriculture, manages 191 million acres of forest land, primarily in the West. "They have been virtually ineffective at stopping anything. There are many Forest Service employees who consider Earth First! to be a positive influence on resource management. They call attention to forest management and then people realize that we're right."

(Continued on page 16)



Dave Foreman and David Brower at a California wilderness conference, 1985

## Earth First!...

(Continued from page 15)

Foreman believes that monkeywrenching has caught on -- particularly in the West -- but is kept under wraps by the Forest Service. "They know the more it gets out the more it'll encourage people. How do you guard 190 million acres of national forest when the Forest Service people are fat and out-of-shape and have to travel by pick-up, and monkeywrenchers can cover 30 miles a day in rough country? It's classic guerrilla warfare. We are choosing the terrain. We are choosing the terms of battle. We are making up our own rules."

Jay Humphries disagrees. "It's really increased in the last four or five years," he says. "But there are still less than 100 incidents a year. Most of the illegal activity and threats to Forest Service land are related to marijuana growing, not environmental ecotage."

Does Dave Foreman still worship the earth with acts of sabotage? "It's hard for me to do anymore," he says. "For instance there was a big ugly golf course going in, in a relatively pristine desert right near where I live. I'd have liked to take a few bulldozers out, but I couldn't. I was the first person they'd look at."

Foreman said he is careful and harbors no dreams of being a martyr. "I want to be around to watch industrial society collapse," he says.

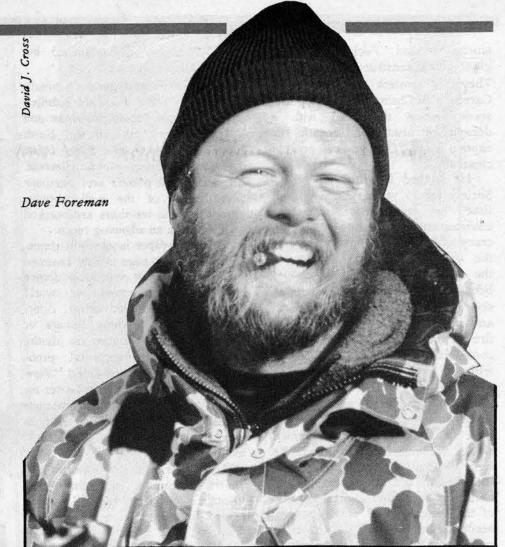
While it may seem inevitable that a herd of livid hard hats will someday go beyond the limits of the law themselves, grabbing Foreman or Wolke and pounding them senseless, Foreman believes it will never happen. "Because they're scared of us," he says defiantly. "They respect us. We aren't wimpy environmentalists that kowtow and fit the image of the standard urban nerd. We're tough and we admit it."

Not all of their tactics are outside of the law. They've organized letter-writing campaigns and circulated petitions on behalf of biota everywhere. The most ambitious undertaking is the recently formed Biodiversity Project to push the Endangered Species Act to its limit. Jasper Carlton, an activist who almost single-handedly forced the Department of Interior to list an endangered caribou in Idaho, is coordinator.

The ultimate goal, Carlton says, is to have three ecosystems in the United States, Yellowstone National Park and environs, Glacier National Park and the surrounding wildland, and Everglades National Park, all managed from a biocentric rather than anthropocentric point of view. That is, management must favor wildlife and flora: not economic gain.

With a sophisticated computer program and a team of dedicated biologists around the country, along with numerous Earth First! activists, the project will track imperiled species throughout the country, from the ridge-nosed rattlesnake, to Goodings onion, to the grizzly bear. The goal is not to use the Endangered Species Act to prevent development, says Carlton. Instead, he hopes for a long-term institutional change by forcing management agencies to look not at a single species and its little piece of habitat, but at whole ecosystems and many interrelated species.

Carlton says he is currently appealing through the administrative channels of the Forest Service, Bureau of Land Management and Army Corps of Engineers and has not filed suit on behalf of any species yet. If the administrative appeals aren't settled satisfactorily, he says,



he has the ability to begin the lawsuit process on as many as 200 species in the next six months.

In spite of such cerebral approaches to environmental warfare, Earth First! will always be better known for its confrontational, bellicose approach to conservation. It is, as Edward Abbey says, a visceral response that many Americans can relate to. And to many it simply feels good to strike back at the system with a monkeywrench and see the change -- a bulldozer leaking its vital fluids, for example, -- rather than sending a stream of paper into a sea of bureaucracy.

Meanwhile, Dave Foreman doesn't hesitate when he is asked, should he be given several weeks to live, what he would undertake as his last great monkeywrench. He leans back and laughs, and then says smugly, "I would hijack a semitruck, fill it full of nitrogen fertilizer and soak it down with diesel fuel and drive it on to Glen Canyon dam."

Jim Robbins is a freelance writer in Helena, Montana.

## Earth First! tactics combine the legal and the extra-legal

any of Earth First!'s group have paid the price of arrest and conviction for their direct actions. Foreman has been arrested four times, convicted three. What do acts of civil disobedience accomplish? Foreman says it calls attention to issues by bringing the media -- especially television -- to cover environmental stories that otherwise wouldn't make the broadcast news. Such tactics also buy time.

Mike Roselle, of California's Bay Area, Earth First!'s coordinator of direct action, spent a year as director of civil disobedience for Greenpeace. He raises money for direct actions around the country and offers practical advice on how to go about monkeywrenching. Last February Roselle was in the Pennington County jail in Rapid City, S.D., doing 30 days for climbing over George Washington's face and hanging a 160-by-80-foot nylon banner from Mount Rushmore National Monument that read, "We the people say no to acid rain."

ne of Roselle's most dramatic stories concerns the Medicine Tree. Protection of ancient trees is an Earth First! priority. Besides being irreplaceable, oldgrowth Douglas fir and redwood stands harbor unique ecosystems and wildlife species. In the fall of 1983, some one hundred residents of Garberville, a small town in northern California, wanted to stop the logging of an ancient grove of redwoods on land owned by Georgia Pacific. The site is considered sacred by the Sinkyone Indians, and was adjacent to a state park. One of the trees, estimated to be 3,000 years old, is known as the Medicine Tree. From the grove, said Roselle, you can hear the ocean surf pounding and sea lions barking.

"Nobody in their right mind, except a hardened logger, could cut those trees down," Roselle says. "How could anyone look at those trees and say "oh boy, hot tub material."

A local environmental group tried to get a temporary restraining order to stop the logging, based on a California law that governs forestry practices on private land, but was told by the judge that it could not be granted until the logging actually began.

Roselle, a veteran of the anti-war movement, held a week long training session in direct action techniques for locals. Meanwhile an illegal, 24-hour camp was set up on Georgia Pacific land in case the lumber company quietly started logging. When loggers began revving up their chainsaws environmentalists on watch got the word back to Garberville. The owner of a movie theatre

on Main Street put up a message on the marquee: "GP is cutting trees!"

Loggers felled a few trees during the first day. But that night a hundred or so people, Roselle said, caravaned to the grove. They camped at an archaeological site near the Medicine Tree -- a tree so large it took seven people holding hands to circle it. When the loggers showed up for work in the morning they were surprised by a determined band of "tree huggers." With TV cameras watching as protestors blocked their path and circled the Medicine Tree, the loggers didn't go to work. Meanwhile lawyers for the local environmental group frantically tried to get a restraining order.

The next day, the timber company was prepared. Numerous sheriff's deputies and company security showed up with two buses. And as the protestors, wearing bright colors and balloons and blowing airhorns so they would be seen, dashed among the cathedral of green to slow the loggers down, they were hauled off to jail. As the police would take away one group of protestors a handful of others would rush in. The logging was slowed, and finally, the injunction same through

But venue on the case was changed to another jurisdiction and in the meantime Georgia Pacific resumed logging. As the cutting resumed one morning, loggers were determined to cut the trees --

protestors or not. Trees crashed as protestors darted among the giants. One woman suffered a fractured collarbone when a falling redwood hit another smaller tree and pinned her to the ground. People were arrested. Roselle and another protestor moved to block the loggers from the Medicine Tree. Roselle was taken away by the authorities as the other protestor tried to stand between a chainsaw and the tree. An angry logger swung at him with an axe -and missed. Chainsaws began tearing deeply into the tree, sawdust and chips spitting showering the ground.

Then, in a modern day imitation of the cavalry and their welcome bugle, the sheriff arrived with a bullhorn. The restraining order had come through. "Anyone who continues cutting this tree will be arrested," he shouted.

Protestors replaced the pieces of the Medicine Tree with an asphalt salve used for sawn limbs and the Indians performed a healing ceremony for the tree. The 7,100-acre grove was purchased in 1987 by the California Trust for Public Lands for addition to the Sinkyone Wilderness State Park. The Medicine Tree, says Roselle, is still standing.