

BOXHOLDER

High Country

news

April 30, 1984

Vol. 16 No. 8

The Paper for People who Care about the West

\$1.00

Can the West swim upstream to jobs and happiness?



An exploration of economic development

The West has been obsessed by something it calls "economic development" since the great resource bust of 1981-1982 turned attention from mining, drilling and cutting to tourism, manufacturing, and agriculture.

As in other *High Country News* special issues, this one on economic development consists of on-the-ground stories followed by above the ground generalizations. The on-the-ground reportage is provided by Sarah Locke on the San Luis Valley and by Sandy Tolan on Phoenix and the Central Arizona Project.

If there's a good guy - bad guy cast to the stories, then it is Locke's story which wears the White Hat. The San Luis Valley is one of the poorest

regions in the West, but it is also an area which has pioneered in solar energy and now has more solar installations per capita than any other place in America. But that grassroots initiative hasn't led to the creation of a mini-industry, as some hoped. Instead, solar is another way in which the isolated, rural valley gets along.

By comparison, everything Arizona touches seems to turn to gold, including floodplains in the heart of Phoenix. Sandy Tolan's article shows how the multibillion dollar Central Arizona Project, which will divert water from the Colorado River to Phoenix and Tucson, will be used to promote a huge real estate development along the shores of the Salt River. It is an example of federally subsidized economic development,

and shows why water projects determine at least the near-term fate of the West.

Two recent issues of the *Atlantic* magazine helped put economic development into perspective. Those issues carried lengthy articles by Jane Jacobs, the author of numerous works on cities. This time, she dealt with the forces that cause national and regional economies to rise and fall. She sheds disturbing light on both the San Luis Valley and the present prosperity of the Sunbelt. As the essay reviewing her articles shows, Ms. Jacobs is not an optimist -- even about Sunbelt Buckle Phoenix.

Illustrator David Wilson of Durango, Colorado, was good enough to provide a visual overview (see above) for the economic development issue.

He put in an all-nighter to produce one view of economic development in the West. It compares Westerners to South Sea Island cargo cults -- tribes whose contact with western civilization came in the form of crashed airplanes filled with unimagined treasures.

Finally, the issue contains several shorter articles which bear on economic development -- the decline of hospital occupancy in the region in the wake of the resource bust, a clash between freedom of discussion and economic development in the town of Montrose, Colorado, and the continuing effort to build a dam on the Middle Fork of the Powder River in Wyoming despite strong economic signals against it.

WESTERN ROUNDUP

Montana mill dispute ends in compromise

Champion International in Montana has gained state approval to discharge waste from its Frenchtown pulp and paperboard mill directly into the Clark Fork River -- but not without concessions to persistent local conservationists.

The Montana Water Quality Bureau issued Champion a two-year permit with stipulations that the river must be carefully monitored. Champion has also agreed to contribute \$100,000 to gather baseline data on the biology of the Clark Fork.

The Champion Mill, which employs over 700 workers, asked the state last July to allow year-round discharge when its gravel basins became clogged and ceased to function. Champion had been discharging waste directly into the river only at times of high spring run-off when dilution of waste material was assured.

The Water Quality Bureau performed an environmental review of Champion's request and last fall came out with a preliminary decision. The decision granted Champion a 5-year permit to dump waste in the Clark Fork all year long without conditions for monitoring the effects.

Conservationists and river users then began to fight. As Tom France, an attorney for the National Wildlife Federation said, "I don't think Champion anticipated the degree of outcry for a clean Clark Fork River." The Clark Fork is heavily used by fishermen, rafters, and other recreationists, and 170 miles below the mill the river flows into Idaho to Lake Pend Oreille, one of Idaho's most prized recreational lakes. Landowners around Lake Pend Oreille were concerned over additional degradation to the lake's water quality.

Steve Pilcher of the Water Quality Bureau didn't anticipate the barrage of questions about Champion's permit. Two years ago, when the permit was reissued, "There wasn't a

word about it," he recalled. "But now they swear on a stack of Bibles that the river is going to hell." The Bureau, which Pilcher says never has enough money to do basic research on waterways, has had to reprioritize its projects as a result of public interest in the Clark Fork.

The alliance of conservation groups that formed to contest Champion's new permit included the Montana Environmental Information Center, the National Wildlife Federation, Trout Unlimited, the Lake Pend Oreille Shoreowners Association, and Idaho's Green Monarch Coalition. They could have challenged the Water Quality Bureau for not writing an EIS, but the alliance realized that would not have addressed the core problem facing the Clark Fork River -- lack of baseline data.

Karl Englund, an attorney representing Trout Unlimited, said an EIS based on current knowledge of the Clark Fork River would have had to rely heavily on computer modeling and information gathered from other rivers. "What good would it do us to spend thousands of dollars on a lawsuit while allowing further degradation of the Clark Fork if the result is a lousy EIS?"

Instead, conservationists met with representatives from Champion and the Water Quality Bureau and hammered out an agreement which focuses on gathering baseline data. The data will be used for the preparation of an EIS two years down the line, a document which will be the basis of future permitting decisions on the Clark Fork.

The agreement between the conservationists and Champion (the state of Montana unofficially supports the agreement) calls for four studies:

- a \$200,000 study of pollution biology on the Montana portion of the Clark Fork to be performed by the Montana Water Quality Bureau with existing funds and EPA monies.

- a similar study on the Idaho portion of the Clark Fork, including Lake Pend Oreille, funded by the state of Idaho.

- a study of the fisheries and aquatic insects of the Clark Fork to be conducted by the Montana Department of Fish, Wildlife and Parks. Champion will donate \$100,000 and conservation groups will add nominal funds.

- Champion will hire private consultants to study alternative waste disposal technology to replace their defunct gravel filtration system.

An advisory board with representatives from all three interests will also monitor the studies and report to the public. Tom France of the National Wildlife Federation said that he hopes the new information generated by the studies will go beyond the Champion issue to address the state of the entire Clark Fork River. There are currently 40 state permits allowing waste discharge in the Clark Fork drainage.

Champion International representative Bob Kelly praised the agreement as "an opportunity to participate in a positive and open discussion" with the conservation groups. He added, "We're not going to convert one another." Kelly is confident the studies will give their mill a clean bill of health, especially in regard to allegations that the mill affects water quality as far away as Lake Pend Oreille. "The more information, the better off we will be," he said. "We are not concerned with additional information at all."

Was the agreement with Champion a victory for conservationists? "Yes and No," said Karl Englund. "A best-case scenario would be that no new discharges would be allowed. But we struck a good deal."

"We have forced the state of Montana and Champion to pay for gathering data which should have been done years ago," Englund said.

--Paul Larmer



High Country News

HIGH COUNTRY NEWS (ISSN/0191/5657) is published biweekly, except for one issue during August and one issue during January, by the High Country News Foundation, 224 Grand Avenue, Paonia, Colorado, 81428. Second-class postage paid at Paonia, Colorado.

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

Tom Bell
Editor Emeritus
Ed Marston
Publisher
Betsy Marston
Editor
Judy Moffatt
Promotion
Marjane Ambler
Carol Jones
Glenn Oakley
Geoffrey O'Gara
C.L. Rawlins
Peter Wild
Dan Whipple
Contributing Editors
Mary Moran
Editorial
Paul Larmer
Intern
Nancy Barbee
Circulation
Laura Yarrington
Darkroom
Karen Bennett
Production
Judy Heideman
Debbi Neill
Typesetting
Tom Bell, Lander WY
Michael Clark, Boulder CO
Lynn Dickey, Sheridan WY
Adam McLane, Helena, MT
Geoff O'Gara, Lander WY
Garrett Ray, Littleton CO
Kathy Roush, Florence MT
Herman Warsh, Emigrant, MT
Robert Wigington, Boulder CO
Board of Directors

Articles appearing in High Country News are 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 editors.

Advertising information is available upon request. To have a sample copy sent to a friend, send us his or her address. Write to Box V, Paonia, Colorado, 81428. Call High Country News in Colorado at: 303/527-4898.

Subscriptions are \$18 per year for individuals, \$25 per year for institutions. Single copies \$1.00 plus \$1.25 postage and handling.

Dear friends,

One of the things we regret each issue is our failure to acknowledge the impromptu, ever-changing network which helps put out High Country News. We write about staff and writers, but rarely mention the collection of individuals without whom we could not begin to paint the regional portrait the paper presents.

In some cases, a local event or person leads us to a regional issue. For example, Mike Vitek, who manages our local hospital, pointed out to us the decline in occupancy at his institution and led us to wonder if it is a regional phenomenon. It is, as a roundup indicates.

In other cases, we go further afield. Don Snow was HCN's Montana correspondent until January. He now directs the Northern Lights Institute, but remains interested in the paper. He suggested we follow up the Champion paper mill controversy on the Clark Fork River, which we have done. He also had several other suggestions for stories -- including the Colstrip III power plant hearings -- which will be coming in future weeks.

A Colorado state official, DeWitt John, mentioned that Montana's two top BLM officials were moving on, and there is a roundup on that subject.

More distantly, Tom Pomeroy of

Ketchum, Idaho, called to tell us about a wilderness protest against Senator James McClure (R-ID) at a Sun Valley talk two weeks ago. Pomeroy, who builds log homes and who is a member of the Idaho Conservation League, said, "McClure wouldn't meet with us, so we figured we'd protest and catch some press."

The story on how flooding can help wildlife came through a Utah contact. Hal Linke, who publishes the Utah Waterline, told us there was to be an interesting conference on flooding in Grand Junction, and sure enough -- there was. It was put together by engineer Bryant Rose and consisted of interesting and hair-raising accounts of Utah's efforts to keep itself from being washed into the Great Salt Lake.

The network which keeps HCN in touch includes alumni, especially founder Tom Bell. He wrote to us recently from Lander, Wyoming:

"When It's Springtime in the Rockies" was a favorite cowboy song when I was a kid. It has been a long time since I was a kid, but I'm still looking forward to springtime this year. It has been a long winter. You might say that is the lure of the northern Rocky Mountain states.

"There is one problem with springtime in the Rockies. You can't be sure when it has arrived. You keep

waiting until the Fourth of July and if it hasn't snowed in the past week, you can be fairly certain spring has arrived. In fact, it may have passed."

Bell called it on the nose for the Front Range of Colorado, which was hit with up to two feet of snow on Easter weekend. That may have been their spring.

To speak of another Lander tradition, we hope you are all training to run, play volleyball, or eat and lie around at the May 26 HCN footrace-potluck to take place in the Paonia town park starting at 1 P.M. We especially emphasize the need for eaters and liars-around, if only to keep certain non-running members of the staff from feeling too out of place.

Finally, in an historic first, HCN must pull a barb out from under its own skin. Thad Box, head of the College of Natural Resources at Utah State University, was misquoted in the Bozeman (MT) Chronicle and we picked up the misquote. Box did not say, "Eagles, hawks, coyotes, snakes and grizzlies just need killing."

He said, "Many ranchers feel that eagles, snakes and grizzlies just need killing." That is a fair statement, Box writes us. He was a guest lecturer at the Political Economy Research Center at Bozeman, which believes public lands should be turned over to private interests.

--the staff

Some hospitals are ailing in the West

When times are tough in the West, people stop getting sick -- or at least they put off going to the hospital. The result is that some hospitals are cutting back services to stay afloat or changing their concept of health care.

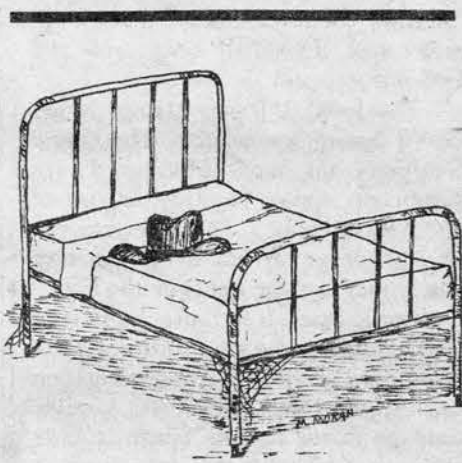
At Memorial Hospital in Rawlins, Wyoming, for example, 18 percent of the full-time employees have been cut over the past two years, falling from 256 to 211 and salaries have been cut by \$621,000 including the loss of some fringe benefits. In addition, patient days have dropped some 20 percent since 1982 from 17,559 to an anticipated 14,000 this year, said Chief Administrator Dick Mills.

Mills said that one of the main causes is Wyoming's recession, which hit late and is just now bottoming out. He cited the loss of 200 jobs when the Union 76 uranium mine closed in April of 1983 as having "some link" to the declining use of Memorial Hospital. "Many of those who lost jobs were transferred out of Carbon County," he said. He added that baby deliveries have significantly dropped in the past year reflecting the population loss and the tight fiscal situation in Rawlins.

The plight of Memorial Hospital in Rawlins is not unique in the Rocky Mountain region. New Mexico, Colorado, Wyoming, Montana, and Utah have all experienced reductions in hospital use. In Colorado, during the first three quarters of 1983, rural hospitals experienced a 10 percent decline in patients, 2 percent more than for urban hospitals.

At Delta County Memorial Hospital in western Colorado, losses were approximately \$98,000 in January, according to Administrator Michael R. Vitek. He has had to reduce the hospital's monthly operating expenses by \$70,000 to help the hospital survive. Since the first of the year, between 40 and 50 workers have lost their jobs. So far, beds are filled 29 percent less than they were in 1983 and the length of stay has dropped from 4.8 days to 3.5.

A major cause for the decline is the hard-hit mining industry, Vitek said. When workers from the nearby



Hawk's Nest coal mine were laid off in 1982, many had health insurance coverage for their first year out of work. But now that the year is up he said, miners postpone hospital visits.

In addition to the depressed economy, Vitek says the recent change in the Medicare payment policy is adding to the hospital's woes. The federal Medicare program, which pays about a quarter of all hospital bills in this country, now bases its payment to hospitals on diagnosis rather than cost reimbursement. In other words, Medicare pays a fixed price based on the operation to be performed whether the patient stays one day or six. That gives hospitals incentive to get the patient in and out as quickly as possible.

Throughout the United States, the business community, which dished out \$77 billion dollars for workers' health insurance premiums in 1983, has also been taking measures to control escalating health costs. Many companies now require their employees to get a second opinion before undertaking a major operation. Companies are also increasing the size of deductibles.

Ken Rutledge of the Montana Hospital Association said that full coverage has disappeared in Montana because of the debts of insurance companies such as Blue Cross. Back in the late 1970s, Rutledge said that hospital use was low and health

insurance companies built up large cash monetary reserves. All that changed in 1980 and 1981, he said, when Montanans flocked to the hospitals in "skyrocketing numbers." Health insurers quickly lost their reserves because they failed to anticipate the deluge and incorrectly set their premiums.

As a result, Rutledge said, "Premiums have been adjusted upward 30, 40, even 50 percent to pay off insurance debts." And these high premiums have translated into higher deductibles for workers.

The bottom line to the efforts of the federal government and the business community to cut back on health costs is that people can't afford to go to the hospital as often or for as long as they have in the past. Instead, they are looking for alternatives. As Richard Johnson of the Wyoming Hospital Association put it, "People are finding health care outside the traditional brick and mortar of the hospital."

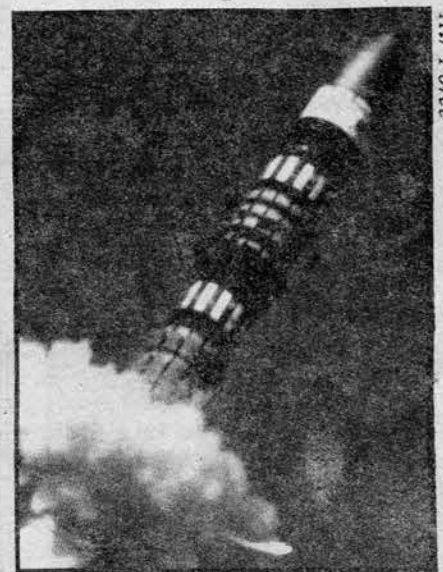
Hospitals, in turn, are seeking new ways to meet patients' needs at lower costs. Outpatient services are on the rise. Minor surgery is now performed in one day at ambulatory services to avoid the expense of overnight stays. Hospitals are also setting up contracts with nearby nursing homes and rehabilitation centers where recuperating patients can stay at less cost. Memorial hospital in Rawlins has recently instituted a birthing room where mothers can deliver and leave within 24 hours. There is also a one-day surgery service and a new home-health care program will be introduced this month.

Although the rapid decline in hospital use should moderate in the Rocky Mountain states if the recession fades, inpatient services will probably continue to atrophy in the future as high costs and outpatient services keep people away from hospitals. In order to survive, hospitals will have to expand their concept of health care. As Michael Vitek said, they will have to see themselves as part of a "continuum of care."

--Paul Larmer

HOTLINE

MX challenged in court



MX missile test

The anti-MX movement took to the courts this April when the 8-state coalition Western Solidarity and 39 co-plaintiffs sued the Air Force, President and Defense Department. Two days later on April 20, Colorado also filed suit against MX missile deployment in Nebraska and Wyoming, charging that impacts to Colorado were ignored in the Air Force's final Environmental Impact Statement. The state was joined in that suit by the cities of Denver, Fort Collins, Loveland and Boulder as well as Larimer and Boulder Counties. Colorado is the first state to challenge MX basing. Western Solidarity's 80-page suit challenges the final EIS for failing to analyze alternate basing modes and locations, accidental detonations of propellant fuel, and for numerous alleged violations of regulations and laws.

Elk and orchards don't mix

A special game damage office has been established in the Western Colorado town of Hotchkiss to process 56 claims from fruit growers whose orchards were partially destroyed by elk this winter. Since the harsh winter of 1979, about two thousand elk have begun to make the valleys their home when the snow comes early, heavy and it stays bitter cold for months. Orchard claims in Delta County this year are at an all-time high of \$842,163, which is 5 percent of the state's Division of Wildlife budget, says wildlife supervisor Mike Stone. The larger question beyond payment is what to do in the future. Options range from the expensive -- bait and feed earlier and provide more fencing -- to the drastic. Game wardens say the only way to prevent the problem is to beef up hunting seasons and/or shoot the elk in orchards during the winter.

State acts to halt arsenic contamination

Montana has filed suit in district court charging ASARCO Inc. with contaminating groundwater with arsenic from its lead-zinc smelter in East Helena. The state's Department of Health and Environmental Sciences asked the court for an injunction prohibiting the company from re-using waste water; for \$50,000 in civil penalties; and recovery of two years worth of investigation and water sampling costs. Last fall, cattle near the smelter died after drinking water from a ditch contaminated by arsenic.

Montana's suit also asks the court to require ASARCO to submit a compliance schedule of corrective measures no later than September 15.

--the staff

River flooding was a boon to wildlife

In the short term, last year's Colorado River flooding damaged wildlife. But in the long term, the floods were a blessing, according to Colorado Division of Wildlife Commission Chairman Jim Kennedy. The Commission is a group of citizens appointed by the Governor to direct the DOW.

Kennedy told a March 31 meeting on flooding sponsored by the Professional Engineers Council that he had first assumed the overflowing streams and rivers damaged wildlife. The Grand Junction resident said he'd seen the Colorado River destroy bird habitat and drive nesting birds and other wildlife out of their traditional areas.

But, he continued, "This is a short term destruction of wildlife. The long term effect is good. It improves the riparian zone" by spreading "the cottonwood and willow, wild plum, chokecherry, alder, and silverbell as

well as the partially submerged plants -- bullrushes, marshgrass..." It recharges groundwater and cleanses gravel, making it more receptive to fish eggs.

He said flooding is especially important because of the upstream dams and diversions which control downstream flow in all but the heaviest runoff years. Research, he said, indicates that the decline of willows, which provide vital wildlife habitat on the South Platte River in Colorado, is related to upstream water storage and diversion. The 1983 floods, which overwhelmed storage, may bring the willows back by spreading seeds and nutrients and recharging groundwater.

From man's point of view, flooded fields are a disaster. But Kennedy's slides showed how cultivated land is increasingly squeezing the riparian zone and destroying the stream-side habitat once used by wildlife. The

floods can be seen as reclamation in reverse -- turning fields back into wildlife habitat. He said that some irrigation canals provide habitat, but that the burning and tree cutting that usually takes place along such canals minimize their usefulness.

Kennedy, who is publisher of the Grand Junction *Daily Sentinel*, was frank in his discussion of the Colorado Division of Wildlife he helps set policy for. In the question period, DeBeque rancher Bill Prather charged that he'd been betrayed by the DOW. Prather said he'd been a "good guy" and left a few acres of his land for wildlife. When the State Highway Department condemned that land for Interstate 70 through DeBeque Canyon, the DOW convinced the Highway Department to condemn another 40 acres of Prather's land to mitigate the lost wildlife land.

Kennedy told Prather he knew the case, and agreed he'd gotten a bad deal from the DOW. Earlier in his talk, Kennedy had said that some DOW officials are insensitive to the need to work with private landowners. But he also said that with a new DOW director and a slightly different Commission, change may be coming.



HOTLINE

**A clear consent
from EPA**

Grand Canyon

A consent decree signed April 20 means 48 of the nation's 50 states must protect the clarity of air over National Parks and Wilderness areas. The visibility standards, required by the 1977 Clean Air Act, were to be in effect two years ago. But the Environmental Defense Fund, the National Parks and Conservation Association and the Colorado Mountain Club charged that the Environmental Protection Agency under Anne Burford encouraged states to ignore the requirement. Under the consent decree, the EPA now agrees to require states to enforce such standards. Alaska and Washington have already established visibility standards.

The consent decree may be appealed by Chevron. Chevron's proposed Clear Creek Oil Shale Project in Colorado could be put at risk by the consent decree because of its closeness to the Flattops Wilderness Area. The decree could affect areas such as the Grand Canyon, which are already impacted by southwest power plants, and areas where new development is proposed.

Working Group folds

The Joint Working Group on oil shale is officially dead. (HCN, 4/16/84). The group dissolved itself in mid-April after half-hearted efforts to continue negotiations on oil shale leasing by industry, local government and environmentalists collapsed.

**Indians win at
Kootenai Falls**

The Kootenai Indian nation won a major victory April 23 when administrative law judge David Miller denied a hydroelectric license to a group of utilities wishing to build a dam on Kootenai Falls in northwestern Montana. Among the reasons cited were the Indian's first amendment rights (the site is sacred to the Kootenai), the lack of need for electric power in the Northwest, and the scenic and recreational value of that stretch of the Kootenai River.

The Idaho and Montana utilities, led by Northern Lights, Inc., proposed spending \$226 million to build a 144-megawatt dam. The case will undoubtedly be appealed to the FERC commission. But an attorney with the Native American Rights Fund, which represented the Kootenai nation, said that the April 23 decision would carry a great deal of weight.

Arizona Tourism Office

The U.S. District Court for Oregon has issued an injunction prohibiting any timber sales on the 200,000 acre Mapleton District of Siuslaw National Forest. The court found that the U.S. Forest Service violated the National Environmental Policy Act by failing to prepare an adequate "worst case analysis" in its 7-year plan and by not considering cumulative impacts of activities on land not controlled by the Forest Service.

The case was brought by the National Wildlife Federation, the Oregon Wildlife Federation and the Siuslaw Task Force. Because of the issues involved, the case could have far-reaching effects.

The plaintiffs argued that the high susceptibility to landslides on Oregon's Coast Range created a severe hazard to streams which provide spawning and rearing habitat for fish including coho salmon, chinook salmon, sea-run cutthroat trout and steelhead trout. To mitigate the landslide dangers, the Forest Service planned to leave fragile or landslide-prone areas uncut. These "vegetative leave areas" span several acres on hilltops or along stream banks.

When the USFS prepared its EIS for the timber sale, it predicted a nearly 100 percent success rate for "leave areas." Of the 12 leave areas actually attempted in the Mapleton

District, however, only five were successful, five partly successful and two unsuccessful.

That led U.S. District Court Judge Gus J. Solomon to write, "The Forest Service has not perfected its prediction rate on location or size of their leave areas... The effectiveness of the leave areas in preventing landslides is at the heart of the Forest Service's case. It admits damaging fish habitats in the past, but it asserts that leave areas and other mitigation techniques will prevent similar damage in the future. There is little evidence to support this assertion."

A second part of Solomon's decision dealt with the cumulative impacts of logging on stream ecology. Solomon ruled that the Forest Service's EIS must consider cumulative impacts of all activities that affect streams both on public lands not administered by the Forest Service and on private lands.

In addition, the court ruled that environmental statements are necessary on the ranger district level if there are unique characteristics to the district. There may be as many as 100 ranger districts around the country without specific EISs that could now be required to prepare them.

Andy Stahl, forester on the case for the National Wildlife Federation in Portland, said, "The process the court

requires will certainly have an effect elsewhere." One question is whether Bureau of Land Management plans fit the criteria set by the decision. Stahl said, "It doesn't appear that they do, but it would take someone to do something about it -- like file a lawsuit. And doing something about it is very hard." As illustration, Stahl pointed out that the timber cutting lawsuit was started over two years ago.

However, Walter Shiverdecker, public affairs officer for the Forest Service in Portland, said that "Based on what we've been able to glean, the problems are mostly procedural." Shiverdecker pointed out that the judge upheld the Forest Service on some important substantive points. "The judge said we haven't violated the Multiple Use and Sustained Yield Act. That means he did not find anything wrong with our management practices." Shiverdecker said the decision should apply to a very limited number of cases.

The immediate effect of the injunction will be a delay in next year's timber sale plan until an EIS is completed. Shiverdecker said that will take one to two years. There is presently a four-year backlog of timber already sold on the Mapleton District.

--Dan Whipple

BOOKS

Ancient cultures have a lesson for us*Those Who Came Before*

Robert H. Lister and Florence C. Lister. Tucson: University of Arizona Press, 1983. 184 pages. \$32.50, hardcover.

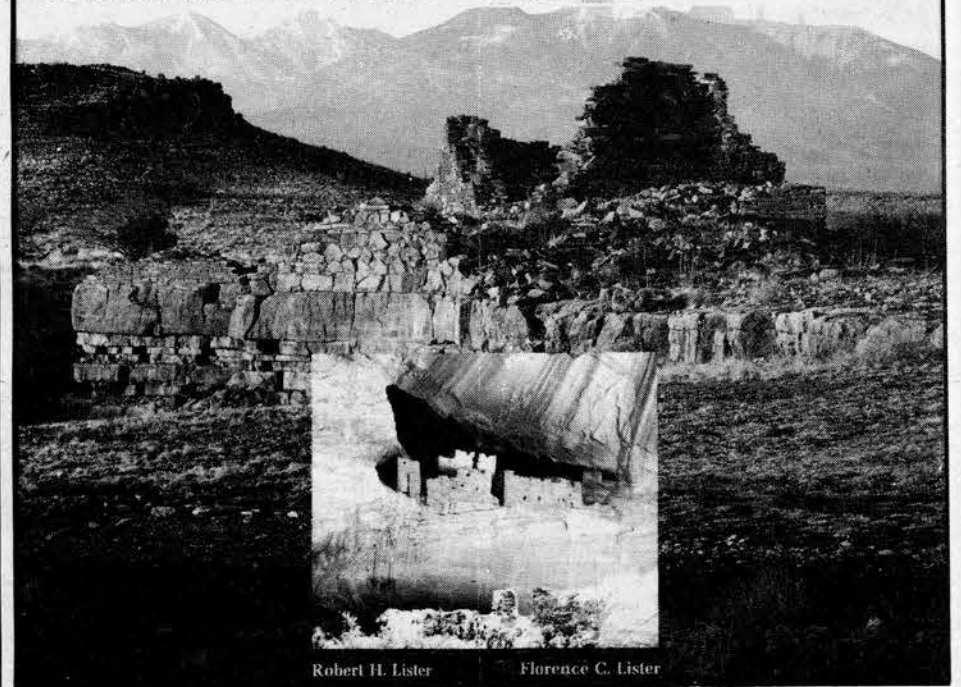
Review by Peter Wild

On the trail of some stray cows, Richard Witherill nosed his horse through the pinons of southwestern Colorado. When the cowboy broke out of the undergrowth at the top of the mesa, he stopped thunderstruck: spread out on a ledge in the opposite cliff stood an ancient city. That was in the 1880s.

Today, we aren't likely to stumble on such a treasure as what is known now as the Cliff Palace of Mesa Verde National Park. Still, the sharp-eyed hiker wandering over the states of the Four Corners area can pick out the remains of prehistoric cultures, crumbling towers on ridges and rounded trash heaps along river beds. There are thousands of the sites in Utah, Colorado, Arizona, and New Mexico -- which make the region precious to American anthropologists. Yet the remains are only shadowy indices, fading clues of the complex native cultures that once flourished across the Southwest.

How did they survive the harsh environment of cold, heat and drought? Why did they suddenly disappear? In some cases, the first white discoverers found utensils in place, left on the table, as if the residents had just stepped out for a few moments and would soon return.

Lavishly illustrated by the photographs of George A. Grant and David Muench, *Those Who Came Before* surveys 28 of the major protected ruins in the four states. The book

THOSE WHO CAME BEFORE

Robert H. Lister

Florence C. Lister

details how each received federal protection, explains the anthropological significance of individual units, and provides a bibliography for further study. An overview, the volume rightly takes a holistic approach -- a "pan south-west interpretation" as it's called in academic lingo. Throughout, the emphasis is on the cultural interactions of prehistoric settlements, especially on the slow transfer from Mexico of technology and plants such as corn that helped bring the inhabitants of the Four Corners region to the most sophisticated stage of any prehistoric people found within the borders of the United States.

The authors, a man-and-wife writing team, do not solve the mystery of how these ancients seemed to appear overnight and then just as suddenly vanished. We may never

know the answer. Disease, warfare, religious schism may all have played their parts. And it may be, though the authors don't go into this as deeply as they might, that some cities had become too big for their britches. In prolonged wet cycles they grew too large and complex for what inevitably follows wet years in arid climates -- drought. When the lean time came, exacerbated by overcut forests and depleted soil, the people stood bewildered as a nourishing river fell below the lips of their irrigation canals. Then it disappeared into its sandy bed. Unprepared for scarcity, the society based on abundant resources disintegrated.

What about our own towns and cities here in the arid West, overtaxing resources far more than native tribes ever did? The implication is clear.

Wyoming studies a questionable dam

The Wyoming legislature's response to the proposed Middle Fork water project may illustrate why Governor Ed Herschler has spent only \$64 million of the \$600 million he proposed to spend on water projects during his 1982 re-election campaign (HCN, 2/6/84).

The Wyoming Water Development Commission and the governor promoted the project during the recent Wyoming legislative session. They asked the legislature to jump the project from reconnaissance phase to design phase and to allocate \$3 million for further project planning and cost studies.

But the combination of industry's lack of commitment and agriculture's inability to pay, confusion over water rights, and questionable downstream effects convinced the legislature to put the project on hold while a study is done. So the project is stuck in an intermediate phase. Money is appropriated but inaccessible until after the study.

Under the Middle Fork proposal, the state would foot an estimated \$35 million bill to develop a dam and 50,000 acre-foot reservoir on the Middle Fork of the Powder River west of Kaycee, Wyoming. The only certain customers are 22 ranches east of Kaycee near Sussex. They would buy one-quarter of the water for irrigation. The remainder is for industrial customers. However, industry is yet to commit.

But only industry can afford to pay the high costs of the dam. Water costs of even \$200 an acre foot are considered low for major industrial projects. Irrigators would probably pay no more than \$10 an acre foot, still a relatively high price for irrigation water. If all the water were sold at irrigation rates, the state would get back only two to five cents on each tax dollar invested.

Why is the state even considering such a financially shaky project? Wyoming Assistant State Engineer Wayland Anderson says that one must look at the overall water situation in the West, where the only way to maintain water rights is to put the water to "beneficial use," and where older water rights take precedence over younger water rights. One "beneficial use" is storage, and upstream states compete with downstream states to see who can build

dams faster. Anderson says that "even if there's no firm commitment for water (in the Middle Fork project) it may be of long-term interest to the state to put the water into storage."

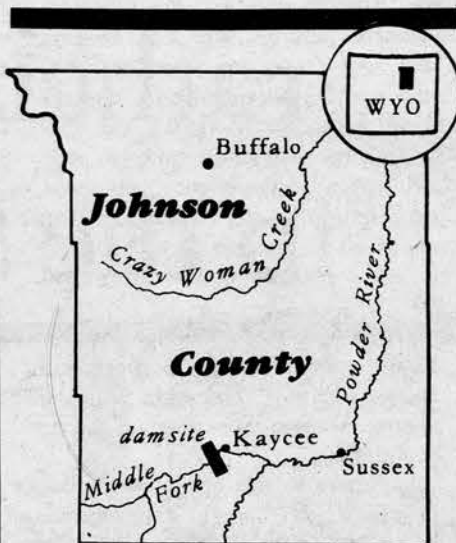
Since the early 1900s, many local farmers have dreamed of damming the Middle Fork for supplemental irrigation. The project almost flew in the early 1970s when the state Farm Loan Board approved an \$8 million loan to the irrigator's Powder River Reservoir Corporation. The loan was secured by a contract with Carter Oil (now Exxon) to buy three-quarters of the reservoir's yield. There were rumors of an Exxon coal gasification project, but neither Exxon nor the corporations that have held options on the contract over the years -- including ARCo and now possibly Basin Electric Power Cooperative -- have committed themselves to specific project plans to use most of the reservoir's water.

Because of industry's lack of commitment, the BLM first ruled not to grant a needed right-of-way permit for flooding 141 acres of Bureau of Land Management land. Last year they reversed that ruling.

But during the more than decade-long delay of the project, the \$8 million loan sat in the state treasury and projected construction costs quadrupled. Now there are questions about the validity of the industry contract under the new cost projections. And Don Meike, leader of the irrigators' corporation, says that the synthetic fuels slowdown has taken its toll on Exxon. The company has indicated to the irrigators that it won't want water from the Middle Fork project until at least the 1990s.

The state needs to obtain water permits in order to proceed with the Middle Fork project. It has the power to eliminate permits by discontinuing their five-year extensions, but for several reasons it favors buying out permits in the case of the Middle Fork. Not the least of these reasons is what State Representative Lynn Dickey of Sheridan calls "a question of fairness after people have put effort into the project and counted on the state's past precedent of almost automatic extension of permits." Also important is the fact that the permits in question predate and may not be subject to the Yellowstone Compact.

The questionable validity of the Middle Fork industry/irrigator con-



tracts complicates Wyoming's water permit dealings. The state doesn't know if it should be dealing with Exxon, the Powder River Reservoir Corporation, or both.

And as in any water project, there would be downstream effects. According to a 1984 report done for the state, a go-ahead on the Middle Fork project would probably eliminate the chances for proposed projects associated with energy-boom claims on the Powder River, such as the proposed Clear Creek project near Buffalo, Wyoming. In addition, ranchers with downstream water rights that they've been using for years may suddenly lose their water to upstream permit holders.

Downstream ranchers are also worried about the quality of their water. The Middle Fork, unlike many of the Powder River sediment-laden tributaries, is a clear trout stream. A decreased flow in one of the Powder River's cleanest water sources, along with a general decrease in downstream flow, would result in an increase in dissolved solids in Powder River water. A detailed study by the Montana Department of Natural Resources showed that the downstream water degradation might damage ranchers' ability to grow alfalfa. Montana has threatened to sue if water quality is damaged. But according to Denise Bierley, environmental coordinator for the Wyoming Water Development Commission, "from the standpoint of Wyoming and the state engineer, laws only govern the quantity of water delivered, not the quality." --Mary Moran

HOTLINE

Protesters greet Senator McClure

Senator James McClure (R-Idaho) got a large welcome at the Bailey, Idaho airport April 14. Approximately 100 members of the Idaho Conservation League met him with signs protesting his wilderness bill. He found more protesting signs in the town of Ketchum on his way to his keynote talk to the annual meeting of the Idaho Wildlife Federation. McClure has proposed that 527,000 acres be made wilderness out of Idaho's 8.1 million roadless acres. The Idaho Wildlife Federation wants 4.9 million acres put in wilderness, with another 2 million put in a roadless reserve.

Rachel Veith, who edits the Idaho Wildlife Federation's newsletter for its 3000 members, said McClure softened his wilderness stand a bit, describing his bill as a starting point. He also said he wished he had waited to announce the bill until after his appearance at the Federation annual meeting. But he made it clear to the 160 banqueters that he still believes wilderness is a wasteful dedication of land. Why did the Federation invite McClure? "Because we like to hear the other side, too," said Ms. Veith.

Forest Service stops spraying herbicides



The Forest Service has temporarily halted all aerial spraying of herbicides on National Forest lands. Over the last year, conservation groups have argued in several court cases that worst-case analyses should be included in BLM and Forest Service EISs for herbicide applications. Government agencies countered that EPA approval of herbicides insures their safety and that worst-case analyses take months to prepare and are easy to prove inadequate. But the courts repeatedly ruled that the EISs were inadequate. Recently, U.S. District Court Judge James Burns in Portland, Oregon ordered a halt to herbicide applications on BLM and Forest Service land in Oregon and Washington until he can rule on a herbicide suit he is hearing.

In response to the court rulings and in particular the Oregon court order, Forest Service Chief R. Max Peterson said that herbicide spraying on all Forest Service land would cease while the agency developed new procedures. However, the Forest Service will continue ground applications of herbicides outside of Washington and Oregon. The BLM said it will also halt herbicide spraying in Washington and Oregon, but not elsewhere.

Two from Montana take on new jobs

Montana's two top BLM officials are scattering north and south. State Director Mike Penfold heads north to Alaska in May to become state director of the BLM in that state. Associate director Kannon Richards heads south in June to become Colorado's state director.

In terms of land area, it is a huge step up for Penfold. As Montana state director, he is in charge of 8.4 million acres in Montana, South Dakota and North Dakota. In Alaska, he will run roughly 160 million acres -- almost half the BLM's 340 million acres nationwide.

Before coming to Montana in 1979, Penfold, 46, was a Forest Supervisor for the National Forest Service and served in Washington, D.C. with the Council on Environmental Quality.

Penfold gets mixed reviews from groups which dealt with him in Montana. Emily Stonington of the Montana Wildlife Federation in

Bozeman says, "We will really miss him." She especially praises him for using the Asset Management program to implement land exchanges that in many cases favored wildlife's access to water and winter range. "They've really listened to us."

John Smillie, a staff member with the Northern Plains Resource Council, a rancher and environmental group concerned with coal leasing and development, had a different perspective. Penfold, he said, was a very strong defender of James Watt's coal leasing program and of the "disastrous" Fort Union and Powder River Basin coal sales. Initially, he said, Penfold was easy to talk to. "But especially once the administration changed, he became a fairly vociferous defender of everything Mr. Watt did."

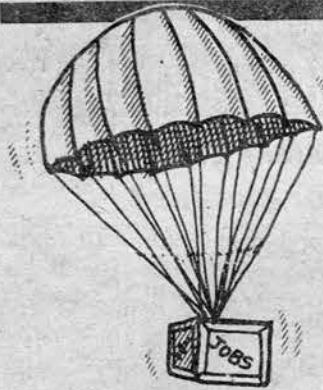
The Montana groups had little to say about associate director Richards except to cite his reputation as a

finance-oriented administrator. He will take over 8.3 million acres of Colorado BLM land from present acting director Robert Moore. State director George Francis resigned in December, 1983.

--the staff

BARBS

Which way to Canada? The Denver Post's Patrick Yack summed up the Hart campaign after New York and Pennsylvania: "Gary Hart is coming home. He is coming West, to the land of new hope. Here, he will be far from the silent smokestacks of the East. Cities rotting atop cracked concrete. Big city bosses. Union stewards. Unemployment lines." Instead, he will be in the America "of microchips and croissants, Volvos and Sony Walkmen, restored urban neighborhoods and L.L. Bean catalogs."



by Sarah Locke

Over the past ten years, Arnie and Maria Valdez have tried just about every imaginable method of getting the sun's heat to warm buildings, to grow food year-round and to generate electricity.

The evidence of those ten years of effort are visible on their homestead in Colorado's San Luis Valley. Walking around their property is a crash course in the evolution of low-tech solar technology. Here's a Trombe wall... There's an attached greenhouse... Photovoltaic cells power the lights in this building... The solar heated pig and chicken sheds are across the yard.

Is this an example of money-is-no-object experimentation? Far from it. Their goal is to build every project as cheaply and efficiently as possible, and to then let others know what works and what does not work.

The Valdezes are well suited to conceive and build solar devices, and to then spread them among the residents of the San Luis Valley. They are fifth generation natives of the valley, an area known for its cold, its poverty and traditional ways.

With a base elevation of 7,500 feet and only eight inches of precipitation a year, the San Luis Valley is a high desert. Thanks to the Sangre de Cristo Mountains to the east and the San Juan and La Garita mountains to the west, it's the largest enclosed alpine valley in the world.

But unlike others who live in Rocky Mountain valleys, San Luis Valley residents do not have access to the mountains which surround their valley. Costilla County, which is home to the Valdezes, is one of the very few counties in the western United States which has no public lands. That, combined with the slow rate of growth of trees in the valley itself, makes wood scarce as a fuel.

That's especially a hardship in the cold, high valley because more than one-third of the county residents live in poverty. About three-quarters of the population speaks Spanish. It is the poorest and the most Chicano county in the state. Finally, despite the scarcity of wood, it is very dependent on wood heat.

So Costilla County has lots of reasons for adopting solar devices. It does not seem like a natural location for solar energy, which is usually identified with expensive cedar shake houses in exclusive subdivisions. But the Valdezes estimate that 20 percent of the households in Costilla County use solar energy in some form. Considering that less than one percent of all American homes use solar energy, the valley's claim to being the most solarized part of the country seems credible.

The Valdezes' interest in solar began the winter after they were married, a winter they spent in a one-room adobe house Arnie had built when he was 18.

"It was great in the summer, but

Solar energy is about life rather than lifestyle in the San Luis Valley

totally uncomfortable in the winter," recalls Maria. "The eggs froze. The shampoo froze. We knew we had to do something."

"Basically, we got into solar out of necessity. We were experimenting; live it and learn it. We were part of a handful of people doing solar on a grassroots level."

Arnie's first project was a solar hot water heater built out of a large metal Coke canister and an old radiator. He refined his design and that summer he got a job building solar water heaters on a New Mexico Indian reservation.

The couple's experience with solar devices gave them the confidence to tackle a large project -- the 3000 square foot pueblo style home they and their three kids live in today. They built it for \$10 a square foot with a Farmers Home Administration loan -- a loan they think was the first ever the agency approved for a passive solar adobe home.

The loan didn't come easy. The local FmHA representative who approved the loan left the area shortly after the Valdezes started building in 1976. The new representatives froze the loan funds when they saw what Arnie and Maria were building. In addition to being suspicious of the passive solar and adobe construction techniques, the representatives said the house was too big for the Valdezes' family.

"It totally violated all their guidelines," says Arnie.

Colorado's Senator Gary Hart intervened on the Valdezes' behalf and they were able to continue making their adobe bricks and laying up the two-foot-thick walls.

Today, a 300-square foot greenhouse provides 75 percent of their heat, as well as fresh vegetables throughout the winter and a warm location for their two fish tanks. The kitchen has a built-in solar food dryer, but no refrigerator. The couple evicted it recently after deciding it used too much electricity.

The most high tech item they own is a windmill they bartered for; it meets the rest of their electrical needs.

"When FmHA people see this house now, they drop their teeth," says Maria.

It wasn't just the bureaucrats who wondered about the house. Neighbors were also curious, for there hadn't been an adobe house built in the area in ten years. Arnie and Maria would remind people of how adobe buildings stay cool in the summer and, with a proper heat source, warm in the winter.

The desire to encourage people to try adobe and solar for themselves helped shape the approach the Valdezes took. "People started stopping by to see what we were doing," recalls Maria. "So we tried to make them feel comfortable with the whole thing, to come into our house and say, 'Okay, this is just an adobe house with some glass on it. I can do this.'"

There was interest in solar energy elsewhere in the San Luis Valley. In 1976, Colorado's first solar energy group, the San Luis Valley Solar Energy Association, was formed in Alamosa, the largest town in the valley. Arnie and Maria were on its board of directors. But Alamosa is 50 miles from the Valdezes' home near the town of San Luis. Plus, their area of the valley -- due to its poverty, its dependence on wood, and its largely Chicano population -- had its own problems.

So the Valdezes decided to start a solar energy group in San Luis tailored to local needs. In 1978, they formed People's Alternative Energy Services, a non-profit organization based in the small adobe house where frozen eggs and shampoo began their interest in solar energy. The couple, the years have shown, make a good team.

Arnie had always been interested in building and designing things. He won a valley-wide scholarship to enroll in the engineering program at the University of Colorado in Boulder. But the craziness of Boulder in the 1970s made him decide to finish school in the valley, and he got a degree in industrial arts from Adams State College in Alamosa.

Maria got her undergraduate degree in cultural anthropology from Adams State and a master's degree in education through an independent study program sponsored by Antioch College in Ohio.

While she was completing her master's degree she lived in Denver for three years and did demographic studies and wrote grant proposals for Headstart. By the time she left there she was director of their research program. She was accepted into a doctoral program in population geography at the University of Colorado, but decided instead to return to the valley.

Now Maria, 34, writes proposals and usually acts as the spokesperson for their husband/wife team. Arnie, 31, has a soft-spoken manner which is

the perfect balance for Maria's high-energy approach.

Through People's Alternative Energy Services, the Valdezes have held numerous solar and adobe-building workshops, trained CETA volunteers to install solar collectors and written two "how-to" booklets on low-cost solar devices -- one for a food dryer and one for a water heater. Their bilingual lending library has books on everything from technical alternative energy information to organic gardening and community health.

They have received grants from religious groups and private foundations, but never from government sources. And they have never received more than \$7,800 at once.

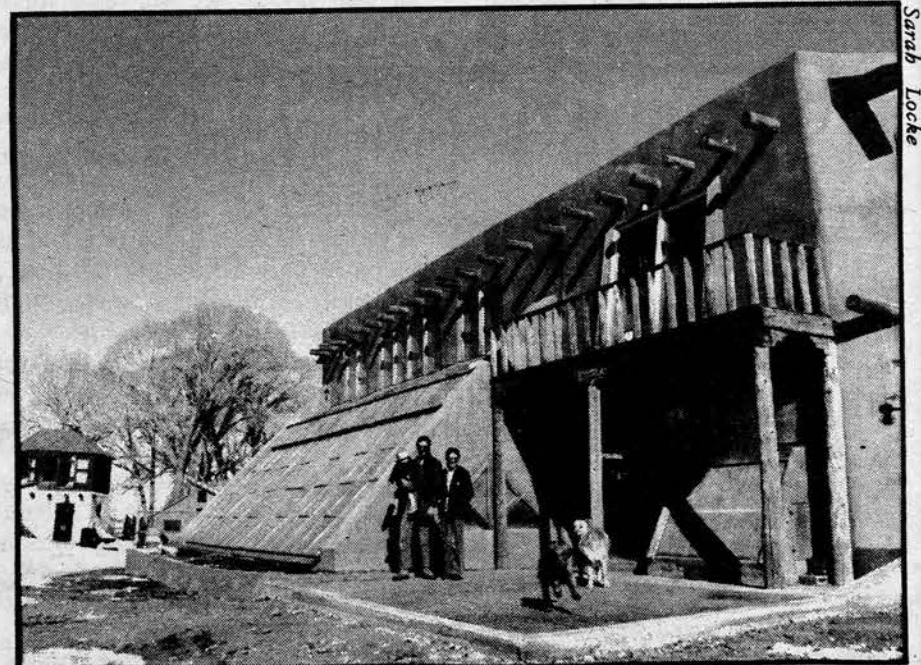
"Part of our philosophy is to extend any money we do get as far as possible," explains Maria. "We put an emphasis on minimal overhead, and we only pay ourselves about \$150 each per month when we do have grants, which isn't all the time."

They supplement their income with work as private solar consultants. Arnie has designed houses and installed solar hot water systems around the state. They have also worked as solar consultants for migrant farm programs and Indian reservations.

"Solar has allowed us to stay in the valley. It's been a way for us to work here without having to be teachers, or get jobs with the county and get involved with all their red tape," says Maria.

Now the solar gospel as interpreted by Arnie and Maria is spreading under its own power. They no longer have to convince people that solar energy works. The Catholic Church has a solar-heated community building and rummage house. The First Presbyterian Church has solar panels on the church itself, a greenhouse attached to its rectory and a solar-heated dog house.

On any road or in any part of town you see fiberglass-enclosed greenhouses and solar water heaters. As we're driving around looking at solar



The Valdezes in front of their solar home

Sarah Locke

projects, Maria points out the house of a neighbor who has put up a solar water heater without any outside advice.

"That's great," she says. "It's really good to see people doing things on their own initiative."

Getting people to be more self-reliant has been an important goal in Arnie and Maria's work from the start. Solar technology is not an end in itself for them. It's a way of giving pride and self-sufficiency back to a community which has been forced onto the welfare roles for decades.

Energy has been Costilla County's most pressing problem, but now the Valdezes are starting to look for other ways that they can make their community more independent.

"We want to do more than just build another collector and another collector and another collector," explains Maria.

When the county lost its ambulance service because of poor management, the Valdezes and seven other people took EMT courses, petitioned the community for support, and got approval to run the service themselves as minimally paid volunteers.

More recently, their solar and community-organizing experience has gotten them thinking about how they can apply their knowledge to Third World problems. They are already

coordinators of a Peace Corps training program in which volunteers get a taste of what it's like to live in a poor rural area. The volunteers live with local families for two weeks, and work on community projects such as grain storage and irrigation systems.

But a recent trip to India and Nepal has changed their perspective on just how poor their area is. Officially they went to Asia to attend an International Conference on World Affairs held in New Delhi. The Valdezes were two of 45 American delegates from rural development programs.

But what the trip really meant for them was "a philosophy change," says Maria. "I won't call us poor anymore. Low-income, maybe, but not poor. Now we have a comparison to see how poor people can really be."

"We don't know what recycling is in this country. We forget about these things because Americans are so affluent. In India cow dung is prized as a fuel, but here it's just lying all around everywhere. We need to get people thinking about how rich we are, instead of how poor we are, and how we can get people to save. We're still wasting wood like crazy here, and it's going to get really critical."

There are no natural gas pipelines

in the valley and residents either burn wood or pay premium prices to have propane trucked in. So wood is tangible wealth, and some people hoard huge piles in their yards even if they do not depend on wood for heat.

They are obsessed with wood because it's not readily available. Costilla County has no public lands. There are no National Forests where they can gather wood. And the last open tract of mountain land, 77,000 acres, was fenced off by a new owner in 1960. That fencing plunged Costilla County into an energy crisis 14 years before the rest of the nation.

But the Valdezes found that their county's wood situation is not nearly as bad as in many Nepali villages, where people must walk for three days to find wood.

But the fact that the Nepalese are worse off is not necessarily comforting. Maria says, "You have to have a crisis for people to respond... Solar grew out of crisis, and now deforestation really concerns me after what I saw in Nepal."

"I've started seeing trees here just like the ones in Nepal where all the lower branches are stripped off, and there's just a clump of leaves at the top. But here people are pulling off those branches to make Christmas wreaths, which are shipped all over the country."

Asia taught the Valdezes about recycling and deforestation, but Arnie and Maria saw many ways that Asians, particularly those in remote mountain villages, could benefit from the Valdezes' solar ideas.

Arnie talks about plans for solar lamps, solar kilns for firing bricks at high temperatures, and solar glazing made out of fiberglass which could be used where glass is unavailable.

The Valdezes would like to return to Asia within the next five years. But for now they think that training other people to work in undeveloped countries might be the best way for them to contribute to Third World energy problems.

Maria is already planning ways to make the Peace Corps training more realistic for the volunteers. "No more silverware. Everyone can eat with their hands. And no one is going to use the indoor plumbing... Maybe we should let the squat toilet really smell."

"I don't think that will be necessary," says Arnie.

□

Sarah Locke is a freelance writer who lives in Boulder, Colorado. This article was made possible by the High Country News Research Fund.

The San Luis Valley is expert at getting by

The federal government would not need economic safety nets and food stamps if we had all grown up in Colorado's San Luis Valley. When hard times hit, we'd simply go home. Which is why that valley's population peaked in the Great Depression. Young people who had gone to Albuquerque or Denver in search of jobs came home when the urban economies collapsed.

They didn't find jobs at home. The high remote desert valley has no industry and a shrinking number of agricultural jobs. It has always exported young job seekers. But in the Depression they came home because the living was cheap, if not easy. Even a small irrigated plot of land can raise lots of vegetables and potatoes during the 90-day growing season. The more people that moved back, the more hands to do the labor-intensive irrigating and weeding.

The people boomlet ended with the Depression, and the valley's six-county population bumped downward -- from 46,000 in 1950 to 38,000 in 1980. Now population is up to about 39,000, perhaps a sign of these latest hard times, or perhaps a sign that the area's efforts at economic development are working.

The economic development is tied to its low economic level. Steve Colby of Colorado's Department of Local Affairs says: "The San Luis Valley is a classic example of a place where costs have become so low it can be a primary incubator for new businesses."

Terry Hundley, the city manager of Alamosa, the valley's largest town, says one example of that incubation process is a large mushroom farm. It opened 18 months ago and now employs 200 people. It fits the area perfectly -- it is labor intensive, it uses agricultural byproducts such as chicken manure and straw, and it can cope with the major handicap -- remoteness and high freight costs

since mushrooms are a high-value product. Another start-up company, Hundley says, plans to use the area's geothermal energy to raise ornamental fish.

Sometimes one start-up business feeds off the corpse of another. There were efforts to make fuel alcohol from grain during the energy crisis. Now, Hundley says, there is hope of converting an alcohol plant to a small beer brewery.

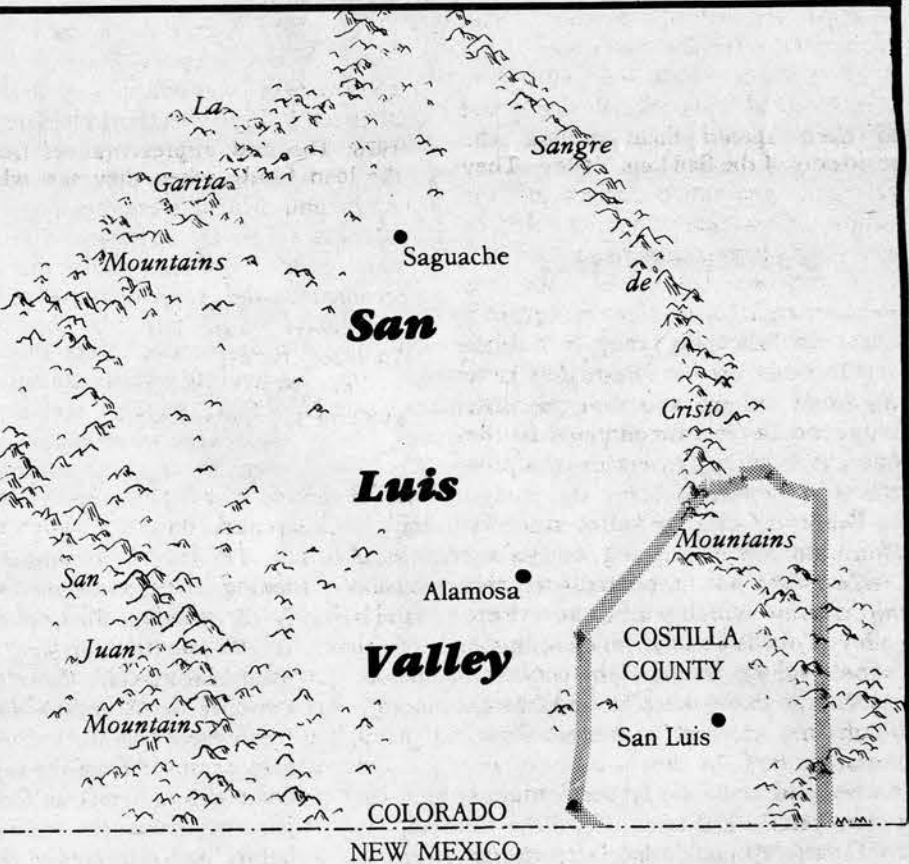
But in general, he continues, the area continues to export unprocessed raw materials -- russet potatoes, lettuce, and barley grain for beer. "The economic strategy here is to add value to our agricultural products by processing them." But thus far there is only the mushroom plant and a small starch plant which processes potatoes.

Hundley says residents don't appreciate the usual description of their area as impoverished. It does have two of the forty poorest counties in America. But, he says, the lack of cash is balanced by the ability of people to raise their own food, the climate and beauty, and the low cost of living.

Part of the low cost of living is solar energy, which freed many residents from propane, electricity, or a chainsaw and truck to cut wood. Hundley says, "It helps the area get by."

At one time, there were higher expectations for solar; some thought it would develop into an export industry. But after ten years the industry is tiny. The biggest export is expertise. Solar architect Akira Kawanabe of Alamosa and Bob Dunsmore of the Solar Energy Center are in demand as consultants. Kawanabe says 30 percent of his work is outside the valley.

There are a few small firms exporting goods: A & J Solar sells adobe bricks to Pueblo and Denver and Hot Stuff Controls exports motorized damper controls. But, Kawanabe continues, freight rates



and a lack of money prevent more activity.

After ten years, interest in solar, he says, has levelled off but is also in transition. "Until recently, all solar activity was residential. Now it's spreading to commercial and institutional buildings."

Usually, he says, his work consists of retrofitting since there is little new private construction. The exception is housing built for retirees from Texas and California. They are attracted by scenery and price. A 2,200 square foot home costs about \$65,000.

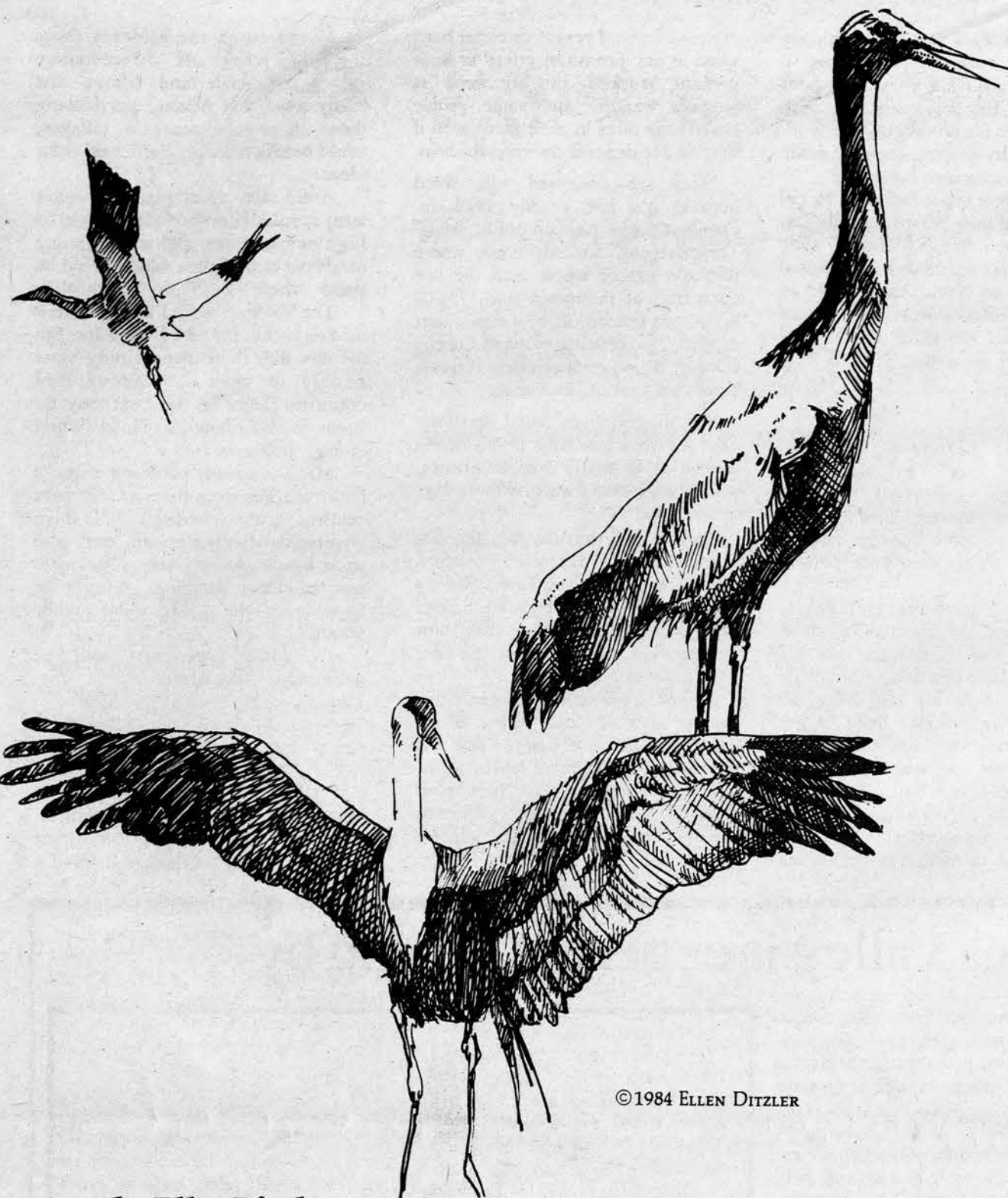
Alamosa manager Hundley speculates that the small population in the valley -- 39,000 people spread over 8,000 square miles -- works against business development. "It's tough to make it here. There's less margin for error." A business, he says, has to get every customer it goes after because the pot is so small.

What local capital there is goes to potato, barley, and lettuce farmers. Their need for capital has grown as farmers swallow their neighbors, buy bigger equipment, and install center pivot sprinklers. The mechanization reduces the need for labor in a valley where unemployment is consistently over 10 percent and in one county hit 27 percent.

The San Luis Valley is 75 miles wide and 125 miles long with 400,000 irrigated acres. It produces 90 percent of Colorado's potatoes with yields up to 65,000 pounds per acre. Sheep, lettuce, barley and winter grain are also raised. But the 45,000 acres in potatoes is likely to expand thanks to three years of high prices. There are very roughly 250 potato farmers today, down from perhaps 700 thirty years ago.

--Ed Marston

The cr



©1984 ELLEN DITZLER

by Ellen Ditzler

I first saw whooping crane 79-7 in the early spring of 1981 at Red Rocks National Wildlife Refuge in southwestern Montana. The refuge employee who divulged its presence thought us fools enough to deserve the secret. We were the first visitors to brave the quagmire of thawing roadways into the valley since fall, and camped in puny tents sagging under a driving sleet. When the sun appeared, we observed dabbling ducks from a row of bright red bean-bag chairs set on the lakeshore, a sizzling batch of shish kebab on the campfire, binoculars in one hand, wine cups in the other, none of us knowing the difference between a merganser and a bufflehead. Birders.

The whooping crane was on the refuge, he said -- somewhere on 32,350 acres of willow thickets, meadows, marshes, mudholes, streams, a river and two sizable lakes, amidst trumpeter swans, ducks, geese, sandhill cranes, eagles, hawks, coyotes and a handful of refuge workers half loony from a long winter. The black dots scattered across the broad valley like someone's lost herd of Angus cattle were moose browsing in the weak spring sun, shedding clumps of their raggy carpet of winter hair like popped mildweed pods. Somewhere in this rich fodder of the wild was a rare white crane.

Our informant said it had flown into Red Rocks with a group of migrating sandhill cranes that normally nested at Grays Lake, Idaho, a hundred miles to the south. The unusual event was now protected by the valley's near inaccessibility; seeing the whooper could be our own private adventure, prodded by the uneasy feeling that at any moment we would be interrupted by a helicopter bearing the world's foremost authority on whooping cranes and the entire board of directors of the Save the Whooper Club of America, hotly pursued by the thundering rubber of a thousand tennis-shoed Auduboners.

Fate brought us together on one plop of land in an entire continent blessed with only 107 wild whoopers; we'd find the bird with the nonchalance

of a miracle. Since this particular whooper was traveling with its sandhill crane foster parents, we would "merely" seek a pair of sandhills with an odd, large white adolescent stomping loyally after them through the marshes.

The whooper-sandhill connection needs explanation.

The North American whooping crane (*Grus americana*) has seemed eternally poised on the brink of doom. Plentiful in the Pleistocene epoch (about 500,000 years ago), it thrived on the watery grasslands that then covered much of the continent: a marsh-dweller, denizen of a freshwater and brackish wetland environment one step removed from the salty seas of life's origins. Over the millenia, as forests encroached on the vast marshes, the whooper adhered to its old habits and retreated to the shrinking confines of wetland habitat, dwindling in numbers as its range receded.

In this century, whooper populations declined rapidly and dramatically, as hunting, egg and feather collection, an alleged fondness among rural Southerners for whooper gumbo, suburbia, industry, agriculture, the Army Corps of Ceaseless Improvements and countless other civilized notions robbed the bird of health and habitat. In 1918 a Louisiana farmer named Alcie Daigle personally accelerated the lunge towards oblivion by blasting to bits the 12 whoopers that were nibbling rice fallen from his threshing machine. Had Alcie performed his massacre 20 years later, he would have wreaked extinction singlehandedly: in 1938 one migratory whooper flock remained and it consisted of 14 birds.

Although whooper counts are never exact, estimates are that this flock now numbers about 75 birds. They nest in the wilderness of Wood Buffalo Park in Canada's Northwest Territories and winter precariously near military bases and oil rigs at Aransas National Wildlife Refuge on the Texas Gulf Coast. There, they spend nearly half their lives on the rim of the original salt sea of their progenitors. Habitat management, publicity, a

blossoming conservation conscience and protection along the 2500-mile Aransas-Wood Buffalo flyway have helped the population rise from hopeless to teetering. Thirty-seven birds live in captivity, but captive breeding hasn't been overwhelmingly successful in terms of returning the birds to the wild.

Quite simply, one can't set a zoo-hatched whooper down in Texas and expect it to fly to Canada in April. A young whooper must be told when and where to migrate and its parents, through a process called imprinting, provide the impetus. Thus, generation after generation, individual whoopers remain bound by racial memory to the summer and winter ranges of their ancestors. Various ranges once existed from coast to coast and from central Mexico to the arctic, but not one whooper lives who can remember them. Today the single natural migratory memory is instilled in the Aransas-Wood Buffalo flock. Until recently, all the world's wild whoopers flew it.

In 1956 scientists began to examine the idea of using greater sandhill cranes -- and, more importantly, their territory memories -- to lead young whoopers to new horizons. Sandhills (*Grus canadensis*) are grey-brown in color and smaller than whoopers, but share common traits. Both mate for life, return each year to traditional nesting grounds, usually lay clutches of two eggs and rear young in similar manners. The idea was to have sandhills adopt and raise whoopers, thereby imprinting them onto a sandhill range and establishing a new whooper flock in the wild.

Years of study showed that sandhills would accept egg switches and whoopers would not desert their nest if one of their eggs were removed (survival of both chicks is, in fact, rare). Operating on the premise that this yield could be increased without endangering the whoopers, in 1975 wildlife biologists removed excess eggs from whooper nests in Wood Buffalo Park and flew them in insulated suitcases to Grays Lake National Wildlife Refuge in Idaho. There, 14 whooper eggs were slipped onto sandhill nests. The miracle followed: nine whooper chicks hatched as if they were sandhill cranes and the sandhills accepted the small, russet-colored progeny that emerged from an egg they hadn't laid. That fall, four surviving young whoopers flew south amidst sandhills and landed on winter grounds in Bosque del Apache National Wildlife Refuge in New Mexico.

About 32 whoopers have been successfully grafted onto the Rocky Mountain sandhills. The egg stock comes each year from Wood Buffalo nests and captive birds at the Patuxent Wildlife Research Center in Maryland. (The whooper I was to see in Montana, number 79-7, was from an egg laid in 1979 on Wood Buffalo nest 7.) Although mortalities occur, whoopers have survived under the care of sandhills. In short, they think they *are* sandhills.

Meanwhile, back in Red Rocks, Montana. Two doting sandhills among hundreds will lead us to an elusive whooper, a fugitive from extinction. We go to the east end of the refuge (an arbitrary decision based on the elimination of north, south and west) where every snow patch looks like a whooper, thick willows clog half the valley from view. Suddenly there is the throaty rattle of bugling sandhills, a sound so prehistoric in nature, one wouldn't be alarmed to see a fleet of screechy Dawn Lizards or pterodactyls burst from the bush, aloft on membranous sails. Instead, two sandhills rise in flight and, behind them, a white satin giant with jet black wing tips. The whooper.

When you finally sight a whooping crane, you wonder how you could mistake it for anything else or anything else for it. It dwarfs the fussing mouse-grey sandhills with a five-foot height, most of which is in long slender black legs and a sinuous neck. Its gently tapered body is snow-white except for a scarlet crown and ebony featherlets swept back from its cheeks like the stroke of the *sumiye* ink brush of an Oriental calligrapher. At rest, the whooper's black primary feathers are concealed beneath white plumage; in flight, they tip an astonishing wingspan of nearly eight feet.

Crane at the edge of the field

From a willow bush, we watch the whooper take flight. With a shrill whoop, it runs along the ground with great lanky strides, neck outstretched, immense wings flicking upward in short arcs, then slower, graceful arcs as it becomes airborne. Brilliant white against the rusts and browns of the valley floor, it wheels magnificently into the upper reaches of blue sky and finds its course.

What is it about this bird that fascinates us? Its appearance is alternately awkward and comical ("flying sheep," Manitobans call them; "flamingos in a white tuxedo," others say), or of grand beauty made awesome by size and uniqueness. The feeling it evokes is not entirely aesthetic, but spiritually pure and enhancing as well. All around us, the world has changed since the dawn of life; this bird is the dawn of life -- unchanging, stubbornly locked in another time that somehow spills over into the unspoiled splendor of this wild, wild valley.

The essence of the whooping crane is well expressed in the serene logic of Zen, a discipline born of a culture whose artists continually paid homage to white cranes in painting and poetry. In a 10th-century Zen *mondo* (a dialogue of questions and answers that elicit teachings), a monk asks the master to reveal the source of the lion's great power. The master replies that the animal's power is in its "spirit of sincerity" -- literally, the power of "not-deceiving." Nothing held in reserve, nothing disguised or wasted, like the lion, the whooping crane is what it is and always has been.

Three years later, I see whooper 79-7 again. This time it is on its winter grounds at Bosque del Apache in New Mexico's Rio Grande Valley. Its perilous odyssey south from Idaho has brought it across mountain ranges and basins, driven by an arcane instinct borrowed back of late by the nurturing gift of sandhills. While some of the whoopers in this flock have names (Homer, Dick, Ernie), this one is simply 79-7, a five-year-old male with blue, white and yellow leg bands. Son of sandhills. A whooper that went to Montana.

At the refuge office, Rod Drewien, a biologist with the Cooperative Wildlife Research Unit at the University of Idaho, explained that it is not uncommon for subadults to wander. At breeding age (5 to 9 years old), whoopers take a lifetime mate; the ties within a family unit are strong, territories are well-defined and fiercely defended in wild dances with wings outspread, beaks open -- elaborate charges, chases and prances that defy the trespasser. Meanwhile, the adolescent floaters move about in response to varying food and water conditions. Some of the Rocky Mountain whoopers have spent summers near Montana's Crazy Mountains and at Island Park near Yellowstone.

Drewien said that while the foster program has been heartening thus far, two major problems remain. First, the whoopers must be kept alive. Second, whoopers reaching sexual maturity must stop thinking they are sandhill cranes, recognize each other, pair, breed and raise young. Several whoopers already have shown promising display behavior toward other whoopers -- at least, they aren't enticing any of the range's 15,000 sandhills into weird nuptial consummations induced by the fervor of a confused cross-gonadal identity crisis. The flock is still young and predominantly male; the future must produce more females. According to Drewien, the goal of a self-sustaining Rocky Mountain whooper flock will be met "if we can get about 40 to 50 birds of breeding age and if we quit losing them."

Losses have been heavy, particularly among vulnerable fledglings. Predation and drought have taken their toll and some birds have died in mortal encounters with barbed wire fences and powerlines. Hunting season, which coincides with the flock's fall migration, makes wildlife managers edgy, although precautions have been taken to ensure that hunters know the difference between a whooper and a sandhill, snow goose, egret, heron, small refrigerators or road signs. Not entirely eliminated is the possibility of a few Alcide Daigles in the bush, cuddling hot triggers, drooling for whooper skins.

A new threat looms. When I was at Bosque del Apache, one of the whoopers was sick or injured. (I leapt to the culpithood of the White Sands Missile Range southeast of the refuge. Never did trust the Air Force. Lousy shots.) The whooper died several days later and an autopsy revealed the cause: lead poisoning. The death sparked a controversy over the use of lead shot for hunting: How many other precious whoopers were ingesting lethal doses of lead with their food?

At one time, people feared that the whooper's "crystallized psychology," or inability to adapt to changing habitat conditions, would ultimately make it a victim of extinction -- like the California condor or grizzly bear, a relic of precivilization that by nature cannot compromise or adjust to man's idea of what the world should be like. If this argument rings a gloomy prophecy, it is because it reflects on one of modern wildlife science's most provocative and frustrating dilemmas: in the interest of preservation, do we change the whooper (or condor or grizzly), nudging evolution with seemingly benign manipulation, or do we change the world in which they live to conditions more suitable to their natural psyche?

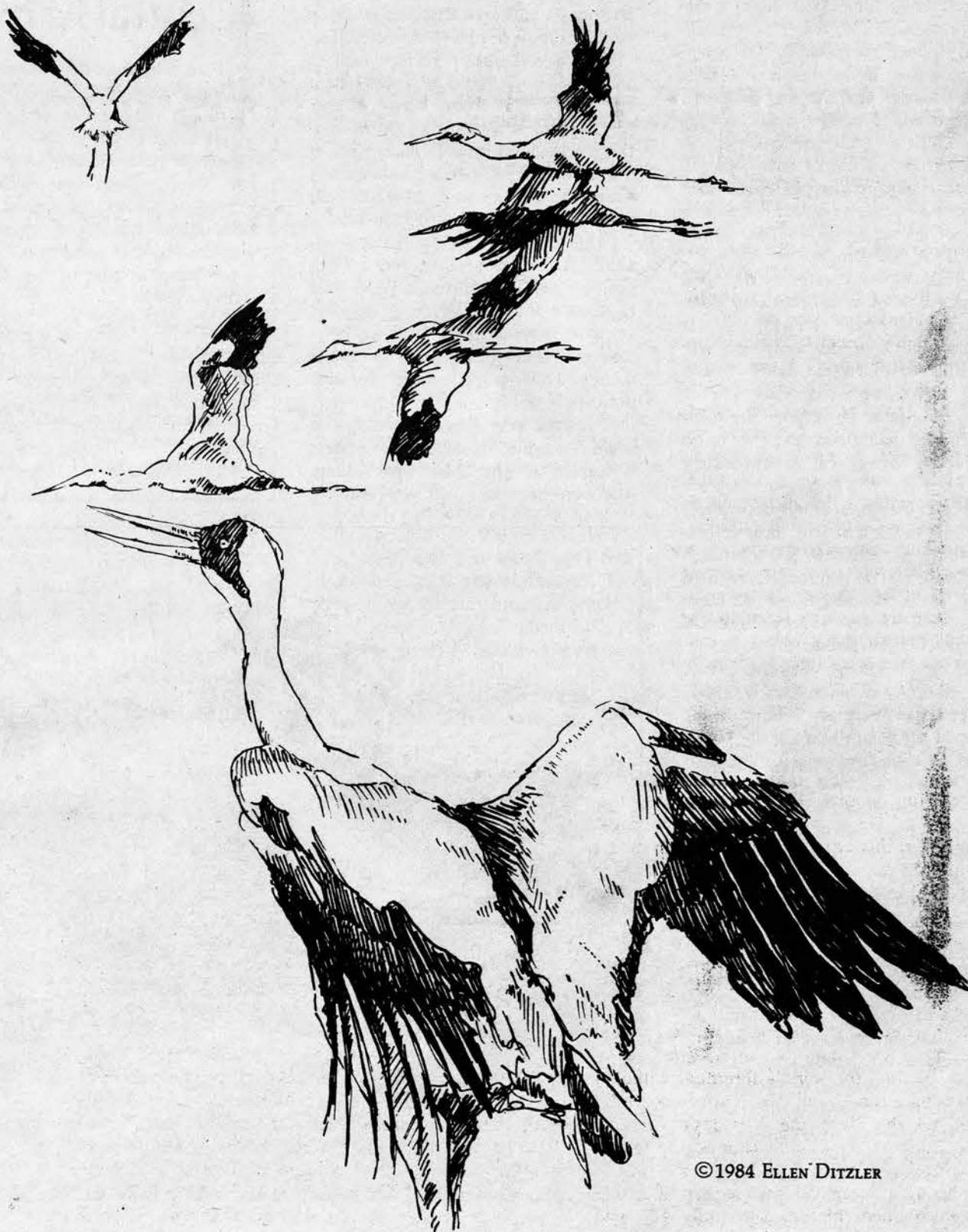
From the whoopers, we expect both. By grafting them onto sandhills, we have indeed altered their rearing techniques and diet, albeit without genetic tampering and only on a temporary basis. Yet as the Rocky Mountain birds mature, we'll want the whoopers to act like whoopers and reclaim a range that was once theirs, though drastically reduced in size and in

constant jeopardy. Thus far, the whoopers have responded with fragile but stubborn vigor and, hopefully, with an enduring tenacity to their own ancient integrity -- their "spirit of sincerity" that makes them what they are.

Although their Rocky Mountain range may seem vast, we've given back little of the whooper's world and only in remnants that faintly offer the isolation these strange creatures seem to require. The "gift" has perhaps come by default; portions of our region, by virtue of settlement patterns, preservation of public lands or whatever, have remained wild enough to contain them. The status is, to put it mildly, tenuous in the face of incessant pressures to rid us of even that small heritage.

With the red-crowned and Siberian cranes of Asia, the North American whooping crane is one of the world's three extant white cranes. In Japan the crane has pervaded art, literature and folklore for centuries, as a bird of mythical powers, messenger of the Immortals, carrier of souls to paradise, a symbol of longevity. Today, some Japanese grain farmers expect utter disaster if a crane does not appear as an omen of hope at the edge of their fields. Watching whooper 79-7 feed quietly in the marshes of Bosque del Apache, I feel that this well-traveled rare white bird should be everyone's crane at the edge of the field; alive, wild and always amidst us.

Ellen Ditzler is an artist-writer who lives in Helena, Montana. This piece is dedicated to M., J. and T., the bean-bag birders.





by Sandy Tolan

Phoenix, Arizona. The transformation of the Southwestern desert into lakes and lush lawns is central to Sunbelt growth. As the speedboats on man-made Lake Powell, the Golf Cart Crossing street signs in Sun City, and the hundreds of square miles of grassy suburbs throughout Arizona show, water is the base on which the area's expansion is predicated.

Arizona thought big when it secured federal authorization for the Central Arizona Project (CAP), and it is thinking big in putting that coming water (HCN, 2/20/84) to use. A prime example of its plans for that water is the proposed Rio Salado project in Phoenix. The dream is to replace a worthless, debris-filled floodplain of the Salt River with a multibillion-dollar project -- 20,000 acres spread along 16 linear miles of riverfront covered with parks, lakes, golf courses, homes and commercial development.

"It is the centerpiece for Arizona," says Arizona House majority leader Burton Barr, one of the project's strongest supporters. "I see a beauty there that's incomprehensible. It would provide a mecca for people in this state and others to come and participate on a year-round basis... without having to go 800,000 miles away, or to San Diego..."

Rio Salado was created by the 1966 graduate school of architecture class at Arizona State University. It depends, at least indirectly, on the Colorado River water CAP would bring, and on construction of upstream dams to reduce the Salt River's 100-year-flood level to open thousands of acres to riverside development.

The development of this flood plain is too big to be a strictly local effort. Constructing the new 300-foot-high Cliff Dam on the Verde River and raising and rebuilding Roosevelt Dam on the Salt River requires federal authorization and funding.

A large step toward that authorization was taken April 3, 1984, when Interior Secretary William Clark approved the final phases of the CAP. Without his approval of so-called Plan Six, Rio Salado would be impossible due to the threat of flooding.

Clark's approval of the \$1 billion Plan Six was qualified: Arizona will have to share the costs, and a six-month moratorium was placed on Cliff Dam while a study was done of its effect on wildlife.

Supporters and opponents of Cliff and Rio Salado agree that Clark removed the dam as a local political issue by asking the National Academy of Sciences to study it. Clark's strategy, they say, is to eventually use the study to justify construction.

"Clark is being helpful to Cliff's cause in trying to take it out of the political arena," said an April 7 *Arizona Republic* editorial titled "Cliff Dam Will Rise." It continued, "He knows that environmentalists would

Phoenix works to turn a Salt River floodplain into a billion-dollar development

like nothing better than to make it a political football... Clark has effectively outmaneuvered them for 1984."

Environmental opponents of Cliff, who say the dam's reservoir on the Verde would destroy one of the last habitats for desert-nesting eagles, also believe Clark's study sidesteps environmental concerns. "There have been studies and studies and studies," says Maricopa County (Phoenix) Audubon Society President Herb Fibel. Fibel predicts Clark will eventually say: "Well, we did everything, we checked this out, and there's no basis (for objections), and we're going to go ahead."

If Cliff does rise, it will combine with the rebuilt Roosevelt to flood-proof Rio Salado. Then, once the state-chartered Rio Salado Development District buys privately held land, developers can plant hundreds of acres of grass in the river bottom and put homes and other buildings at the edge of the new 100-year flood plain.

The development district plans to assemble its 10,000-acre development site by buying 5,000 acres of now private land at a cost of \$200 million. But it is possible that at least some of the more than 150 private land owners within the district may refuse to sell, preferring to bet on rising land values.

The land speculation and development possibilities inherent in the project raise concerns beyond bald eagle habitat on the Verde. Opponents say the project is a land scam -- foolhardy development that will divert money from safer, more sensible projects.

"It's the very worst planning you could imagine," says Dr. Robert Witzeman of the Maricopa County Audubon Society. "If you want a

disneyland, if you want to build those beautiful parks they say would attract additional things, you could do it for much less cost anywhere else in the valley.

"It's a terrible scam," Witzeman says. "They're telling people that homes will be safe down here in the river bottom because there's a 300-foot-high dam protecting them upstream. But they don't tell them anything about 1891, when we had a 200-year flood" which would have flooded Rio Salado land. If the project goes through, "It's going to make us look like the greatest fools of development at any cost... to be mowing bermuda grass in a river bottom, and locating people there at risk."

Also involved in the controversy are those now living in the area. Many Hispanic residents of south Phoenix worry that the city will force them out to make room for Rio Salado. Very few

south Phoenix residents live in the Salt River's 100-year floodplain. The few who do, says Witzeman, could have their homes protected for a fraction the cost of Cliff.

The Rio Salado district has identified about 300 families to be moved because they live on land perfect for commercial development. South Phoenix residents believe their barrio, one of the oldest neighborhoods in Phoenix, is jeopardized by a plush development designed for someone else.

Felix Cabajal, a member of a south Phoenix committee opposed to Rio Salado, says, "The city is going to come and say, 'Well, we need your property for progress.' What progress? You're going to make golf courses? We need jobs. We need food. We got people over here eating out of garbage cans. And now the city wants to take our homes. What do we have left? Nothing."

Central Arizona Project flows on

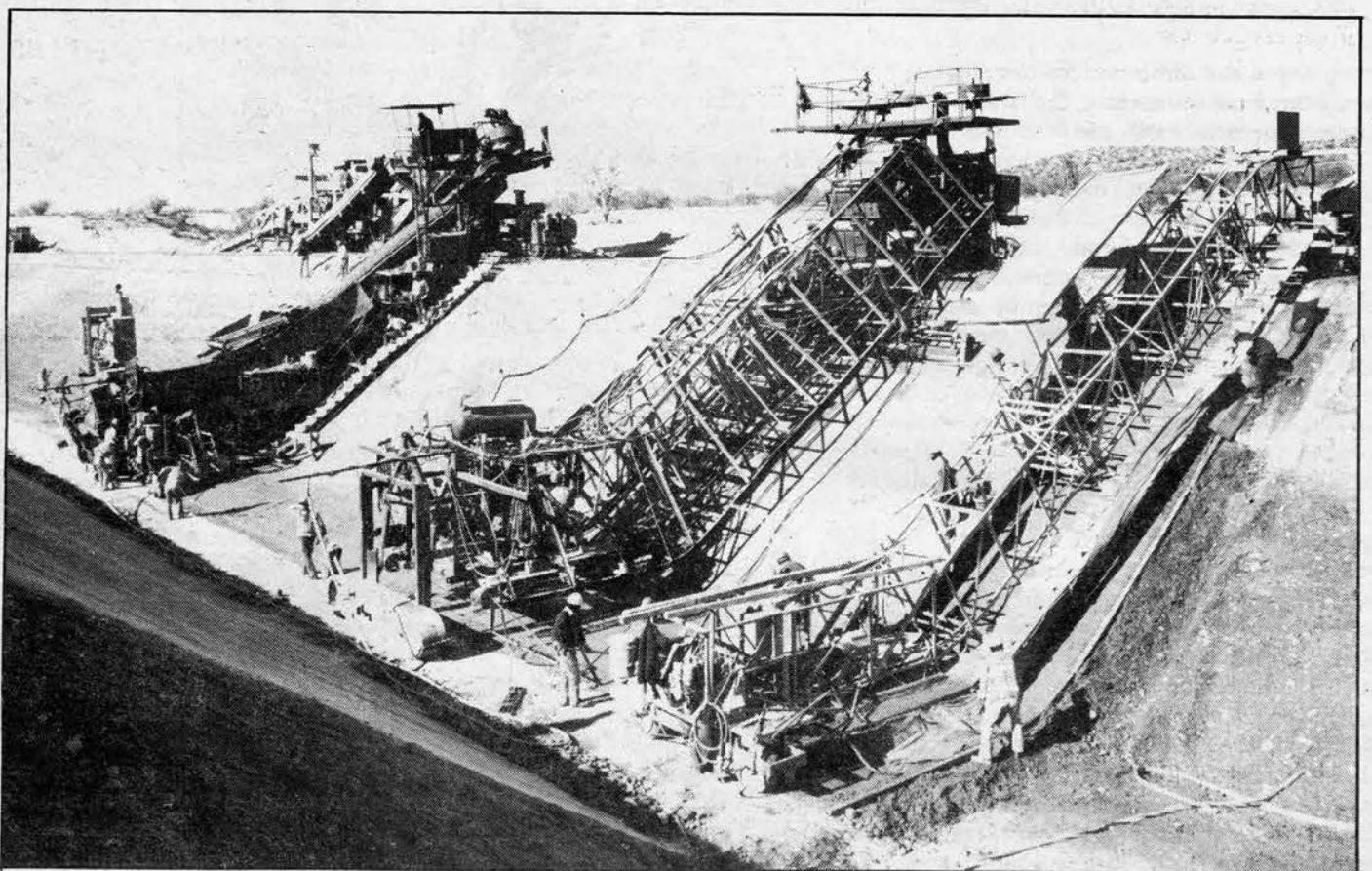
Plan Six, recently approved by Interior Secretary William Clark, is a \$1 billion compromise designed to avoid building Orme Dam on the Salt River below its confluence with the Verde. Orme was killed by President Carter; it would have flooded thousands of acres of wildlife habitat and an Indian reservation as part of the Central Arizona Project.

Instead, Plan Six calls for rebuilding Roosevelt and Stewart Mountain dams on the Salt River and building New Waddell Dam on the Agua Fria River and Cliff Dam on the Verde River.

The total cost of the CAP is

estimated at \$3.5 billion. By the year 2000, CAP is to be carrying water over 300 miles and 1,200 up from the Colorado River to Phoenix and then into central Arizona and Tucson. CAP will make its first deliveries by the end of 1985, when it starts supplying municipal and industrial water. It will eventually irrigate one million acres of desert.

The importance of Clark's April 3 approval is indicated by Arizona Congressman Morris Udall's (D-Tucson) statement to the *New York Times*: "(April 3) was the second most important day in the history of Arizona's water." The most important day, he said, was the project's 1968 authorization.



Paving Jumbos lay down concrete for the Central Arizona Project at a rate of about 5,000 feet a day.

Bureau of Reclamation/Joe Madrigal, Jr.



Tim Bray, Director of the Rio Salado Development District, says people will not have to move if the city council adopts residents' recommendations against relocation. "If relocation is not desirable," says Bray, "then let's have no relocation. And that's acceptable to us." But even if the council decides against relocation -- and many residents believe this unlikely -- higher land values and encroaching development would ultimately displace them.

"We will not be the ones to benefit by this, because we will no longer be here," says Tony Banda, another south Phoenix resident. "The taxes in

this area will be so high that we cannot afford to live here. Who are the people that are going to be in south Phoenix after it is developed, and after it becomes the paradise everybody says it will be? It certainly will not be the people that are here now."

"I'm concerned about that," says House majority leader Barr. "You know, the idea was that we were going to make everything better... I would think that in the confines of this entire affair, there can be something done for these people that will make them better off -- without moving them 82 miles. That's something we have to work at. I didn't even know they (the south Phoenix opponents) had surfaced until recently..."

South Phoenix may not be Rio Salado's big problem. Its real challenge may come in competing against other development interests for money to build Cliff and Roosevelt. With Cliff, the state's share of Plan Six may be \$350 million. Boosters of other unfinished parts of CAP -- particularly the New Waddell storage dam on the Agua Fria river west of Phoenix -- will be after the same money.

And if money for Cliff Dam is secured, one final hurdle will remain: a challenge in federal court by a coalition of opponents, including the Maricopa Audubon Society.

'Rio Salado is a scam. It's going to make us look like the greatest fools of development at any cost.'

Aspen remark sinks program

Economic development and freedom of the press clashed last month in Montrose, Colorado. The clash was set off by a five-minute radio broadcast on aspen trees.

The broadcast on regional radio station KUBC featured writer George Sibley (*HCN*, 4/2/84) talking about Louisiana-Pacific's new waferboard factory near Montrose -- a factory which will use several thousand acres of aspens per year.

Sibley had some critical things to say about L-P -- including the fact that some loggers refer to them as a "gyppo" outfit because they contract out their logging. Sibley, a former sawmill worker, also criticized environmentalists who live in houses with large, exposed beams. Finally, he said that more research is needed into the aspen question.

Sibley was interviewed on *Colorado Speaks*, a series of five brief programs a week on public service issues that is syndicated throughout western Colorado. *Colorado Speaks* producer Candi Harper said a canceling letter from KUBC, one of the syndicating stations, cited a lack of sensitivity to economic issues. She then called KUBC's Angus Bowen. "He told me: 'You don't know how hard people worked to bring that firm here.' Then he hung up on me." KUBC program manager Neil Schurtz told *HCN* that the program was dropped for a variety of reasons, and not for the Sibley program.

Ms. Harper said, "I'm sorry the forum isn't there any longer for the Montrose area. I'm sorry we can't talk about Louisiana-Pacific. I also regret

that I didn't make it clearer in each broadcast" that this is an open forum discussing all sides. Ms. Harper also said that her public broadcast series, which explores social and environmental issues, had undoubtedly irritated KUBC's management before. "This was probably the last straw."

Montrose (population 9,000) is typical of many western towns in its failure to share in the national economic recovery. It is a local service town for hard rock mining in the San Juan mountains to the south, for uranium mining to the west, for irrigated agriculture, and for tourism. The mining is almost totally shut down. The regional downturn in electric energy consumption has also hit hard. Montrose is home to Colorado-Ute Electric Association, which laid off about 200 employees over a year ago.

To bolster tourism, Montrose is pushing National Park status for the nearby Black Canyon National Monument, a deep canyon carved by the Gunnison River, and is attempting to land a proposed federal currency printing plant.

But the major emphasis is on industry. The Montrose business community supplied land and utility subsidies to the Louisiana-Pacific waferboard factory. A recent flap concerned L-P's use of a corporate jet to fly the Montrose county commissioners to Washington, D.C. to testify against a Natural Resources Defense Council appeal of the Gunnison-Uncompahgre-Grand Mesa National Forests' Fifty Year Plan.

--the staff



Sarah Locke

A town cut off from the mountains

Agricultural towns in the Rockies invariably use land in the same way. The mountains provide summer range for livestock while the valley meadows are producing winter feed for livestock and cash crops. The mountains also provide recreation, firewood and wild game for the community.

The town of San Luis fits that pattern with one exception -- the mountain land is now all privately owned.

San Luis was founded in 1861 and is the oldest town in Colorado. When Spanish-speaking settlers arrived in the early 1800s it was Mexican territory. The settlers were given grants of land divided into "varas" strips -- parcels of varying size bound at each end by the rivers flowing off nearby mountains.

The strips were supplemented by communal grazing land in the mountains. After the U.S. won its war against Mexico in 1848, the valley became American. But one of the conditions of the Guadalupe-Hidalgo treaty of 1848 was that the Mexican land grant system, including the access to communal land, be recognized.

For more than a century the people around San Luis continued to use the mountain lands, never questioning their right to do so. But somewhere along the way -- and no one seems to understand how it happened -- the communal lands were sold.

In 1937, the Simms family from Santa Fe, New Mexico paid a little more than \$2 per acre for the 240,000 acre Trinchera Ranch. This was the largest privately-owned tract of land in Colorado at that time. Malcolm Forbes, publisher of *Forbes* magazine, then bought 168,000 acres of the ranch in 1969, and has subdivided half of this acreage for second homes. Two of the three subdivisions are nearly sold out and the third is about half gone. Forbes recently bought the remaining portion of the ranch.

But the real controversy in the valley surrounds the Mountain Tract --

a 77,000 acre piece of land southeast of San Luis. In 1959 Jack Taylor, a North Carolina timber baron bought this land from a group of Denver businessmen. Some claim that Taylor signed a document saying that the local people would still be allowed to use the land for summer pasture and for collecting firewood. No one can prove the existence of such a document.

All the people in San Luis know is that Taylor immediately fenced off the land. When people still tried to trespass, he bulldozed roads and posted armed guards. The local opinion that Taylor was racist was reinforced by a 1974 interview in the Raleigh, North Carolina *News and Observer* newspaper. Taylor said:

"The anti-Anglo thing is an inferiority complex. They know they're not equal, mentally or physically, to a white man... You try to keep them afraid of you... They think that we'll shoot 'em. I guess we'll have to keep them thinking that."

Taylor himself was shot a few years ago, and he has spent little time in the valley since then. His ownership of the land has been challenged, but the judge ruled that the Mexican land grant laws were not valid. Valley residents filed a second class action suit in 1981, but the case is still mired in the legal system.

"There's a cloud over the title," says Arnie Valdez. "It's hard to tell what really happened, but most people think that a local official must have sold us out at some point."

What this all means for the people in Costilla County is that they are the only county in Colorado with no public lands. Since the Mountain Tract was fenced off in 1960, Costilla County's population has dropped by a third. It's impossible to know whether the closing of the mountain lands was responsible for the exodus. But it can be said that a certain way of life in Costilla County ended 24 years ago.

--Sarah Locke

LETTERS

WHAT THE GRIZZLIES NEED FIRST

Dear *HCN*,

One correction to your otherwise accurate article "Fierce Bears Get Aggressive Help" (*HCN*, 4/16/84) is in order. The Citizens' Proposal to save the Yellowstone grizzly bear asks that a feeding center for the bears be re-established only if man-caused mortality cannot be largely eliminated. We can expect that such mortality will drop to near zero and that population recovery will occur once, as called for by the proposal, all developments and activities that may hurt the grizzly are disallowed within critical habitat.

Grant Village, Fishing Bridge, harmful logging operations, oil drilling, and other projects that are collectively destroying the Yellowstone grizzly would not be possible under the Citizens' Proposal. Feeding is a reserve measure that would be used only if necessary to help stabilize the bear population. By itself, it is no substitute for strict protection of both the grizzly bear and its habitat.

Tony Povilitis
Director
Campaign for Yellowstone's Bears
Boulder, CO

Second Annual High Country News Outdoor Education

TETON SCIENCE SCHOOL'S OUTDOOR CLASSROOM COLLEGE CREDIT AVAILABLE*

NON-RESIDENTIAL

2 DAY SEMINARS

ANIMAL BEHAVIOR FOR NATURALISTS
June 2-3/\$50

ECOLOGICAL ETHICS
June 23-24/\$50

A BRIEF JOURNEY THROUGH THE NIGHT SKY
June 30-July 1/\$40

3 DAY SEMINARS

WILDLIFE IN PERIL: THE ENDANGERED SPECIES STORY
July 6-8/\$80

ECOLOGY OF ELK, MOOSE AND BIGHORN SHEEP
July 13-15/\$80

4 DAY SEMINARS

ZION NATIONAL PARK: WARM COLORS - WARM DAYS
May 4-7/\$195

GLACIER NATIONAL PARK: BIG SKY FROM THE TOP
August 24-27/\$195

GRAND TETON NATIONAL PARK: FALL COLOR
September 28-October 1/\$195

5 DAY SEMINARS

BIRDS OF JACKSON HOLE
June 20-24/\$135

GEOLOGY OF JACKSON HOLE
July 2-6/\$135

VASCULAR FLORA OF THE TETONS
July 9-13/\$135

NATURE ILLUSTRATION
July 9-13/\$135

LIGHT ON A DARK TOPIC: INTERPRETING THE NIGHT SKY
July 23-27/\$135

ENVIRONMENTAL EDUCATION
July 23-27/\$135

ALPINE ECOLOGY
July 30-August 3/\$135

UNDERSTANDING ANIMAL BEHAVIOR
August 6-10/\$135

INTRODUCTION TO EDIBLE AND MEDICINAL PLANTS
August 13-17/\$135

ECOLOGY OF JACKSON HOLE
August 20-24/\$135

RESIDENTIAL

YELLOWSTONE-TETON CONNECTION: TWO PARKS - ONE ECOSYSTEM
August 11-18/\$395

Co-taught with Yellowstone Institute. Participants spend four days in Yellowstone followed by four days in Grand Teton National Park, exploring the geological, natural and human history of this unique ecosystem. College credit available.

FIELD ECOLOGY FOR HIGH SCHOOL STUDENTS
June 18-July 27/\$1050

This is the eighteenth year for this exceptional program. For students seriously interested in an in-depth exploration of the greater Yellowstone-Teton ecosystem and field ecology methodology.

ENVIRONMENTAL STUDIES FOR STUDENTS AGED 13-15
August 1-10/\$300

An introduction to natural history and ecology designed to inspire a lifetime interest.

Residential participants' fees include room, meals, transportation and instruction during the courses.

Non-residential participants camp free at nearby Gros Ventre Campground, or find other lodging. All meals are the responsibility of the participants. Alpine Ecology participants provide their own backpacking gear.

*College credit available on most courses at \$28/hour through the University of Wyoming.



Colorado Outward Bound

Surrounded by the rugged peaks of the Rocky Mountains, your course takes you from the first day's backpacking to major peak ascents. In the spring and fall, canyon backpacking and rock climbing are offered in the Utah Canyonlands, and in winter, cross-country skiing and ski-mountaineering in the Colorado Rockies. White-water rafting courses on the Green, Yampa and Colorado rivers take place May through September. Longer courses offering college credit include Western Wilderness Quarter and Leadership Development Semester.

For a free catalog contact: Colorado Outward Bound School, 945 Pennsylvania, Dept. HCN, Denver, CO 80203-3118.

Rocky Mountain National Park

Rocky Mountain Nature Association, in cooperation with the National Park Service, Colorado State University, and the University of Northern Colorado, invites you to participate in the seminar program at Rocky Mountain National Park.

Continuing a tradition begun in 1962, this adult program includes both weeklong and weekend sessions. All courses are taught by leading professionals who are also recognized for their teaching ability. College credit is granted for most of the weeklong seminars. Emphasis is on

outdoor exploration of the Rocky Mountain environment; long and strenuous field activities are complemented by occasional indoor sessions. Each seminar is limited in size.

Glacier Institute

The Glacier Institute has a new outdoor program in Glacier National Park for the scientist, artist, teacher, and inquisitive summer visitor. Glacier National Park on the Canadian border in Northwestern Montana has long been one of the showpieces of our national park system. Glacier Park offers a wealth of learning opportunities with its rich variety of wildlife and diverse glaciated landscapes from alpine cirques to broad forested valleys.

All classes are taught on-site in Glacier Park with an emphasis on outdoor learning. Our instructors are professionals with a special feeling for the park that they will share with you. Spend a weekend or a week exploring the park and expanding your interests in natural sciences, art, photography, history, or education.

Yellowstone Institute

The Yellowstone Institute is one of the region's unique educational programs, providing field seminars in a classroom that includes all of the natural wonders of our nation's oldest national park -- Yellowstone. The Yellowstone Institute offers 50 courses this year covering a broad range of



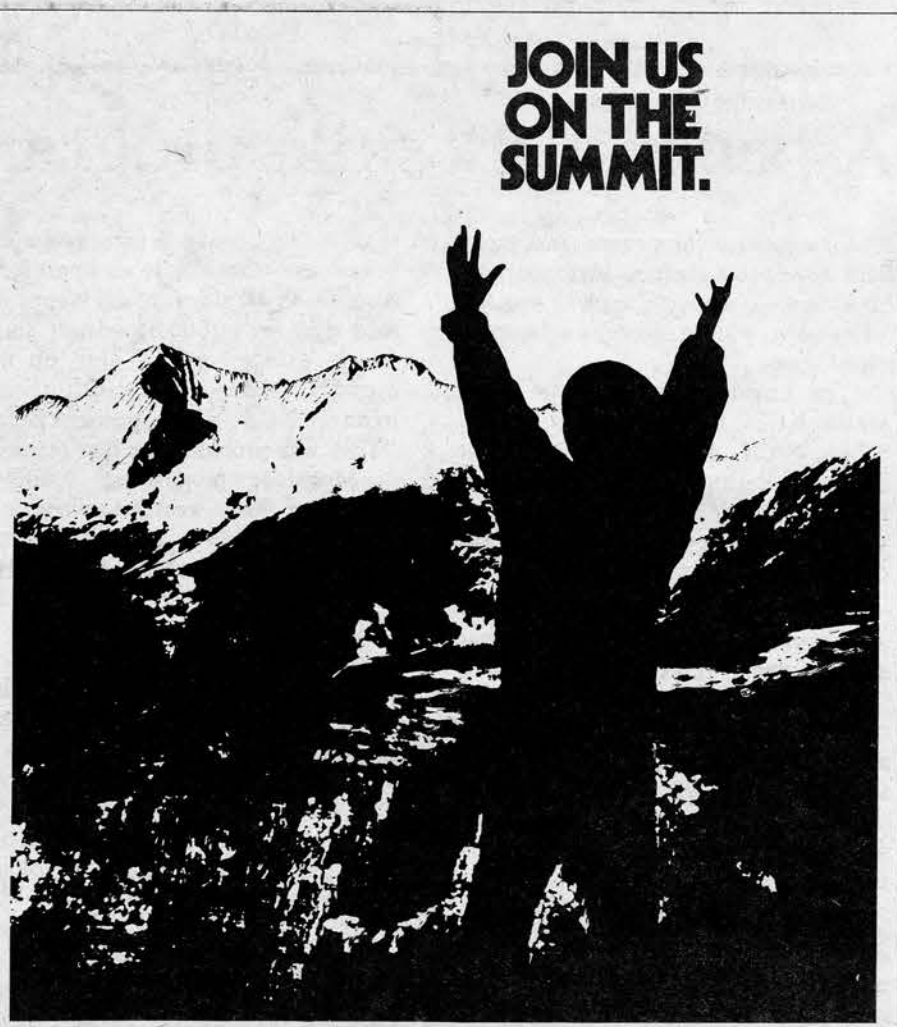
The WINDSTAR FOUNDATION'S GARDEN PROJECT is offering two one-month Apprenticeship Programs in Biodynamic/French Intensive Horticulture during summer 1984. There will be an emphasis on high altitude gardening and extending the growing season.

Session 1 May 26-June 24

Session 2 August 12 - September 16

For inquiries, write:

Gretchen Hofmann, The Windstar Foundation
P.O. Box 286, Snowmass, CO 81654



**JOIN US
ON THE
SUMMIT.**

WHO ARE WE? We're Outward Bound—an opportunity for you to experience personal growth through adventure. We'll give you the unique opportunity to push your limits while enjoying the grandeur of the Colorado Rockies in the summertime.

Sooner than you think, the mountains will become your second home. You'll gain a new perspective on your environment and yourself. As your journey unfolds, the strangers in your group will become friends. Together, and by yourself, you'll learn new ways to solve problems and skills applicable to your everyday life. These courses are tough. They're meant to be—but not beyond the reach of anyone who tries. They're fun. And as safe as human ingenuity and experience can make them.

WHERE? Few places on earth can match the beauty of the Rocky Mountains. You'll be surrounded by rugged peaks, fragile alpine tundra, fragrant sub-alpine meadows, clear lakes, and the magic of forests, wildflowers, rocks and streams. On a ten-day or 23-day mountaineering course, you'll learn how to backpack, mountain climb, rock climb and innumerable other skills. You'll feel the challenge of an alpine peak ascent, the tranquility of a mountain dawn.

WHEN? Our summer program runs from May through September, spanning the variety of conditions and environments from late spring to early fall. If the summer course doesn't suit your schedule, consider our other experiences. Glide through the pristine wilderness of the winter mountains on cross-country ski, thrill to the fast-moving pace of a whitewater raft trip, or explore the mystery of the Canyonlands of southeastern Utah.

WHY YOU? We all need a change of pace, an opportunity to live up to our own potential. You can stay in your home forever. Comfortable. Secure. Untested in the rich waters ahead. Or you can choose to explore the unknown.

Write for a free four-color catalog today. No experience necessary. Outward Bound is a non-profit educational organization.

JOIN US.

Send a free catalog on the year-round courses offered to:

Name

Address

City/State/Zip

Age

Mail coupon to:
Colorado Outward Bound School
945 Pennsylvania St., Dept. HCN
Denver, CO 80203
(303) 837-0880



Established 1961

Directory

topics, including wildlife, geology, botany, history, photography, astronomy, horserpacking, fishing, biking, backpacking and canoeing.

The Yellowstone Institute is a program of the Yellowstone Library and Museum Association, a non-profit, tax-exempt organization. The Institute was created nine years ago to enhance public understanding of Yellowstone National Park. Most of the field seminars are based at a National Park Service facility in the seldom-visited Lamar Valley of northeast Yellowstone.

Teton Science School

Jackson Hole and Grand Teton National Park offer one of the world's outstanding natural outdoor classrooms. Teton Science School, now in its eighteenth year, is a private, non-profit school offering a spectrum of natural history and field ecology courses throughout the year for all ages.

Instructors are highly qualified specialists in their fields who, while investigating their topics in depth, will also relate them to the broader web of life in this spectacular area. All classes are field studies with informal lectures. Some involve laboratory follow-up, others are conducted while backpacking in the high country. Most of the courses, residential and non-residential, are based at the school located on the quiet side of Jackson Hole in Grand Teton National Park.



Summer in Yellowstone

Join the Yellowstone Institute for over 40 field seminars in Yellowstone National Park. Courses vary from 2 to 8 days, and many may be taken for college credit.

1984 courses include:

- Rocky Mountain Wildflowers
- Birds of Yellowstone
- Small Mammals
- Night Skies over Yellowstone
- The Yellowstone-Teton Connection
- Volcanoes and Fossil Forests
- Large Mammals
- Grizzly Bear Biology and Management
- Outdoor and Wildlife Photography
- Canoeing
- Backpacking
- Fly Fishing
- Biking Yellowstone
- Wilderness Horserpacking
- Ways of the Mountain Men
- Animal Sign: Tracks, Scat, Hair, Feathers, and Galls
- Environmental Education
- Plus many other courses. Also a 3-day camp for children at the historic Buffalo Ranch.

The Yellowstone Institute is a non-profit, tax-exempt organization. For a free catalog, write:

The Yellowstone Institute Box 515
Yellowstone National Park, Wyo. 82190
(406) 443-0861

NEAT STUFF

MORE CHEAP BEER than you can possibly drink at the 5th annual Northern Plains Resource Council's Bozeman Benefit, May 18, 6 P.M. at the Gallatin County Fairgrounds. Chili dinner, auction and dance.

THE MONTANA ENVIRONMENTAL INFORMATION CENTER

Rendezvous



Bring a friend or two - get your tickets now!

June 2, 1984

Boulder Hot Springs

A spring gathering for all conservationists who like to have fun. We supply meat, beer and entertainment, you bring a pot luck.

Contact EIC 443-2520

SPRING WITH US!!

CONDOMS & SPERMICIDAL PRODUCTS. Large variety at discount prices (5-50%) from alternative non-profit organization. Books on natural birth control, sexuality, population issues and more. For a FREE descriptive mail order brochure, write us: Zero Population Growth, 4426 Burke N., Seattle, WA 98103.

CONSERVATION

FAMILY INSTITUTE IN ARIZONA sponsored by Tucson Audubon Society August 14-17 near Oracle in the Catalina mountains near Tucson. Field studies for families: cabins, catered meals included. For brochure write Family Institute HCN, 30-A N. Tucson Blvd., Tucson, AZ 85716.

WATER '84

May 12 & 13, 1984

THE FUTURE OF WESTERN SLOPE WATER: WHOSE DECISION?

The Inn at Glenwood Springs
Glenwood Springs, Colorado

Contact: Box 728
Connie Albrecht Palisade, CO 81526
303/464-5329

SOLAR COMPONENTS

SunLite® glazing
ARCO photovoltaic systems
Solar hot water

Tinkers & Traders

Box 91, Victor, Idaho 83455
208-787-2495

CLASSIFIED ADS cost 20¢ per word, prepaid, \$5 minimum. Rates vary for display advertising; write HCN, Box V, Paonia, Colorado 81428 or call 303/527-4898 for further information.

SINGLE PROFILE NEXUS creates a nationwide network of cultured singles. Box 19983, Orlando, FL 32814.

AN INVITATION TO LEARN AT ROCKY MOUNTAIN NATIONAL PARK



—WEEKEND SESSIONS—

August 17-19
ARCHAEOLOGY ABOVE TREELINE with Dr. Thomas Lennon, University of Colorado
August 24-26
EDIBLE MUSHROOMS OF ROCKY MOUNTAIN NATIONAL PARK with Dr. John Gapter, University of Northern Colorado
August 31-September 3
WOMEN IN THE WILDERNESS with Dara Anderson, Fort Collins
September 7-9
LOW IMPACT CAMPING with Charlie Logan, National Park Service

—WEEKLONG SESSIONS—

June 11-16
BIRD ECOLOGY with Dr. Richard Beideman, Colorado College
June 18-23
MOUNTAIN GEOLOGY—EAST with Dr. Robert Johnson, Colorado State University
June 25-30
OUTDOOR EDUCATION with Beth Hill and Gary Laustsen, Allenspark
July 2-7
SAGEBRUSH TO TUNDRA with Dr. John Emerick, Colorado School of Mines
July 9-14
PLANT IDENTIFICATION with Dr. Donald Mansfield, Colorado College
July 16-21
ECOLOGY OF FURRY CREATURES with Dr. William Alldredge, Colorado State University
July 23-28
ALPINE ECOLOGY with Dr. Clait Braun, Colorado State University
July 30-August 4
ECOLOGY OF FRESH WATERS with Dr. Scott Hermann, University of Southern Colorado
August 6-11
MOUNTAIN GEOLOGY—WEST with Dr. Robert Johnson, Colorado State University
August 13-18
FIELD STUDY OF MUSHROOMS with Dr. John Gapter, University of Northern Colorado

FOR MORE INFORMATION WRITE:
SUPERINTENDENT
Rocky Mountain National Park
Attn: Seminar Coordinator
Estes Park, CO 80517
PHONE 303-586-2371



—FLORISSANT SESSIONS—

June 15-17
ECOLOGY OF THE FLORISSANT REGION with James Mariner, Fountain Valley School
July 6-8
THE FLORA OF FLORISSANT with Dr. William Weber, University of Colorado
August 17-19
INSECTS OF FLORISSANT THEN AND NOW with Dr. F. Martin Brown, Wright-Ingraham Institute

4 SCREENS and AIR Clean for certified seed for planting with the WHIZZER IV



Patented 4-screen cleaning with aspirator and automatic controls: many options available including trailer, baggers, scales, augers, screens for over 100 commodities.

JSX CORPORATION

600 Washington Ave. North
Minneapolis, MN 55401 USA
(612) 333-5118

Bring gamebirds, songbirds

doves, small animals to your property -- attracted by the plants in the WSL Food and Cover seed mixture. Ten preferred annual plants create a diverse planting that grows with little or no maintenance in our unique Rocky Mountain conditions. Add interest and wildlife to your property. Plant as spot or strip plantings around ponds, streams, along fences, borders, ditchbanks, corners, unused areas viewed from your windows -- wherever wildlife is wanted.

Food and Cover Mix (plants 4,000 square feet) \$10

Also available:

WILDFLOWER MIX 1, High Desert (for dry areas)
WILDFLOWER MIX 2, Sub-Alpine (requires slightly more moisture)
Each mix includes several species of annual and perennial wildflowers. Adds color to open spaces. Attracts butterflies. Enjoy a low maintenance wildflower meadow year after year.

Wildflower Mixes	3 ounces	\$15
(2-3 ounces plants)	Half Pound	\$30
1,000 square feet)	One Pound	\$45

All orders shipped postage paid, with instructions, on receipt of payment. Larger quantities available. Other mixes available. Special annual and perennial mixes can be developed for specific needs. Write for information.



WILDLIFE SYSTEMS LTD.

P.O. Box 1031
Blackfoot, Idaho 83221
Tel: (208) 785-0385

Landscapes for Wildlife

Reader Service Coupon

Use this handy coupon to request further information on programs that interest you. Send it and \$1 to High Country News, Box V, Paonia, Colorado 81428. We'll take care of the rest.

Name _____

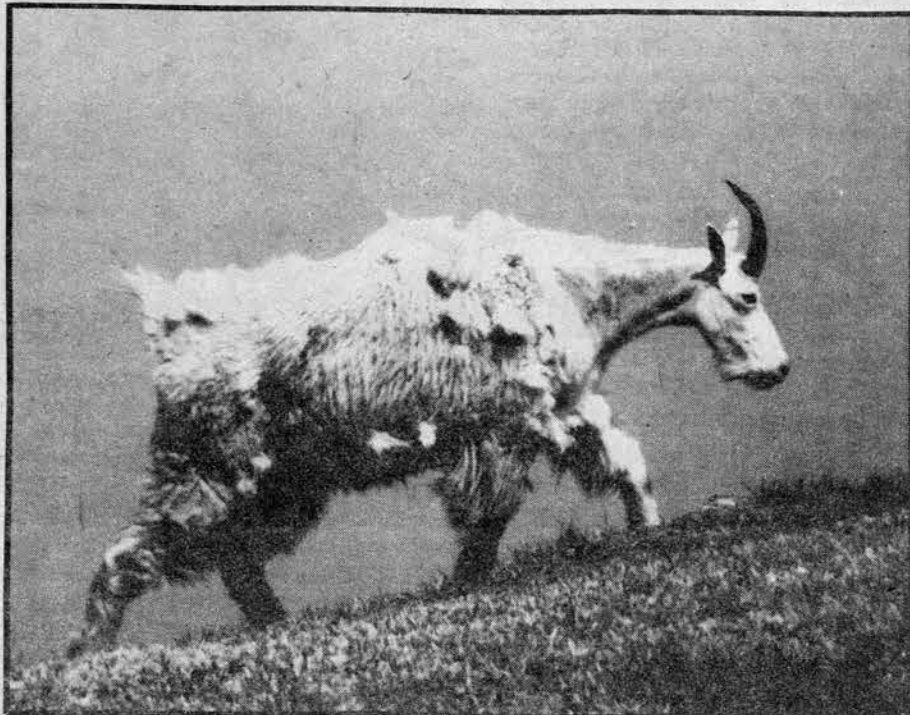
Address _____

City, State, Zip _____

Please send me more information on:

- ☐ Colorado Outward Bound School
- ☐ Glacier Institute
- ☐ Rocky Mountain National Park
- ☐ Teton Science School
- ☐ Yellowstone Institute

HCN Index Volume 15 1983



Diane Ensign

Continued from the last issue...

PUBLIC LANDS

Pothead hunting for profit -- and the loss of history, George Hardeen, 8/7/83, p. 16: Legally protected artifacts are being removed by collectors.

Wildlife refuges may host oil leases, Jan Valdez, 7/22/83, p. 2: Interior Dept. reverses 25-year policy prohibiting oil and gas leasing in Wildlife Refuge System.

The great reforestation shell game, Bill London, 7/22/83, p. 3: Forest worker charges that the Forest Service isn't using the Reforestation Trust Fund properly.

Vocal majority endorses Riley Ridge, Dan Gorham, 8/5/83, p. 4: Proposed gas field on BLM land in Wyoming supported by area residents.

'Progress' closes in on Idaho's Priest Lake, by Bert Krietlow, 11/14/83, p. 4: Plans for ski resort and new homes threaten lake and rare caribou herd.

STATE LEGISLATURES

ICL plays defense in Idaho, Glenn Oakley, 1/21/83, p. 4: Conservation group works to protect Idaho's environmental budget.

Budget deficits, hazardous waste occupy Colorado, Deidre Duncan, 1/21/83, p. 5: Colorado legislature addresses budget deficits and hazardous wastes.

Utah reviews Matheson's BOLD plan, Brec Cooke, 1/21/83, p. 5: Economically stripped Utah legislature looks at public land exchange and instream flow.

Wyoming's budget blues, Dan Whipple, 1/21/83, p. 6: Environmental victories in the financially insecure Wyoming legislature.

In Montana, it's a question of how to split the pie, Don Snow, 1/21/83, p. 6: Spending coal tax monies, other environmental issues to be considered by Montana legislature.

Legislative update -- Colorado, Deidre Duncan, 2/4/83, p. 4: Legislature wades through soil erosion, recreational licensing, the Natural Areas Program and water conservancy districts.

Legislative update - Utah, Brec Cooke, 2/4/83, p. 4: Utah legislature kills nuclear freeze resolutions, other environmental issues and public land swap bills.

Legislative update - Idaho, Glenn Oakley, 2/4/83, p. 5: Idaho Power Company's Snake River water rights questioned by Idaho legislature.

Legislative update - Montana, Don Snow, 2/4/83, p. 5: Montana legislature debates use of Montana water in proposed coal-slurry pipelines.

Legislative update - Wyoming, Dan Whipple, 2/4/83, p. 5: Wyoming legislature discusses coal, water and wildlife issues.

A death in Utah's House, Brec Cooke, 2/18/83, p. 4: Utah legislature and water bonds, land exchanges, severance taxes, and instream flow.

Idaho guts environmental rules, Glenn Oakley, 2/18/83, p. 4: Idaho legislature says no to court injunctions against environment-threatening activities.

Wyoming tries to turn water into gold, Dan Whipple, 2/18/83, p. 5: Wyoming House postpones coal-slurry pipeline water development.

Colorado nongame tax check-off reviewed, Deidre Duncan, 2/18/83, p. 5: Water bills

and non-game check-off move ahead in Colorado legislature, but air quality regulations suffer House defeat.

Montana deals in slurry water, Don Snow, 2/18/83, p. 5: Legislature questions Montana's bans on water use in coal slurry pipelines.

Wyoming closes "disastrous" session, Dan Whipple, 3/4/83, p. 4: Wyoming Legislature defeats minimum stream-flow and wildlife trust fund.

Montana kills anti-environment bills, Don Snow, 3/4/83, p. 5: Montana Senate refuses shortcuts to industrial growth; House boosts non-game wildlife and pesticide restrictions.

Oakley, 3/4/83, p. 5: Public land sales, field burning under scrutiny in Idaho legislature.

Colorado tackles toxic waste problem, Deidre Duncan, 3/4/83, p. 5: An array of hazardous waste bills fight it out in the Colorado legislature.

IPC wrangles over water rights, Glenn Oakley, 3/18/83, p. 4: Idaho legislature considers Snake River water rights and placing endangered wolves on the state's predator list.

Colorado considers Lowry reopening, Deidre Duncan, 3/18/83, p. 5: Hazardous wastes, clean air, and streamflow control concern the Colorado legislature.

Utah passes project BOLD, Brec Cooke, 3/18/83, p. 5: State/federal land exchange heads list of bills passed in Utah legislature's final week.

Colorado eyes groundwater protection, Deidre Duncan, 4/1/83, p. 5: Colorado legislature looks at waste injection controls, groundwater mining, public input on water projects, and dam safety.

Montana kills slurry water use, Don Snow, 4/1/83, p. 5: Montana state legislature continues ban on using water in coal-slurry pipelines.

Idaho keeps wolf on protected list, Glenn Oakley, 4/1/83, p. 5: Idaho legislature acts on wolf protection, grass-field burning and utility payments to power producers.

Colorado inhibits open space purchases, Deidre Duncan, 4/15/83, p. 4: Colorado legislature faces city park condemnation rights, water projects, state park fees and raising speed limits.

Idaho legislature wraps up session, Glenn Oakley, 4/15/83, p. 5: Idaho legislative session closes with budget cuts, the continuation of the Swan Falls water fight, veto of grass-field burning bill and weak hazardous waste bill.

Parks suffer in Colorado legislature, Deidre Duncan, 4/29/83, p. 4: Lottery proceeds and park funds, deteriorating highways and bridges, and city/county land use anti-trust lawsuits concern the Colorado legislature.

Montana legislature '83 - Mixed reviews, Don Snow, 4/29/83, p. 6: Mixed results for conservation issues in the 1983 Montana legislative session.

SYNTHETIC FUELS

Wyoming eyes Hampshire cautiously, Marjane Ambler, 2/4/83, p. 3: Conditional industrial siting permit for a Gillette, Wyoming synthetic gasoline plant.

Life after oil shale, Ed Marston, 4/15/84, p. 1: Western Colorado's oil shale boom -- interrupted or dead?

Oil prices have synfuels struggling, Dan Gorham, 4/29/83, p. 5: Backers of North Dakota coal gasification project may back out.

Synthetic fuels: money in search of an idea, Dan Gorham, 6/10/83, p. 1: Low oil prices and high costs are causing synthetic fuel projects to suspend operations.

Synthetic fuels: less from more, Dan Gorham, 6/10/83, p. 10: A look at synthetic fuel technology.

Wyoming DEQ questions World project, Marjane Ambler, 6/10/83, p. 4: Proposed coal gasification plant runs into groundwater snag.

Colorado shale gets SFC cash, Carol Jones, 8/5/83, p. 3: Cathedral Bluffs Shale Oil Project signs letter of intent from Synthetic Fuels Corporation.

Industry rejected Watt's oil shale giveaway program, 10/31/83, p. 12: Overzealous program was pounced on by industry, local governments, and environmental groups.

SFC will act on oil shale grants... maybe, Gary Schmitz, 11/28/83, p. 5: Oil shale projects vie for SFC loan guarantees and price subsidies.

Oil shale foes end a decade-long war, Ed Marston, 12/12/83, p. 6: Ad-hoc committee may break Congressional blockade.

WATER

Indians gain significant water rights, Marjane Ambler, 1/21/83, p. 3: In-stream-flow protection on the Wind River Reservation.

Idaho lowers water standards, Glenn Oakley, 1/21/83, p. 4: Idaho lowers regulations governing stream sedimentation.

Judge voids New Mexico water law, Steve Hamp, 2/4/83, p. 3: A federal judge rules New Mexico law unconstitutional in ongoing Texas-New Mexico water fight.

They built it up with silver and gold, Paul Talbot with Dan Whipple, 2/4/83, p. 16: Pros and cons of the Central Arizona Project.

BLM's aspen cutting plan sawed down, Carol Jones, 3/4/83, p. 4: BLM proposes aspen clear cutting around Glenwood Springs, Colorado to increase water flow into the Colorado River.

States start water sale scramble, Dan Whipple and Don Snow, 3/18/83, p. 16: States scramble in face of proposed coal-slurry pipelines.

In-stream flow reincarnated, Dan Gorham, 4/15/83, p. 4: Wyoming Wildlife Federation plans petition drive to put in-stream flow on the ballot.

Ranchers vs. Indians -- the water war, Geoffrey O'Gara, 4/29/83, p. 4: A court case over water rights and the treaty creating the Wind River Indian Reservation.

Kemmis' call for leadership, Dan Kemmis, with introduction by Don Snow, 4/29/83, p. 15: The Montana House Speaker's oratory against selling water to a coal-slurry pipeline.

Indians lose first battle of water war, Marjane Ambler, 5/13/83, p. 2: Wyoming judge rules against Wind River Reservation Indian water rights.

Critics boil over water district bill, Kathleene Parker, 5/13/83, p. 6: Legislation, court cases and southwestern Colorado's proposed Animas-La Plata water conservancy district.

BuRec eyes new dam site in Teton Park, Jill Bamburg, 5/27/83, p. 4: New dam sites for aging Jackson dam are examined.

Roll on, Columbia, roll on, John Soisson, 6/10/83, p. 5: Columbia river may be highly contested water source for thirsty southwest.

Colorado floods Grand Canyon beaches, Randy Udall, Patricia Guthrie and Sandy Tolan, 6/24/83, p. 2: The BuRec's Glen Canyon Dam attempts to balance economics and ecology.

Study sees four Powder River dams, Susan Harlow, 6/24/83, p. 4: Tangled water rights and low demand make proposal questionable.

Water policy drains public use, Jess Funk, 6/24/83, p. 4: Two opinions from Interior could allow private control on BLM lands.

Spillway breaking up, Patricia Guthrie, Sandy Tolan, 7/8/83, p. 2: Glen Canyon Dam spillways damaged by record flows.

Dollars no longer flow uphill, Ed Marston, 9/5/83, p. 1: Water workshop in Colorado discusses the end of the dam-building era.

Salt Lake City may become Venice, Lance Gurwell, 9/5/83, p. 5: Great Salt Lake is rising and causing expensive damage.

Hydropower sites are identified, Bill London, 9/5/83, p. 6: Corps of Engineers

says 20 dams could be built or expanded in Montana and Idaho.

The lights dim for Kootenai Falls dam, Don Snow, 9/19/83, p. 4: Montana and federal agencies recommend against granting construction permits.

Water use, flood control clash at hearing, Sandy Tolan, 9/19/83, p. 5: House subcommittee holds hearings in Arizona on Colorado River flooding.

Floods reveal water policy chaos, James R. Udall, 10/3/83, p. 1: Was the Bureau of Reclamation at fault for not acting soon enough to release water from its reservoirs?

Flood victims now face eviction, Sandy Tolan and Patricia Guthrie, 10/3/83, p. 11: States and local, flooded communities debate management of the Colorado River.

Hydroelectric project goes down the tubes, 10/3/83, p. 5: The Federal Energy Regulatory Commission halts a Western Colorado hydropower project.

An empty ditch becomes a river, Don Snow, 10/3/83, p. 3: Dave O'Dell finds a way to make the Bitterroot in Montana a river again.

EPA backs stricter water standards, Mary Moran, 11/28/83, p. 3: New head Ruckelshaus promises tougher regulations.

How Lake Powell almost broke free of Glen Canyon Dam this summer, T.J. Wolf, 12/12/83, pp. 10-14: The effect of the summer's flooding on Glen Canyon Dam.

Bureau downplays damage, 12/12/83, p. 14: The Bureau of Reclamation's estimate of work and money needed to repair Glen Canyon Dam.

A fable for our time, opinion by Ed Marston, 12/12/83, p. 15: An analysis of the Bureau of Reclamation's valor at Glen Canyon Dam.

WILDERNESS

Watt whittles wilderness, Carol Jones, 1/21/83, p. 2: Watt on Wilderness Study Areas and wilderness oil and gas leasing.

A not so RARE event, Carol Jones, 2/4/83, p. 2: Forest Service decides to review RARE II following California court decision.

Bearing down on the Bisti Badlands, Bryan Welch, 2/4/83, p. 6: Mining interests clash with archeological and environmental interests in New Mexico's San Juan Basin.

BLM shorts Red Desert wilderness, Carol Jones, 3/4/83, p. 2: Wyoming's Red Desert suffers blow in BLM's wilderness recommendations.

State wilderness bills moving slowly, Carol Jones, 4/1/83, p. 4: Rocky Mountain states push for state wilderness bills.

Idaho wilderness battles rage, Glenn Oakley, 4/29/83, p. 3: Standings on Idaho wilderness battles.

Utah wilderness victory, Dan Whipple, 4/29/83, p. 4: Appeal reverses non-wilderness designation of 825,000 acres of BLM land.

Idaho forest[less] wilderness plan, Glenn Oakley, 5/13/83, p. 5: Idaho Forest Industry Council presents its state wilderness proposal.

Idaho squares off for wilderness fight, Glenn Oakley, 6/24/83, p. 3: Industry, Congress, and conservationists battle over pending wilderness legislation.

Melcher bill awaits House markup, Don Snow, 6/10/83, p. 2: Montana wilderness bill is laden with compromise.

Wilderness bill satisfies delegates only, Carol Jones, 7/7/83, p. 5: Wyoming's bill designating 635,000 acres of wilderness debated by House subcommittee.

Cradle of the wilderness system?, Peter Wild, 7/7/83, p. 14: Historical look at wilderness preservation.

Bad wilderness bills may wait in wings, Dan Whipple, 7/22/83, p. 4: "Hard release" language in Wyoming's bill may affect other state's bills.

A bad decision for badlands wilderness, opinion by Dan Whipple, 7/22/83, p. 14: BLM's "no wilderness" recommendation for the Adobe Town area in Wyoming attached.

Groups tout Idaho wilds bill, Glenn Oakley, 8/5/83, p. 3: Five conservation groups urge preservation of 2.2 million acres threatened by development.

Utah wilderness battle continues, Jan Valdez, 8/5/83, p. 4: Successful appeal forces BLM to reinstate wilderness study areas.

Wilderness magic eludes Idaho, Lisa Theobald, 9/5/83, p. 5: Senator James McClure hears polarized views at hearings.

Groups struggle for 8 million roadless acres, Glenn Oakley, 10/3/83, p. 4: Industry, conservationists, and Idaho's governor propose wilderness bills.

OPINION

Yoo-hooing our way to decline

The public holds economists in low esteem because it confuses clerks with the true heirs to Adam Smith. Because the clerks dominate the media, the public doesn't realize that those who talk of housing starts, rates of inflation, consumer confidence, and unemployment are technicians who know as little about our system as a hospital orderly knows about cancer.

Not that the clerks and media are totally to blame. Ever since Robert Heilbroner wrote *The Worldly Philosophers*, the distinction between Adam Smith, Parson Malthus and Thorstein Veblen on the one hand, and the clerks on the other, has been clear.

Heilbroner called his world-class economists philosophers because the economic theories they created came out of an understanding of the lives we lead. Some of his economists used numbers. But at bottom their work was based on a comprehensive view of life and society.

A related blindspot, especially in the West, is the belief that Chambers of Commerce and economic development committees, by frantically trying to yoo-hoo factories and military bases into their backyards, are engaged in economic development. Actually, the boosters are more akin to cargo cults. Like those South Sea islanders, they are performing rites in the hope that something valuable will fall from the sky.

More sophisticated than the West's cargo cult are those who use the national political process to snare military bases, missile sites, federal training centers, dams, and agricultural subsidies. Especially in the West -- where independence and conservatism are an authentic part of the regional consciousness -- we all understand the hypocritical and ultimately destructive nature of the cargo cult and pork barrel approaches. But we have been able to pretend we do not really understand what is happening.

Now, thanks to two lengthy articles by Jane Jacobs in the March and April *Atlantic*, we can no longer pretend to ignorance. Ms. Jacobs has reminded us of what true economists are and brought us face to face with the reality of our declining national and regional economies.

Her first article, titled, "Cities and the Wealth of Nations," tells as much about the failure of rural areas to develop as it does about the problems facing the nation's older cities. The second, titled "The Dynamics of Decline," lays out the squishy softness at the heart of the Sunbelt boom epitomized by the Phoenixes and Colorado Front Ranges of the West.

Her thesis is that true economic development is a process -- a process in which creative, innovative people build locally what the region had been importing. Such "import replacement," she says, can only take place in or near a city because it needs a critical mass of people, capital and local

market. Import replacement creates local jobs and makes a region capable of importing new imports, which will be replaced in their turn. It is an ever-changing, competitive situation, most akin to a high wire act performed without safety net or towers.

Her article is studded with brief case studies, including the classic one of how Tokyo's bicycle repair shops after World War II began to make spare parts to keep imported bicycles rolling. Fairly quickly, assemblers collected the manufactured 'spare' parts from scattered repair shops to make bicycles from scratch, first for local consumption and then for export. After that, Ms. Jacobs writes, bicycle manufacturing became the base of new, spun-off activities which replaced still more imports and created exports.

She also explains, again with case studies, how yeasty urban activity can affect the nearby countryside. Increased need for urban labor pulls people out of the countryside just as demand is growing for certain rural products. The result is that the rural area has the impetus to adopt labor saving devices and techniques in both field and home. Drudgery and subsistence living suddenly cease to make sense.

That is the exciting part of Ms. Jacobs' articles -- her explanation of the dynamic, spontaneous nature of a growing, diversifying economy. The depressing part -- the part relevant to the America we live in -- describes how economies decline through growing social programs and military spending, and political arrangements which transfer wealth from creative regions to stagnant regions.

The sterility of military spending as economic development is clear to anyone who knows military towns or factories producing aircraft or cannon. They do not spin off other activities, they do not encourage nearby firms to supply the PXs with food or goods, and they do not buy their bullets or clothing locally.

More surprising is the effect of satellite manufacturing plants set down in distant communities. She says the satellite impoverishes the home base because it is an export of capital. And the satellite may do nothing locally except create jobs because it is not part of the local economic process. So far as the local area goes, the factory came from nowhere and won't lead to anything except some retail and real estate growth.

The reason for this sterility is clearest in the case of an Iran or other undeveloped nation which attempts to buy the 20th century. They can get the factories and refineries. But they will be static, isolated producers, unable to interact with the primitive surrounding economy. The bought technology cannot be part of the creative process which Ms. Jacobs says is at the heart of genuine

economic development. In the same way, a coal or copper or silver mine can't help build a base of economic development. Mining specialization -- as the Buttes and Leadvilles show -- is always a prescription for cataclysmic bust.

The transplanting of factories in search of lower wages or public sector subsidies is the private sector's role in the economics of decline. But the public sector plays a more important part in decline because of the large centralized scale on which it operates. In America, it is the West which is the largest benefactor of our national strategy of decline. Retirees moving to the Sunbelt bring their civilian or military pensions. Military bases are disproportionately present here, as are water projects, military manufacturers, and government nuclear activities. We have more public sector workers than any other region.

This transfer of capital has made parts of the West thrive, but if we understand Ms. Jacobs' theory, we will not thrive long -- sooner or later the West will follow downward those it has bled for its temporary prosperity. That the West has been able to pull capital out of the older cities is not a prescription for long-term health; it is a temporary infusion which will hurt everyone unless the West is able to create a dynamic, creative economic environment which can produce wealth.

Are the implications of her article totally black for East and West? No. She has a prescription for health, but it is so utopian she uses it more to illustrate the problem than to suggest it as a solution. In her view, there are two causes to our decline. One is the military spending and social transfer payments. They are deadly, she says, because they fail to reward productive economic activity.

The second cause is the fact that political entities such as the U.S. are not rational economic units because they tie us all to the same currency. One use of currency, she says, is to tell each region whether it is pulling its own economic weight. The same dollar can't send the correct signal to New York, Wyoming, and California.

Her example is England, where the fine china industry typified by Wedgwood was destroyed by North Sea oil. The latter buoyed the pound in the late 1970s, and drove Wedgwood and others into bankruptcy because they could no longer export their product at a reasonable price. They needed a cheaper pound -- one appropriate to British manufacturing -- to send proper signals to their workers and to allow them to compete. Instead, all of Britain batted off the oil flowing out of the North Sea, even though parts of its economy were atrophying.

Is there a solution short of balkanizing America into a series of independent economic units? Yes, she says. Economic decline can be reversed sometimes if a region can drift in a creative way, moving with economic currents to take advantage of opportunities met in that drift. As she explains it:

"That drift is the diametrical opposite of placing faith in the ready-made, as people do when their idea of helping city economies is to woo transplants from other cities, lobby for military contracts, or work up projects because grants for them are available."

--E.M.

Index...

Wilderness areas are getting beat up, Bill London, 10/31/83, p. 3: Mismanagement of existing wilderness dominates the First National Wilderness Management workshop.



Diane Eastign

Frome was the catalyst, Bill London, 10/31/83, p. 3: A look at Michael Frome, American foremost Wilderness spokesman.

Citizens and the Forest Service join forces to save a Wilderness area, Janet Robertson, 10/31/83: Indian Peaks Wilderness near Denver is being loved to death.

1984 may be a Wilderness Year, Ed Marston, 12/12/83, p. 1: The time is ripe for passage of numerous state wilderness bills.

Wyoming's Wilderness bill is stalemated, Carol Jones, 12/12/83, p. 4: Wyoming Congressman Dick Cheney and Ohio Congressman John Seiberling lock horns over acreage and release language.

WILDLIFE

Subdivision threatens bighorns, Heather McGregor, 2/18/83, p. 4: Ouray, Colorado subdivision may invade winter habitat of struggling sheep herd.

A grizzly situation, Joan Nice, 3/18/83, p. 1: Trials and tribulations of the Yellowstone grizzly bear.

Hatchery closings keep big ones away, Carol Jones, 3/18/83, p. 3: Federal fish hatchery closings will affect fish populations and economics in western states.

Study: cows, wild horses can coexist, Layne Miller, 3/18/83, p. 4: Wild horses -- results of new study and proposed legislation.

Yellowstone moves to protect grizzly, Joan Nice, 4/15/83, p. 2: New grizzly bear management plan will close some Yellowstone Park backcountry to visitors.

Offensive against grizzly killings, Bert Lindler, 4/29/83, p. 3: New federal-state crackdown on illegal grizzly bear killings.

A Montana bestiary, Ellen Ditzler, 4/29/83, p. 10: Illustrated anecdotes about selected Montana animals, live and extinct.

Coyote, 5/13/83, p. 8: Coyotes -- several poems and a Sylvia Long illustration.

Good news about nongame wildlife, Carol Jones, 5/13/83, p. 10: A success story about state wildlife check-off programs.

Cut urged in Colorado wildlife research, Carol Jones, 5/27/83, p. 2: Audit of Research Department of Colorado Division of Wildlife stirs controversy.

No grizzly death trend: panel, Joan Nice, 5/27/83, p. 5: The debate continues over demise of Yellowstone grizzly.

Round 1080 in an old, old feud, C.L. Rawlins, 6/10/83, p. 6-7: An overview of the 1080 controversy, past and present.

Grizzlies are declining, Joan Nice, 7/7/83, p. 3: Conflicting studies reported about Yellowstone grizzlies.

Poaching, a big Rocky Mountain business, Carol Jones, 7/7/83, p. 6: Rampant poaching in the west hard to control because of limited enforcement.

Eagle population comeback in Yellowstone, Jan Valdez, 8/22/83, p. 3: Banning DDT helped bald eagles.

Forest may close off bear haunts, Geoff O'Gara, 9/5/83, p. 3: Shoshone National Forest near Yellowstone considers restricting public access to protect grizzlies.

Citizen Protest saves Bear 60, Betsy Marston, 9/19/83, p. 6: A garbage bear is reprieved at Yellowstone by a citizens' initiative.

Oklahoma protects accused poachers, 10/14/83, p. 7: Oklahoma refuses to extradite poachers of Colorado elk.

If elk would scream, woods would have fewer hunters, George Wallace, 10/14/83, p. 10-11: The bittersweet musings of an elk hunter.

Compound 1080 is back on the range, C.L. Rawlins, 11/28/83, p. 3: EPA reinstates lethal 1080 on a limited basis.

Wild sheep butt heads with oil, K. T. Roess, 11/28/83, p. 4: Seismic testing for oil threatens wildlife on Shoshone National Forest.

Two Wyoming tribes are slaughtering elk, Geoff O'Gara, 12/26/83, p. 2: Slaughter may compel tribes to enact a big game code.

Wyoming Rancher cuts his fence, Marjane Ambler, 12/26/83, p. 3: Governor Ed Herschler convinces rancher to free antelope trapped by fence and snow.

16-High Country News -- April 30, 1984

OFF THE WALL**HCN gives some free advice**

To: Mr. Charles W. Luscher, New Mexico State Director, BLM
 From: *High Country News* staff
 About: Your need for consultants

We here in the *HCN* office have just read the San Juan Basin Coal EIS, learning that your agency is in need of the skills and perspective we could bring as freelance editors/advisors.

We understand that EISs are shell games, wherein each EIS alleges that the relevant information and decision lies in some other EIS. And we understand that the important thing about an EIS is that it protect the agency legally rather than provide information or explain decisions.

Despite *HCN's* own institutional bias, we would not attempt to change this time-honored approach to EISs. Our job would be to help your staff better carry out the EIS mission of obfuscation and confusion. The San Juan EIS shows that the staff is in need of this help.

Were we a New Mexico law firm, we would immediately file a class action suit against the BLM for humiliating many of those who commented on the EIS. For example, the EIS printed the name Hank Poulman in big type and without any of his comments, and beneath it wrote: "No Substantive Comments."

This treatment of Mr. Poulman, which any court in the land would liken to an arbitrary and capricious slap in the face, is all the more damaging because of the trivial nature of many comments you printed and answered. For example, Gus Svolas of the Star Lake Railroad Company wrote:

"Finally, it should be noted that there are several incorrect references to the 'Star Lake - Bisti Railroad' and these should be corrected to reflect that the railroad will be called simply the Star Lake Railroad."

If anyone deserved a "No Substantive Comment," Svolas did. But your staff both printed Mr. Svolas' letter and answered it: "Every occurrence in the text actually refers to the Star Lake Railroad instead of the Star Lake - Bisti Railroad." So not only did the staff answer the comment, but they chose to call poor Mr. Svolas a prevaricator. In addition to picking a fight with him and his railroad, someone had to go through the entire EIS looking for the word "Bisti" to do it.

The most damaging thing about staff action, however, is the way it lets golden opportunities pass by. When Therese Patton wrote to say: "You've really done a sleazy job..." staff answered: "No Substantive Comments."

If *HCN* had been on board, we would have cited a nearby letter from Dick Wittington, who is both a P.E. and a Regional Administrator of the EPA. Mr. Wittington gave your EIS an LO-1, which means a "lack of objections" letter in the category 1 (adequate) rating.

We would have asked the impertinent Ms. Patton: "Would a Regional Administrator of the EPA, who is also a P.E., have given us an LO-1 if we had done a sleazy job?" We would also have pointed out that Mr. Wittington, P.E., didn't find a single problem with the EIS. His agency even failed to pick up on the Star Lake railroad name issue.

The EIS team should also lighten up a bit to show that you guys have a sense of humor. A sense of humor builds public trust. We see many opportunities for humor in the present EIS comments. For example, Lillian Tenopyr of Los Alamos warned those who would plunder the land to remember "what happened to Esau."

The BLM responded, "No Substantive Comments." But it could have said: "The agency is well aware that many believe the Judeo-Christian heritage is an important part of

our approach to resource management -- especially the biblical section that gives us dominion over all living creation and the subsection that enjoins us to be fruitful.

"To deal with this issue, the BLM recently completed a comprehensive, programmatic EIS prepared by an interdisciplinary team and titled: 'The Old Testament and Resource Management on the Public Lands -- a Scriptural Dilemma.' The Esau situation is addressed on page A-412."

There is a precedent for such a religious excursion in the San Juan EIS. Jerry DeGront, in his comment, asked how the BLM could require the movement of Navajo graves to make room for coal mines since he had never heard of a grave-moving ceremony among the Navajo.

The BLM staff may know little about Esau, but it told Mr. DeGront: "The procedure has been used before and is described in *Navajo Graves: An Archaeological Reflection of Ethnographic Reality* by Albert Eward."

On another subject, your agency's comments appeared biased against environmental-type individuals and toward industry. For example, Paul Fyfe, in his comment letter, used the word "conclusory," and the BLM inserted a (sic) to show he was using neither dictionary English nor BLM dialect/jargon. The treatment of Mr. Fyfe contrasts with that of letter writer Don Mosley of Utah-International Coal Company, who wrote: "We don't agree that a worse case analysis..."

The BLM didn't insert (sic) after "worse case," although it did use the accepted term, "worst case," in its reply. Moreover, Mosley's letter received a "We appreciate you (sic) input" (*HCN's* sic), the only letter we saw to receive even a fractured thank you.

In summary, Mr. Luscher, we think *HCN* consultants can do your agency a lot of in-house good by providing both an ethnographic-nonbureaucratic perspective -- one both rational and yet sensitive to the policy and political needs attendant to working for and within a land management agency which has no power to manage the land.

--Ed Marston

BULLETIN BOARD**PHANTOM UTILITY TAXES**

According to the Environmental Action Foundation, investor-owned electric utilities have collected \$34 billion from ratepayers to pay federal taxes which are not yet due. Instead, the foundation says, the utilities are using that pot of money to build power plants which in many cases are not needed. The \$34 billion works out to \$405 for each utility customer. The Foundation suggests that laws and accounting practices be changed so that these "deferred taxes" are no longer paid in advance by consumers. The organization is located at: Suite 731, 1346 Connecticut Ave., NW, Wash., D.C. 20036.

THREATENED WESTERN WILDLIFE

Thorne Ecological Institute of Boulder, Colorado has published the proceedings of a symposium on management of impacted western wildlife. The symposium was the first in the institute's biennial conference series related to wildlife management and natural resource development. There are 35 papers and two panel discussions included in the proceedings. Copies of the publication can be obtained for \$35 from the Thorne Ecological Institute, 4860 Riverbend Road, Boulder, CO 80301.

MONTANA WASTE PROGRAM

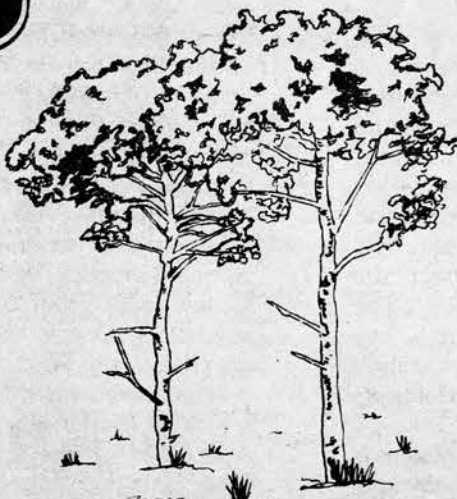
A May 15 hearing in Helena will examine the Environmental Protection Agency's tentative approval of Montana's plan to take over administration and enforcement of federal hazardous waste programs in the state. Public comment may be submitted during the hearing or in writing before the hearing. Comments may be directed at all aspects of the proposed programs, including staffing, permitting, inspection, enforcement, the adequacy of state law to administer federal mandates and the agreement outlining responsibilities of the state and EPA. The Resource Conservation and Recovery Act allows the federal hazardous waste program to be taken over by equivalent state programs.

The Montana proposal may be reviewed at the state Health Department, EPA headquarters in Helena, or several college libraries throughout the state. Written comments should be mailed to the EPA, Federal Building, Helena, MT. The hearing will begin at 9:30 A.M. in Room 289 of the Federal Building.

PICEANCE BASIN PLAN

The BLM's Piceance Basin Draft Resource Management Plan is out and public hearings are scheduled for May. The draft plan describes several management alternatives for the northwestern Colorado basin, including the BLM's "Preferred Alternative." As feared by the Colorado Native Plant Society the Preferred Alternative eliminates all but a part of one of twenty sites recommended by the Nature Conservancy as potential Special Management Areas (*HCN*, 3/5/84).

All public meetings on the draft plan will be held in Colorado towns at 7 P.M.: May 15 at the White River Resource Area Office in Meeker, May 17 at the Ramada Inn in Grand Junction, May 22 at the Ramada Inn Foothills in Lakewood and May 24 at the Holiday Inn in Glenwood Springs. To obtain copies of the document or to submit comments write to the Piceance Basin RMP Team Leader, Bureau of Land Management, White River Resource Area, P.O. Box 928, Meeker, CO 81641 by July 27, 1984.

**IDAHO DAM PLAN DIES**

The proposed Eagle Rock hydroelectric dam on the Snake River below American Falls, Idaho has retreated into the shadows. In March, the Pacific Northwest Generating Company and the Raft River Rural Electric Cooperative withdrew a dam application they had submitted to the Federal Energy Regulatory Commission. Then in early April the FERC released a final EIS urging that the plant not be built. According to the EIS the project would have increased erosion and would have meant the loss of high-quality river fishing, an important whitewater area and ten or more archeological and historic sites. The EIS also predicted harm to trout, bald eagles and waterfowl habitats and predicted loss of fish and game-related revenues to the Shoshone-Bannock tribes.

ALL ABOUT ASPEN

The U.S. Forest Service and a host of other government and private bodies will hold a three-day symposium May 22-24 on the aspen tree, its uses and its management. The Colorado Springs meeting will include talks on Aspen ecology, regeneration, wildlife habitat, recreation, insects and diseases, aspen timber products, timber sale contracts, and use of firewood cutters and volunteers to treat aspen. Send the \$10 registration fee to: The U.S. F.S. Mary Lou Eilers, 11177 W. 8th Ave., Lakewood, CO 80225 by May 8.

WCC ANNUAL MEETING

Concerned citizens of Colorado's Western Slope will gather in Cedaredge, Colorado May 19 and 20 for the 4th annual meeting of the Western Colorado Congress. There will be talks on eminent domain, community organizing and aspen clearcutting, and a panel discussion on rural electric cooperatives.

Officers will be elected and resolutions will be voted on to determine the future direction of WCC, a coalition of consumer, agriculture and recreation interests. The weekend includes a Saturday night dance and a Sunday afternoon goat barbeque and picnic. Registration for the entire event is \$15; the barbeque is free to WCC members. Contact WCC, P.O. Box 472, Montrose, CO 81402.

EXPLORING PURPA

Ah, the complexities of life in the 1980s -- a one and a half day seminar to discuss a single act of Congress. The Utah Energy Office and several co-sponsors will host the seminar to explore implementation of PURPA, the Public Utility Regulatory Policies Act. Speakers and attendees will include representatives from public and private utility companies, small power-generating facilities, government agencies, power-producing equipment manufacturers, trade associations and public interest groups. The setting is May 3 and 4 at the Snowbird Ski Resort near Salt Lake City, Utah. Contact Jerry Zenger (801/581-6348). Registration is \$25.

DRILLING THE KOOTENAI

Environmental Assessments are underway for two U.S. Borax drilling projects in the Kootenai National Forest of Montana. A preliminary EA for drilling four hardrock exploration holes in the East Fork Rock Creek and Orr Creek areas is now available for review. Another EA will examine a plan for core drilling at one site near Rock Lake and close to the boundary of the Cabinet Mountains Wilderness. The second plan also outlines drilling on several claims within the wilderness; no action will be taken before these claims are verified this summer. For more info, contact Dave Silvius (406/827-3533). Send comments on both projects to the District Ranger, Cabinet Ranger District, Trout Creek, MT 59874.

SUBSCRIBE
ONE YEAR/24 ISSUES
\$18/INDIVIDUAL
\$25/INSTITUTIONAL
 SEND YOUR ADDRESS AND CHECK TO
HIGH COUNTRY NEWS
BOX V
PAONIA
COLORADO
81428