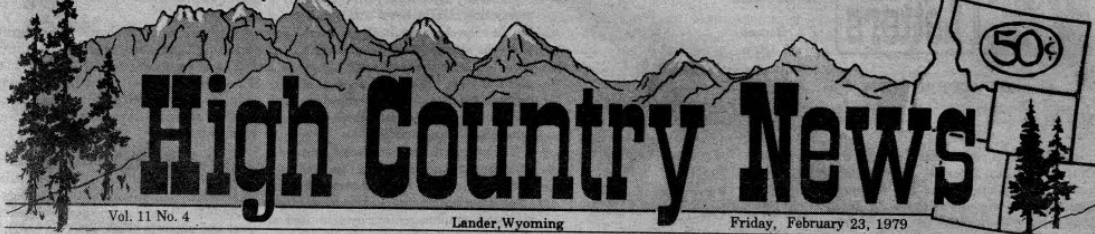


PLEASE CHECK YOUR ADDRESS LABEL: The numbers after your name stand for the month and year your subscription expires. If it's nearly due, how about sending in \$12 today?

XXXXXXXXXXXX
XXXXXXXXXXXX
XXXXXXXXXXXX
XXXXXXXXXXXX 67403

11-79

The Environmental Biweekly of the Rockies and Great Plains



Vol. 11 No. 4

Lander, Wyoming

Friday, February 23, 1979

Tribes, Congress, states have own ideas

Nation now molding its first Indian water policy

by Marjane Ambler

For a quick lesson in Western water history, look at the blue splotches signifying federal reservoirs on a map: you'll notice that many of the big dams — Oahe, Big Bend, Fort Randall, Garrison, Yellowstone, Grand Coulee, Boysen, Fort Peck, San Carlos, Roosevelt and Glen Canyon — flooded Indian lands.

If you have a map showing lands that get water from the major federally-funded irrigation projects, you will see that few Indian reservations are included, however.

Coincidence? Or evidence of a de facto national Indian water policy? Federal officials confirm these patterns, although they say that, until now, the country has never

had anything resembling a national Indian water policy.

Last June, President Carter took the first steps toward establishing such a policy, which he hopes may help right historical inequities as well as help bring peace to factions warring over Western water.

He outlined the new policy and instructed a federal task force to come up with a 10-year plan that he hopes will make it possible for Indian water claims to be resolved without costly, time-consuming court battles. He also called for federal water agencies to encourage new Indian water development.

Now with about three months to go before the policy recommendations are to be announced, 26 tribes of the Upper Missouri

Basin have registered their protests to some of the major recommendations the task force is expected to make.

There are also indications that Congress, some environmentalists and many of the states won't be happy with the Carter Indian Policy either, although for different reasons.

CENTURY OF VACILLATION

When the task force began work, its members were faced with problems created by a century of federal vacillation about whether Indians should be encouraged to melt into the mainstream or to stay on reservations.

In the early 1900s, Congress opened most Western reservations to settlement

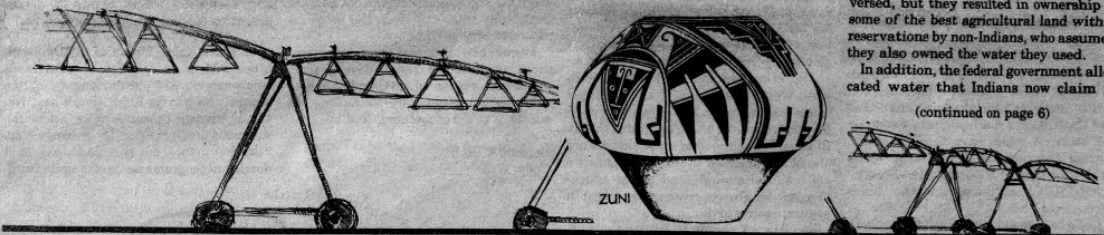
LAGUNA



under the Homestead Act and provided for an individual Indian to own and sell a parcel of land rather than leaving it in tribal ownership. Both policies later were reversed, but they resulted in ownership of some of the best agricultural land within reservations by non-Indians, who assumed they also owned the water they used.

In addition, the federal government allocated water that Indians now claim is

(continued on page 6)



Riddle unsolved after 200 years

Yellowstone: for people or for preservation?

by Philip White

Superintendent John A. Townsley of Yellowstone National Park, and all of his predecessors, could illustrate their professional predicament by pointing to a nice topographic analogy on the map of Yellowstone, the world's first national park.

There, just below the Continental Divide south of West Thumb sits a little fishing pond known as Riddle Lake. The stream flowing from the lake is named Solution Creek.

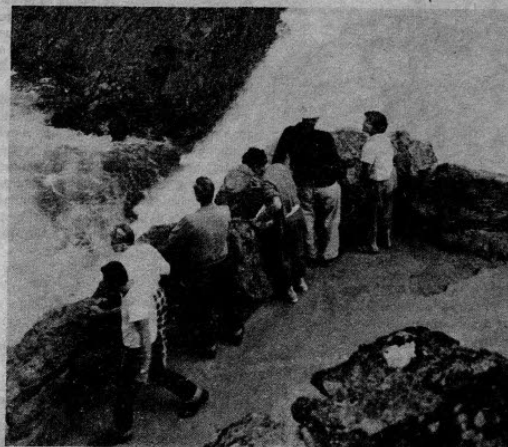
Congress posed the management riddle when the park was created in 1872. The act dedicated this remote, almost unknown land, as "a public park or pleasuring-ground for the benefit and enjoyment of the people." In the same breath, though, Congress required that the land be preserved

"from injury or spoilation" and retained in its "natural condition."

Ever since, Yellowstone's guardians have found that new facets of this riddle spring forth in the lake as fast as human solutions can drain it.

Nat Langford, a leader of the 1870 expedition that discovered the upper geyser basin and conceived the idea of preserving Yellowstone as a public park, wrote in an 1871 article that Yellowstone was "probably the most remarkable region of natural attractions in the world." Many of the park's problems today stem from the hordes of people coming to view those attractions. In 1978, 2.62 million came, up 5.5 percent from 1977. Barring substantial problems with fuel supply and price, park

(continued on page 4)



ON THE BRINK. People pressure in Yellowstone Park is causing serious management problems for the National Park Service.



HCN Letters

AGAINST ATTRIBUTION

Dear HCN,

In response to your "Dear Friends" column in the Jan. 26 issue of HCN, left-handedly apologizing for Dr. Bernard Shanks' "news analysis" of the BLM situation, I would like to come down firmly on the side of such astute and perceptive articles. I'm against the newspaper-type story in which the reporter is assumed to be an utter idiot, completely without any ability to observe or analyze for himself and thus strictly limited to attributing everything he reports.

Such "reporting," which has dominated HCN since Tom Bell gave up the struggle, hamstring HCN's function.

As it is, we now have plenty of publications biased AGAINST protection of the environment. What is needed is at least one that is unabashedly FOR the environment. For HCN to lean toward the conventional "attribution reporting" is more of an affectation than a foolproof way of showing objectivity.

Educated people, by reading newspapers, know quite well that attribution reporting does NOT necessarily produce objectivity. I, for example, read newspapers only to see THAT something has happened, but depend upon the analysis-type reporting found in weekly news magazines to tell me WHAT has actually happened. HCN should emulate such news magazines.

Dr. Shanks' very fine article on the BLM was an excellent example of the type of analysis-reporting badly needed in HCN. It told the story like it truly is, from a basis of intelligence, education, experience and astute analysis. Your column noted that had HCN asked a rancher or miner to write the story, it would have been different. Correct, but those "different" stories would NOT have been TRUE stories! Dr. Shanks' WAS TRUE, and therein lies the difference.

Let's have many more such stories. Let's assume that those who want to write for HCN are not just ignorant journalism graduates working as all-purpose news-

paper reporters, but instead are qualified experts, with every right to present their own opinions, observations and analyses to HCN readers.

F.A. Barnes
Moab, Utah



DON'T FIT STEREOTYPE

Dear High Country News,

Your recent series, "Who's Taking Care of Your Property" (Jan. 26), is a good idea, but the barrage of unrelated, poorly researched, and often untrue ramblings of Bernard Shanks leaves its readers little of value. A collection of historical sketches, which are woefully inadequate, intermixed with his unresearched personal opinions regarding Bureau of Land Management personnel, plus a few inaccurate statements regarding BLM "enjoying" increased funding is a disservice to your readers. Please, no more B.S.

For those who may be interested, none of the Utah BLM district managers fit the stereotyped description given. Here in Moab you will find that business attire including ties is the standard for all managers and division chiefs.

We are trying to do a better job of managing the public lands, and we recognize that we can still improve; however, it is difficult to accept Mr. Shanks' observation that we are "backward and slow to change" on environmental awareness in Utah. He has simply not checked the facts on this one.

Also, to suggest that most of us are from small Western towns with a local education is both incorrect and an indictment of his own university which has trained many BLMers. It is somewhat ironic that we are also often criticized by others because we are not local enough, and college educations are not always given much weight in assessing our worth.

Mr. Shanks seems to equate the U.S. Forest Service with the Society of American Foresters and BLM with the Society for Range Management. This is the same kind of narrow thinking that is used by bigots and chauvinists. Both BLM and FS personnel belong to numerous professional organizations and Shanks' observation is far out-of-date.

As for funding, I suggest that your readers see The Public Lands Institute newsletter Vol. 2, No. 2, February 1979 for a more factual analysis of our perennially austere funding as compared with other agencies.

I welcome further articles on BLM and appreciate constructive criticism from any source. I only ask that the material be accurate, especially in reference to the Moab District.

S. Gene Day
BLM District Manager
Moab, Utah

BIASED JOURNALISM

Dear HCN,

Bernard Shanks' article on the Bureau of Land Management in the Jan. 26 issue of HCN is obviously a bit of biased jour-

nalism. I'm sure Mr. Shanks realizes it, and, by the "Dear Friends" column, the staff of HCN realizes it as well.

I basically agree with your philosophy of presenting certain news analysis articles for the sake of debate. In these articles you say your attempt is to "present an expert who lays down the facts from a particular point of view." The problem is that facts can be twisted to suit the user, or non-facts can be reported to be facts. Such is the case with Mr. Shanks' article.

The article shows a complete misunderstanding of the principles and goals of rest-rotation grazing. The statement that "Rest-rotation grazing is the most intensive grazing management system used on Western rangelands," may in fact be true. However, the emphasis is on management, not grazing pressure. There are other systems that favor much more intensive livestock grazing. Moreover, the representation of rest-rotation grazing is completely false. The system described in the article is, in fact, a system of deferred-rotation grazing.

The "rest" in rest-rotation refers to the fact that at least one unit (pasture) of the system is rested (no livestock grazing) for an entire grazing season. The remaining units are grazed at times determined by plant phenology to insure plant vigor, litter production, seed production, seed trampling, seedling establishment, and livestock production.

Each grazing treatment is developed to promote one or more of these principles with each unit receiving one treatment per season in a rotational sequence.

To those interested in a more thorough explanation, I recommend a pamphlet entitled *Principles of Rest-Rotation Grazing and Multiple-Use Land Management* by August L. Hormay. You can more than likely get a copy from the range department of your BLM.

I would like to suggest that any government payments for range developments and improvements, which Shanks views as subsidies to ranchers, are in the long run subsidies to the consumers' food bill.

Bernard T. Hall
Cody, Wyo.

BACK TO LIVESTOCK AND MINING

Dear HCN,

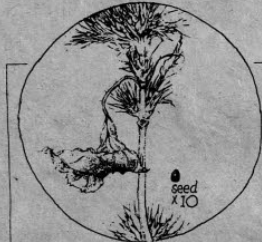
Bernard Shanks should be congratulated for his excellent article on the Bureau of Land Management (HCN, Jan. 26). I believe that he presented a balanced view and captured the BLM situation about as well as anyone could within the limits of a short article.

In his article, Mr. Shanks identifies the Natural Resources Defense Council suit as the factor that has "initiated the biggest change in BLM." I believe that it is having just the opposite effect. Prior to NRDC, a number of factors were eroding the old dominance of the range program in the bureau. The NRDC suit initially created an uproar within BLM, but it is becoming increasingly clear that the long-run effect of NRDC will be to prolong the historic range program dominance.

To begin with, the grazing schedule has allowed range program priorities to virtually dictate the bureau planning schedule for the next dozen years. Secondly, as a result of NRDC, tremendous amounts of money and manpower, by BLM standards, are being spent on range inventory work while a few crumbs, at best, get passed on to other resource programs.

For example, range inventory expenditures this year on one planning unit, about to undergo a grazing EIS, will be about 45 cents per acre. In contrast, about seven cents per acre will be spent for recreation program inventories. Such gross differences in data collection efforts will give the range program a substantial advantage in any situation where range program priorities conflict with other programs.

In short, these effects of NRDC, combined with those of the Public Rangelands Improvement Act, put the range program securely back in the BLM driver's seat. National energy priorities may allow the minerals program to challenge range program dominance, but that combination of dominant programs seems strangely famil-



High Country News is the only paper of its kind in the Rocky Mountain West. An environmental watchdog. Send me the unique HCN, enclosed is \$12. for 25 issues.

Name.....
Address.....
City.....
State..... Zip.....

Mail to: HCN, Box K, Lander, Wyo, 82520
(ask for a sample copy.)



Feb. 23, 1979 — High Country News-3



Wyoming Travel Commission photo
YELLOWSTONE FALLS. In 1889, an elevator was proposed to take people to the bottom of the Grand Canyon of the Yellowstone, and we shouldn't assume the park is safe yet.

Beware: meddlers still covet Yellowstone Park

That 90 percent of Yellowstone National Park's 3,400 square miles remain virtually untouched by meddling human hands is perhaps the greatest wonder in the land of wonders.

A little divine inspiration got the idea rolling back in 1870. Tenacious tutelage by citizens and politicians through the years has, so far, saved Yellowstone's delicate jewels for later generations to see. It was done against great odds.

In the 1880s, several attempts were made in Congress to allow a railroad line through the Lamar Valley to the Cooke City, Mont., mines. Other companies wanted to build railroad lines throughout the park. In 1889, a Montana man applied to build an elevator to the bottom of the Grand Canyon of the Yellowstone that would have been powered by turbines at Lower Falls.

In 1893, a consortium proposed generating power at the falls to power an electric railway through the park.

Park proponents were continually fighting attempts in the 1920s to delete the southwest corner from the park and build reservoirs, ditches and roads on the Falls and Bechler rivers.

The first administrators of Yellowstone, the U.S. Army, fought poachers and buffalo head hunters for years. Conservationists worked to stop the poisoning and shooting of cougars, wolves and coyotes.

Today, the grizzly bear is making a last stand in the backcountry while 30,000 people pass through Old Faithful on the busiest summer days.

While attention today is justly concentrated on protecting those few vestiges of wild America left on the Forest Service and

Bureau of Land Management lands, we cannot afford to take Yellowstone and the other national parks for granted.

Large geothermal projects have been proposed just outside Yellowstone's western boundary. And Bill Menard, director of the U.S. Geological Survey, told a geologists' convention in Jackson, Wyo., in June of 1978 that the time will come when

American recreational and wilderness areas will have to be sacrificed for energy development. He said that energy needs will become so acute that within 40 years, even the national parks will be exploited.

The battle to save the grizzlies' home is far from done.

— PW

Tribes should get water dollars

After seeing the presidential task force's recommendations for Indian water policy, environmentalists may be in a quandary. The policy could affect millions of acre-feet of water as well as the lives of thousands of people on reservations in the West.

Let's avoid the knee-jerk reaction. Let's not automatically assume that the special consideration given to Indian water development is an unacceptable loophole and that water development means dams.

Life on many reservations in the West now is much as it was decades ago off the reservations. While irrigation schemes for non-Indian land are now proposing to make the deserts bloom, Indian tribes in some areas still have fertile, nearly level land close to water that has not been irrigated.

Few environmentalists would object to water development such as this, but if we oppose giving Indians special consideration in the water project review or if we oppose all water projects automatically, we may be denying them a chance at sensible water projects.

Some environmentalists fear that Indian water claims could turn into a backdoor



way of getting water for coal development. However, most tribes aren't interested in selling or leasing their water for use off the reservation, and even if they were, they couldn't under the regulations proposed by the presidential task force.

We can't assume that the tribes will forego their own industrial development. They are considering alternatives such as gasification plants, coal-fired power plants as well as wind generator factories and solar home construction — anything that could supply jobs. Tribes' unemployment level in the West is close to 40 percent.

Of course, we don't want the criteria to automatically exempt Indian water development projects from federal scrutiny. We couldn't endorse another proposal to inundate part of the Grand Canyon, which the Hualapai Tribe wanted in 1974. Nor could we support a tribe using a federal subsidy for a gasification plant in a semi-arid area; it uses too much water to be appropriate.

With forethought, the tribes could use water in ways that are appropriate for this region. They could demonstrate some of the water conservation and non-structural development alternatives that environmentalists are asking the federal government to consider and plant crops that use little water.

To do this, the tribes need planning money. They have no alternative sources of funding as the states do. Even in this money-short year, Congress should approve these funds.

— MJA

More Letters

iar. I believe it used to be known as "the Bureau of Livestock and Mining."

At another point in his article Mr. Shanks identifies some barriers to progress and change in BLM. He quite correctly emphasizes isolation and lack of public credibility as factors which are especially difficult for the bureau to overcome. Each of these problems hangs like an albatross around the BLM neck impeding day-to-day management effectiveness.

I would like to suggest the existence of a third major barrier to BLM progress: the lack of management sophistication within the bureau. Over the years the role of a BLM district manager, for example, has evolved into a demanding, complex administrative job. Effectiveness in this role requires substantial knowledge about such things as budget formation, financial management, public relations, public policy formation, planning, personnel administration and management decision-making. The training of most district managers, however, is in the fields of forestry, range science, wildlife biology or perhaps geology.

It is to the credit of bureau managers that they function as well as they do, but talent, or the ability to survive, is not a perfect substitute for knowledge. This situation not only limits present management effectiveness, it also creates a nearly insurmountable barrier to change and progress.

I do see a ray of hope. The recently proposed changes in BLM planning proce-

dures appear to reflect some relatively recent planning and decision-making concepts. I hope they are an omen of the BLM future.

Bob Barry
Worland, Wyo.

CANT IGNORE PETROLEUM POTENTIAL

Dear HCN;

Phil Hocker's recent letter (HCN, Jan. 12) contained a number of inaccuracies which I would like to correct.

To say that the oil and gas industry does not wish to consider the special values of these areas does not square with industry's excellent record in sensitive environments like the Aransas and Avery Island bird sanctuaries along the Gulf Coast, Bridger Lake in Utah, Florida's Big Cypress Swamp, Northern Michigan's Gaylord areas or the Alaskan North Slope. Industry is more than willing to repeat this record in the Overthrust.

Mr. Hocker's statements about the potential of the Overthrust are also misleading.

The 1977 U.S. Geological Survey study to which he refers estimated that the Wyoming-Idaho-northern Utah portion of the Overthrust contained at least 4.0 billion barrels of crude oil and 4.0 trillion cubic feet of natural gas. By the end of 1978, some 0.5 billion barrels of oil and 3.5 trillion cubic feet of gas had already been discovered in about 20 percent of the area covered by the USGS study. This indicates that the USGS estimates were extremely

conservative, even for this small part of the total Overthrust.

The equally high potential of the Montana Overthrust is underscored by two natural gas fields located in Alberta just across the border from Glacier National Park. The producing structures continue southward into Glacier Park and the Great Bear, Bob Marshall and Scapegoat Wilderness Areas.

Meanwhile, up in Alaska, Congress is talking about classifying the Arctic National Wildlife Range as wilderness. According to a study done for the U.S. Fish and Wildlife Service, part of the wildlife range has oil and gas potential "rivaling that of Prudhoe Bay."

Add up a few of these Glacier Parks, Arctic Wildlife Ranges, Bob Marshall Wilderness Wilderness Areas and Overthrust areas closed by RARE II, and you are no longer talking about a few hours' or days' supply of oil and gas. You are talking about supplies that could last us for years or even decades.

Sooner or later, America is going to have to stop ignoring its petroleum potential in this manner.

Yes, the transition from oil and gas to other energy sources is inevitable. However, for numerous economic, social, technical and environmental reasons, it will not happen overnight. The petroleum is needed today, during this critical transition period, not 10 or 20 years from now.

Compromise does not mean taking every scenic or wildlife area without regard to its mineral potential.

Paul K. Driessen
Rocky Mountain Oil & Gas Association
Denver, Colo.

High Country News

Published biweekly at 331 Main, Lander Wyo. 82520. Telephone 307-332-4877. Second class postage paid at Lander. USPS NO. 87480. All rights to publication of articles herein are reserved.

Publisher Managing Editor Associate Editor Contributing Editors Correspondent Business Manager Circulation Art and Production Editorial Assistant	Thomas A. Bell Joan Nice Marjane Ambler Dan Whipple Peter Wild Philip White Jammy McDonald Will Murphy Hannah Hinchman Sarah Doll
---	--

Subscription rate \$12.00
Single copy rate 50 cents.

Call for permission to reprint 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. Articles and letters will be published and edited at the discretion of the editors.

To get a sample copy sent to a friend, send us his or her address.

Write Box K, Lander, Wyo., 82520.

4-HighCountry News — Feb. 23, 1979

Yellowstone for the people?...

(continued from page 1)

authorities expect to host three million visitors in 1980.

Most of these visitors are coming in private vehicles, often recreational vehicles, causing increasing traffic congestion, pollution and noise and making life miserable for increasing numbers of bicyclists.

During the "energy crisis" of 1974, park visitation dropped below two million for the first time in 10 years. It recovered quickly. Comparing the first eight months of 1978 with the same period in 1974, park figures show a 37 percent increase in visitors, a two percent increase in automobiles and a startling 81 percent jump in RVs. Almost four million gallons of fuel were dispensed in the park in those eight months of 1978.

Yellowstone's master plan of 1973 says administrators must decide "the legitimacy of these mobile apartments as the basis for the traditional camping experience."

Although Townsley recognized that RVs are notorious gas-guzzlers, a unique Yellowstone problem has thus far convinced him to give free rein to them. "Whenever you're talking about sleeping in Yellowstone, you're talking about the grizzly bear. Since camping has traditionally been part of the park experience, RVs are certainly safer than tent camping. At Canyon and Fishing Bridge, in fact, we allow camping only in hard-sided vehicles because of the bears," he says.

Townsley sees a move toward smaller RVs and predicts that "the big campers will begin to disappear in a few years." Although the master plan asks for serious consideration on limiting "trailer and oversize vehicle use on park roads during peak daytime travel periods," Townsley says the park is not ready to take direct actions to reduce peak traffic.

"But we're not planning to build Yellowstone roads up to interstate standards either. We want to keep the old narrow roads, which many people think are inadequate, and watch what happens with the auto and energy in this country in the next few years," he says.

A bigger problem than mere numbers is the citified attitude many people bring to the park. "I know it's a blunt thing to say, but many people don't look to themselves anymore for their own safety. They expect someone else to take care of them," Townsley says.

Several lawsuits have been filed against the National Park Service in recent years over trees being blown down in campgrounds, thermal burns and bear injuries. A trial is expected within the year on a \$225,000 suit filed by 70-year-old Melvin Ford of Salt Lake City who was injured by a bear in the Fishing Bridge campground in August 1976.

This trend worries many observers, including Ruth Shea, a trumpeter swan researcher who was working at park headquarters last fall on the bear monitoring system. "Americans must decide what they want their parks to be. Step by step, we're being forced to domesticate the park," Shea says.

Visitor problems are spreading to the backcountry. "Compared with Yosemite or Rainier or Grand Teton, there wasn't much hiking to speak of in Yellowstone until recently," says Townsley, a 34-year park Service veteran. "The exposure to grizzlies is increasing. One of our real management concerns is determining what is socially acceptable in terms of the inherent risk with bears in campgrounds and in the backcountry. I sense a growing recognition

of the bear's right to be present in the backcountry. I don't think people have that recognition in the developed areas," he says.

EVENTFUL YEAR

Some of the events of 1978 and early 1979 demonstrate the plethora of visitor-related problems facing Townsley and staff:

— A 21-year-old woman was severely mauled by a bear with cubs along the Heart Lake trail. Park officials said she was hiking alone and attempted to photograph the bears. By chance, a group of hikers came along shortly after the mauling, found the victim and summoned authorities. She survived.

— A 24-year-old man employed by Yellowstone Park Co. received minor scrapes from a bear at Grizzly Lake. He and his hiking companion were charged by the Park Service with improper food storage because they left their food in their packs on the ground. The bear first rummaged the packs; then roughed up one man in his sleeping bag. When the man yelled, the bear left.

Park officials also advise hikers to travel in a group and not to follow bears, especially those with cubs. Climbing a tree is recommended when hikers see a bear.

— A 34-year-old woman was gored by a bison when she and fellow photo-seekers came too close to the reclining animal in Hayden Valley. The bison hooked the woman in the right side, tossed her 10 feet in the air and moved off. She recovered. In the park's press release on this incident, Townsley warned against trying to "get a resting bison to stand up" for a photograph.

— A 54-year-old woman climbed over a stone retainer wall at Calcite Spring overlook near Tower and slipped in the loose earth. She fell 300 feet to her death in the Yellowstone River.

— A 23-year-old man received second and third degree burns over 82 percent of his body when he wandered off a trail after dark and fell into a 196-degree geyser pool. He also recovered.

— An H.F. Johnson, Inc., gasoline truck tipped over three miles north of Madison Junction and spilled 7,000 gallons into the Gibbon River. According to assistant superintendent Ronald Wrye, the truck was moving 10 mph over the speed limit when the driver lost control. Cleanup costs were paid by the company. Townsley says the spill was "bad news, especially in this delicate environment. We hadn't experienced such a thing before and weren't as prepared as we should have been. But we tried the best we could under the circumstances to clean it up."



Photo by Philip White

PEOPLE TAKE RISKS at Yellowstone and then sue the Park Service when accidents result.

— Including minor mishaps, 500 vehicle accidents occurred in the park in 1978, causing three fatalities.

— A 17-year-old boy was shot and killed near Mammoth. His companion, also 17 and a runaway, was arrested a few hours later.

— Two unhelmeted snowmobilers from California were seriously injured when they fell from their machine after swerving to avoid a collision with another snowmobile in the Lewis River Canyon area.

Allowing snowmobilers on the park's unpaved roads from December until spring has been criticized, but Townsley is firmly committed to the widest possible "reasonable use of the park. This is some of the extraordinary physiography on the face of the earth. People of all nations and ages and conditions should be able to see these things."

Visitor safety requires that the snowmobile roads be groomed frequently, an expensive proposition. Last winter, the cost was \$60,000, excluding rental and amortization costs.

other precautions are unlikely to even see a bear. But the case of Barrie K. Gilbert, a 41-year-old Utah State University wildlife researcher, is a tragic demonstration of the serious dangers of traveling in bear country.

On June 27, 1977, Gilbert and Bruce Hastings, a graduate assistant, were beginning a study of grizzly behavior funded by the Park Service. North of Mount Holmes in the northwest part of Yellowstone, Gilbert was attacked by a sow grizzly.

Fortunately, Hastings was close behind and his screams drove off the bear. The men were carrying a radio and Hastings was able to summon medical aid by helicopter immediately. A *Jackson Hole News* article last October, 15 months after the attack, quoted Gilbert's description of his injuries:

"I lost the whole left side of my face. Bones were broken, my ears were almost torn off and my left eye was pulled from the

(continued on page 5)

BEARS AND PEOPLE

Chances of being killed by a bear in Yellowstone are much lower than dying in an automobile accident; only three people have been killed by bears in Yellowstone history. Backcountry hikers who make noise, put food out of bear-reach and follow

"Many people don't look to themselves anymore for their own safety. They expect someone else to take care of them."



Photo by Philip White

YELLOWSTONE PARK BUSES. There has been pressure to set up regular bus schedules as an alter-

native to private cars. Now the buses are used just for tours.

Feb. 23, 1979 — High Country News-5

socket." Every facial feature was maimed and 1,000 stitches and 11 hours of surgery were required to sew up puncture wounds all over his body and save his life.

Gilbert said he was "still a mess of scars, but the plastic surgeons were great; they did a wonderful job." It took him many months before he could speak again. He has resumed some teaching duties and has

"Step by step, we're being forced to domesticate the park."

been studying bear-human encounters in Yosemite and Manitoba. "Obviously," he says, "I'm going to be a hell of a lot more careful."

During an NBC television news segment on Yellowstone's bears aired Sept. 7, Gilbert mentioned two aspects of the bear problem. "Children's experiences with teddy bears tend to make the bear essentially an enlarged dog, and, therefore, a very familiar and non-threatening object," Gilbert also said he didn't think people were being warned adequately about bear dangers.

HER OWN TERMS

Naturalist John Burroughs accompanied President Theodore Roosevelt on a two-week Yellowstone tour in April 1903. Burroughs later wrote about the geyser region, speaking of the "jasper walls and amethyst battlements" he had seen. Roosevelt's Yellowstone recollections were of wildlife, especially of a new species of mouse he had collected for the Smithsonian.

Their accounts demonstrate the park's capacity to inspire all people in particular ways. Whether that capacity will be preserved probably depends upon how

Leaving their mark

Yellowstone National Park has always suffered at the hands of irresponsible visitors. Piece by piece, they toted off an entire petrified tree trunk near Roosevelt Lodge. They were fond of soaping geysers. Throwing kerchiefs into Handkerchief pool eventually stopped its flow entirely. Much of the geyserite work at Old Faithful, centuries being formed, was carted away by souvenir hunters.

That tradition continues today. Despite warning signs, people write their names in the algae beds, walk off the boardwalks and throw objects into the thermal features. Morning Glory Pool must be vacuumed annually.

The practice is international.

Park Geologist Rick Hutchinson found these items in Blue Star Spring on July 20: 650 U.S. pennies, three Canadian pennies, 27 U.S. nickels, 20 U.S. dimes, one Canadian dime, three U.S. quarters, one U.S. half dollar (total \$11.23), one German two pfennig piece, one Teton Aerial Tram Lucky Coin, one Grand Teton National Park Lucky Coin, one token good for one free ride on any live Brontosaurus dinosaur, one one-inch tin button, one golf tee, one marble, one nail, one can pop tab, one lead weight, one bottle cap, one bobby pin, three wires, three flashbulb bases, one penlight battery.



TOP ATTRACTION. Even before Old Faithful's two-minute show is over, tourists head back to first

in line at the Hamilton Store curio shop.

Photo by Philip White

"People of all nations and ages and conditions should be able to see these things."

strongly today's Americans, fiduciaries of the future, embrace the sentiments of the park's master plan:

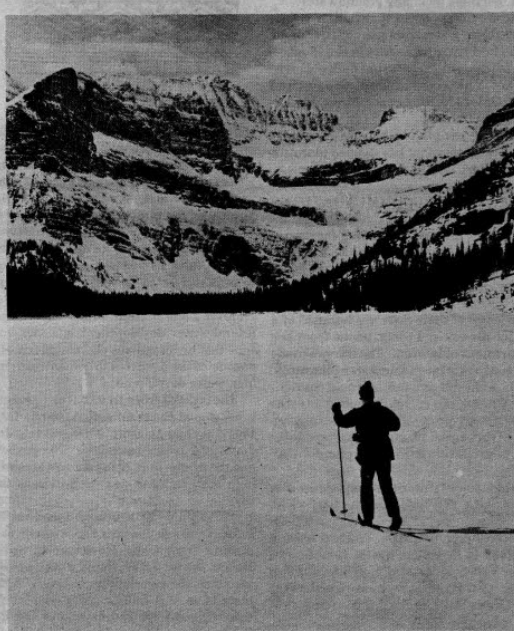
"Challenge in some degree is a fundamental ingredient of a wilderness experience. The (Park) Service therefore must come to see its role in visitor protection as one that features varied levels of risk and hardship, rather than one that promotes ease and comfort. The visitor must be made to see that if Yellowstone's unique wilderness essence is to survive, he must be willing to accept nature on her own terms, rather than his own, contrived within the framework of contemporary ethics."

Research for this article was partially paid for by the HCN research Fund.



Photo by Philip White

JOHN TOWNSLEY, park superintendent, says, "People don't look to themselves anymore for their own safety."



Montana Department of Highways photo

Spare change?

It's not easy trying to decide where your dollars for donations should go (or finding the spare change to begin with).

Sometimes, you never see the result of your contribution. But when you give to the **High Country News Research Fund**, the results show up in each issue of the paper.

A donation of \$100, for example, pays for: **research** (one week's worth) or **investigative reporting** (as much as three published pages) or **photographs** (enough for two issues) or **travel expenses** (2,000 miles at five cents a mile).

If you would like to see where your money's going, give to the **HCN Research Fund**. Contributions are tax deductible. Make out checks to Wyoming Environmental Institute—HCN Research Fund and send to: WEI, Box 2497, Jackson, WY 83001. Thank you.

6-High Country News — Feb. 23, 1979

National Indian water policy...

(continued from page 1)

theirs for massive irrigation projects and industrial use off the reservations.

Although the Interior Department, as the tribes' trustee, is responsible for protecting Indian water rights, it has been "the greatest violator of Indian water rights in the country," according to William Veeder, an attorney who is now working for the department to help tribes with water rights cases.

The department's protection of Indian water rights has been limited to legal action after a non-Indian has put the water to use.

Carter was forced to grapple with the Indian water questions when he decided to revamp national water policy. As the federal-state river basin commissions have complained for years, water planning in the West is impossible without first resolving the Indian claims.

Based on the 1908 Winters Supreme Court ruling and on subsequent court rulings, Indian tribes have rights to water they can use that arises upon, flows through or is adjacent to their reservations, perhaps including groundwater.

These rulings mean that Indian tribes could claim water from most of the major rivers and their tributaries in the West—the Missouri, Yellowstone, Big Horn, Snake, Yakima, Flathead, Green, San Juan, Colorado, Rio Grande, Pecos, Arkansas and Klamath.

The 10-year plan is designed to remove the uncertainty that has stymied planning and exacerbated ill will in the region.

TASK FORCE RECOMMENDATIONS

The task force will be calling for money for planning and development of Indian water in its 10-year plan.

Most tribes are now decades behind non-Indian local governments in their knowledge of their resources because of a lack of money and commitment from the Department of Interior. "The Bureau made different runs (at Indian water planning), but then the administration would change, and they'd never really get it off the ground," according to Phil Corke, a long-time Bureau of Indian Affairs employee who is preparing the 10-year plan for Carter.

While some tribes have completed water plans using BIA funds, Corke says he's afraid these are "grossly inadequate" for negotiation or litigation. When a tribe is involved in litigation, it must establish its water rights by determining how much it needs. This is necessary because of the way the courts have defined Indian reserved water rights.

Corke says in the next 10 years the task force wants each tribe to inventory its present water resources; to figure how much water will be needed for various future uses; to classify lands according to their best use; and to start implementing water development.

To make this possible, tribes will need money from the federal government—up to \$200 million for the 10-year period, according to the task force. Much of this would probably be used to hire private consultants, Corke says.

Indian leaders agree that careful planning is necessary. "We don't want to be like most states; they issue permits for quantity of water that exceed the total flow of a river. If everyone used all their water, the river would dry up. We want to do it right," says Mel Tonasket, vice-chairman of the Colville Tribes in Washington and one

of the chief architects of the National Congress of American Indians' water policy. The NCAI, one of the nation's oldest Indian organizations, representing 150 tribes, adopted the policy at a national meeting held in Rapid City, S.D., last September.

NCAI is adamant that tribes should be the ones to determine their own water requirements and whether water should be developed—not the BIA.

The Upper Missouri Basin tribes reiterated this feeling in a telegram to Sen. Ed-

The tribes could claim water from most of the major rivers and their tributaries in the West.

ward Kennedy (D-Mass.) and specifically criticized the narrowness of the task force's proposed definition of irrigable land. The lower the number of irrigable acres a tribe has, the less water it can claim. The tribes also called for public hearings on the recommendations.

Indian water advocates also say that the United States, as trustee, has an obligation to construct or to provide funds for construction of Indian water resource projects.

Carter made it clear in his directive to federal water development agencies last June that he recognizes this obligation. He instructed the agencies to help increase Indian water development.

"The benefits from Indian water projects won't stop at the reservation boundaries," says Jonathan Deason, who heads the Indian water policy task force. The projects and the money they bring into an area will help both Indians and non-Indians, he says.

One example of a project that benefits Indians and non-Indians about equally is a pipeline from Oahe Reservoir in South Dakota. About 9,000 people will be served, including the community of Faith, birthplace of an anti-Indian group, the Interstate Congress for Equal Rights and Responsibilities, according to Cheyenne River Sioux Tribe Water Planner Joe Troisi. Many of the people previously had to haul water as far as 50 miles for domestic use.

To encourage the approval of more Indian projects, Deason says the task force will recommend that social benefits, such as increases in jobs, be given more weight on Indian projects than on non-Indian projects.

"I'm not saying all Indian water projects should be developed... and we won't ignore environmental impacts," he says. But, he says, Indian projects have a unique status because of the trust relationship with the United States and should be given special consideration.

SUSPICIONS

The Upper Missouri Basin tribes said in their telegram to Kennedy that these spe-

cial criteria won't help. The Carter administration's general requirements are so strict that no more water projects could be built in the West, Veeder says, and the special Indian criteria won't make enough of a difference to win approval.

He proposes that instead, each Indian project should be evaluated with an eye to how it would affect the reservation. "Forget all this cost-benefit hogwash," he says. "There's not a project in the West that would have passed these criteria."

Indian leaders' fears that Carter won't fulfill his promise to encourage funding for Indian water development were heightened last fall. Just a few months after the president's message, his Office of Management and Budget cut several Indian water projects from the budget.

OMB says the projects were eliminated from the fiscal year 1980 budget "without prejudice" because they are a part of Carter's water project review, which affects all projects. After the review, the projects might be funded.

However, Corke of the task force says he, too, is afraid of what might happen to future projects. "They're a bunch of glass-eyed bankers over there at OMB; they're afraid there are going to be lots of Ak Chins coming down the line," he says. The Ak Chin Tribe in Arizona last year received a \$42 million commitment from Congress to develop the tribe's water in return for the tribe waiving any claims to more water.

One of the projects that OMB slashed from the budget was the Grassrope irrigation project on the Lower Brule Reservation in South Dakota. Tribal members pinned dreams of economic independence and jobs on the project. Like many Indian reservations, the Lower Brule is isolated, and job opportunities are limited. "We have survived mostly by government 'gimme projects,'" says Michael Jandreau, tribal chairman, despite the fact that their land is some of the best in the state for irrigation.

A pilot irrigation project had already brought in \$80,000 in salaries for tribal members who farmed for the tribe last year as well as a net income of \$130,000. A feedlot, alfalfa pellet production facilities and possibly a canning factory, all using water or crops from the project, were planned.

The Grassrope project and the other projects cut by OMB used existing water storage. "All that they needed to do to get the

water was stick a straw in," Corke of BIA says.

Corke says he understands the tribes' fear that they won't get money for development or planning. "I just hope it doesn't turn out that way," he says.

Without planning money, the tribes would be forced to negotiate for water without any idea of how much they need.

Partly because of these suspicions, the NCAI water policy opposes the federal government's forcing tribes to quantify their water needs.

Deason of the task force says he won't ask the tribes to put a ceiling on their rights. The 10-year plan will just provide a time-frame for conducting studies to prepare the tribes for making water claims, he says.

OPPOSITION IN CONGRESS

Even if Carter fulfills his promise to push for funding for Indian water planning and development, some opposition can be expected from Congress.

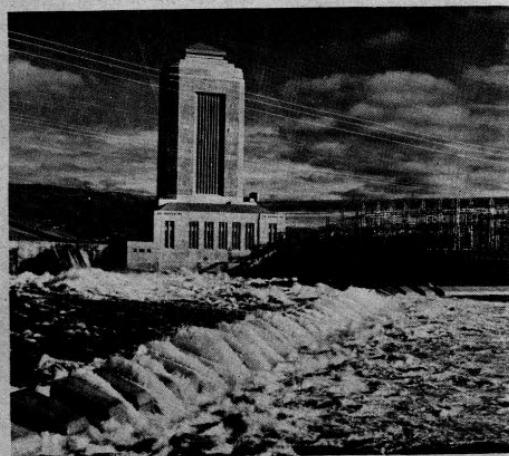
Congress and President Carter have differed sharply over water policy, primarily because Carter has eliminated federal funding for many non-Indian projects. This tension can only be expected to increase if Carter asks for millions of dollars to encourage the tribes' water development. While the administration and the Indian leaders think they can justify these expenditures, a Congress elected in the heat of the taxpayer revolt may not agree, especially since Indians make up a very small percentage of the voters in most districts.

While many aspects of the policy could be implemented without congressional approval, the budget recommendations cannot.

Indians also fear opposition from environmentalists who may be afraid that special criteria for Indian water projects will allow an unacceptable loophole in the president's water policy, according to Charles Trimble of the United Effort Trust, a national Indian lobbying group.

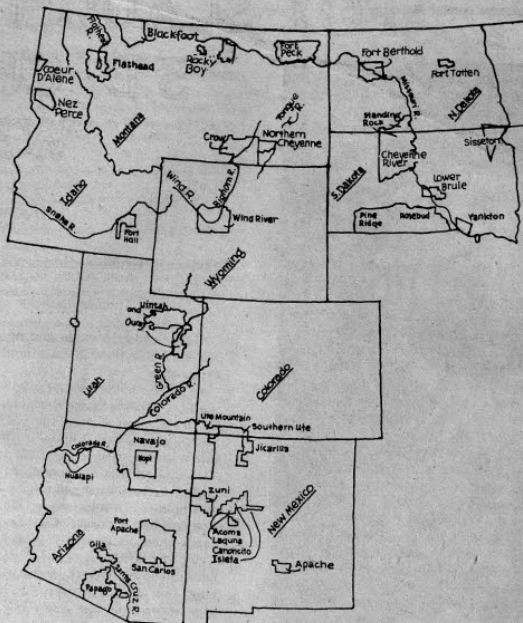
Although Trimble admits that local tribes supported the Dolores project in Colorado and the Central Utah Project when the environmentalists opposed them, he says, "You're not going to have many Indian tribes asking for big dams." Many of

(continued on page 7)



Montana Highway Commission photo

FORT PECK is one of the many federal dams that inundated Indian reservations in the West, resulting in the loss of millions of acres of land and few benefits to the tribes.



INDIAN WATER CLAIMS will affect almost every major river basin in the West. Shown are Indian reservations in the Northern Plains and Rockies. A Supreme Court ruling grants the Indians rights to all waters arising on, flowing through or adjacent to reservations.

Map by Hannah Hinchman

(continued from page 6)

the tribes have seen the problems caused by large water projects. Millions of acres of Indian lands have been inundated, displacing many of the people and flooding out some of the tribes' best agricultural land, berry bushes and wildlife habitat. However, in those cases, the tribes got no money from the sale of water from the dams, and often no water or electricity.

Trimble says most tribes want wells, pipelines and rights to existing water storage, rather than new dams. "We're not going to run rice paddies all over the reservations to use up all that water," he says.

Deason points out that environmentalists should also consider the potential environmental benefits of the Indians' claims. In some cases, the tribes may be able to protect streams by guaranteeing flows.

Most Western states' water laws do not provide for instream uses of water such as fish or recreation. Several tribes now involved in litigation are claiming such rights, including the Colville Tribes in Washington, which are claiming water for fishing, and the Northern Cheyenne Tribe in Montana and the Spokane Tribe in Washington, which are claiming water for esthetic purposes.

A federal district court judge in Spokane, Wash., said this month that the Colville Tribes' rights don't cover fishing. Although the ruling favored the tribes' rights in many ways, Veeder, who represented the tribes, says they plan to appeal the ruling.

Pat Parenteau of the National Wildlife Federation says he believes there should be more Indian water development because of the "debt we owe them. The government spent all its time and money on agricultural projects and left the Indians far behind the rest of the West in developing its water," he says. He also realizes that the

Indians don't see water development as synonymous with impoundment.

However, he's afraid that the Bureau of Reclamation might see Indian water development funds as an opportunity and might advise the tribes to concentrate on impoundment. "If I thought the Indians would be in control, then I wouldn't be so skeptical," he says.

Parenteau opposes using a special formula for evaluating the costs and benefits of Indian water projects. He sees the social criteria that the task force is proposing as a "fudge factor, a hidden economic subsidy." He thinks that special consideration should instead be given to Indian projects more openly — after the costs and benefits are evaluated. "Let's be up front about what we're doing," he says.

Most other representatives of environmental organizations have not given the Indian water proposals close scrutiny yet.

JURISDICTION THE BIG QUESTION

Even if Indian water policy recommendations gain support from environmentally concerned members of Congress, Indian advocates will have to contend with opposition from others who are concerned about jurisdictional conflicts.

The NCAI is calling for the tribes to have "full authority to administer, control and allocate the water resources on their reservations," including water now used by non-Indians. However, their jurisdiction is adamantly opposed by these non-Indians and by the Western states.

The presidential task force has decided not to address the question at all, according to Corke of the BIA. Meanwhile, Interior is not approving any tribal water codes, although several tribes have adopted their own codes without department sanction. Veeder thinks the question should be answered.

"It's like saying we're going to be a doctor but we won't pay attention to infectious diseases. . . . It's an incredible bureaucratic escape," he says.

The final ruling on the Colville Tribes suit may also set a precedent for jurisdictional questions. The federal district court judge recognized the right of the Colville Tribes to adopt a code but said that the state should have jurisdiction over non-Indians' use of water.

The Colville Tribes' code has served as a model for several other tribes. It requires all water users to apply for permits, which are renewable after 10 years. The code includes a priority system for different types of use, such as domestic, agricultural, industrial and recreational. There is no charge for the water — just a small fee to cover administrative costs.

Tonasket says the code insures that all water users will be treated fairly. "People have the misconception that Indians want to dry up non-Indians. It's not true. In a lot of cases, non-Indians have lived side by side on the reservations for years. They're part of the community," he says.

In South Dakota, non-Indian members of the Tri-County Water Users Association board got a Cheyenne River Sioux permit rather than a state permit for their Oahe pipeline project even though the state also issues permits to Indians and non-Indians on the reservation. They know the priority date for the tribe's water rights pre-dates any state water rights.

The non-Indians in the area had refused to participate in the project until an agreement was reached calling for a board composed of half Indians and half non-Indians. "We didn't want the tribe to have absolute control. It'd be like any government project — it wouldn't be run right," says Jim Holloway, one of the board members.

Although the compromise has solved jurisdictional questions for the board members, dispute with the state is possible. South Dakota, like many other Western states, argues that while the tribes have Winters rights to water, they don't have jurisdiction over water, according to Bob Neufeld, secretary of the State Department of Natural Resource Development.

The state also objects to the tribe's attempt to get authority from the federal government to sell Oahe Reservoir water to industry, which would most likely use it outside the reservation. The Cheyenne River Sioux is the only tribe to try to get

Feb. 23, 1979 — High Country News-7

such an option, and some other Indian water advocates don't support the effort.

Neufeld opposes it because, he says, "Our position is that the Winters rights extend no farther than the boundaries of the reservations."

LIKE OWN JUDGES

Neufeld hopes the state's Indian water questions can be settled without resorting to the courts. However, he says, if there are court battles, he would like them to be in state courts. "We like to deal with our own judges," he says.

Carter said in his message in June that Indian water rights should be settled in federal courts if litigation is necessary, and the BIA is proposing such a bill. NCAI agrees and calls for increased funds for hiring attorneys to defend the tribes.

Anthony Rogers, an attorney who represents many tribes, points out that normally, a state judge is appointed by governors and legislatures or is elected by largely non-Indian voters. A review of court cases shows that state judges almost always rule against Indians. Federal judges, who are appointed for life by the president, are more politically secure and more often favor tribes.

Some states are supporting a bill in Congress that would not only provide for settling all Indian water rights cases in states. It would also eliminate all unexercised federal and Indian reserved rights and provide for state jurisdiction over water used on non-Indian lands within reservation boundaries. The bill was written by the attorney general of the state of Washington, Charles Roe.

George Waters of NCAI isn't too worried about the Roe bill. He says, "We don't think any reasonable member of Congress

(continued on page 12)



The presidential task force has decided not to address the hottest question of all — jurisdiction.



TRIBAL ENTERPRISE. Within the next 10 years, tribes will be outlining their future needs for water, for industrial, agricultural, and domestic uses as well as commercial enterprises such as this motel and restaurant on the Crow Reservation in Montana.

FOX SLAUGHTER S.D. CULT WHA KILL

by Thomas Jenkins

Most farmers, hunters and naturalists call the red fox the craftiest animal in their experience.

Examples of the ingenuity and capriciousness of the red fox are almost legendary. To divest itself of fleas, the red fox will carry a piece of bark in his mouth and wade into a stream, submerging itself until only the smallest part of its nostrils and the bark are above water and all the fleas are on the bark. Then he lets go. The red fox also can lure ducks out of water and then catch them. It plays tag with big horn sheep and caribou. A mated pair expresses emotion upon reunion by ecstatically "kissing" one another all over. The red fox is able to run faster than a race horse. It has been clocked at 45 mph.

The fox, an open-land animal with reddish-yellow fur and a white-tipped, bushy tail, only partly has earned his image, however. Many of our impressions stem not from firsthand observations, but from literature. From Aesop's fables to Uncle Remus stories, Thornton W. Burgess' "Reddy the fox" and D.H. Lawrence's "The Fox," the fox is a symbol of slyness and guile, of male aggressiveness and even demonic phallic energy.

His worth in the ecological chain, however, is not always understood. The fox does not destroy its prey species. It does what all predators do; it gets rid of inferior stock. This nocturnal hunter, by wile and speed, culls out the sick and crippled among its prey, helping to prevent the spread of their diseases.

Because it suppresses the rodent population, the fox is also of significant economic value to farmers. In certain years the 1,300 types of rodents in the United States have caused an estimated \$700 million worth of damage to grains and other food supplies.

Overkill of coyotes, bobcats and foxes by hunters can disrupt the balanced chain of predation. Hunters earn cash for killing predators in many of our states. There are bounties for bobcats in 13 states, for foxes in 12 states and for coyotes in 11 states. But during recent years, over 85 percent of all bounty money was paid for foxes.

In the mid-60s South Dakota initiated an ill-conceived "death-to-the-fox" campaign. The pheasant population had dropped from 15 million to 5 million. In an effort to reverse that trend, the state paid over \$100,000 in bounty fees for 25,301 foxes in



Photo by Kent and Donna Daznen

THE RED FOX has reddish-yellow fur and a white-tipped, bushy tail.



Photo by John H. Tobias, Jr.



THE SWIFT FOX, a cousin of the red fox, is being used in South Dakota to control the spread of prairie dog towns.

ABSAROKA — BEARTOOTH WILDERNESS

"Absaroka — Beartooth wilderness passes," Apr. 21, p. 13. 904,500 acres added to wilderness system.

"House votes on Absaroka — Beartooth," by Dale Burk, Mar. 10, p. 16. Little opposition expected in House to A-B wilderness.

AIR QUALITY

"Two more reservations want Class I quality," by Marjane Ambler, Apr. 21, p. 7. Tribal governments in Montana seek air protection.

ALASKA

"Alaskan lands bill: our last chance," Feb. 10, p. 3. Editorial re: HR 39.

"Alaska: how the house was won," by Bruce Hamilton, June 2, p. 1. Sierra Club representative describes lobbying strategy in Washington D.C.

"Bureaucrats burn midnight oil to protect Alaska," by David Crosson, Dec. 1, p. 12. Frantic effort to bolster legal protection for 120 million acres.

"Carter boldly safeguards Alaska wildlands, wildlife," Dec. 15, p. 13. Proclamations protect national interest lands until Congress acts.

"Gravel filibuster annoys Senators," July 28, p. 13. Progress of Alaska lands act in Senate. "Gravel's threats kill Alaska bill," by Bruce Hamilton, Oct. 20, p. 1. Compromises unacceptable to Sen. Gravel.

"House committee agrees to set aside 93 million Alaska acres," Mar. 24, p. 7. Present status of Alaska lands bill (HR39).

"Interior ponders how to guard Alaska," Nov. 3, p. 13. Andrus to find means of protecting 99 million acres until Congress can act.

"1978, the year the Senate shortchanged Alaska?" by Pam Rich, Sept. 8, p. 1. National interest bill still faces Senate debate.

"Only dim hopes remain for passage of Alaska bill this year," Sept. 22, p. 5. Senate dragging feet on Alaska lands.

ALTERNATE ENERGY

"Amory Lovins brings good news; Cross-pollinator gadfly," by Alexis Parks, p. 1. Friends of Earth representative advocates solar energy.

"Appropriate technologies threatened by popularity; So what if Sears decides to sell solar greenhouses?" by Wade Greene, Dec. 15, p. 1. Commercial interests bound to try to channel new technologies to their advantage.

"Center for Innovation makes inventors' schemes come true," July 14, p. 10. Center for Innovation concerned with pressing human needs. List of alternative funding for energy ideas.

"DOE looking for applicants for appropriate technology grants, Dec. 1, p. 10. Information on grants for small-scale energy technologies.

"DOE selects top eight technologies," Dec. 1, p. 11. Eight energy technologies that DOE will concentrate on developing.

"Indians explore alternative energy possibilities," by Marjane Ambler, Feb. 10, p. 10. Report on conference on Fort Berthold Indian Reservation.

"Montanans scrutinize alternative energy program," Dec. 29, p. 11. Legislators question grants for solar devices, alternative energy development.

ARAVAIPA CANYON

"Aravaipa Canyon — BLM's first wilderness?," by Philip White, Feb. 10, p. 8. Description of proposed small wilderness.

AUDUBON CAMP — WEST

"Audubon Camp West not just for the birds," by Randy Hyman, Dec. 15, p. 12. Description of camp program.

BACKPACKING

"A 2,400-mile walk along the top of the continent," by Marjane Ambler, July 14, p. 16. Nancy Gardner's experiences hiking along the Continental Divide.

BADGERS

"The Sherman tank of the animal world; The bulldozing badger," by Sarah Doll, Mar. 24, p. 8. Description, habits and behavior; place in ecological system.

BEARS — GRIZZLY

"Teach people to respect bears" by Michael Frome, Aug. 25, p. 3. Opinions re: management of bears. "Yellowstone grizzlies holding their own," Apr. 21, p. 13.

BLM

"Senate looks at BLM funding needs," by Joan Nice, Jan. 27, p. 12. Conservationists push for more money for BLM. "Court rejects BLM's request for delay on

grazing EIS's," May 5, p. 13. Court reaffirms need for EIS's as quickly as possible.

"BLM catches flak for wilderness inventory," by Philip White, Dec. 29, p. 1.

BOOK REVIEWS

"Art Anatomy of Animals," by Ernest Thompson Seton, review by Hannah Hinchman, Feb. 24, p. 9. Reprint of Seton's 1896 study of arrangement of fur and feathers.

"Becoming an Environmentalist," by Barbara Clark, Jan. 27, p. 16. Inspiration for non-destructive life style.

"Coming into the Country," by John McPhee, review by Peter Wild, June 2, p. 16. A mosaic of Alaskan history, people.

"The Deserts of the Southwest," by Peggy Larson, review by Peter Wild, May 19, p. 16. Purpose to sensitize public to desert.

"A Field Guide to Conservation Archaeology in North America," by G. McHargue and M. Roberts, review by Peter Wild, Mar. 24, p. 16. Useful to the curious as well as serious archaeologist.

"Hear that Lonesome Whistle Blow" by Dee Brown, review by Dan Whipple, Nov. 3, p. 16. Account of railroad-building fever of late 1800s.

"The Hidden Canyon" by Edward Abbey, review by Peter Wild, Mar. 24, p. 16. Abbey's favorite threatened place.

"House of Trials" by G. Michael McCarthy, review by Peter Wild, Apr. 21, p. 12. Useful contribution to history of conservation; describes early days of national forests.

"The Household Pollutants Guide," by the Center for Science in the Public Interest, review by Peter Wild, May 19, p. 16. People making money by selling dangerous products.

"Jobs and Energy," review by Richard Grossman and Gail Danecker, Environmentalists for Full Employment, review by Peter Wild, Feb. 4, p. 9. Explodes myth that industrial growth with its high energy use spells increased jobs.

"Killing the Hidden Water" by Charles Bowden, review by Gary Nabhan, Jan. 27, p. 16. Water as energy throughout history of great American desert.

"Make your Own Electricity" by Terence McLaughlin, review by Peter Wild, Oct. 6, p. 16. Advantages and disadvantages of wind, water and solar devices.

"Methane: Planning a digester," by Peter-John Meynell, review by Susan Schellenbach, Sept. 22, p. 12. Adequate information for building digester.

"Modern and Classic Woodburning Stoves" by Bob and Carol Ross, review by Peter Wild, Sept. 8, p. 8. Guide to insure efficiency, safety and pleasure from woodburners.

"Naturally Powered Old Time Toys" by Marjorie Henderson and Elizabeth Wilkinson, review by Peter Wild, Dec. 15, p. 7. How to harness natural powers to make toys.

"Nature's Economy" by Donald Worster, review by Peter Wild, Feb. 24, p. 9. History of ecological thinking over last three centuries.

"Nuclear Power: the Bargain we Can't Afford," by Richard Morgan, review by Peter Wild, Feb. 24, p. 6. Discussion of failure of nuclear hopes.

"The Old Ways," by Gary Snyder, review by Don Snow, Feb. 24, p. 8. Westerners can reinhabit land.

"The One Straw Revolution," by Masanobu Fukuoka, review by John Mionczynski, Nov. 17, p. 12. Goes beyond normal organic farming.

"Outlaw Trail," by Robert Redford, review by Peter Wild, Nov. 3, p. 16. Result of author's love affair with western history.

HCN Index 1978 pull-out section

The Environmental Bi-Weekly



High Country News

"A Pilgrim's Notebook; Guide to Western Wildlife," by Buddy Mays, review by Sarah Doll, June 16, p. 8. Guidebook with a difference. Loss of habitat biggest problem.

"Rocky Mountain National Park Hiking Trails, including Indian Peaks," by Donna and Kent Dannen, review by Peter Wild, Sept. 22, p. 16. Subject handled with sense of wonder.

"Stories that Could be True," by William Stafford, review by Peter Wild, July 14, p. 12. Collected poems.

"Sun! A Handbook for the Solar Decade," edited by Stephen Lyons, review by Peter Wild, July 14, p. 12. Essays by people who have thoughts on solar issues.

"Trees," by Andreas Feininger, review by Peter Wild, Sept. 8, p. 8. Careful probing by photographer and naturalist.

"BRIDGER-TETON NATIONAL FOREST "Bridger-Teton — more than slow-growing timber," by Bart Koehler, Dec. 1, p. 3. Guest editorial suggesting management practices for area.

BUGBEE, BRUCE

"Land use consultant offers open spaces, profits," by Glenn Oakley, Feb. 10, p. 16. Consultant suggests solutions to land use and value problems.

BURROUGHS, JOHN

"John o' birds tempered industrialists," by Peter Wild, Dec. 29, p. 1. Biographical material. Conservation pioneers series.

"CHACO CANYON NATIONAL MONUMENT

"Mines of '70s to invade 12th century; Record of Anasazi ecological suicide," by Sarah Doll, Apr. 7, p. 8. Tales of ecological disaster could be lesson to society.

CHARTER, BOYD

"Cantankerous cowman gave Montanans courage," by Kye Cochran, Sept. 22, p. 3. Recollections of deceased founder of Northern Plains Resource Council.

COAL DEVELOPMENT

"Colstrip 3 & 4 mired in confusion," by Dan Whipple and Jonny Lerner, Mar. 10, p. 10. Clean Air Act delays Colstrip construction.

"Court OK's some coal lease sales," June 30, p. 11. U.S. District Judge Pratt approves limited coal leasing.

"Group protests shift in coal leasing plans," Sept. 8, p. 7. Western Colorado Resource Council charges that BLM made changes not revealed to public.

"Interior faults CEP coal lease study," Dec. 15, p. 10. Contradictory information charged.

"King Coal's legacy of irresponsibility," Feb. 10, p. 3. Editorial re: laws controlling mining.

"Interior plans new coal lease system; Gives power to state, local governments," by Dan Whipple, Oct. 6, p. 11. Administration has preliminary plans for involving state, local governments in leasing decisions.

"Keep railroads out of coal mining, Justice Department says; Interior disagrees," Sept. 22, p. 7.

"Power emissions may reduce ag productivity; coal's long term effects," by Marjane Ambler, July 28, p. 1. Studies indicate subtle changes.

COAL GASIFICATION

"Navajo Tribe rejects WESCO gasification plant," by Dede Feldman, Mar. 24, p. 10. Various aspects of Indians' decision to reject project.

COAL SLURRY PIPELINE

"Eminent domain for slurry pipeline defeated," July 28, p. 11. First vote in House defeats slurry interests.

COAL TAXATION

"Utilities will sue Montana over coal tax," Jan. 13, p. 10. Pro and con on Montana's 30 percent severance tax.

COLORADO RIVER

"States protest Colorado River EIS," July 28, p. 13. Confrontation between environmentalists and water developers.

COMOLA, MIKE

"Claim jumping in the wild: Comola v. Asarco," by Bill Schneider, Jan. 13, p. 16. One-man guerrilla army, bane of hard rock mining.

CONGRESS

"Colorado, maverick of the inland Western States; Its development-oriented old guard no longer rules in Congress," by Joan Nice, Mar. 24, p. 1. Analysis of environmental voting by Colorado congressional delegation.

"Conservationists give Utah delegation a low rating," by Joan Nice, May 5, p. 1. Voting records of Utah's congressional delegation.

"Idaho elects wilderness champ & foe to Congress; Idaho voters inconsistent," by Marjane Ambler, Apr. 7, p. 1. Analysis of Idaho's congressmen, from environmentalists viewpoint.

"Montanans faceturnoil next election; Three of four seats up for grabs," by Dale Burk, May 19, p. 1. Analysis of Montana candidates for Congress.

"North Dakota's delegation listens to agriculture," by Marjane Ambler, Feb. 24, p. 1. Analysis of voting record of three North Dakota congressmen on environmental issues.

"Sick of superlatives? Callous about congressmen?" by Bruce Hamilton, June 2, p. 3. Letters to congress do make a difference.

CONNELL, MYRA

"Dear Friends column," Mar. 24, p. 20. Biographical notes, portrait, of compiler of index and author of "Branching Out" column.

COTTONWOOD

"Cottonwoods — sacred and sensible," by Gary Paul Nabhan, Nov. 3, p. 8. Description, history, defense of cottonwood.

COYOTES

"The coyote," by Mark Twain (from *Roughing It*) Dec. 15, p. 8.

CRANES, WHOOPING

"Cranes migrating, oblivious to legal disputes," Nov. 17, p. 16. Fish and wildlife count cranes migrating.

"Developers fear whoopers could block water plans," Oct. 6, p. 12. Plans for protecting critical crane habitat has dam and diversion promoters worried.

"Utilities fund to watch over whoopers forever," by Marjane Ambler, Dec. 15, p. 11. Utility sets up trust fund for cranes.

"Whoopers may delay Grayrocks yet," May 19, p. 11. Critical habitat and Grayrocks project. CWW (Construction Workers for Wilderness)

"Construction workers for wilderness? You bet!" by Jill Bamburg, Dec. 29, p. 16. Facts about new organization.

"Environmentalists should reach out to workers," editorial by Howie Wolke, Dec. 29, p. 3. Plea for broader base of involvement in conservation movement.

DAMS

"Flathead River at the watershed," by Richard Eggert, May 19, p. 7. Proposed dams on one of few remaining free-flowing rivers.

"House funds 'fat, sick turkeys in pork barrels,'" June 30, p. 7. Carter threatens to veto public works bill that includes controversial water projects.

"IJC urges Canada to halt Poplar River Project," by Dan Whipple, Feb. 10, p. 11. Canada and U.S. fight over dam project.

"Lamm blasted for support of Foothills project; Tied to Denver growth," by David Sumner, May 5, p. 12. Denver area water problems. Growth problems. Proposed solutions.

DOUGLAS, WILLIAM O.

"Defender of nature in the nation's highest court," by Peter Wild, Jan. 27, p. 1. Concept that natural things have legal rights. Conservation pioneer series.

DUNOIR

"Forest Service wants to let loggers in the DuNoir; Also plans a rocky 11,000 acre wilderness," by Richard Murphy, Mar. 24, p. 18-19.

"40,000 acre DuNoir wilderness proposed," May 5, p. 13. Roncello proposes bill to make wilderness larger than Forest Service recommendation.

"House passes DuNoir wilderness bill," July 28, p. 13. Fate of DuNoir depends on Hansen and Wallop.

"Why no confrontation at the DuNoir hearing?" Apr. 7, p. 3. Editorial analysis of public hearing on proposed addition of area to wilderness.

EDIBLE PLANTS

"Feast on Freak Mountain," by Hannah Hinchman, Aug. 25, p. 8. Descriptions and sketches of edible plants in South Pass, Wyo., area.

HCN Index 2-Feb. 23, 1979

ELECTRICAL GENERATING PLANTS

"BPA bill shapes destiny of states in Rockies," by Marjane Ambler, Jan. 13, p. 1. Conservationists alarmed by proposed legislation to reorganize BPA.

ENDANGERED SPECIES

"Committee adds 'flexibility' to Species Act," by Bruce Hamilton, Oct. 6, p. 4. Proposed amendments to endangered Species Act.

"Creepy crawlies: a lesson in humility," by Philip White, May 5, p. 3. Editorial re: Endangered Species Act.

"House ignored plight of eagles, wolves, falcons," by Elizabeth Kaplan, Dec. 1, p. 3. Guest Editorial on Endangered Species Act.

"It's a Cherokee fish—and I am its brother," by Jimmy Durham, July 28, p. 3. Statement to House committee by Director of International Indian Treaty Council.

"Mortals to designate worthless species and affordable habitat: Even whooping cranes aren't sacred," by Bruce Hamilton, Oct. 6, p. 3. Sharp criticism of amendments to Endangered Species Act.

"Report predicts endangered species battle-grounds," Oct. 6, p. 2. Eleven counties in Rockies to have conflicts between endangered species and energy projects.

"Supreme Court protects endangered species," June 16, p. 10. Supreme Court halts Tellico Dam to save snail darter.

"Congress passes bill to help Grayrocks Dam," Oct. 20, p. 15.

"Debate raises questions about truth in lobbying: Senate amends Endangered Species act," by Justus Bavaras, July 28, p. 12.

"Furred, finned, feathered cousins' fate at stake: Endangered Species act in danger," by Philip White, Mar. 24, p. 12. TVA applies pressure against Endangered Species Act.

"Snail darter's victory may be brief," June 30, p. 12. Various aspects of efforts to amend Endangered Species Act.

"Time running short for Endangered Species Act," by Justus Bavaras, Aug. 25, p. 16.

"Weakened Endangered Species Act passes," Oct. 20, p. 15.

ENERGY CONSERVATION

"Loan institutions shun energy-conserving home: Too unconventional," Jan. 13, p. 11. Idaho couple turned down for loan on energy conserving house.

"McGraw calls insulation a 'consumer ripoff,'" by Joan Nice, Apr. 21, p. 1. Homeowners' money for insulation won't save as much energy as promised by industry.

"New Mexico researchers debunk insulation myth: Adobe and sunlight save more, they say," by Dede Feldman, Apr. 21, p. 5. Study makes sense to adobe builders and solar enthusiasts.

ENERGY

"Congress phases out gas controls: pushes for conservation, solar power," Nov. 3, p. 7. Summary of recently passed energy policy.

"Soft-energy knight visits nuclear castle: Lovins at Sandia," by Dede Feldman, Apr. 21, p. 5. Study makes sense to adobe builders and solar enthusiasts.

ENVIRONMENTAL PROTECTION

"God bless America. Let's save some of it," by Edward Abbey, May 19, p. 1. Essay on environmental movement, economy, society.

"Environmental films: nuclear power to family farming," by Dede Feldman, May 5, p. 8. Reviews and list of environmental films.

"Congress passes 'fantastic' park and recreation bill," by Bruce Hamilton, Oct. 20, p. 7.

"Lame ducks and a question mark lead Wyoming," by Dan Whipple, June 16, p. 1. Analysis of attitudes of Wyoming congressional delegation.

ENVIRONMENTALISTS

"Issues, politics, people, and—fun: Why activists are active," Jan. 13, p. 1. Qualities of leadership: notes on Lynn Dickey, Lou Reed, Dorothy Bradley, Randolph Nodland, Marcia Pursley, Jay Reed, Dick Randall, Mike Jacobs, Margaret Murie, Florence Krall, Bob Kiesling, Tom Bell, and others.

ETTER, ALFRED

"Eloquent witness of 'unmeasured dimensions, unmakeable things'—Alfred Etter," by Bruce Hamilton, Apr. 7, p. 3. Tribute.

FALCONS, PEREGRINE

"Man once fought against peregrines—now fights to preserve them," by Ruth-Carol Cushman, June 30, p. 8. Decline of the peregrine, and efforts to preserve the species.

FERRETS, BLACKFOOTED

"Clark: poisons key to ferret's fate," Jan. 13, p. 12. Prairie dog poisons believed to have brought ferret to near extinction.

FISCHER, HANK

"Hank Fischer: least popular man in Montana," by Dan Whipple, June 30, p. 16.

FOOTHILLS WATER PROJECT

"Water board sues critics of the Foothills pro-

ject: An attempt to choke off debate?" Sept. 8, p. 2. Denver Water Board sues federal officials, environmental groups.

GARDNER, NANCY

"A 2,400-mile walk along the top of the continent," by Marjane Ambler, July 14, p. 16. Backpacking along Continental Divide.

GEOTHERMAL ENERGY

"Hot-spring tomatoes boost 'non-profit' cattle ranch," by Elise Dirlam, Oct. 20, p. 16. Description of hot-spring greenhouse project; personal interview with Betty Countryman.

GRAYROCKS DAM

"Basin Electric making concessions to opponents," by Philip White, Nov. 17, p. 12. Concessions may settle dispute.

"Judge halts work on Wyoming's Grayrocks Dam," Oct. 6, p. 1. Effect of dam on Platte River one factor in federal order to halt work.

"Permit issued for Grayrocks Dam," by Dan Whipple, Apr. 7, p. 11. Permit issued in spite of objections.

GREAT DIVIDE BASIN

"Great Basin besieged—the fight for the Red Desert," by Jack Pugh, Dec. 29, p. 8. Conflict of desert wilderness versus mineral exploration.

HAWKS

"Hikers watch Utah hawk spectacle—at eye level," by Ann Schimpf, Dec. 1, p. 8. Pioneering work in study of hawk migrations.

"It floats like a leaf in silent circles—waiting," by Thomas M. Jenkins, Oct. 6, p. 8. Description and behavior of red-tailed hawk.

HERBICIDES

"EPA takes first steps against chemicals that contain dioxin," June 2, p. 6. Outlines dangers of 2,4,5-T and TCDD.

"Idahoans protest use of 2,4,5-T on forests," Apr. 7, p. 13. Protests postpone use of herbicide in forest.

"Side effects of herbicide shake EPA: But industry maintains it's safe," by Justus Bavaras, Feb. 24, p. 1. Evidence of 2,4,5-T in food chain; may have severe consequences.

"2,4,5-T fires nationwide controversy," Oct. 6, p. 6. Herbicide linked to human illness. Bill introduced to ban.

HIGH COUNTRY NEWS—INDEX

"HCN Index—1977," by Myra Connell, Mar. 24, p. 1.

HIGH COUNTRY NEWS

"Dear Friends," Sept. 8, p. 1. Account of auto accident that affected four members of staff: Justus Bavaras, news editor, was killed.

"HCN readers say 'good, but not good enough,'" July 28, p. 16. Results of reader survey.

HIGH UNTAS WILDERNESS PROPOSAL

"Coalition wants more low country in High Uintas wilderness," Oct. 6, p. 13.

HORNADAY, WILLIAM T.

"Stout-hearted Hornaday waged a war for wildlife," by Peter Wild, Dec. 1, p. 1. Conservation pioneer series.

INDIAN PEAKS WILDERNESS PROPOSAL

"After 70 years of debate one last hurdle for Indian Peaks Wilderness," by Kent Dannen, Sept. 8, p. 4. Indian Peaks bill in House, soon to be in Senate.

INDIANS

"Black Elk's message dramatized," by Dede Feldman, May 5, p. 9. Adaptation of book Black Elk Speaks.

INDUSTRIAL SITING

"Kerr-McGee Corp. must face Wyoming Siting panel," June 16, p. 10.

"Kerr-McGee determined to dodge siting regs," Feb. 24, p. 11.

JACKSON HOLE—AIRPORT

"Jets may find a way into Teton airport," June 2, p. 13. Frontier Airlines proposes modified jets for limited period.

JACKSON HOLE SCENIC AREA

"Jackson Hole Scenic Area bill killed," Oct. 20, p. 7.

"Jackson Scenic Area—It's for our children," June 16, p. 7. Report on hearing on area.

LAND USE AND PLANNING

"Jackson battles for public welfare; feds should fight for scenery," July 28, p. 3. Editorial re: scenic easements, local planning, Teton Co.

LIBBY DAM

"Permit system has advantages over zoning for local planning," by Lee Nellis, April 21, p. 7. Argument for case-by-case basis for planning.

LIBBY DAM

"Judge stops Libby Dam project," Sept. 22, p. 12. Three environmental groups win halt to project.

LOS ESTEROS DAM

"Artifacts of many cultures lie under shadow of Los Esteros," by Dede Feldman, July 28, p. 8-9. Dam would destroy scenic canyon, grazing land, wildlife habitat, archeological sites. Little opposition in N.M.

MACLEOD, DONALD "DOC"

"MacLeod says human species endangered—by us," by Jill Bamburg April 21, p. 16. Subject sees oil and gas development in Jackson Hole as serious threat.

MARSH, GEORGE PERKINS

"An observer who inspired reforms," by Peter Wild, Aug. 25, p. 1. Book by Marsh gave early environmentalists first massive scientific evidence. Conservation pioneer series.

MASS TRANSIT

"Nearly empty buses mystify Millers," Feb. 24, p. 11. Bus service near Saratoga and Encampment, Wyo. not used by miners.

"Western passenger train service should continue," June 30, p. 3. Editorial urging continued Amtrak service.

MERSON, ALAN

"Merson flaunts environmental bias." Environmental Protection administrator, Region VIII, by Marjane Ambler, Oct. 6, p. 1.

METCALF, SEN. LEE

"West loses Lee Metcalf's, environmental voice," by Robin Tawney, Jan. 27, p. 3. Elegy for Metcalf, who could usually be counted on to support environmental measures.

MINING (in situ)

"In situ mining has advantages but is no panacea," by Justus Bavaras, Mar. 24, p. 17.

NATIONAL FORESTS

"High court says fish, wildlife are not part of

national forest," July 14, p. 1. Ruling by U.S. Supreme court re water rights.

NATIONAL PARKS

"National Park Service chases squirrels of political popularity. A sprawling agency with a two-part mission," by Bernard Shanks, Oct. 20, p. 1.

"Park-barrel projects please environmentalists," June 30, p. 13. Omnibus bill would add to parks, scenic rivers, monuments, etc.

"Parks bill has Carter caught between two goals," Aug. 25, p. 12. President committed to both parks and reduced spending.

NCAI

"Nat'l Center for Appropriate Technology gives help, gets criticism," by Joan Nice, June 16, p. 1. Center criticized by public interest groups, utilities and federal govt.

NIYC

"National Indian Youth Council seeks to protect Indian land, resources," by Dede Feldman, March 24, p. 20.

NON-GAME SPECIES

"Montana's nongame wildlife finds friends," by Hank Fischer, May 5, p. 16. Funding problems would be solved by federal non-game bill.

NORTH PLATTE RIVER

"Residents tackle North Platte River conflicts," Feb. 24, p. 6. WOC workshop in Saratoga attempts to solve problems of various uses of river.

NUCLEAR POWER

"Hurdles to power generation," Jan. 27, p. 10. Disaster predicted without nuclear plants.

"Montanans demand vote on nuclear plants," Nov. 17, p. 7. Montana and Hawaii pass initiatives restricting nuclear plants.

"Nuclear accident spurs investigation; Fort St. Vrain alarms Denver residents," by Philip White, Feb. 10, p. 1. Nuclear industry discouraged because of radioactive leak.

"Rocky Flats nuclear protest draws thousands," by Dede Feldman, May 5, p. 10. Protesters call for closure of nuclear facility where leaks and pollution have occurred.

"Rocky Flats weapons plant protesters found guilty of trespass," Dec. 15, p. 7. Ten protesters of Rocky Flats fined.

"Seabrook stopped," July 14, p. 10. Seabrook nuclear plant halted by Nuclear Regulatory Commission following protests of opposing groups and governor.

"Unique reactor not living up to industry's hopes," by Philip White, Feb. 10, p. 4. Problems with only gas-cooled reactor.

NUTHATCHES

"Unorthodox woodland traveler: the white-breasted nuthatch," Oct. 20, p. 7. Description of species.

"White-breasted nuthatch drawing by Laney Hicks, Oct. 20, p. 8-9. Reproduction of print offered for sale by HCN.

OIL SHALE

"Judge nods to Piceance Basin shale development. Says one environmental statement is enough," Sept. 8, p. 7. Victory for shale development.

OREGON TRAIL

"Present meets past on Oregon Trail," by R. Newell Searle, June 30, p. 1. Account of trek by author on one sector of old trail.

PARANTEAU, PAT

"Devoted to defending rivers and the whoopers," by Philip White, Nov. 17, p. 16. Profile of subject.

PAWNEE NATIONAL GRASSLAND

"How to protect buttes' wealth while sharing it. Pawnee Nat'l Grasslands dilemma," by Karen Reichardt, Feb. 24, p. 16. Problems of preserving values of area.

PETROLEUM INDUSTRY

"Conservationists offers remedy for Overthrust strife," by David Crosson, Sept. 22, p. 1. Wyoming Sierra Club chairman offers compromise re: oil and gas exploration in overthrust belt.

PINE BEETLE

"The Mountain Pine beetle plague—could there be a silver lining?" by Stephen S. Campbell, Sept. 22, p. 8-9. Theory that beetle attacks may benefit forest.

PINE—BRISTLECONE

"The bristlecone defies time, weather, and human comprehension," by Thomas M. Jenkins, Nov. 17, p. 8-9. Photo essay on subject.

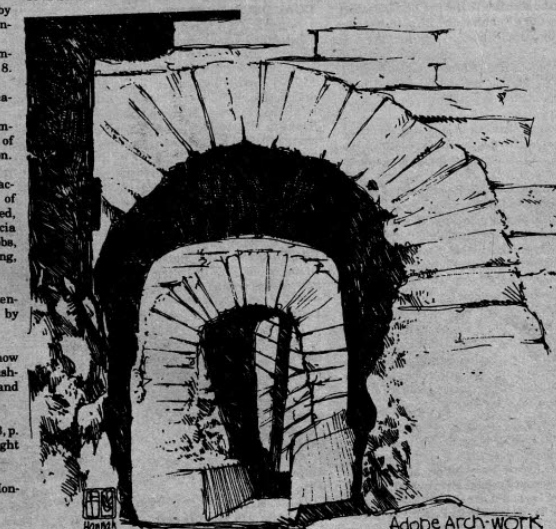
PLANTS—DESERT

"Drought dodgers of the plant world," by Stephen R. Wenger, July 14, p. 8-9. Description and photos of some desert plants.

POLITICS

"Environmentalists, backlash and the 'New Right,'" by Dan Whipple, May 5, p. 1. Apparent shift in national mood following successes of environmentalists.

"Western Election Review: Taxpayers revolt may have stacked the deck," Nov. 17, p. 1.



Summary of chances for environmental legislation in Western States in coming sessions.

POLLUTION — AIR

"Campbell county air pollution could limit future coal mining, Jan. 27, p. 11. Too much dust in air."

"Coal development dust plagues Powder River family," Nov. 3, p. 15. Rancher blames road, railroad, mines for poor health of family and livestock.

"Colstrip to get air okay," Jan. 27, p. 11. Colstrip 3 and 4 seem to be getting green light.

"Denver may be model air clean-up city," Jan. 27, p. 13. Action plan to focus on car pools, mass transit.

"Dirty air a health hazard in 30 areas of West," by Marjane Ambler, June 2, p. 1. Problems of meeting air standards in West.

"EPA denies Colstrip air permit, cites pollution," June 16, p. 10. EPA moves to preserve air quality for Northern Cheyenne Reservation.

"EPA now considering emission limit of 50 percent," by Marjane Ambler, May 5, p. 11. Regulations being considered would lead to deterioration of air quality.

"EPA recommends relaxed national smog limits," June 16, p. 13. EPA proposes tolerating more smog.

"EPA shrinks from regulating tons of dust stirred up by coal mines," by Bruce Hamilton, Nov. 17, p. 10. Mining means major air pollution.

"Political smog keeps Denver air dirty: Colorado legislative report," by Todd Engdahl, June 2, p. 7. Air pollution top issue in Colorado Legislature; governor vetoes bill.

"Question isn't clean air v. dirty coal," May 5, p. 3. Editorial on Sen. Malcolm Wallop's attitude toward clean air and use of coal for energy.

"West can't wait to deal with automobile pollution," March 24, p. 3. Editorial on suggested solutions to pollution in Denver.

"Wyoming may penalize two air violators," Jan. 27, p. 10. Air pollution enforcement action may be taken against UP & L and Atlantic City iron mine.

PREDATOR CONTROL

"Interior to rule on coyote-killing method," Nov. 3, p. 13. Interior considering allowing use of 1080.

"Colorado group calls for experimental 1080 program," July 14, p. 13. Public Lands Institute suggests use of poison in single dose, specific way.

"Sheepmen hopeful about coyote fence," Jan. 27, p. 13. Electric fence may prove effective.

"Utah sheepmen fear predator poison ban, Jan. 27, p. 13. Utah sheepmen threaten closure of land if use of 1080 is denied.

PUBLIC LANDS

"Carter considers land agency shuffle," by Bernard Shanks, March 24, p. 1. Carter orders study to consider extensive reorganization of departments in charge of lands.

RADIOACTIVE WASTE

"Business before health in Salt Lake," by Justus Bavarakis, June 16, p. 3. Editorial charging Salt Lake Board of Health with ignoring responsibility.

"Rally opposes storage of nuclear wastes in N.M.," by Dede Feldman, Nov. 3, p. 10. Details of protest against government plans for storing radioactive waste near Carlsbad.

"Salt Lake City ignores risk of radiation," June 16, p. 11. Problems of tailings pile in Salt Lake.

"TVA to be first at cleaning up old uranium site," by Joanne Koster, Dec. 1, p. 1. Efforts to clean up tailings in S.D.

RANGE MANAGEMENT

"Congress looks at range bill," Feb. 10, p. 6. Discussion of grazing and range bill introduced by Rep. Teno Roncaldo.

"Range manager Gary McKiver, a target for angry ranchers," by Judy Donovan, Dec. 29, p. 7. Controversy between ranchers and range manager.

RARE II

"DOE identifies RARE II energy conflicts," March 10, p. 10.

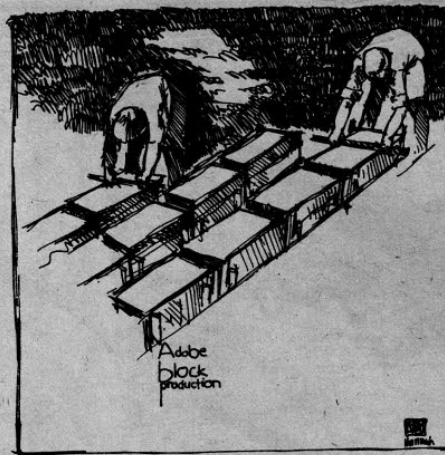
"Environmentalists claim many RARE II victories," Dec. 1, p. 16. Most votes in comment period favored Alternative W.

"Forest Service secrecy serves only confusion," Nov. 17, p. 3. Editorial criticizing Forest Service methods.

"Rare II may achieve less than expected, says Forest Service," Aug. 25, p. 5.

"Rare II tables turn; conservationists enraged," by Joan Nice, June 30, p. 1. Conservationists dissatisfied with Rare II.

"USFS roadless land oil policy set," by Dan Whipple, March 24, p. 11. Wilderness losses in RARE II opinion poll; wins in Colorado, Idaho," by Dan Whipple, Nov.



3, p. 1. U.S. Forest Service developing final recommendations in secret.

RAWHIDE POWER PLANT

"Residents fear growth encouraged by coal plant," by Don Snow, April 7, p. 4. Opposition to impact on agriculture, etc. if plant is built in Colorado.

RECLAMATION

"Colorado solons attack reclamation regs.," Feb. 24, p. 10. Controversy over intent of reclamation laws in Colo.

ROADLESS AREA

"Conservationists offer backpacking with a purpose. Expeditions to evaluate roadless areas," by David Sumner, April 7, p. 16. Outline of expeditions offered to explore roadless areas.

SAGEBRUSH

"The Emigrant's Friend," by Mark Twain (Mark Twain's guide to Western flora and fauna, from *Roughing It*), Dec. 15, p. 9.

SCHURZ, CARL

"Schurz preached conservation to a profligate nation; Congress howled with derision," by Peter Wild, Oct. 6, p. 6. Schurz' contributions to conservation unique yet not immediately successful. Conservation Pioneer Series.

SOLAR ENERGY

"Are commercial solar systems worth the price?" by Joan Nice, Feb. 10, p. 1. Mass market slow because of high price of equipment.

"Federal bucks, blessings behind solar power," Oct. 6, p. 10. Federal funds for solar development may be increased.

"Fusion magazine links Sun Day with terrorism," by Dede Feldman, Aug. 25, p. 10. Anti-appropriate technology magazine prints propaganda against solar energy.

"Indians learn do, don'ts of solar energy — by experience," by Dede Feldman, Dec. 29, p. 10. Conference on solar and alternative energy on Indian reservations.

"Passive heating and cooling, a solar Cinderella?" by Joan Nice, July 28, p. 1. Comparisons of active and passive systems.

"Solar power lures strange bedfellows in N.M.," by Dede Feldman, May 19, p. 10. Defense and nuclear industries cashing in on solar boom.

"Solaron plans to cut the cost of solar heating devices," June 16, p. 11. New design will cut cost.

"Sun Day, a tough act to follow?," July 14, p. 11. Solar Action, Inc. granted funds to report on barriers to development of solar energy.

"Sun Day is May 3," Apr. 21, p. 8. Effort to bring solar energy to public.

"Sun offers prosperity without disruption," by Dede Feldman, Sept. 22, p. 1. Navajos seek energy self-sufficiency.

SOCIAL IMPACT

"Energy impacts reach to distant recreation areas," by Lee Nellis, May 19, p. 12. Big Horn Basin people disturbed by increased number of recreation visitors.

STREAMS — PROTECTION

"Suit would force Interior to protect water in canyon country," Dec. 1, p. 13. Sierra Club sues Interior in effort to protect stream flows in southwest U.S.

STRIP MINING

"Feds to approve four states to watchdog stripmining," Sept. 8, p. 6. Secretary of Interior predicts agreements soon to be signed.

"Suit to test reclamation requirement," March 10, p. 11. National Indian Youth Council will test federal reclamation laws.

SWEETWATER RIVER

"Herschler opposes Sweetwater wild, scenic study," by Marjane Ambler, Feb. 10, p. 12. Various facets of proposal.

TREES — POEMS

"Pines at La Grande," by William Stafford, March 24, p. 17. Poetry of the earth series.

UDALL, MORRIS

"Miners, Alaskans, conservatives want Udall out," by Steve Auslander, Oct. 20, p. 10. Political fight in Arizona.

URANIUM

"Uranium supplies face rising demand," by Justus Bavarakis, March 10, p. 8. Summary of uranium sources.

"Aborigines' fate also tied to uranium," Oct. 20, p. 11. Peter Hayes, Australian, explains status of uranium mining in Australia.

"Impacts: uranium mines and mills move more than mountains," by Justus Bavarakis, March 10, p. 8. Social wildlife and other effects of developments near Jeffrey City, Wyo.

"Indians oppose uranium mining in New Mexico," by Dede Feldman, Oct. 20, p. 11. Indians opposed to destruction.

"N.M. uranium mine may pollute river," by Dede Feldman, April 21, p. 11. Reopening of old mines contested by environmentalists because of pollution possibilities.

"The West mines, mills and worships radioactive fuel: uranium," by Justus Bavarakis, March 10, p. 1. Uranium means prosperity and radioactivity hazards to health in mines and tailings.

"WOC, miners settle desert uranium fight," Nov. 3, p. 11. Compromise re: controversy of Wyoming Outdoor Council and Minerals Exploration Co.

"WOC set hazardous precedent," Jennie McDonald, Dec. 15, p. 2. Guest editorial criticizing compromise position of Wyoming Outdoor Council re mining permit in Seven Lakes area.

"WOC won by shrewd compromise," by Leslie Petersen, et al., Dec. 15, p. 2. Guest editorial defending position taken by WOC re mining permit in Seven Lakes area.

WASHAKIE BASIN

"A visit to Adobe Town badlands; a haven for wildlife — and desert rats," by Dan Whipple, Jan. 13, p. 8. Expedition to evaluate area in Wyoming's Red Desert as potential wilderness.

WATER

"Carter water policy is better than nothing," by Dan Whipple, June 16, p. 12. Conservationists say policy needs improvement.

"Congress, Carter lock horns on water projects; water policy reforms face acid test," by Dan Whipple, Aug. 25, p. 1. Carter's proposed water policies face stiff opposition.

"Can foresters claim water for wildlife?," May 19, p. 13. National Wildlife Federation and federal government seek to overturn court decision re: water for wildlife.

"Recharge could bring water, wildlife to dry plains; the underground alternative to dams," by Joan Nice, Dec. 15, p. 1. Idea of underground storage of water explored.

"Water shortages foreseen in West," by Lynne Bama, Aug. 25, p. 7. Lewis D. Walker answers questions re: water resources at Cody, Wyo., meeting.

"Implementation of water policy angers Colorado officials," July 28, p. 13. First applications of Carter water policy raises cry.

"Gillette water pipeline project — a half-told story," by Dan Whipple, July 14, p. 5. Alternative plans ignored.

"Governors pleased with Carter water policy," by Dan Whipple, June 2, p. 12. States to be included in water policies.

WIND

"Wind — the tough, unpredictable spirit of the mountains," by Kent and Donna Dannen, May 19, p. 8. Photo-essay re: wind in high altitudes.

WOLVES

"First confirmation of Idaho wolf sighting," Sept. 22, p. 13. Biologist sights timber wolf.

WOOD BURNING

"Old and new ideas in wood heating explored," by Philip White, Dec. 29, p. 12. Review of Maine Times special issue on wood stoves.

"Safety tips can snuff out woodburners' nightmares; wood stoves at home: how to make them safe," by Bill Eckert, Jan. 27, p. 6.

Feb. 23, 1979-HCN Index 3

orado officials," July 28, p. 13. First applications of Carter water policy raises cry.

"Gillette water pipeline project — a half-told story," by Dan Whipple, July 14, p. 5. Alternative plans ignored.

"Governors pleased with Carter water policy," by Dan Whipple, June 2, p. 12. States to be included in water policies.

WIND

"Wind — the tough, unpredictable spirit of the mountains," by Kent and Donna Dannen, May 19, p. 8. Photo-essay re: wind in high altitudes.

WOLVES

"First confirmation of Idaho wolf sighting," Sept. 22, p. 13. Biologist sights timber wolf.

WOOD BURNING

"Old and new ideas in wood heating explored," by Philip White, Dec. 29, p. 12. Review of Maine Times special issue on wood stoves.

"Safety tips can snuff out woodburners' nightmares; wood stoves at home: how to make them safe," by Bill Eckert, Jan. 27, p. 6.

JOHN WEGEL

"Yellowstone Park's most devoted geyser gazer," by Philip White, Dec. 15, p. 16. Activities of Wegel studying geysers.

WELLSVILLE MOUNTAINS

"Utahns fight to leave the Wellsvilles as they are," Jan. 13, p. 12. Development plans and proposed motorbike trail arouse opposition.

WETLANDS — PROTECTION

"Court to say whether wetlands will be drained," by Sarah Doll, March 24, p. 7. Suit in N.D. to halt Channel A project.

WHEATLAND POWER PLANT

"Basin requests plant speed-up," June 30, p. 10. Basin Power Co. asks Wyoming to authorize earlier completion date.

"Workers, town are victims of utilities' arrogance," Oct. 20, p. 3. Editorial blaming utilities for timing of shutdown order.

WHITMAN, CARL

"Carl Whitman, a drop-out with alternative ideas," by Marjane Ambler, June 16, p. 16. Advocate of alternative energy sources.

WILD AND SCENIC RIVERS

"Political rapids rock proposals for wild rivers," by Philip White, June 2, p. 6. Omnibus plan for rivers.

WILD HORSES AND BURROS

"Activists torn over what's best for wild horses," by Marjane Ambler, July 30, p. 1. Analysis of wild horse problem, Adopt-a-Horse program, proposed changes in management.

"Compromise reached on wild horses in range improvement bill," Oct. 20, p. 13. Persons who adopt may own horses after one year probationary period.

WILDERNESS

"BLM airs proposals for reviewing wilderness; conservationists say they're generally acceptable," by Philip White, April 7, p. 12. BLM plans orderly inventory.

"BLM soon to enter wilderness preservation fray; oil man feels ignored," by Philip White, Feb. 10, p. 7. Two sides of controversy on Rare II and BLM organic act.

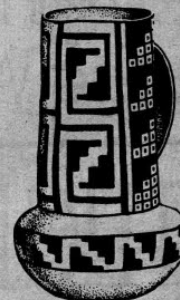
"Wilderness in Rockies could save federal dollars," by Gary Haden, April 7, p. 1. Justification of wilderness on economic basis.

WILDLIFE

"As winter waxes, wildlife wanes," by Sarah Doll, Jan. 27, p. 8. Ways of wildlife in winter; winter hazards to wildlife.

YELLOWSTONE RIVER

"Montana fights over Yellowstone water," Jan. 27, p. 1. Who gets how much water.





Inform yourself on the fate of
the Western wilds. Read

HIGH COUNTRY NEWS

Box K · Lander, Wyo. 82520 · \$12 for 25 issues.

PREDATORS BEWARE: PRAIRIE DOGS DON'T LET IT SLIP

less than one year. But the pheasants did not return. Their real enemies, it was realized later, were drought and the mowing of 500,000 acres of land of excellent pheasant cover at the peak of the pheasant nesting cycle. While the reduction of foxes didn't affect the pheasant population, it was a boon to the rabbits and other rodents.

South Dakota recently came to grips with a different kind of problem: how to control or remove excess prairie dogs. In the light of the pheasant episode, the state's plan is sheer irony. It is placing swift foxes, cousins of the red fox, in the prairie dog villages. This nearly extinct fox, smaller and perhaps less crafty than its red relative, is still an effective predator.

"We have a prairie dog problem, almost unique in the whole country," said Jack McCulloh, president of the South Dakota Stockgrowers Association. "We have hundreds of thousands of acres of public lands adjoining private lands which have been devastated by the spreading cancer of this emerging prairie dog population."

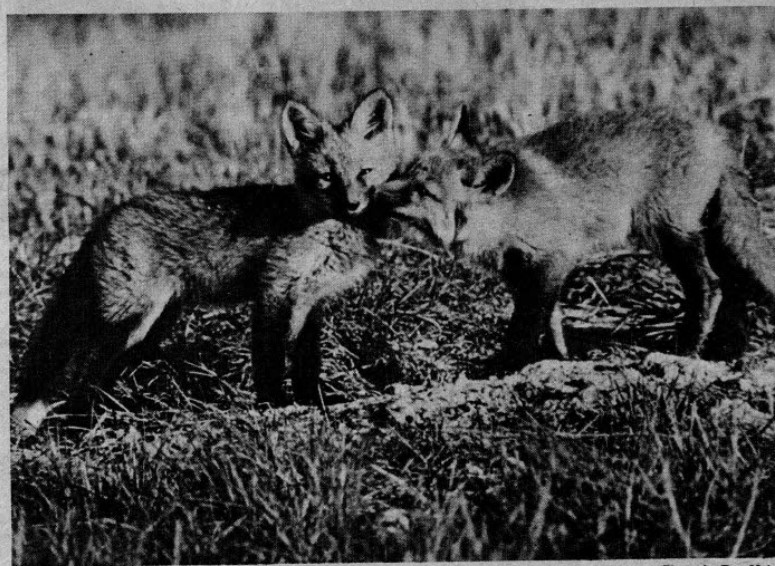
The South Dakota wildlife department and the federal government provided a total of \$30,000 for a program to breed the swift fox in captivity. The foxes then are let loose in the prairie dog communities, which they can reduce from 80 acres to 10 to 15 acres.

The swift fox is listed as endangered in Nebraska, South Dakota and North Dakota, but not in Wyoming and Montana, where it may be hunted or trapped at any time of the year.

Although the swift fox occasionally steals chickens, even from high-fenced chicken farms, the incidence is statistically slight. It doesn't need to obtain food in this way. After all, it has radar-keen senses; the swift fox can hear the squeal of a mouse 150 feet away. It also has varied tastes. It will eat wild berries, lizards, snakes, insects and some grasses which makes widespread, repeated chicken-stealing unnecessary. In a few cases, foxes that lived as close as 200 yards from chicken farms ignored them.

Theirs is an active existence. Leonard Lee Rue III eloquently expresses this in his book, *The World of the Red Fox*. He says, "Predators neither sow nor do they reap. They cannot hibernate, seldom migrate, only occasionally store food for the future. Their way of life is an active pursuit of food and must, in this sense, make them shrewd opportunists."

Thomas Jenkins is director of the division of communication and arts at the Red Rocks Campus of the Community College of Denver.



Photos by Ron Maler

THE RED FOX PUPS shown in the photos above will be able to run faster than race horses. Ingenious and capricious, the species can catch ducks by luring them out

the water and kill fleas by luring them into it. Red foxes sometimes express emotion by ecstatically "kissing" one another all over.

In literature, the fox is a symbol of slyness and guile, of male aggressiveness and even demonic phallic energy.

10-High Country News — Feb. 23, 1979

Severance taxes: what's the point?

by Dan Whipple

Every year at about this time, legislatures across the Northern Rockies and Northern Plains region debate the issues facing the states. And, every year, regular as the harvest, the question of mineral severance taxes comes up.

Mineral severance taxes are big business in the West. In 1978 the two largest energy producing states — Montana and Wyoming — collected over \$120 million between them from taxes on their minerals. Two other states, North Dakota and Colorado, collect substantially less — about \$20 million for North Dakota in 1978 and about \$6.6 million for Colorado in the first six months of 1978. Utah does not have a severance tax, although the state levies a one percent occupation tax on metalliferous mines.

The states' severance tax systems vary according to what minerals are taxed and the level of tax. However, the purposes of the taxes are generally similar, aimed to fulfill three goals. The first is to raise money for everyday state operations. Every state with a severance tax puts a hefty portion of the proceeds into its general fund.

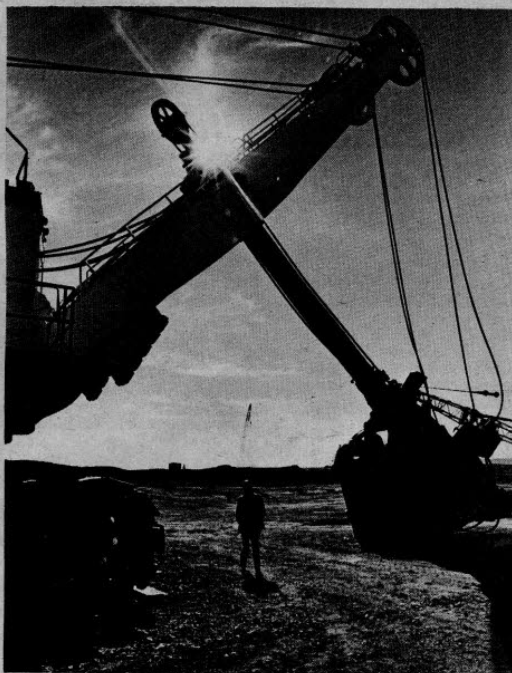
A second major purpose is to pay for the impact of rapid energy development. All four of the states with severance taxes have set up impact fund accounts to aid counties and communities dealing with the rapid growth associated with energy development.

Finally, the states all have set up some form of permanent mineral trust fund to hold a portion of the tax collections. The final disposition of the mineral trust fund is usually vague and even occasionally unspecified in the law, but its overall intent is to provide an economic base for the state after its non-renewable minerals have been extracted.

Environmentalists have by and large supported high mineral severance taxes. Not surprisingly, industry has generally opposed them.

But, is the mineral severance tax an environmental issue?

Lynn Dickey, Wyoming Gov. Ed Herschler's legislative liaison, says, "The coal severance tax is not an environmental issue because increasing or decreasing by the small amounts discussed in the legislature will not make the least difference in the amount of coal mined. We'd have to get



COAL MINING is the main target of severance taxes in the Western states. Kerr-McGee Corp. photo

up to a 50 percent tax before it would be an inhibiting factor."

Wyoming's severance tax on coal is 10.5 percent, with an additional ad valorem tax, levied by the county, of about six percent. The legislature defeated a proposal to raise the severance tax by five percent during this recent legislative session.

Bill Sperry, executive director of the Wyoming Outdoor Council, says that the tax is an important environmental issue, "because our environment is also people. The severance tax provides aid to impacted communities and sets aside money for the future."

Montana has a 30 percent severance tax, the highest in the country. This tax is under assault — in the legislature and

elsewhere — for being too high. Montana-based coal companies and their midwestern utility customers have filed a lawsuit against the tax, claiming that it inhibits interstate commerce in violation of the U.S. Constitution.

Bob Kiesling, of Montana's Environmental Information Center, defends the state's tax as an important statement by the people of the state on environmental issues. He says, "The whole business of trying to alter the historical pattern of resource development is reflected in the severance tax. In the past, resource developers have extracted to their hearts content without returning to the state any of the wealth. The severance tax is a strong statement that the people of Montana don't want this type of extraction. Fair value is now returned to the state."

From the industry side, Bill Budd, executive director of the Wyoming Mining Association, sees the severance tax issue as partly environmentally inspired. He says, "Some people are not being honest in this issue. There are those in the environmental community — though by no means everyone — who are doing everything they can to discourage mining — tax them out of existence, regulate them out of existence, etc. There are those who want to use it (the tax) to stop growth."

Some observers have pointed out what they consider to be a disturbing trend in the uses to which increased severance taxes are being put. For example, about 15 percent of the proceeds from the Wyoming coal tax go into a special fund earmarked for water development projects. North Dakota is currently considering a similar fund. Other uses for severance tax money that could be considered environmentally



The HCN
Hot Line

energy news from across the country

NUCLEAR MISHAPS 'BIZARRE.'

Recently-released Nuclear Regulatory Commission files discuss 285 accidents at nuclear power plants over the past 10 years. The files, obtained under Freedom of Information requests by the *Wilmington (Del.) News-Journal*, contain "a bizarre selection" of problems that safety analysts had not foreseen, according to the collector of the files, Dr. Stephen H. Hanauer, a senior NRC safety official. In one incident, a hose from a nuclear power plant's drinking fountain led directly to the plant's 3,000 gallon radioactive waste tank. In another case, workers used a regulation basketball to plug a plant suction pipe. The ball exploded, and the pipe spilled 14,000 gallons of contaminated water into the plant's basement in less than five minutes. A spokesman for the Union of Concerned Scientists said that the files "have taught us that there is no way to imagine in advance what can go wrong at nuclear power plants." UCS is a Boston-based lobbying group opposing nuclear power.

LEADED GASOLINE POLLUTING.

An atmospheric physicist for a California air quality management district has told the National Air Quality Commission that motorists using leaded fuel in cars designed for unleaded are negating air pollution advances in Southern California and probably in other parts of the country. Dr. Thomas Heinsheimer told the federal panel, "The use of leaded gasoline in cars equipped with catalytic converters is destroying the effectiveness of those devices and may erase the air quality progress of the past 20 years. It also appears that this factor could impair the air quality in many urban areas of the United States."

ALASKA GAS LINE STALLED. Two University of Alaska researchers say that public money will be needed to continue construction of the multi-billion dollar Alaska gas pipeline. According to the *Alaska Advocate*, the researchers report, "The Alaska Highway gas pipeline cannot now be financed and operated as an ordinary commercial venture." Reporting to the state legislature, the researchers say that without federal financial assistance, the project is not a sound investment. However, they say that because of past promises by the line's promoters and national political leaders, the notion that public money won't be needed persists. Changes since the pipeline first received Congressional approval in 1977 have turned the project into a "marginal venture at best."



Strip law enforcement halted

A federal judge in Virginia has issued a temporary injunction against the enforcement of the federal strip mine law in that state, saying that the law is probably unconstitutional. The injunction bars the Office of Surface Mining from enforcing the law in Virginia.

A full hearing on the issues is scheduled for March 26, in Big Stone Gap, Va. According to McGraw-Hill's *Mine Regulation* newsletter, the judge predicted that the Virginia Surface Mining and Reclamation Association, which asked for the injunction, would probably win.

U.S. District Judge Glen Williams condemned the Office of Surface Mining's shut-downs of some Virginia coal mines as "flagrant violation of the Fifth Amendment of the Constitution." Williams ruled

that property had been seized without due process, and that mining had been made "economically unpracticable."

The judge said that Virginia is especially hard hit because the regulations will make the state's steep terrain more expensive to mine. He said that the rules could increase mining costs by as much as 73 percent, making the state's coal uncompetitive. Evidence submitted to the court indicates that 26 Virginia mining companies have gone out of business, 500 miners have been laid off and the number of permits has dropped dramatically, due in part to the act.

An OSM spokesman said that the injunction is "very damaging" to the program, but believed that chances of a reversal on appeal are good.

(continued on page 11)



energy news of the Rockies and Great Plains

NEW COLSTRIP PLAN UNVEILED.

In order to meet the Class I air quality standards on the Northern Cheyenne Indian Reservation in southeastern Montana, Montana Power has proposed changes in the design of its Colstrip 3 and 4 power plants. The company will use taller smokestacks and a new type of a lime scrubber system to try to get Environmental Protection Agency approval. MPC Board Chairman Joseph McElwain told the Missoulian that the company has tested the use of dolomitic lime in scrubbers in a power plant near Billings and that the process tests showed "a little better than 96 percent sulfur removal." A federal court must still decide whether EPA acted properly in denying a permit to Colstrip in 1978. MPC and the other participating utilities argue that Colstrip is not subject to the 1977 Clean Air Act Amendments and that, therefore, EPA acted improperly in denying the permit. However, EPA is expected to accept and review the revised permit application.

WYOMING APPROVES SECOND SLURRY LINE.

The Wyoming House and Senate have both approved a controversial proposal for a second coal slurry pipeline to originate in the state. The line would go from near Sheridan, Wyo., to the Texas Gulf Coast and be owned and operated by Texas Eastern Corp. The legislation approved a maximum of 20,000 acre-feet of water from the Little Bighorn River for use in the line and an additional 25,000 acre-feet to be turned over to the state. The legislation also includes provisions for

turning the water and the reservoir over to the state at the end of the pipeline's useful life. The line would be subject to review by the state's Industrial Siting Council. Slurry pipelines have been exempt from such review previously. Wyoming Gov. Ed Herschler is expected to sign the bill. Both Montana and the Crow Tribe have voiced objections to Wyoming using the water from the Little Bighorn, which flows into Montana.

OIL SHALE IS "VALUABLE." The 10th U.S. Circuit Court of Appeals has ruled that oil shale property claims by Shell Oil and D.A. Shale Inc. are valid because oil shale is indeed a "valuable"—a prerequisite under mining law before miners can stake valid claims. The government had originally said that shale was valuable but reversed its opinion about 15 years ago to attempt to retake the old shale claims. The two companies appealed the decision and have won the right to hold onto shale lands in Garfield County, Colo., unless the U.S. Supreme Court reverses the decision. The court ruled that Interior changed its definition of "valuable" solely because of a change in departmental policy resulting from personnel changes and not because of anything relating to oil shale and its development. The agency is not free to change the application of general mining laws in this fashion, the court said.

IPP BUYS WATER. Shareholders in four Utah irrigation companies and officials of the Central Utah Conservancy District have voted overwhelmingly to sell the Intermountain Power Project 45,000 acre-feet of water annually for \$1,750 per acre-foot. IPP is planning a 3,000 megawatt power plant in Millard County, Utah, near the town of Lynndyl. Only two of the 300 voting members of the irrigation companies voted against the sale of the water. The irrigation companies must now meet with their shareholders to change their charters. Currently, the charters forbid the sale of water for any but agricultural uses. IPP will not make any payments until construction is under way on the power plant, expected in mid to late 1980.



OIL SHALE is considered a "valuable commodity," according to a recent court decision. Pictured is an oil shale tract on Kinney Rim in Wyoming's Washakie Basin. Stripes on cliff are oil shale outcroppings.

U.S. Geological Survey photo

Taxes...

(continued from page 10)

detrimental are highways, and state building funds.

Most activists dismiss these expenditures as not being damaging, however. WOC's Sperry says, "The water projects thing is more of a reaction to cancelling federal water projects. This is passing. We'll get money for impacted communities, which is a long range goal, and the communities will need the help."

Dickey agrees with Sperry's assessment, but for a slightly different reason. She says, "Most of the money goes to the permanent mineral trust fund. Water project dollars could be used for a lot of beneficial things, like dam safety and pumping irrigation water."

"It's really an equity issue—fairness—the people in the state are paying a lot of costs, both tangible and intangible. The severance tax puts some of that burden on the shoulders of the consumers of energy."

North Dakota currently has a flat rate severance tax equalling 85 cents per ton of coal mined. The legislature is currently debating a percentage tax of either 33.33 percent or 25 percent of the coal's sale price. Political observers say, however, that the state probably will retain its current tax or perhaps even lower it.

The "tangible" costs of development are an issue in the North Dakota debate. A recent study by the Regional Environmental Assessment Program predicted a \$29.7 million shortfall in state revenues to keep up with the cost of development. House Republican Majority Leader Earl Strinden called this assessment "just plain a crock."

Feb. 23, 1979 — High Country News-11

Strinden claims that the state will have a \$20 million surplus by 1983.

The final issue that worries industry is whether the increasing severance taxes in the West will discourage mining. Kiesling says that Montana's 30 percent tax "has not affected either the pace or the quantity of development. They have affected the loudness of the outcry from industry. They have argued that it would impede development. There is no solid evidence that this is the case. If fact, there has been ever-expanding coal development."

WMA's Budd says, however, "We believe that no taxes should be imposed unless there is a distinct need for additional revenues. Wyoming has a \$90 million surplus now and there are predictions that in the next five years, severance tax revenues will double without any increase."

"Anything that increases the cost of mining is a problem. The cost squeeze factor is becoming very real, especially with the recent clean air act amendments. The only advantage Western coal has is that it can be burned relatively cleanly without expensive scrubbers. Now, they have to put the scrubbers on anyway. When we can't compete, it will have an adverse impact."

Another environmentalist, who asked not to be identified, says that this cost squeeze is exactly the tactic that should be applied. He says, "Any step you take which is opposed by the industry is a step in the right direction. They are interested in keeping costs down. As more costs are added, you eventually make the alternatives to development more attractive. There are economic benefits to mining coal in the West. Increasing the severance tax equalizes the cost to benefit."

Where the money comes from

SEVERANCE TAXES

Wyoming:

Coal — 10.5 percent of sales price.
Trona and uranium — 5.5 percent.
Petroleum, natural gas and oil shale — 4.0 percent.
Stripper oil (less than 10 barrels a day production) — 2.0 percent.
Precious metals, other — 2.0 percent.
In Wyoming, counties also assess ad valorem taxes on minerals, averaging 6.3 percent statewide.

Montana:

Coal — 30.0 percent of sales price.

Utah:

Metalliferous mines — a 1.0 percent occupation tax, imposed on gross proceeds, after subtracting other applicable taxes and the first \$50,000 of production.

Colorado:

Coal — 60 cents per ton. For every three point increase in the wholesale price index, the tax increases one percent.
Oil and natural gas — 2.0 percent of production under \$25,000; 3.0 percent from \$25,000 to \$100,000; 4.0 percent from \$100,000 to \$300,000; 5.0 percent over \$300,000.
Molybdenum — 15 cents per ton.
Metallic minerals — 2.25 percent on production of more than \$11 million.

In Colorado, for coal, a tax credit of 50 percent of the tax is given for coal produced underground and for lignite. For oil and gas, there is no tax on stripper well production and credit of 87.5 percent of the ad valorem taxes is allowed. For metallic minerals, credits of the total ad valorem tax are allowed, not to exceed 50 percent of the tax computed.

North Dakota:

Coal — 88 cents per ton (1978).
Oil and gas — 5 percent of wellhead price.

North Dakota's coal tax has a base of 60 cents per ton and increases one cent for each three point increase in the wholesale price index.

12-High Country News — Feb. 23, 1979

30 Energy-Efficient Houses... You Can Build

\$8.95

by
Alex Wade
and
Neal Ewenstein



Review by Joan Nice

by Alex Wade, photographs by Neal Ewenstein, Rodale Books, Emmaus, Pa. 18049, 1977. \$10.95 hardcover, \$8.95 paperback. 316 pages.

30 Energy-Efficient Houses is the story of no-waste homes and the people who built them, many of whom have had no previous construction experience. Most of the houses shown in the book are small and rustic. Their costs are remarkably low — down to \$1,800 for an ingenious homebuilt

dwelling for two. Many, though not all, of the houses in the book utilize the sun to provide much of their heat.

"The designs in this book reduce cost dramatically and put private houses back within reach of most people," says author Alex Wade.

Photos and floor plans of each home are included. Wade samples different sites and sizes of homes — everything from a New Mexican adobe, to a mountain house sunk into the earth, to a Florida home on stilts.

While the first half of the book is purely people and their houses, the second half focuses on the design principles essential to low-cost energy efficient dwellings. The author says that post and beam framing, for example, is cheaper and simpler than conventional framing. He also discusses "ecological and economical" materials, windows, doors, skylights, insulating

flaps, waste disposal, natural heating and ventilating, and more.

You come to know and sympathize with the people who built these houses. You suffer with them at the mercy of stubborn bankers and building inspectors and downright repressive building codes. Nevertheless, they give convincing testimony as to the overall desirability of building your own home.

"Funny thing," one owner-builder says, "the only things we didn't do (masonry and plumbing) were the only things which got screwed up."

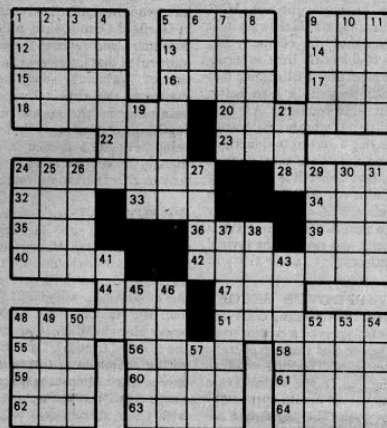
The author is an architect and a contributor to a book that has become a classic

in the field, *Low-Cost, Energy-Efficient Shelter* by Eugene Eccle. 30 *Energy-Efficient Houses*, with its focus on design rather than construction, should prove to be equally useful.

The blessing and the curse of this book is that it may give certain readers a nearly unextinguishable dream. When they find themselves holding a hammer and nails because of it, I'm not sure they'll all thank Wade. But later, after many hours of nail driving and other unaccustomed tortures, perhaps some of them will begin to look like the rugged people featured in the book, most of whom are grinning with pride.

CONSERVATION PIONEERS

by Philip White



ACROSS

1. First name of the West's first prominent woman writer, author of *One Smoke Stories*
5. Liquid measure
9. Murie's book: *Journeys to the* — North
12. — La Douce
13. Seine tributary
14. A noxious substance in Vonnegut's *Cat's Cradle* (with 19 down)
15. Settle
16. Determine quantity
17. — judicata (law)
18. Activity at recording session
20. Krutch's *The Voice of the* — and The — Year
22. Book by 48 across: *The Crooked* — e
23. Suffix meaning female
24. Beach cabins
28. Lights out
32. Interior Secretary who wrote *The Quiet Crises: Ud* —
33. Compass direction
34. Hawaii volcano Mauna —
35. Slim: sive —
36. Purebred canine organization (abbr.)
39. Spanish title
40. Where 42 across grew up
42. Forester, writer, wilderness defender who advised that "tutelage of the earth" requires "thinking like a mountain"
44. Young woman entering society
47. Cousin of ostrich
48. Utahn who wrote *Across the Wide Missouri*
51. George Perkins Marsh's classic *Man and* —
55. Black cuckoo
56. Where Murie studied elk: Jackson —
58. Murie's names for elk antler tines: brow, bay, —, royal, sur-royals
59. — the law, but the land sets the limit" Mary Hunter Austin
60. Followers
61. Sea eagle
62. Film speed

63. Yellow-breasted —
64. Soaks flax

DOWN

1. Almost rain
2. Operatic solo
3. Mills was responsible for creation of this wilderness preserve (abbr.)
4. Where 5 down grew up
5. Judge who authored "A Wilderness Bill of Rights"
6. Southwestern oxbow: — con
7. Actor's speech heard only by audience
8. — and bounds
9. Ed Abbey's book about an old man's resistance to an Air Force testing range: — on the Mountain
10. Box elder's genus
11. —, —, perturbed spirit" — Hamlet
19. See 14 across
21. Concorde is one
24. Home for Brower, Hardin, Muir (abbr.) — f.
25. Choir section
26. Boasted
27. William T. Hornaday helped save this Alaskan mammal
29. First name of 42 across
30. Critical problem with some endangered species: gene —
31. Famous book by 42 across: A — County Almanac
37. Most astute
38. Head of a comet
41. Bustle
43. Tinker
45. Central concept in 31 down: "The Land —"
46. Lincoln assassin
48. Two Years Before the Mast
49. First name of 3 down's Mills
50. Autobiographical sketch
52. Black and white pelagic bird: m —
53. Rail
54. Where 42 across saw the "fierce green fire dying"
57. Pasture

Indian water...

(continued from page 7)

would support such an extreme solution." However, he does expect other bills to be introduced to attempt to establish state jurisdiction and to force tribes to quantify their water needs.

Present Indian water claims are based entirely upon judicial decisions. There are no statutes governing the reserving of water for Indian reservations.

Indian leaders fear that since the Congress isn't bound by existing law, it might conclude that supporting Indian reserved rights is detrimental and inconvenient to non-Indian interests and must therefore be

changed.

Mel Tonasket of NCAI says that it has been convenient in the past to ignore Indian water claims, just as it has been convenient to ignore the constraints of living in the water-short West. The Indians have been the easiest to take from because they are the poorest and the federal government allows it, he says.

"It's like inviting everyone to come and feast when you only have a 10-pound turkey. Pretty soon, everyone starts looking at the next table," he says.

Research for this article was partially paid for by the HCN Research Fund.



FISHING AND RECREATION may be protected by Indians, if the courts give them the water and authority they need. Pictured is Ray Lake on the Wind River Reservation in Wyoming.



Western Roundup



Feb. 23, 1979

13

Montana wildlife managers worried about development threats

by Mavis McKelvey

The future of wildlife habitat in Montana does not look good to most of the 35 people who spoke at a three-day conference of professional fish and wildlife managers in Missoula, Mont., early in February.

Montana Fish and Game Commissioner Al Bishop, who is also an attorney in Billings, emphasized the importance of reclaiming strip mined lands. "Some people argue that this is just a small piece of land lived on by prairie dogs, but strip mining is not just affecting a little piece of land in a few places, and we're a bunch of suckers if we believe it is," he said.

Bishop is apparently alarmed by two bills now being considered in the Montana legislature that would relax revegetation standards for strip mined land and curb the power of the Fish and Game Department to acquire land for wildlife habitat.

He pointed out that the state constitution guarantees a clean and healthful environment and requires the state and each citizen to protect the environment. Bishop sees the recent referendum vote to curb nuclear development in the state as a reaffirmation of the people's interest in environmental protection.

Fish and Game Director Robert Wambach said that in the closing decade of this century, the federal government's domination over resource management will grow. However, in Washington, D.C., the U.S. Fish and Wildlife Service will never have the power of an agency such as the Department of Energy, he said.

The Montana representative of the Wilderness Society, Bill Cunningham, said that he sees "wildlands shrinking like a snow bank on a hot June day." He said that

wilderness was the only hope for the future of wildlife.

Two speakers representing industries offered different perspectives on Montana's resources. Don Nettleton, a land manager for Burlington Northern, said that the social and economic well being of the nation may require less wild land. He thinks development could proceed in such a way that impacts would be minimized, however.

The chairman of the Montana Power Co.

board, Joe McElwain, said, "Montana is a resource state, and it must contribute its share of resources to the wealth of the nation." He called for more dams for electric power and for more coal development to conserve our oil resources and reduce inflation.

When asked if he had the controversial Allenspur Dam in mind when he called for more dams, McElwain said, "It's a great dam site, but there's no water behind it."

Al Jenkins, past president of the Billings

Rod and Gun Club reflected the general pessimism of the group when he said, "I see a future of fish and wildlife in which the land is dug up, leveled and denuded; a land marked with second homes as people escape people."

The meeting was sponsored by the Society of American Foresters, the Soil Conservation Society, the American Fisheries Society and the Society for Range Management.



BISTI BADLANDS would be the site for a new coal mine if a proposed coal exchange isn't approved.

Coal exchange needed to protect Bisti area's dinosaur bones

Environmentalists in New Mexico are hoping for a coal land exchange to save a portion of the Bisti Badlands in northwestern New Mexico from strip mining. A 400 acre section of the badlands has already been leased to the Western Coal Co., but

environmentalists say it should not be mined because of the scenic and paleontological values of the area.

Western Coal agrees that the area should not be mined and has requested that the Bureau of Land Management exchange its lease for coal lands elsewhere.

BLM says, however, that it does not have authority under current law to make such an exchange. The federal strip mining law provided for coal lands exchanges, but only if the land to be exchanged was in an alluvial valley floor. The badlands lease does not fit this criteria. However, the company is seeking legislation to authorize the exchange. Sen. Pete Dominici (R-N.M.) supported the bill in the last session of Congress, but it failed to win approval.

Paleontologists say the site is comparable to Dinosaur National Monument in Colorado. Preliminary surveys show some areas to be literally covered with dinosaur bones, some of which are believed to be newly-discovered species. Several complete dinosaur skeletons have been found. A special paleontological task force set up by the state of New Mexico has recommended that the area be preserved.

Through its land use process, BLM says that it is suggesting a 1,360 acre "outstanding natural area" designation, as provided for in the Taylor Grazing Act. A coalition of

six conservation groups wants a 7,400 acre area preserved, but BLM says that this larger designation would have to fall under the BLM wilderness inventory now underway. Bob Calkins, area manager for the Farmington Resource area of BLM, which administers the Bisti Badlands says, "We are interested in acquiring the lease, and the company wants to work with us, but we don't have the authority to make the exchange. We do recognize the value of the area."

Western Coal's current plans call for mining to begin in the early 1980s. More information can be obtained from the Committee to Preserve Bisti, 715 West Apache, Farmington, N.M. 87401.

Public hearings will be held on the New Mexico BLM wilderness inventory on March 15 in Crown Point from 7:00 to 9:00 p.m. and on March 16 in Farmington from 9:00 a.m. to 9:00 p.m.

Colo. solons reject 'endangered' list

A Colorado legislative committee has killed a proposal that would have designated some state insects and plants as endangered. The bill would have provided penalties for persons guilty of "wanton, reckless destruction" of the endangered species, according to the Colorado Division of Wildlife.

The Rocky Mountain News reports that some legislators were "fuming" at the proposal. Rep. George Boley said, "I think it would mean that you'd have to get a license to shoot a plant."

However, a University of Northern Colorado biologist said that a list of this kind could be a key in finding lands unsuitable for strip mining. The biologist, James Fitzgerald, warned that if the state doesn't develop such a list, the federal government will do it for them.

Former governors urge fallout probe

Four former governors of Nevada are calling for a thorough investigation of possible harmful effects resulting from nuclear weapons tests conducted in the state. Charles Russell, Grant Sawyer, Paul Laxalt and Mike O'Callaghan all say that, despite past government assurances about the safety of the tests, investigation of possible health damages is warranted, the Gannett News Service reports.

Eighty-four nuclear tests were conducted in the southern Nevada deserts between 1951 and 1962. Utah, Nevada and Arizona residents, who may have been af-

fected by the above-ground tests, have been filing claims against the government. Attorneys for the claimants estimate that the tests could have affected the health of as many as 36,000 people in nine counties.

Some scientists also have alleged that the Atomic Energy Commission knew that people would die from the fallout from the nuclear weapons, but that the government suppressed the information. Sawyer, now a Nevada attorney, says that he believes he may have been misled by health and AEC officials who said the tests were safe.

Forest Service to limit herbicide use

The Forest Service's new vegetation management statement for Oregon and Washington, due in its final version by 1980, will reduce emphasis on herbicides. According to Paul Buffam, regional director of forest pest-control programs, herbicides will not be eliminated entirely, but the statement will "highlight all the alternatives." Alternatives include using fire, tractors, hand labor and other means to control undesirable vegetation. Any project in the national forests in those states that will use herbicides between now and 1980 will require an environmental assessment.

Meanwhile, the Bureau of Land Management's final environmental statement regarding vegetation control on Oregon forest lands says the agency will continue to emphasize herbicides. The agency estimates its spraying projects will

cost \$2 million a year for the next 10 years. BLM also approved the use of Silvex. Silvex contains the same controversial contaminant, dioxin, that is found in 2,4,5-T, a herbicide which has been banned for use by the Interior Department.

Wyoming unexcited about water line

A proposal by South Dakota lawmakers for a \$900 million pipeline to bring water from the Missouri River to Gillette, Wyo., has received a cool reception from Wyoming's governor, Ed Herschler.

The purpose of the pipeline, which would divert about one percent of the river's flow, would be to provide water to rural users in western South Dakota and to industrial users in Wyoming, possibly including Energy Transportation System, Inc. ETSI

is planning a coal slurry pipeline from Wyoming to Arkansas.

The proposed 300-mile underground water line would be financed by industrial revenue bonds. It would require Congressional approval and formation of a commission including members from both states. Herschler told the Casper Star-Tribune, "We lost a little enthusiasm over the projected cost." Although he says the project is not dead, he's not optimistic about it.

14-High Country News — Feb. 23, 1979

Bad for parks, endangered species

New chairmen good for dams, air, solar power

by David Crosson

In the recent battle over congressional committee appointments, environmental interests lost at least as much as they gained.

Jamie Whitten's (D-Miss.) selection as chairman of the House Appropriations Committee represents a significant loss for environmentalists. A staunch advocate of water project funding, Whitten's influence is certain to be felt in the battles over parks and dams expected in Appropriation's Interior and Energy and Water Development (formerly Public Works) subcommittees. Whitten had a 14 percent rating in 1977 from the League of Conservation Voters.

Already, the battle lines seem skewed in Whitten's favor. The Interior Subcommittee chairman, Sidney R. Yates (D-Ill.), does not have a good environmental record. Tom Bevell (D-Ala.), chairman of the Energy and Water Development Subcommittee, is tabbed a "pork barrel enthusiast" by Ed Osann of the National Wildlife Federation. Fueling environmentalists' pessimism, the Carter administration's budget proposal increases water project funding while it cuts nearly all facets of the government's land protection efforts.

Environmentalists are also disturbed by the rise of John B. Breaux (D-La.) to the chairmanship of the Fisheries and Wildlife Conservation and the Environment Subcommittee of the House Merchant Marine and Fisheries Committee.

Environmentalists had hopes of seating Gerry E. Studds (D-Mass.) instead of Breaux. Instead, Studds was appointed chairman of Merchant Marine's Oceanography Subcommittee. While Studds's new position may assure a hearing for some initiatives in coastal zone protection, Breaux's appointment seems certain to prompt further attacks on the Endangered Species Act.

Environmentalists are pleased that Toby Moffatt (D-Conn.) gained the chair of the Energy, Environment and Natural Resources Subcommittee of the House Government Operations Oversight Committee. With Robert Drinan (D-Mass) and Henry Waxman (D-Calif.) on the subcommittee, Moffatt's feildom could become a significant forum for environmental concerns.

Jerome A. Ambro (D-N.Y.), new chairman of the Natural Resources and Envi-

classifieds

Classified ads must be prepaid.

POSITION — Funding raising assistant. Do research, write proposals, help plan campaigns. Must write well, be systematic, have fund raising experience, work well with people. \$11,000 per year. Send resume to Northern Rockies Action Group, 9 Placer St., Helena, Mt. 59601.

SKI TOURING PHOTOGRAPHS NEEDED New, richly illustrated ski touring book to be published. We are searching for unique, creative B&W photos. Published photos will be credited. Send submissions to: Ron Watters, Box 9024, ISU, Pocatello, ID. 83209. For sample of work see recently published *Ski Trails and Old Timers' Tales*: Solstice Press.

ORGANIZERS WANTED The Powder River Basin Resource Council, a citizens' resource conservation group concerned about energy development in eastern Wyoming, wishes to hire field organizers immediately. Energetic people with leadership potential and simple tastes are desired. Invaluable experience. Send resume to PRBRC, 48 N. Main, Sheridan, WY 82801 (307) 672-5809.



ACTION IN THE U.S. CAPITOL in the coming session will be affected by committee chairmen, and environmentalists aren't too optimistic about many of the choices.

ronment Subcommittee of the House Science and Technology Committee, is described by Toby Cooper of Defenders of Wildlife as "liberal and articulate." Richard L. Ottinger (D-N.Y.), new chairman of the Energy Development and Applications Subcommittee of Science and Technology, is considered sympathetic to the solar camp.

There also is widespread relief among environmentalists that Henry Waxman (D-Calif.) will chair the Health and Environment Subcommittee of the House Inter-

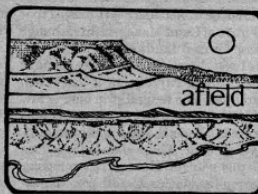
state and Foreign Commerce Committee where Clean Air Act amendments are scheduled.

On the Senate side, Dale Bumpers (D-Ark.), who had a 79 percent 1977-1978 rating from the League of Conservation Voters has been named chairman of the Recreation and Renewable Resources Subcommittee of Energy and Natural Resources. The Energy and Natural Resources Committee is expected to be sympathetic to environmentalists, largely due to the appointments of freshman Sens. Wil-

liam Bradley (D-N.J.) and Paul Tsongas (D-Mass.)

The only congressional committee dealing with environmental matters that has not completed its subcommittee lists is the Senate Agriculture Committee. The committee failed to meet while the American Agriculture Movement was demonstrating recently in Washington, D.C.

David Crosson is a free-lance writer and HCN correspondent in Washington, D.C.



DUBOIS, Wyo. — Within a week's time I saw three disembodied heads by Wind River — evidence of the rigors of this violent winter.

The temperature is up a few degrees — the average is a little above zero, rather than way below. The water of the river, always just above freezing, has opened up the ice; it is drifting sluggishly down the dark stream.

On one day I found the head of a half-grown beaver on bloody snow. It lay where willow branches from the family winter stash stuck up through the ice. Long strips of skin and a couple of long bones remained — all that was left of a youngster with cabin fever. He took his chance to chew his willow bark while sitting on the ice in the

moonlight, after weeks in the dark house under the bank. A great horned owl killed him, I surmise. The owl had to eat, too.

The next day, in almost the same spot, in two inches of fresh snow, was a yard-across space heavily trampled and bloody. No tracks led to or away from it. A dark Thing lay in the middle. The Thing turned out to be the head of a sucker, greenish-black and as large as the beaver's head. This sucker used to be a pretty big fish.

It snowed in the night. The next day, a little bit upriver was a similar trampled and bloody circle with a Thing in the middle. This was the head of a whitefish. There was a signature this time, the big tracks of an eagle, circling around on one side of the messy trample. A couple of hours later I saw a bald eagle soaring up the river. Now I'm looking for another head.

— Mary Back

This far along into the winter Westerners have settled into comfortable or resigned cold weather patterns. Ed Foss from Condon, Mont., writes:

"In winter wood must be carried from shed to cabin, fires stoked, horses fed and

feeders filled. When work is finished one has time for hiking, snowshoeing, looking and listening. Evenings in this home on the mountain are set aside for reading, writing, the editing of journal notes and listening to music."

And Alan Kesselheim from Rush, Colo.: "Work is called off. Birds have found sheltered hollows in the thick weeds or huddle on the lee side of tree trunks. Larger animals too, wait and conserve; doing what must be done. All with patience. Only we men look out thinking about time wasted. I return to the chair in front of the heater, a steaming cup of coffee, books and the mending of clothes."

We have been rewarded, at least in the central Wyoming area, with chinooks and a general warming trend. Snow is gone from some sunny banks and the ground underneath looks flattened, as though the earth had slept in its clothes for several nights. During the day the snow sags like a disappointing soufflé. In the morning its refrozen surface crunches like the edges of a crisply baked cookie.

— HH





HCN Bulletin Board



LOONEY LIMERICKS

by Zane E. Cology

If you drink a bottle of whiskey
While touring, which makes you feel
frisky.

Avoid the careening
Where Yellowstone's steaming
The geysers are really quite risky.

IN MEMORY OF THE LAND

This film is "50 minutes of shocking truth that I'm sure Montana Power and Consolidation Coal and the National Coal Council would prefer the energy public not see," according to *Missoulian* columnist Dale Burk. He is referring to a film by Robert F. Gates called "In Memory of the Land and People." The film shows strip mining and its effects from Appalachia to the Rocky Mountains. It can be rented for non-profit showings for \$75 or purchased for \$650. Write to Omnifilm Systems, 117 Virginia St. E, Charleston, W. Va. 25301 or call (304) 342-2624.

APPROPRIATE TECHNOLOGY SMALL GRANTS.

The U.S. Department of Energy, Region VIII, is accepting applications for its program to support small-scale, energy-related technologies. Individuals, local non-profit organizations and institutions; state, regional and local agencies; Indian Tribes and small businesses are eligible for small grants (from about \$300 to about \$50,000). The grants will support projects that: seek to define the potential of innovative ideas, concepts or technical improvements; investigate, study or test technologies that have gone beyond the concept development stage; or evaluate the feasibility of projects under actual operating conditions. The Region VIII program is open to residents of Colorado, Montana, North Dakota, South Dakota, Utah or Wyoming. Applications must be received by 4:00 p.m. May 2, 1979. For further information and application forms, write to DOE, Region VIII, Appropriate Technology Small Grants Program, care of WESTPO, 3333 Quebec St. Suite 2300, Denver, Colo. 80207.

WYOMING STATE LAND USE PLAN

The Wyoming State Land Use Commission has approved a draft state land use plan, which will be available for public review in mid-March. The draft presents "numerous options to zoning from which communities and counties could choose to implement their local plans." For information contact the Office of Land Use Administration, 1720 Carey, No. 500 Boyd Building, Cheyenne, Wyo. 82002.

TVA URANIUM EIS

The Tennessee Valley Authority has issued a draft environmental impact statement on proposed uranium mining at the Edgemont site in South Dakota and Wyoming. A public hearing will be held on the statement at Edgemont High School in Edgemont, S.D. at 7:30 P.M. on Thursday, March 1. The mining involves properties in the southwestern Black Hills area of Fall River and Custer counties in South Dakota and in Niobrara and Weston counties in Wyoming. Ore production is scheduled to begin in the early 1980s. Copies of the EIS are available from the TVA information office, 400 Commerce Ave., Knoxville, Tenn. 37902 and at the public libraries in the affected counties.

RIVER OF NO RETURN WILDERNESS

The River of No Return Wilderness Council in Idaho is asking for public support of legislation now before Congress creating a 2.3 million acre River of No Return Wilderness in Idaho. Congress is considering three bills, one creating a 2.3 million acre area, a timber industry bill creating a 1.3 million acre area and the Carter Administration's 1.9 million acre proposal. For further background information, consult the group's brochure "Can Idaho's River of No Return Wilderness Be Saved?" which can be obtained from the group at Box 844, Boise, Idaho 83701. The group is asking letter writers to contact Sen. Frank Church (D-Idaho) in support of the larger acreage proposal. Hearings are expected in late April.

HANDS-ON

An armchair "tour guide" to appropriate technology projects in Massachusetts has been published by the Massachusetts Self Reliance Project. Included are descriptions of a machine shop powered by water, a business heated with wood scraps and an island community powered by windmills. The book also describes a solar greenhouse, a municipal sludge composting project, a community canning center, urban gardens and over 200 food cooperatives. The book, entitled *Hands-On*, is available for \$3.75 plus 50 cents for postage from the University of Massachusetts — Hands-On, Box 459B, Amherst, Mass. 01002.

NEW MEXICO SOLAR ENERGY ASSOCIATION
13724 Cerrillos Rd. Santa Fe P.O. Box 2004

PASSIVE Solar Energy Slides / 6 sets / \$12.75 ea.
(a) General (b) Direct Gain
(c) Solar (d) Thermal Storage Walls
(e) Attached greenhouse
(f) Connective loops & roof ponds

TAPE / Dr. Doug Balcomb slides Commentary \$2.75

BOOKS / 40 Assorted Titles covering all aspects of Passive Solar Energy. Write for list of prices.

BULLETIN Subscriptions 12 Issues \$10.00 per year

BUMPER STICKERS / (a) "Develop Solar Energy" (b) "Sun Power" \$1.00 each

—NON-PROFIT—

BLM WILDERNESS WORKSHOP

Citizens who are wondering how to make their opinions count in the wilderness designation process are invited to a Bureau of Land Management Wilderness Workshop in Canon City, Colo., on March 11. The workshop, sponsored by the Rocky Mountain Chapter of the Sierra Club, will offer participants field study experience through a hike to a BLM roadless area near Canon City. Evening sessions will cover the BLM wilderness process, public involvement, and potential BLM wilderness areas in Colorado. Both citizens and BLM staff are expected to participate. For reservations and more information, contact John Stansfield, Chapter BLM Coordinator, 402 E. Del Norte, Colorado Springs, Colo. 80907, (303) 471-0712.



Eavesdropper

environmental news from around the world



service directory

plexiglas acrylic sheet for storm doors, windows

do it yourself and save.
Plasticrafts • 2800 N. Speer Blvd.
Denver Co. 80211 • 303-433-8801

Endangered Species T-Shirts
Wolf, Bear, Whale, Dolphin
Wilderness Bear Bow
Evert-Wilderness in red,
blue, blue & yellow in
sizes S, M, L and XL.
Wilderness shirts will
support for Alaska Wild-
erness bill. Satisfaction
guaranteed.

Send \$7.00 each to:
Jim Morris
P.O. Box 2400 Dept MC
Boulder, Colo. 80506
A portion of the
proceeds goes to
wilderness preservation
efforts.

Alaska Wilderness
Share the
Earth!

Trailhead Ventures

PRIME WESTERN BACKPACKING
FREE TRIP SCHEDULE:
P.O. BOX CC
BUENA VISTA
COLORADO 81211
(303) 395-4001

LARSEN'S BICYCLES
233 E. 2nd
Powell, Wyo.
754-5481

Raleigh bicycles

dealers for:
Clavin Multicum
composting toilets

Suplite® fiberglass glazing for
greenhouses and solar panels
for information send SASE to:
tekton knifex + traders
box 91, Victor, Idaho 83455

PUBLIC NOTICE

Wyoming Department of Environmental Quality

A public hearing will be held before the Wyoming Environmental Quality Council on Wednesday, March 28, 1979, beginning at 10:00 A.M., in the Auditorium located in the basement of the Hathaway Building, Cheyenne, Wyoming.

The purpose of the hearing is to receive public comments on proposed modifications to Wyoming Water Quality Rules and Regulations Chapter I entitled, **Quality Standards for Wyoming Surface Waters**.

The proposed modifications are restricted to the following specific items, and the Council will consider comments which pertain to these particular items only:

1. Modification of the list of Class I Waters (Section 8a);

2. The classification, identity, and location of Fish Creek near Wilson, Wyoming (Section 8a (14)).
3. Minor modifications of wording, language, and emphasis (various sections).

Any person wanting more information including a copy of the existing Chapter I regulations, the list of proposed Class I waters, and the proposed wording modifications should contact Mr. John F. Wagner, Water Quality Division, Wyoming Department of Environmental Quality, Hathaway Office Building, Cheyenne, Wyoming, 82002 (telephone: 307-777-7781).

Persons making oral statements at the hearing should provide a written copy for the hearing officer. Person who do not wish to make oral statements may submit written statements at the hearing or may send their written statement to: Mr. David B. Park, Chairman, Wyoming Environmental Quality Council, Hathaway Office Building, Cheyenne, Wyoming, 82002.

16-High Country News — Feb. 23, 1979

Yellowstone's wonders — through a kaleidoscope

"What would the world be, once bereft
Of wet and of wildness? Let them be left,
O let them be left, wildness and wet;
Long live the weeds and the wilderness yet."

— Gerard Manley Hopkins: "Inversnaid"

by Philip White

Inexorable ticking of the old clock speaks of deadlines this February day. A windy symphony outside: a fresh gale on the Beaufort scale.

I glide happily over memories and notebook jottings, illegible, from a summer's work as a dendrochronologist's assistant in the lodgepole pine forests of Yellowstone National Park. My task is to make a word arpeggio to sit in a frame of Yellowstone pictures.

Yellowstone is too grand, though, for my words. I can't make them take a structure or resolve into sentences. So I'll give you only a few turns of my kaleidoscope:

— chartreuse huckleberry leaves glowing midst pine

stems in a late afternoon forest. A squirrel skirrs up one tree. Its shadow climbs the next.

— little dipper, not long fledged, awaiting mother's return from downstream with food, already doing cosmic ouzel knee bends.

— pocket gopher, madcap miniature bulldozer, repeatedly darting backwards, back into its tunnel, after shoving armfuls of dirt up and over its pile.

— sunset over Buffalo Meadows. Archipelagos of pink, chevrons of saffron. A kestrel comes across, hovers, lands in a tree. Clark's nutcrackers, those sour, raucous patrolling landlords of these rare islands in the pine ocean, immediately evict it.

— grizzly, sauntering about on a little rise of silver sagebrush in the meadow, digging and licking at ant-hills. The ants, next day, alive with reconstruction.

— orb webs suspended from threads strung between boughs or trunks sometimes a dozen feet apart, braced above and below with guys and cables, showing awesome sapience. Waiting on each is the three-quarter-inch gray-dappled spider with false orange eyes on the underside of its abdomen.

— the sound of bark beetles boring and of the flowing sap.

— after a midnight moonset in August, heaven's Per-seid rockets slide and burn. Heavy sidereal traffic.

— bizarre, ineffable jazz of late-summer: elk playing calliope and flute, sandhill cranes on synthesizers, snipe winnowing percussion, robins' arias, whirring nutcrackers' wings, buzz of grasshoppers.

— the splendid flowers, springbeauties appearing when snow, and the pink snow algae, disappear; yellow and burgundy monkeyflowers together beside a stream; the blue of gentian and magenta of fireweed.

— lambent, lovely Yellowstone Lake, black-tipped wings of pelicans above it, snowy Absaroka reflections upon it, all in regal apposition.

— the shapes of trees, the forms of forests; liverworts in shaded, wet caverns; ferns on hillsides; illogical replication of kame hillocks.

— a snowmelt stream purling, bubbling in jaunty June run, foam-specked, hurtles off the rhyolite cliff, sending starry, spinning spray crashing far below. Not a drop flows or falls in July.

Away, away from the asphalt habitat of the machines, here in Yellowstone's woods, we can see ennobling little frills of miracles everywhere. We can hear magnificent whispers.



Dear Friends,

After studying the paper's most recent vital statistics, we're pleased to report that on the surface at least, things look good. From July through December of last year we spent \$27,862 and took in \$28,498. We still have a few bills for that period to pay, but even so, we should come out on top.

We have a healthy balance in our research fund of \$10,488. That gives us a solid base for improving the quality of the writing and photos in *High Country News*.

Due to the miraculous response to the medical fund plea sent out after the staff's auto accident in August, we also have \$12,000 we are using for a promotion campaign and \$9,000 that will be spent on one or more of the following options:

hire a new person for the news staff to replace Justus Bavarskis, who was killed in the accident; raise salaries for the existing staff; buy a new typesetting machine. Salaries are currently \$425 a month, plus insurance coverage.

The only thing that worries us about the past six months, which have been the most financially productive period in *High Country News* history, is that we saw no rise in our subscription income. In fact, we suffered a slight loss, amounting to about 75 subscribers. Our total number of subscribers is about 3560 — a plateau we've been on for about three years now. We can't seem to get over that 3,600 hump. Yet to sustain the paper at its present subscription price and to pay the staff some-

thing more than a subsistence wage, we must find more readers.

Our 63 percent renewal rate over the past six months is slightly higher than it was for the same period last year, but we aren't finding as many new subscriptions to replace the non-renewals.

Our promotion campaign, directed by Jazmyn, is aimed at sending about 30,000 potential HCN subscribers a sample of the paper and a letter asking them to subscribe. We've had what we're told is a good response to the mailouts sent in the last few months — 1.8 percent of the people contacted have subscribed. It cost us five dollars in materials and postage to find each of them. Labor was donated by friends and staff.

As we move to larger scale mail-outs, our costs will go up because we'll have to pay for labor. But we hope to find at least 500 new readers through the effort. Through advertising we hope to reach a few more.

We also plan a push in the advertising department, where we've been coasting for the past few months. Hannah and Jazmyn have designed a new packet of ad promotion materials and sent them out to a long list of likely prospects.

We are determined not to let ads eat up valuable news space, however. A new unit on the press allows us to expand from 16 to 20 pages whenever the news (or something like the index we printed this time) requires it. It's a much less costly and cumbersome alternative than deciding to run an extra

section, which was our only option before.

It is ultimately readers who sustain us, however, intellectually as well as financially. About 61 percent of our income over the last two quarters was derived from subscription checks. Another eight percent came from advertising, 11 percent from contributions, 12 percent from selling books, prints and T-shirts, two percent from newsstand sales and seven percent miscellaneous.

On the other side of the ledger, our largest expense is salaries, which account for 51 percent of the total. Other big chunks of our income go to printing (14 percent) and postage (eight percent).

The money you sent last fall not only covered the staff's \$10,000 in medical bills, but also has given us a chance to put the paper on a firm financial footing. Thanks for your inspiring support.

THE INDEX

We hope you find the pull-out index to last year's HCNs useful. Our thanks go to Myra Connell, who has compiled the index for us since 1974.

Myra has decided to devote more time to her writing, however, and she won't be able to do a 1979 index for us. If anyone else out there could take on the task, we'd appreciate hearing from you. Myra says it takes three to four hours every two weeks.

CONSERVATION PIONEERS BOOK

For folks who ordered Peter Wild's book: it has finally been published by Mountain Press, which assures us you should be receiving your copies within the next three weeks. According to the publisher, the delay has been due to mix-ups with the printer. We are sorry it has taken so long and thank you for your patience.

— the staff

In The News

Yellowstone

park is a riddle. 1

Indians

after water. 1

Foxes

ingenious, capricious. 8

Mining

how states benefit. 10

Kaleidoscope

on Yellowstone. 16

Index to 1978

Special pull-out section.