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Vol. 13 No. 3

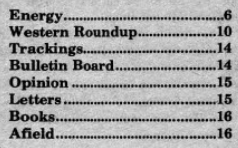
In the News

Strong laws and public pressure have forced Utah's Kennecott to clean its air. Will the firm's hand now be forced on water quality?

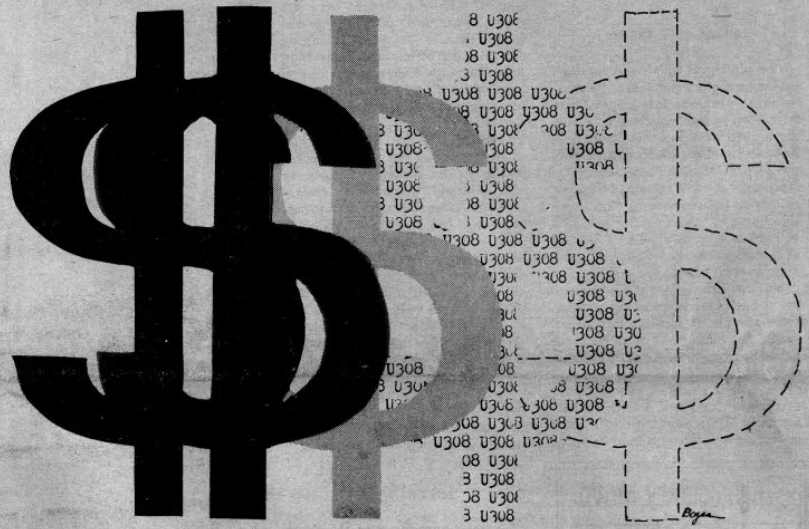
Recarpeting worn-out trails in Teton National Park raised "naturalness" issue. Betsy Bernfeld digs for a prescription.

At least one industry group wants to adjust the clean air rules to allow some health damage. But environmentalists are brewing some sophisticated strategies to hold their ground.

Hank Fischer celebrates Groundhog Day by telling his tale of youth, dark thoughts and the master of the orchard, who got his revenge.



Wy. loses millions on ore tax



The same faulty formula is used for computing royalty money due on production from state-leased land. The state, which has never audited uranium royalty payments, may have lost more than \$1 million in 1978 and 1979 combined — about three times the amount collected.

Wyoming enacted a one percent severance tax in 1969. The tax has been

In 1969, when the formula was developed, it gave a reasonable approximation of "fair market value." However, according to several studies completed since then and HCN's own analysis, the formula substantially undervalues low grade ores such as those mined in Wyoming. As ore grades declined and prices rose, the state's valuation became more distorted. By the mid-1970s, when uranium prices skyrocketed from about \$7 per pound to

Between 1969 and 1978, the state Department of Revenue and Taxation collected about \$8.2 million in severance taxes, while it failed to collect about \$13 million. In one year, 1978, Wyoming received \$3.6 million but should have collected \$9.6 million.

New Mexico, which taxes yellowcake
(continued on page 2)

2-High Country News — Feb. 6, 1981

Uranium tax...

(continued from page 1)

on the sales price and has a tax rate comparable to Wyoming's, collected about \$4 per pound of yellowcake in 1978. Wyoming got about \$1 per pound.

With the current depressed condition of the uranium market, New Mexico producers are, not surprisingly, lobbying the state legislature for a tax "more like Wyoming's." According to a report prepared by a New Mexico uranium industry consultant, Wyoming's method of taxation encourages the production of low-grade ores. New Mexico's system "places New Mexico producers at a major disadvantage relative to those of other states." The report recommends a 75 percent reduction in the state's tax rate.

LEGAL SITUATION

The question of whether Wyoming's assessment procedures are "illegal" would have to be decided in court. There have been no legal challenges to date, but a 1978 state Supreme Court decision, *In Re Monolith Portland Midwest Co.*, further defines the concept of "fair cash market value." The court ruled that the term means "what a willing buyer will pay a willing seller." It is hard to imagine a seller willing to exchange yellowcake for \$7.50 a pound, even in today's depressed market.

Various arms of the state government have been aware of the problem with the tax assessment for several years, but nothing has ever been done about it. Two years ago, the State Planning Coordinator's Office, a policy arm of the governor's office, examined the assessment procedure. Nancy Bedont, formerly of the planning staff, and a co-worker spent a month examining the

The Wyoming severance tax assessment formula offers a feast for lovers of arithmetic. If you were a uranium company trying to figure out how much you owed the state in severance taxes, you would first determine what grade of ore you were mining. Let's suppose it contained 0.13 percent yellowcake per ton of ore. You would next consult Domestic Uranium Circular No. 5, compiled by the U.S. Atomic Energy Commission in 1952, and look up the base price per ton of ore. In our hypothetical case, it is \$5.46. Then you would find your average selling price per pound of U3O8 — let's say \$32.

The equation the state uses is:

$$1/8 (B \times S) = V$$

B = Base Price (per ton of ore)

S = Average Selling Price (per pound U3O8)

V = Assessed Value

formula and concluded it distorts the market. However, Bedont left state government, and no follow-up was done, either by the planning coordinator's office or the governor. Asked for a copy of the report or the files upon which it was based, a current planning staff member said he couldn't find either.

Several years ago, Warren Bower, currently head of the Ad Valorem Tax Division of the Wyoming Department of Revenue and Taxation, also looked at the formula. No formal report was ever completed, but Bower said, "The formula tended to undervalue ores that were low grade. The schedule may have overvalued high grades, but there weren't any being mined in the state." Bower recommended to the three-man Revenue and Taxation Board that the matter be studied further, but it wasn't because, he said, the department is badly understaffed.

Another apparent irregularity in the assessment formula is that it should have been established through rule-making procedures with public hearings. It was not.

ROYALTIES

Like most bureaucracies, the Wyoming state government is a confusing web of agencies. The Department of Revenue and Taxation is responsible for assessment and collection of severance taxes on all minerals mined in the state, but the State Land Commission assesses and collects royalties on minerals from state leases. The situation with uranium royalties is, if anything,

(continued on page 5)

For arithmetic fans: the formula

One eighth is the multiplier because, in 1969, when the formula was devised, this was the approximate relationship between the selling price of U3O8 and the price listed on the AEC circular. So, in our hypothetical case, \$32 is divided by 8, then multiplied by \$5.46, giving you an assessed value of \$21.84 per ton of ore.

According to AEC Circular Number 5, 0.13 percent grade uranium yields 2.6 pounds of U3O8. So, while you are paying taxes on a ton of ore valued at \$21.84, you are obtaining a product from that ton bringing you revenues of \$83.20.

DSW.

21.86
2.6 lb
U3O8

AEC #5
\$32 ÷ 8 = \$4
late price \$46



Photos by Mike McClure

BOOM AND BUST. Gillette, Wyo., is still booming with adolescent bravado while Bosler is senescent. Severance tax revenues could cushion the bust part of such cycles.



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Dear Friends,

Ever since Woodward and Bernstein made Watergate famous, every high school kid has wanted to be an investigative reporter. After all, investigative reporters are supposed to look like Robert Redford and gain money, fame, glory and sex for their efforts. Who wouldn't be interested?

Well, we are here to tell you that investigative reporting is not all it's cracked up to be. Woodward and Bernstein may have met "Deep Throats" in underground garages at midnight. But most of the time, HCN's investigators are alone in the kitchen with calculators and heaps of papers smuggled out of tiny, dull-green offices of government. All that happens at midnight is an occasional nightmare.

At least that's how Dan Whipple, our associate editor, describes the adventure of preparing the story that appears

on page 1 of this issue.

Whipple, who says he looks more like Red Skelton than Robert Redford, spent three long, hard days in Cheyenne gathering the initial data. Then came about 50 hours of consultation with a helpful attorney. Once home again, Whipple sat for innumerable hours at his desk trying to put the quotes and the figures together in readable form.

Almost none of the information used to compile the story was secret. But apparently no one else had the patience or the motivation to ferret out the story — even though it means millions of dollars to Wyoming people.

But Whipple is too exhausted to enjoy our speculations. He's just glad it's over.

We have been delighted with the variety of mail we've received from all of you offering solutions to our dollar dilemma (see HCN, 1-9-81).

One reader from Fresno, Calif., was

very perturbed by the use of news space that he had paid for to beg for money. He advised us to find someone young and eager to sell advertising for HCN.

A Milwaukee reader, who reads Zane Grey on the bus to stave his longing for the West, is buying subscriptions for his senators and representative. He also offered to sponsor ads for HCN in local newspapers or national environmental magazines.

Several of you said HCN is needed now more than ever, "especially with James Watt on the throne." The staff of an environmental group in Colorado took up an office collection and extended their subscriptions.

A reader in Minneapolis offered to buy subscriptions for libraries. And one in Montrose, Colo., urged members of her organization to get their own subscriptions instead of sharing one copy.

Thanks. You make opening the mailbox a joy everyday.

— the staff

Kennecott copper

Feb. 6, 1981 — High Country News-3

Utah water planners turn on the pressure

by Michael Moss

SALT LAKE CITY — Since the turn of the century, Utah Copper, a workhorse division of Kennecott Minerals, has pulled ore from the Oquirrh Mountains west of the Jordan Valley.

Down in the terraced pits, the daily chore remains how to maneuver the dozens of shovels and trucks around to make the world's largest open pit just a little deeper.

Up in the corporate offices, however, overlooking Mormon Square in downtown Salt Lake, the maneuverings are legalistic and the growing challenge is how to ward off an encroaching population the firm's copper mining jobs have helped fuel.

Public officials in Utah, while still gun-shy of Kennecott's considerable political influence in the state, are beginning to flex new regulatory powers that may force changes in the company's operations.

The problem for Kennecott is that since 1904, when its Bingham Canyon copper mine began eating away the Oquirrh (pronounced like ogres with a "k"), the Salt Lake metropolitan area has grown 12-fold, nearly spilling over the one million mark.

The recipe for continuing a smooth mining operation calls for keeping the growing population and the mine separate.

A thousand-foot-high wall of dumped waste rock and a couple of miles of farm land have helped buffer the mine from the nearest suburbs. But several ecological ingredients, namely air and water, have escaped Kennecott's hold.

Until now, the company has focused on air quality. The latest annual report boasts of spending over \$8 million, 11 percent of its total capital expenditures, on air pollution control equipment.

Receiving less attention is the problem of water contamination, particularly groundwater, which remains totally unregulated.

It's the latter, like some invisible menace trooping out of Grimm's Ogre Mountains to invade the shining city, that has environmental regulators worried, and Kennecott officials scrambling for legal patches. The pressure on Kennecott is building and could influence whether the company will succeed in expanding on to federal land.

IT'S ALL CONNECTED

The Bingham copper mine, while only a branch of Kennecott's corporate tree, is a record-setter and a bastion of company pride. The first and largest in the world, the open pit employs 40 shovels, 73 locomotives, 80 trucks and 2,650 people in its ever descending spiral of terraces.

Making a molehill out of a mountain, company officials like to quip, although the operation more accurately has simply inverted the mountain. From the mine's 52 benches, which extend from 5,240 to 7,830 feet above sea level, Kennecott has pulled some 1.4 billion tons of copper ore. Also extracted are such not-so-trivial byproducts as gold, silver, molybdenum and platinum. All told, the mine is a money-maker.

Along with the jewels, however, has come junk. For every ton of ore, two tons of unwanted rock is collected, which the company heaves over the eastern edge of the pit towards the Jordan

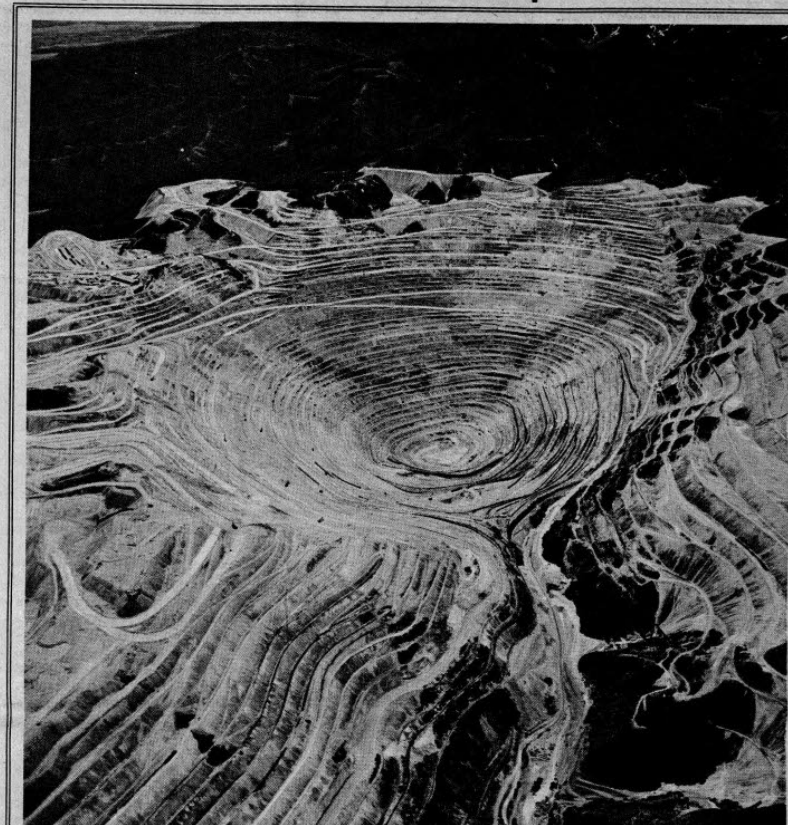


Photo by Don Green, Kennecott Minerals Company

AN INVERTED MOUNTAIN, the Bingham Copper mine is now half a mile deep covering 1800 acres. To keep thing spiraling downward, the firm dumps 400,000 tons of waste rock every day over the eastern edge (left). Butterfield Canyon, into which Kennecott wants to expand, is just over the upper edge of the pit.

dan Valley and Salt Lake.

Today, the pit is walled in on its valley side by mammoth hills of rust-streaked rock like ramparts shielding some medieval fortress. Looking up from the base, one can see a tiny dot appear at the top periodically, followed by a plume of avalanching rock as yet another truck dumps its load. It's another sort of plume that has officials worried.

fine, except that the Bingham mine waste walls contain a smorgasbord of heavy minerals and other contaminants a person in Salt Lake City would not want to drink.

Those contaminants are flushed out of the waste rock both by natural causes (precipitation) and a commercial leaching process in which Kennecott rinses the rock to recover leftover minerals.

Like the invisible menace in Grimm's

water supply office, "but things could be serious."

COUNTING THEIR GUESSES

Like most of the land surrounding Salt Lake City, the Jordan Valley foothills area near the Bingham mine is in flux. Side by side are signs peddling fresh eggs and fresh housing developments.

It's a prime location for suburban growth, just minutes from downtown with an impressive view of the Wasatch Mountain Front. Already, as many as 20,000 people in the 30 square miles directly northeast of the mine are getting their drinking and irrigation water from underground.

That water, says geologist Reed Mower, is probably contaminated.

Mower, a 1951 graduate of the University of Utah and employee of the state Department of Natural Resources, is regarded by public officials as the foremost expert on Jordan Valley ground water. He wrote a 1971 study for the U.S. Geological Survey that remains the only major public analysis of the area's groundwater system.

Known as Technical Publication 31, the Mower study identified the Bing-

The walls contain a smorgasbord of heavy minerals and other contaminants a person in Salt Lake City would not want to drink.

Although there is some dissent, most experts agree that a glass of water poured over the walls of waste rock will theoretically trickle down into an underground water-bearing rock known as an aquifer, flow northeast in a plume until it rises to join the Jordan River, and eventually — years or decades later — make its way into the Great Salt Lake.

In short, the natural water system seems to be connected. All would be

sales, however, no one seems to know how much mineral contaminant is being flushed underground, how contaminated the underground water is, or how far the contamination, if there is any, has spread. A case now in federal district court may decide the question by opening Kennecott water monitoring data to public scrutiny.

"We're not in over our necks," says Gayle Smith, head of Utah's public

(continued on page 4)

Kennecott...

(continued from page 3)

ham mine as the source of serious water quality problems. "There's a high probability (area's groundwater) is contaminated from leachates, from dumped materials at the Bingham site," Mower said last week, although even today he still lacks the data for a conclusive opinion or an accurate estimate of the amount of contamination.

"Personally," said the state's Smith, "I don't see how there couldn't be substantial contamination. We just don't know. We don't have all the facts we'd like to have."

Also suspicious of contamination is Gerald Kinghorn, director of Salt Lake County's water quality planning effort (under section 208 of the federal Safe Drinking Water Act). But he, too, lacks adequate data.

Kennecott officials are more sure of themselves. "There's no problem of groundwater contamination that I'm aware of," says Fred Templeton, director of Environmental Affairs for Kennecott Minerals.

One major chunk of evidence indicating serious contamination, however, comes from Kennecott itself. Monitoring data collected by the company over the past 10 years at a well site near the mine known as Well Springs shows staggering amounts of heavy metals and other contaminants.

While the normal level of sulfates outside the area is 49 milligrams per liter, at Well Springs the levels have fluctuated from 204 milligrams to 1,152 milligrams per liter. Levels of magnesium, iron, aluminum chloride and copper exceed state and federal standards. Geologists believe Well Springs well taps the aquifer that feeds the Jordan River and Salt Lake.

Kinghorn and Smith are cautious about the Well Springs data, noting that some of the contaminants probably come from mining operations that preceded the Bingham mine. Smith also questions the accuracy of the monitoring technique apparently used by Kennecott.

Kinghorn, however, believes the Well Springs contamination may be extrapolated throughout the immediate area and, significantly, that there's more data like Well Springs in Kennecott's information banks.

The Well Springs data was jostled loose by a lawsuit now being heard in U.S. District Court — a case that could determine whether Kinghorn is right.

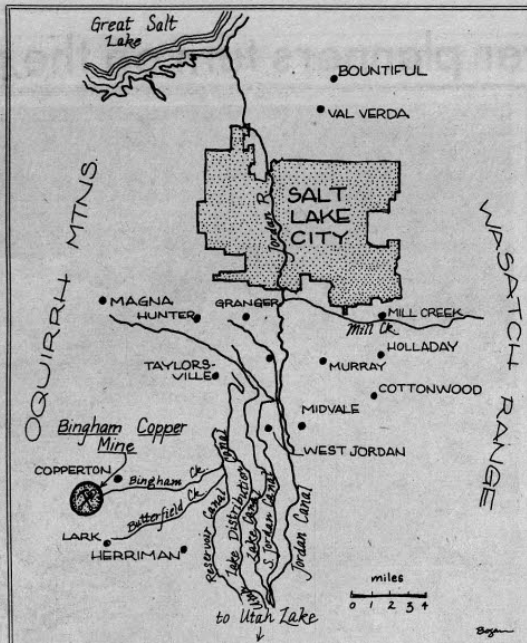
FOOT IN THE DOOR

At issue in the case is a proposed several-thousand-acre land transfer between the Bureau of Land Management and Kennecott. One part of the exchange, 230 acres in Butterfield Canyon just south of the Bingham mine, would allow Kennecott to expand its operation by dumping and then leaching an additional 200 million tons of waste rock.

Two owners of adjacent land in the canyon and two downstream water suppliers sued the BLM. The exchange, they claim, would cause environmental damage, especially to groundwater, and the BLM failed to adequately assess such effects.

The judge issued a temporary injunction on the transfer last fall and agreed to hear arguments.

The case could be critical to Kennecott's expansion plans and to the



environmental quality of the still relatively undeveloped Butterfield Canyon.

Although the new dumping would be limited to 200 million tons as proposed by Kennecott, Kinghorn testified in court that the proposed dumping would "significantly enlarge" the boundaries of existing groundwater pollution.

Because water quality is "marginal" in the area already, he said, any additional contamination presents a serious threat. In a letter to his superior, the state's Smith agreed, saying he was very concerned about Kennecott's proposal.

The BLM's role in the exchange is important, Kinghorn said, because that may be the only stage of the operation where public officials could have any influence.

One official believes BLM failed to prepare the EIS because of Kennecott's political influence.

"At present," Kinghorn told the court, "there are no state, federal or local statutory programs that would in any way prevent Kennecott from further degrading the surface and groundwater supply having its source in Butterfield Canyon."

Smith disagrees, noting that Utah has gained control over such matters through the federal Safe Drinking Water Act. While Kinghorn realizes the state has authority, he said it has no effective program to enforce that authority; its regulatory muscle is limp.

The regional director of the Environmental Protection Agency, Roger Williams, has asked the BLM to further analyze the water quality issue with an eye towards preparing a full environmental impact statement on the land transfer, including a complete study of groundwater.

The landowners and water suppliers who filed suit, geologist Mower, Kinghorn and Smith all agree that a full EIS

is necessary.

Kinghorn suspects political dirt. In a letter to EPA's Williams, he complained that he and officials in the Department of Health had been unable to convince the BLM to prepare the EIS "because of the very significant political influence of Kennecott in the state of Utah."

BLM officials said they cannot discuss the question while the case is in court. The district court judge may rule on the matter this month.

EPA may apply more pressure next June when it reviews the company's surface water pollution discharge permit (known as point source, or NPDES). That review, say EPA officials, may enable them to raise the groundwater question.

How much does Kennecott know?

That's a question many people are wondering about, and several public officials are starting to ask.

If monitoring data already exist, time and effort could be saved in drafting a groundwater management plan for the Jordan Valley. If serious contamination is occurring, dangerous wells could be capped and alternative water sources provided before there is damage to human or animal health.

Geologist Reed Mower said, "It is my understanding that they do have (monitoring programs)."

State drinking water chief Smith has been thwarted in all attempts to secure any monitoring information from Kennecott. He told *High Country News*: "They probably have a lot of groundwater information. I can't think of an industry that large near a metropolitan area that wouldn't be concerned enough to not (have such information)."

In a Dec. 4 letter to Kennecott's head

of Environmental Services, Robert Heaney, Kinghorn asked for the "release of technical information that will help us resolve the problem."

Heaney had little to offer: "At this time," he wrote, "Kennecott has no data or other information that would suggest that Kennecott's mining plan...would impact in any way adversely upon Butterfield Creek." He did promise to consider Kinghorn's request, however.

Another Kennecott official's comments were only slightly more revealing. Fred Templeton, directly under Heaney in the corporate structure, stressed that Kennecott has always had a high "consciousness" of environmental problems.

When asked whether that included groundwater quality and whether Kennecott had adequate information to determine whether there was a groundwater problem, Templeton told HCN, "I think we have an assessment of the situation that is appropriate in this case."

NEGLECTED BY ALL

If Kennecott has tried to ignore its groundwater quality impacts, as public officials are claiming, the company is not alone. Groundwater, again like that invisible menace in Grimm's tales, has long been out of sight, out of mind.

While one out of every two people in this country obtain their drinking water from wells, less than one percent of the government's water quality control efforts goes towards groundwater — almost all laws and regulations deal with surface flow.

But now, a half-million dollars from state and federal sources, local and state officials in the Jordan Valley will join with the U.S. Geological Survey in a four-year study of the valley's groundwater.

The first goal, says Kinghorn, whose office will coordinate the study, will be to set up a grid system of monitoring wells throughout the valley to gather the basic data and identify "hot spots" that may need immediate action.

The study is not only critical for determining whether valley water users are safe, but it could also help determine the need for controversial new water supply projects, such as the Central Utah Project.

However, the success of the water study partly rests with Kennecott. Alvin Rickers, the state's director of environmental health, asked Kennecott to a meeting to discuss sharing groundwater quality data.

At press time, Kennecott had not responded to the request. Kennecott's Templeton, however, said that the company has "always been cooperative" and that "a lot of this thing is just getting started."

The state's Smith is optimistic, saying he is hoping for a "gentleman's agreement" with Kennecott on the issue. Smith stresses that Kennecott has "gone to great expense on air pollution control," although he also concedes that "they've been forced." Whether its hand will be forced on groundwater quality remains to be seen. For now, Kennecott's door is shut on the issue. But officials are knocking.

Research for this article was paid for in part by the HCN Research Fund.

Feb. 6, 1981 — High Country News-5

Park stirs up soil on trampled Teton lakeshore

by Betsy Bernfeld

GRAND TETON NATIONAL PARK, Wyo.—Marion Lake is a small, bright blue glacial tarn snuggled at the top of Granite Canyon. It is fairly remote—an 8.8 mile walk up the canyon trail or six miles from the top of the Jackson Hole Aerial Tram.

But "remote" is popular these days. Park officials estimate that 1,464 people camped at Marion Lake last year. The effects of these campers and the horses some of them brought with them are plain to see. The best flat vantage points near the lake are barren of vegetation, the big rocks nearby are blackened from campfires, and numerous little trails crisscross the meadows between the main trail and the lake.

The situation presents park officials with a paradox: By law, they must preserve the natural vegetation and allow the public to recreate there.

The task is complicated by the lake's 9,240-foot elevation and short growing season. Snow patches here sometimes linger into August. It is further complicated by the prescription for natural vegetation.

"You can't just do it like your own garden," says Utah State University botanist Richard Shaw. Shaw, who is also a summer naturalist at Grand Teton, recommends covering the abused areas with a net of fibrous matting and staking them off to prevent further damage.

Then Shaw recommends collecting seeds from plants nearby and distributing them on the barren areas. "It is not wise in subalpine and alpine areas to buy seeds from a nursery. You can't rely on a seed company to be careful with identification," says Shaw. What's more, it is not enough to get the correct species. You also need a plant that is adapted to the conditions at Marion Lake.

According to Bob Wood, resource management specialist at Grand Teton, the park might be willing to take some "less natural" steps. "The literature concludes that you can't go halfway," says Wood. He proposes that seeds be collected from the site and propagated

elsewhere in containers. He would also support the addition of sterilized sphagnum moss or potting soil and chemical fertilizers to replenish the badly eroded topsoil.

Even though rehabilitation is not a high priority, the park has made some progress. Twenty-one teenagers, members of the Youth Conservation Corps, worked for two days in 1979 at Marion Lake. They organized the maze of trails into one lake shore and one ridge trail, delineating and stabilizing these with rocks. To encourage regrowth on the old trails and lake shore campsites, they scarified the soil (broke it up to a depth of about 6 inches) and stabilized it with matting. In a few places five-inch plugs of soil and vegetation were transplanted from nearby areas.

Camping is no longer allowed near the Marion Lake shore, but is restricted to a tree-covered ridge. Signs have been planted warning the public about the short growing season and delicate vegetation.

Now all there is to do is wait. Barring further damage, Shaw estimates that it will take 10 to 20 years for regrowth—an optimistic estimate. Some alpine rehabilitation literature speaks in terms of hundreds of years.

Another damaged area in Grand Teton is 9,035-foot Lake Solitude. In 1962 it was closed to grazing, in 1970 to camping. A minimal amount of stabilization work was done there in 1963, including rocking off the maze of little trails around the lake in favor of one main trail. Two campsites were scarified. A photo study was started in 1959 and followed up every three years. While some of the swampy areas around Solitude have recovered, 1978 photographs show that the campsites and trails have "no discernible revegetation almost 20 years later," according to Wood.

This past summer at Marion Lake a few plants were already struggling up through the matting, particularly in the boggy areas. Unfortunately, many hikers seem to be using the matted trails as carpeted pathways. In areas

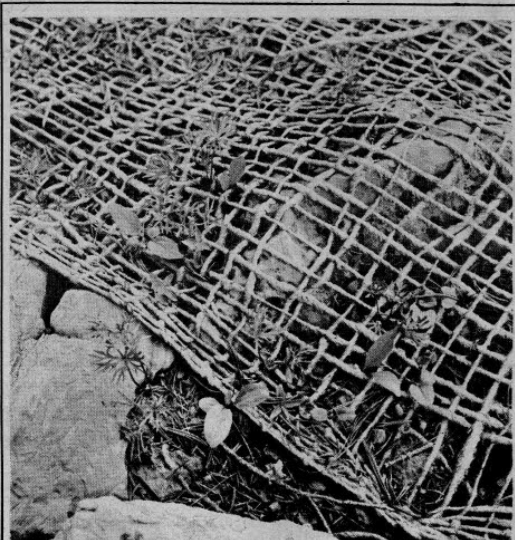


Photo by John Bernfeld

MATTED TRAIL. This trail at Marion Lake, worn out by hikers, is matted to encourage regrowth.

where they have compacted the soil, backcountry rangers have pulled up the matting and done more scarification.

The park probably won't reseed or improve barren soil this year, according to Wood, as budget cuts are expected.

While he would like to do some rehabilitation at the high lakes in the future, it is not a priority project. People apparently aren't disturbed by the barren lakeshores, Wood says. "To my knowledge, there has never been a single complaint."

Betsy Bernfeld is a free-lance writer in Wilson, Wyo. This article was paid for by the HCN Research Fund.

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Uranium tax...

(continued from page 2)

more garbled than that of severance taxes.

State mineral leases require that royalty payments to be based on federally-determined ore prices—or, when the government stops setting those rates, on "fair market value of the ore."

In the 1950s, the federal government was the only purchaser of uranium, mostly for weapons. The AEC published a schedule of prices for uranium ore in 1952 that were extremely low by today's standards. The document, known as "Domestic Uranium Circular No. 5," is still used to establish base prices for severance taxes in Wyoming.

The federal government got out of the uranium market in 1959. An attorney for the Nuclear Regulatory Commission, the bureaucratic successor to the AEC, said Circular No. 5 is no longer in effect. He told HCN, "I've never even heard of it." So, the application of the AEC prices in the royalty assessment would seem to be at odds with the lease terms.

However, most companies simply do a shorthand method of calculating the royalty owed the state by paying five percent of the ore value that was assigned for severance tax purposes.

Only four state leases have produced any uranium in the last several years—those of Kerr-McGee, Western Nuclear, Getty Oil and Lucky Mc (now Pathfinder Mines). Because of the inadequate information filed with the state, it is impossible to determine the exact amount of royalties lost, but it was almost certainly in excess of \$1 million in 1978 and 1979 and \$2 million between 1975 and 1979.

In 1979, Kerr-McGee reported yellowcake sales at \$43.35 per pound. Using the state's assessment formula, the company paid royalties on an assessed value of \$14.78 per ton of ore. Considering the grade of ore Kerr-McGee was mining, the assessed value of the yellowcake in the ore was about \$10.55 per ton, only 25 percent of the price the company actually received.

Western Nuclear, which mines the most uranium from state lands, reported valuations of between \$6 and \$8

per ton in 1979. In the years of very high prices—from 1975 to 1979—reported valuations varied widely from company to company and month to month. In September of 1974, Lucky Mc reported ore values of \$1.38 per ton.

Western Nuclear has never filed all of the required paperwork that would allow the state to figure out royalties independently. The company has told the State Land Commission that the information is available in the company's office if the state wants to conduct an audit. The commission has never audited uranium royalty returns, however, and a source at the agency says it has neither the budget nor the personnel to do so. Kerr-McGee is the only company operating on state land that consistently files its requisite paperwork with the land commission.

However, unlike his counterparts in the Revenue and Taxation Department, recently-appointed State Land Commissioner Oscar Swan is aware of the problems with uranium royalties and is trying to correct the situation. Swan said he is not satisfied that the ore prices being reported by the companies are realistic. He said, "We are

requesting \$30,000 from the legislature for a consultant to review the lease problems, and we haven't lost the right to collect back royalties if we find we are owed them."

NOT SO ROSY

In 1978, Wyoming's Department of Economic Planning and Development issued a report on the past and future of the uranium industry in the state. The document presented an optimistic forecast, predicting values of \$55 per pound by 1985. The future no longer appears so rosy, however. There have been large lay-offs in several communities, and the economic consequences have been severe. The state, by its sloppy procedures, has deprived itself and these communities of substantial sums of money that could have cushioned the blow.

Research for this article was paid for by a grant from the Fund for Investigative Journalism and the HCN Research Fund.

6-High Country News — Feb. 6, 1981

Energy

Clean air fans pour on the PR



by Lonnie Rosenwald

WASHINGTON, D.C. — The tables were draped in white cloth and arranged in three rows inside the conference room. While the guests mingled over Bloody Marys and wine, four hosts in dark blue suits darted around the room attending to last minute details. The catered sandwiches were unwrapped, and the press packets were placed in front of each table setting. The hosts silently reviewed each of their presentations a final time, then joined the 27 reporters at the tables as the luncheon began.

The scene was the offices of the Natural Resources Defense Council, where environmentalists are coordinating plans to improve and defend the Clean Air Act in Congress this year. If the luncheon is any indication, the upcoming battle will be more than the quality of life versus cost-benefit, public interest versus economic development debate. Environmentalists are emphasizing the public relations side of lobbying, while industry appears to be pouring an enormous amount of money and effort into research.

One example is a four-volume study of the Clean Air Act by the Business Roundtable. The roundtable, an organization of 200 corporate chief executive officers, brought in two doctors from Harvard University, the Arthur D. Little accounting firm and two consulting firms to prepare the report, which the organization is using to propose changes to Congress.

The 12,000 member National Association of Manufacturers has set its own Environmental Quality Committee to work assembling a similar list of changes. The committee, with 200 members from businesses across the country, is now on its sixth draft of recommendations.

The focus of all this attention is the federal Clean Air Act, the comprehensive law that provided for a myriad of air pollution regulations ranging from auto emission controls to the design of smokestacks on power plants. First enacted in 1970, the law comes up for reauthorization this year.

To see why the act's proponents will resist weakening the act, one need only look at the accomplishments under the law.

— About 14,000 lives were saved during 1978 alone as a result of the law's impact, according to a study by the Council on Environmental Quality.

— Americans accrued \$17 billion worth of health benefits in the same year, CEQ says.

— Regulated pollutants, such as sulfur dioxide, have been reduced in most cities.

— Catalytic converters for cars and scrubbers for coal-fired power plants are routinely installed. The National

Clean Air Coalition estimates that half the cars in America have catalytic converters, which remove 70 to 90 percent of hydrocarbon and carbon dioxide pollution.

Industry's complaint is, of course, the cost of enforcement. One survey by McGraw-Hill Co. found that clean air regulations now cost industry \$10 billion a year.

President Ronald Reagan raised the hopes of the act's opponents during his campaign by declaring air pollution "substantially controlled" and calling for less regulation of business. The National Clean Air Coalition, on the other

Air standards should be based on what concentrations produce "permanent damage" or "incapacitating illness," according to one group.

hand, says most existing power plants are still uncontrolled, and less than 10 percent have any emissions controls.

Environmentalists will be fending off a variety of industry proposals.

A favorite target of industry is PSD — prevention of significant deterioration — a program which regulates pollution in areas that are as clean or cleaner than federal pollution limits. Under the PSD program, these areas of the country are divided into three air quality classes, ranging from pristine Class I areas such as national parks to Class III, which includes smaller cities. Discharges of new industrial pollution are restricted by varying degrees in each of these areas.

The National Association of Manufacturers may seek to have those increments "liberalized" for Class I and have Classes II and III eliminated.

Many businesses in urban areas are more interested in changing the National Ambient Air Quality Standards (NAAQS), concentration limits placed on pollutants by the Environmental Protection Agency.

Industry argues that the standards are costly and in some cases unachievable.

ble. "Personally I think some of those numbers (pollution limits) could be raised by 50 percent, and it wouldn't hurt anybody," said Daniel Cannon of the manufacturers' group.

EPA should not base its standards on what pollution levels produce health effects, plus a margin of safety, according to the Roundtable study. Instead, the agency should base its standards on concentrations that produce "permanent damage" or "incapacitating illness," the study said.

The National Association of Manufacturers has also discussed the idea of

changes is unquestionably more hostile to environmental regulations and more willing to listen to industry. Four of the new conservative Republican senators, Washington's Slade Gorton, Steven Symms of Idaho, James Abdnor of South Dakota and Frank Murkowski, Alaska, have joined the Environment and Public Works Committee, which will handle the Clean Air Act. Sen. Robert Stafford (R-Vermont), the new committee chairman, promised there will be no big changes in the law, but it won't be easy to prevent such changes.

In the House, Rep. Henry Waxman (D-Calif.) remains at the head of the health and environment subcommittee, where he also has a record of blocking efforts to weaken environmental laws.

The debate will probably begin in March with hearings before these committees. The last time the Clean Air Act was amended in 1977, the effort took two-and-a-half years. No one expects things will be any easier this round.

Lonnie Rosenwald, formerly a reporter for the Idaho Statesman, now is on the staff of States News Service in Washington, D.C. Research for this article was paid for by the HCN Research Fund.

UTAH ... a national sacrifice area?

The focus of energy development in the west.

The range of the MX missile system.

The home of the Sagebrush Rebellion.

Nuclear waste dumping proposed for S.E. Utah.



Yet, harbored in Utah are the 13,000 ft. high Uinta Mts., Dark Canyon, Grand Gulch, Kaiparowits, Desolation Canyon, The Dirty Devil, and Escalante Rivers. The Canyonlands, the Deep Creek Mts., the San Rafael Swell and many other natural wonders are threatened with destruction.

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Energy

TVA to dump coal, dig West

Because of unexpected energy conservation and an increased emphasis on nuclear power, the Tennessee Valley Authority plans to reduce its coal use by as much as one-half within the next 20 years.

Since TVA is the nation's largest coal user, the decision will be hard on the Eastern mines that provide most of its fuel. At the same time, it could be good news for Western uranium producers.

While TVA has deferred some nuclear plants, it plans to produce 45 percent of its power by fission by the year 2000. The plants will be fueled by Western uranium.

TVA, an independent federal agency, buys about 32 million tons of coal annually. Coal plants supply about 60 percent of TVA's power, while nuclear reactors produce about 12 percent.

TVA Chairman S. David Freeman told *Coal Week*, a McGraw-Hill newsletter, that coal use will be greater only if consumers start using more power. TVA currently estimates only two to

three percent growth in power usage per year.

The brunt of the shift will be taken by high sulfur Eastern producers, caught between the slack market and air pollution standards that increase the demand for low sulfur, cleaner coal. *Coal Week* says that low sulfur suppliers will have little trouble finding buyers to replace TVA.

TVA decided to switch from coal to nuclear power in the mid-1960s. Nuclear was then thought to be cheaper than coal power. Now, however, TVA and other utilities have found nuclear power to be more expensive than they anticipated. According to *Coal Week*, the agency estimates that six of its nuclear power plants will cost as much as \$31.6 billion when they are completed in the mid-1990s — three times the original estimates.

The U.S. Senate will hold hearings later this year to consider TVA's plans. However, a TVA spokesman says most of the equipment for TVA's reactors already has been ordered.



Hot Line



MONTANA OIL SHALE. A new survey of oil shale deposits in central Montana indicates that the area contains an estimated 180 billion barrels of recoverable oil as well as a significant amount of other valuable metals. The U.S. Geological Survey reports that the Montana shale may be worth as much as \$85 per ton, due largely to valuable metals in the deposits. The oil in Montana shale is worth about \$7.15 per ton of rock, and it also contains vanadium oxide, nickel, zinc, selenium and molybdenum. Private companies so far have balked at undertaking shale oil development without funding assistance from the federal government. The report covers about 2,700 square miles in seven Montana counties.

EASING LEASING. President Ronald Reagan, following up on his promise to cut federal red tape, is planning to speed up the leasing of publicly-owned land for oil and gas exploration, according to the Newhouse News Service. Interior Department lawyers are reportedly working on draft orders to remove some of the procedural roadblocks that have slowed petroleum development on federal lands. Most of the lands targeted for expeditious leasing are in the West and on the Outer Continental Shelf. During his confirmation hearings, Interior Secretary James Watt called Interior's administration of public land "arrogant" and the backlog of oil and gas applications "almost unbelievable." The new guidelines are expected in 60 days.

LEASING SUIT. Kansas-Nebraska Natural Gas Co., Petroleum Exploration, Inc. and several other parties are suing the U.S. Interior Department and the Bureau of Land Management for

the right to lease oil and gas properties within the Teton Wilderness Area in the Teton National Forest in northwestern Wyoming. The suit contends that BLM violated the provisions of the Wilderness Act of 1964 when it refused to grant a non-competitive lease within the congressionally-designated wilderness area. BLM based its decision on the so-called Krug Memorandum of 1947. The memorandum, written by then-Secretary of the Interior J.A. Krug, extends a number of protections to the Jackson Hole area to preserve the scenic, recreation and wildlife resources of the area. The suit says that the memorandum goes beyond the Wilderness Act, which specifically authorizes oil and gas exploration in wilderness areas until 1984. The case is being brought in the U.S. District Court in Cheyenne, Wyo.

NO WESTERN COAL PLANTS. The project director of the World Coal Study says coal gasification plants and coal-fired power plants should not be built in the West because the region lacks water, labor and community services. Carroll Wilson, a Massachusetts Institute of Technology professor and former general manager of the U.S. Atomic Energy Commission, said energy companies are making a mistake by not moving coal to areas in which the infrastructure already exists to handle the impact from large energy facilities.

POWER TO THE INDIANS. About 2,000 Navajo families will get electricity in their homes for the first time as a result of two U.S. government loans totaling \$9.4 million. The Rural Electrification Administration has approved the loans for a large electric construction program on the Navajo Reservation in Arizona, New Mexico and Utah. The loans will finance construction of about 475 miles of distribution lines, 15 miles of transmission lines and three distribution substations. The agency says that the Navajos have not had electricity before because their homes tend to be far apart, rather than in clustered communities.

Classifieds

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NEWS EDITOR. High Country News is looking for a full time news editor with copy editing skills and a good grasp of natural resource issues. Low salary, health insurance. Job includes writing, making assignments and editorial policy setting. Send resume, writing and/or editing samples and references to Geoffrey O'Gara, HCN, Box K, Lander Wyo. 82520.

TIRED OF SLICK SOLAR? Let Solar Utilization News tell you about solar products, handyman hints, solar patents, government reports, and wind and solar heating projects. For a free sample copy, write SUN, P.O. Box 3100, Estes Park, CO 80517.

NUCLEAR METAPHYSICS: This book explores the hidden meaning of atomic energy. Nuclear process symbolically corresponds with human transformation. Ancient myths of gods Uranus, Pluto, coincide with modern use of uranium, plutonium. Astrological meaning of planets Uranus, Pluto, provide insight into resolution of nuclear crisis. Implications fully explained for individual and society. Recommended for the enlightened anti-nuker. \$4 includes postage. Fox Publications, P.O. Box 521, Dept. H, Flagstaff, AZ 86002.

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STAFF POSITION. Illinois South Project. Collectively-run public interest organization. \$10,500. Organizing, research and education on ag-land loss & family farm issues. For application: 701 N. Park, Herrin, IL 62948.

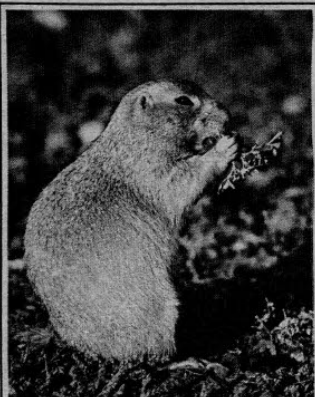
EXECUTIVE DIRECTOR. The Wyoming Outdoor Council, a statewide conservation organization, is seeking an Executive Director. The job includes organization management, fundraising, lobbying, and issue work. Salary: \$800-1000 a month depending upon qualifications. Health insurance, mileage. Send resume and writing sample to Peter Kozisek, Wyoming Outdoor Council, P.O. Box 1184, Cheyenne, Wyo. 82001.

RURAL NETWORK is a social support group for single, mid-life/broad age range, country-oriented, ecologically concerned people. Information with SASE. RURAL NETWORK, Rt. 1 Box 49B, Avalon, WI 53505.

8-High Country News — Feb. 6, 1981

Neglected wildlife:

Photo by John P. George



**black-tailed
prairie dog**



Photo by Colorado Game and Fish Department



opossum



by Dave Hall

SALT LAKE CITY — Al Heggen's desk looks like a typical bureaucrat's — piled high with memos, date books, letters and impact studies. Only one item seems out of character — the poster with a gawky prairie falcon peering over Heggen's shoulder saying, "Do Something Wild."

But it's all part of his job as director of Utah's nongame wildlife program. The poster is designed to encourage Utah taxpayers to donate money to unhunted wildlife through a checkoff on the state tax form. Heggen hopes the scheme will double his budget.

The tax checkoff idea is not new, but it is still controversial. Colorado and Oregon already have raised hundreds of thousands of dollars through check-offs (see HCN 2-9-79), and three other states — Minnesota, Kentucky and Kansas — have approved the checkoff approach.

In this country nongame wildlife includes nearly 3,000 vertebrate species that are not sought by hunters or fishermen — such as birds of prey, songbirds, reptiles and small mammals. Hunting and fishing license fees and excise taxes from the sale of guns, ammunition and fishing equipment add up to millions of dollars each year. But most of this is earmarked for game management and research. While some

game programs, such as habitat acquisition, help all species, nongame's special needs are usually neglected.

In 1973 only four states — California, Oregon, Washington and Colorado — had organized nongame programs. By mid-1980, 27 states had nongame departments, and seven others were developing them. Many agencies have changed their names from departments of fish and game to departments of wildlife, reflecting this new emphasis. Colleges and universities are also starting to recognize nongame wildlife in their programs.

Until recently, federal nongame funds for states also have been limited. While federal endangered species money has been available, many states are not able to raise the required matching funds. Some help was provided by Congress in September, when it passed the Wildlife Conservation Act of 1980, which guarantees \$5 million a year to be split among the states to prepare and implement comprehensive nongame management plans.

In the meantime, a few states have tackled the problem. All have met with opposition, and only a few generate as much money as they'd like.

— Missouri passed a constitutional amendment in 1976 that increased the state sales tax by one-eighth of one percent. The additional funds go to several wildlife programs including nongame,

Photo by John P. George



great horned



Photo by John P. George



coyote



which received more than \$2 million in 1979.

— California's yearly general fund appropriation is substantial.

— Washington raised \$409,000 in 1979 by selling personalized license plates, a method that was declared unconstitutional in Colorado.

— Oregon and Colorado added \$337,000 and \$650,000 respectively to nongame budgets through tax check-offs in 1980.

Other states are raising small sums through various sales promotions. Iowa sells nongame wildlife certificates for \$5; Michigan and New Jersey sell T-shirts; Pennsylvania sells wildlife stamps and patches.

Money is usually available for species that are already in trouble, and that is where most nongame programs begin. The next step is to try to manage wildlife populations so they do not become threatened. The second step makes good sense economically, because once a species is in trouble, massive expenditures are needed to prevent extinction. The California condor and peregrine falcon are cases in point. Millions are being spent annually to save these birds.

Colorado already is making significant progress. River otters (endangered in Colorado) are being reintroduced; habitat management has boosted the white pelican population; and the

black

DO SOMET



YOUR U
CONTRIB
FUTURE F

Taxpayers to the rescue

ed owl



Photo by Dick Randall, Department of Wildlife

kestrel



Photo by John P. George

black-necked stilt

porcupine



Photo by Ben Malar

Once a species is in trouble, massive expenditures are needed to prevent extinction.

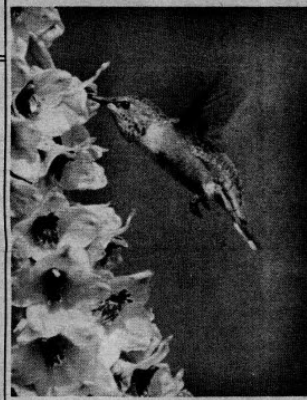


Photo by Robert Haggard

rufous hummingbird

THING Wild

You may now contribute part of your Utah income Tax Refund to protect and preserve the future of Utah's nongame wildlife. Watch for the check-off box ☒ on your Utah income Tax forms. Make your mark, and give Utah's Wildlife a future.

OUR UTAH TAX DEDUCTIBLE CONTRIBUTION MEANS A FUTURE FOR UTAH'S WILDLIFE.



greenback cutthroat trout has been reintroduced, moving it from endangered to threatened status in the state.

In Utah, nongame funding is supporting a project to reintroduce the endangered peregrine falcon in the northern part of the state. The Wasatch Mountains east of the Great Salt Lake once had among the largest populations of nesting peregrines in the West. In 1979, prior to the reintroduction of five young birds north of Salt Lake City, there were none.

Utah's program is patterned after those in Colorado and Oregon. Passed during the 1980 legislature, it permits citizens to make a tax-deductible donation of \$1, \$5, \$10 or other amounts on their 1980 state tax forms.

Although Utah has fewer taxpayers than Colorado or Oregon, Hegggen hopes the checkoff will generate \$200,000 this year. He is depending upon an ambitious campaign based on the "Do Something Wild" theme that Colorado used and private support from Skaggs Companies, Inc., based in Salt Lake City. Skaggs is producing a 30-second public service television commercial and buying television time to run the commercial from now through April.

In other Intermountain states, opposition to nongame programs or particular funding schemes continues. Nevada and Montana both have meager non-

game budgets. With a tight rein on general funding appropriations and no state income tax, Nevada can look forward to little change in the near future. Montana is introducing a checkoff bill this year, but a telephone survey conducted last summer by the University of Montana showed that four of five Montanans opposed increased emphasis on nongame. Illinois and Nebraska governors have vetoed nongame bills.

Wyoming and Idaho have no formal nongame budgets but emphasize these species in existing programs. Wyoming is hoping its legislature will approve a wildlife trust fund, and Idaho lawmakers are considering a checkoff bill.

Idaho can expect opposition for many of the same reasons used in other states: Some legislators feel use of such funds will hinder development. Others fear the checkoff will set a bad precedent, resulting in a flood of requests from similarly worthy causes. Some fear increased nongame funding will mean protection for what some consider nuisance species, such as prairie dogs and coyotes.

Jim Hekkers of the Colorado Division of Wildlife says a state's nongame funding problems are not over even with the passage of checkoff bill. In Colorado, legislators have cut back general funds for nongame due to the success of the checkoff. Some legislators have prop-

posed diverting one-half of the Colorado checkoff money to the state's parks and recreation system (see story, p. 10).

In addition, Hekkers feels that checkoff funding may begin to decline because it depends on voluntary contributions each year.

Some conservationists have proposed that individuals with the greatest interest in nongame wildlife's future — such as bird watchers, picnickers, backpackers and nature photographers — should pay for their management through a tax on items like bird seed, feeders, backpacking equipment, cameras and binoculars. Such bills were introduced in Congress twice in the late 1970s but were killed by the U.S. Chamber of Commerce and a number of labor unions.

Under the provisions of the 1980 Wildlife Conservation Act, the U.S. Fish and Wildlife Service will over the next 2½ years study this option as well as many of the state programs to determine the best way to secure reliable support for nongame species.

Dave Hall is a freelance writer in Salt Lake City and a member of the state nongame wildlife advisory council. Research for this article was paid for by the HCN Research Fund.

10-High Country News — Feb. 6, 1981

Western Roundup



DEMONSTRATORS GATHERED on the steps of the Utah State Capitol Jan. 27 to mark the 30th anniversary of the first atomic testing in the Southwest. For Janet Gordon (right), who attributes her brother's death and other cancer in her family to the test fallout, disposing of high-level nuclear waste in Utah would add new "hot spots" the state doesn't need.

Nongame taxed by new Colo. plan

Colorado's income tax check-off scheme has proven so successful for wildlife that the parks department now wants a piece of the action.

Created in 1973, the program enables state income taxpayers to donate one or more dollars of their refund to help fund a nongame wildlife management program (see related story on page 8).

The system has generated hundreds of thousands of dollars, and several other states in the region are setting up similar funding mechanisms for nongame.

Now, however, the Colorado Parks and Recreation Department wants a share of the proceeds. The proposed law (House Bill 1014) would divide the check-off revenue equally between nongame programs and unrelated park and recreation programs.

Wildlife enthusiasts are unen-

thusiastic about the proposal. "It's just not fair," says Vim Wright, a former lobbyist for the Colorado Open Space Council and the principle designer of the check-off scheme.

Wright argues that the nongame program was essentially a new one. Nongame animals had previously been neglected by wildlife managers, and no money was available from the general funds for a new management program.

Several state legislators, however, are not buying that argument. Even the original sponsor of the nongame check-off, Sen. Fred Anderson (R-Loveland), has cosponsored House Bill 1014.

Its passage looks promising. And so does the likelihood that a string of worthy causes, from cancer research to library bookmobiles, will also start lining up for a spot on the tax form.



Tribes' clean air idea questioned

"How are you going to eat clean air?" asked town council president Virgil Mallory and with that question protested a plan to upgrade the Flathead Reservation in Montana to Class I (pristine) air quality.

Mallory was joined by Jim Couture, a Montana Power Co. executive, who said that if "99 percent of the U.S. is Class II, then it should be sufficient for the reservation."

But most of the other two dozen speakers at a recent public hearing in St. Ignatius supported the proposal, reports the Missoulian.

Under the 1977 amendments to the Clean Air Act, state and governing bodies have the authority to request re-

designation to Class I, the highest air quality standards allowed under the act, or Class III, which allows more degradation. To date, only the Northern Cheyenne Indian Reservation in eastern Montana has voluntarily acquired the Class I status. Congress gave most national parks and wilderness areas Class I air protection.

The new classification would not affect existing industries on the reservation, said Butch Rachal of the U.S. Environmental Protection Agency in Denver.

But it would, he said, "preclude heavy industrial growth on the reservation" and make it virtually impos-

Utahns raise varied waste doubts

SALT LAKE CITY — A two-month-old stale cover of smog had blown away the day before, leaving the 16 demonstrators with a crisp, clear sunrise view.

Gathered by candlelight on the steps of the Utah Capitol last week, they were marking the 30th anniversary of atomic testing — a day the Air Force dropped a one kiloton bomb named "Able" near Las Vegas, Nev.

Janet Gordon, organizer of the dawn vigil, said that and subsequent testing caused a plague of leukemia and other cancer in her family. She is one of almost a thousand southern Utah residents who have filed \$2 billion in claims against the federal government.

Nuclear testing, uranium mining, left-over uranium mill tailings — Utah has received a large share of the nuclear age's by-products. Now, along with the proposed MX nuclear missile system, the state is a prime candidate to host high-level nuclear waste.

For Gordon, the prospect of nuclear waste disposal in Utah is unsettling. "We already have hot spots left over from the testing," she said. "Do we need more?"

Many other Utahans are asking the same question. But while there is widespread opposition to nuclear waste disposal in the state, the reasons for the resistance are varied and not generally due to the nature of the wastes themselves.

For some conservationists, it's a wilderness issue. "This may shock some people," said the Sierra Club's Brian Beard, "but my main concern is the impact the test drilling may have on the Canyonlands."

To help determine whether there is a suitable site, the Department of Energy has been exploring four areas in Paradox Basin, including Gibson Dome, adjacent to Canyonlands National Park. The exploratory work has included drilling test holes, trenching and establishing seismography stations.

DOE officials, according to a recent draft environmental impact statement on nuclear waste disposal, are optimistic that the thick-bedded salt deposits several thousand feet below the surface will be suitable for long-term storage of high-level waste, including spent fuel rods, reprocessing wastes, and worn out nuclear reactors.

Beard and other conservationists recently won a ruling by the Bureau of Land Management (which manages the land being tested) to require a comprehensive environmental analysis of DOE's testing operations in southern Utah. Only site-specific studies have

been done so far. Further testing has been halted until the overall study is completed.

For a second group of opponents, it's a states' rights issue. "I'm not afraid of nuclear waste," said State Sen. Ivan Matheson (R) from southern Utah. "What bothers me is that Utah is becoming whatever the East wants us to be, whether it's a playground or a dumping ground."

Matheson and many other state legislators are backing a bill introduced by Sen. Frances Farley (D-Salt Lake) that would prohibit the federal government from placing high-level nuclear wastes in the state unless the governor and the legislature approve.

According to Farley, legislation banning the disposal of all radioactive waste has been passed by six other states, while seven states, including Montana and South Dakota, prohibit the disposal of high-level waste within their borders. Nine states require legislative approval, as Farley's bill would.

Significantly, several of those states having restricting laws are also being analyzed by DOE for disposal possibilities, and Utah officials don't want to be caught with the only open door.

"When it comes down to it," said one observer, "DOE is going to find four or five sites that are suitable geologically. And then it's going to be a political question of who gets it."

Farley's bill was approved by the full Senate last week, and final passage is anticipated. The only major dispute was over a proposed (and unsuccessful) amendment to also give counties veto power.

A third type of opposition to nuclear waste disposal in Utah centers on the nuclear energy issue itself. "We just don't want to encourage more production," said Chad Dobson, a member of the state's 15-person task force reviewing the issue and a principle drafter of Farley's bill.

The state task force is seeking funds from DOE to continue its work.

Congress, meanwhile, came close but failed to agree on a federal strategy for disposing of high-level radioactive wastes. A state's right to veto repository projects was a key issue in the debate, and an amendment by Rep. Peter Kostmayer (D-Penn.) and James Santini (D-Nev.) to help smooth the way for such vetoes was killed by the House, 161 to 218.

State veto power and the larger issue of high-level waste disposal is expected to be taken up by Sen. James McClure's (R-Id.) Energy and Natural Resources Committee this spring.

redesignating that "Indian people don't understand how you can take away clean air the same as they didn't understand how you could take away land in 1910 (when the Flathead Reservation was opened to non-Indian homesteading)."

The public hearing was part of a detailed procedure the tribes must follow for redesignation. The Environmental Protection Agency's role is limited to ensuring the tribes follow those rules. A tribal council decision is expected within a month.

State of Wyoming Public Notice

Feb. 6, 1981 — High Country News-11

PURPOSE OF PUBLIC NOTICE

THE PURPOSE OF THIS PUBLIC NOTICE IS TO STATE THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS UNDER THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972 (FWPCA) P.L. 92-500 AND THE WYOMING ENVIRONMENTAL QUALITY ACT (5-11-101 et. seq., WYOMING STATUTES 1967, CUMULATIVE SUPPLEMENT 1973).

IT IS THE STATE OF WYOMING'S INTENTION TO ISSUE WASTEWATER DISCHARGE PERMITS TO (3) INDUSTRIAL FACILITIES, (1) COMMERCIAL FACILITY, (2) OIL TREATER FACILITIES, AND (1) SWIMMING POOL FACILITY, TO MODIFY (1) INDUSTRIAL PERMIT, AND (2) MUNICIPAL PERMITS, AND TO RENEW (3) MUNICIPAL PERMITS, (1) SWIMMING POOL PERMIT, AND (2) FEEDLOT PERMITS.

APPLICANT INFORMATION

(1) APPLICANT NAME: Antelope Coal Company
MAILING ADDRESS: 111 SW Columbia, Suite 800
Portland, Oregon 97201
FACILITY LOCATION: Antelope Mine, Converse County, Wyoming
PERMIT NUMBER: Wy-0030198

The Antelope Coal Company plans to construct an open pit coal mine approximately forty five miles north of the City of Douglas, Wyoming.

The discharges flow into School Draw (Class IV Water). The discharges must meet effluent limitations which are considered by the State of Wyoming to represent "best available treatment." However, the permit also contains a "re-opener clause" which requires the permit to be modified should more stringent limitations be developed at the federal level.

Runoff from disturbed areas will be controlled by sedimentation ponds which are designed to completely contain the runoff resulting from a ten year - 24 hour precipitation event. Because these ponds will not normally discharge, they are not specifically identified in the permit but are covered by operation and maintenance provisions.

Periodic self-monitoring of effluent quality and quantity is required with reporting of results quarterly. The permit is scheduled to expire January 31, 1986.

(2) APPLICANT NAME: North Antelope Coal Company
MAILING ADDRESS: 12015 E. 46th Avenue, Suite 600
Denver, Colorado 80239
FACILITY LOCATION: North Antelope Mine, Campbell County, Wyoming
PERMIT NUMBER: Wy-0028177

The North Antelope Coal Company plans to open a large open pit coal mine which will be located approximately fifty miles South of the City of Gillette, Wyoming.

The discharge flows into Porcupine Creek (Class IV Water). The discharge must meet effluent limitations which are considered by the State of Wyoming to represent "best available treatment." However, the permit also contains a "re-opener clause" which requires the permit to be modified should more stringent limitations be developed at the federal level.

Runoff from disturbed areas will be controlled by sedimentation ponds which are designed to completely contain the runoff resulting from a ten year - 24 hour precipitation event. Because these ponds will not normally discharge, they are not specifically identified in the permit but are covered by operation and maintenance provisions.

Periodic self-monitoring of effluent quality and quantity is required with reporting of results quarterly. The permit is scheduled to expire January 31, 1986.

(3) APPLICANT NAME: Northwestern Resources Company
MAILING ADDRESS: P.O. Box 729
Thermopolis, Wyoming 82443
FACILITY LOCATION: Grass Creek Mine, Hot Springs County, Wyoming
PERMIT NUMBER: -- y-0030317

The Northwestern Resources Company operates a small open pit coal mine known as the Grass Creek Mine which is located approximately twenty miles southeast of Meeteetse, Wyoming.

The discharges flow into Coal Mine Draw (Class IV Water). In the application for this permit the State of Wyoming did not require the Company to submit data on the trace metal concentrations of the discharges. The reason for this is that any water encountered in the mine pit will result from precipitation runoff and not interception of groundwater.

The discharges must meet effluent limitations which are considered by the State of Wyoming to represent "best available treatment." However, the permit also contains a "re-opener clause" which requires the permit to be modified should more stringent limitations be developed at the federal level.

Runoff from disturbed areas will be controlled by sedimentation ponds which are designed to completely contain the runoff resulting from a ten year - 24 hour precipitation event. Because these ponds will not normally discharge, they are not specifically identified in the permit but are covered by operation and maintenance provisions.

Periodic self-monitoring of effluent quality and quantity is required with reporting of results quarterly. The permit is scheduled to expire January 31, 1986.

(4) APPLICANT NAME: Purple Sage Subdivision
MAILING ADDRESS: P.O. Box 846
Rock Springs, Wyoming
FACILITY LOCATION: Sweetwater County, Wyoming
PERMIT NUMBER: Wy-0030252

The Purple Sage Subdivision is a planned permanent housing subdivision of 175 units located on the far western side of the City of Rock Springs and adjacent to Interstate Highway 80. The proposed method of wastewater treatment is a package plant which will discharge to Bitter Creek (Class IV Water) via an unnamed drainage.

The proposed permit requires compliance with National Secondary Treatment Standards effective immediately. Also, since the development is just outside the Intercity Sewer District's boundaries, it is required to be hooked up to the District's collection lines within 12 months of the date the lines serving the western part of the District are completed.

Self-monitoring of effluent quality and quantity is required on a regular basis with reporting of results quarterly. The permit is scheduled to expire December 31, 1983 by which time hook-up to the Intercity System is expected.

(5) APPLICANT NAME: Marathon Oil Company
MAILING ADDRESS: P.O. Box 2690
Cody, Wyoming 82414
FACILITY LOCATION: Buffalo 20 Lease, Battery No. 1,

(continued on page 12)

Did you read this?

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2. When the conversation lags, lay the newspaper and your reasons for subscribing to it on the table.
3. Offer to share a piece of the action — the coupons below.
4. Seal the deal with a flourish. Rip out the coupons and hand one to each friend.
5. You've just become a vital part of the HCN lifeline. Thank you.

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Lander WY 82520

() Now I know where my friend picked up such good info on wood stoves, window shutters and why our electric bill just went up. Don't leave me out of the conversation — send a year of HCN for \$15.

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() According to my friend, HCN gets out the news — whether it's what's in my drinking water or what's buried at the local dump — before the dailies get around to it. Enclosed is \$15 for one year (25 issues).

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Address
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State & Zip

High Country News, Box K,
Lander WY 82520

12-High Country News — Feb. 6, 1981

(continued from page 10)

SW $\frac{1}{4}$, NW $\frac{1}{4}$, Section 2, T47N,
R100W, Park County, Wyoming

PERMIT NUMBER: Wy-0030309

(6) APPLICANT NAME: Trigg Drilling Company

MAILING ADDRESS: 2122 Western Federal Savings Bldg.
718 17th Street
Denver, Colorado 80202

FACILITY LOCATION: Tribal-Trigg No. 1-4, No. 2-4, No. 3-4, Sage
Creek Field, SW $\frac{1}{4}$, Section 4, T1N,
R1W, Fremont County, Wyoming

PERMIT NUMBER: Wy-0030325

Facilities are typical oil treaters located in Park and Fremont Counties, Wyoming. The produced water is separated from the petroleum product through the use of heater treaters and skim ponds. The discharges are to Little Buffalo Creek (Class IV Water) and Sage Creek (Class II Water).

The discharges must meet Wyoming's Produced Water Criteria effective immediately. Chapter VII of the Wyoming Water Quality Rules and Regulations infers that as long as the Produced Water Criteria is met, the water is suitable for beneficial use. There is no evidence to indicate that limitations more stringent than the Produced Water Criteria are needed to meet Wyoming's Water Quality Standards. The Department will continue to evaluate the discharges and, if necessary, will modify the permits if evidence indicates that more stringent limitations are needed.

Semi-annual self-monitoring is required for all parameters with the exception of oil and grease, which must be monitored quarterly. The proposed expiration date for the permits is December 31, 1981 for the Marathon facility and December 31, 1983 for the Trigg facility.

(7) APPLICANT NAME: Huckleberry Hot Springs Swimming Pool

MAILING ADDRESS: P.O. Box 1049
Jackson, Wyoming 83001

FACILITY LOCATION: Teton County, Wyoming

PERMIT NUMBER: Wy-0030333

The Huckleberry Hot Springs Swimming Pool is located on the Rockefeller Parkway approximately three miles south and one mile west of south gate of Yellowstone National Park. The pool is fed by natural hot springs. The discharge from the pool enters a small pond which in turn discharges to Tanager Creek (Class IV Water), which is a small, boggy waterway which flows approximately $\frac{1}{4}$ mile before entering Polecat Creek (Class II Water). Copper sulfate and chlorine are added to the pool to control bacteria, weed, and algal growth. In addition, a gravel filter is occasionally backwashed into the pond below the pool.

The proposed permit sets effluent limitations on Total Copper, Total Residual Chlorine, and pH at the outfall from the small pond following the pool. The effluent limits are designed to insure the protection of aquatic life in Polecat Creek. Monthly self-monitoring of effluent quality and quantity is required and the results must be reported at the end of each season (October). The permit is scheduled to expire February 28, 1986.

(8) APPLICANT NAME: Cordero Mining Company

MAILING ADDRESS: P.O. Box 1449
Gillette, Wyoming 82716

FACILITY LOCATION: Cordero Mine, Campbell County,
Wyoming

PERMIT NUMBER: Wy-0023761

The Cordero Mining Company operates the Cordero Mine which is a large open pit coal mine located approximately twenty miles south of the City of Gillette, Wyoming.

The discharges flow into the Belle Fourche River (Class II Warmwater Stream) and Dean draw (Class IV Water).

The discharges must meet effluent limitations which are considered by the State of Wyoming to represent "best available treatment." However, the permit also contains a "no-greater clause" which requires the permit to be modified should more stringent limitations be developed at the federal level.

Runoff from disturbed areas will be controlled by sedimentation ponds which are designed to completely contain the runoff resulting from a ten year - 24 hour precipitation event. Because these ponds will not normally discharge, they are not specifically identified in the permit but are covered by operation and maintenance provisions.

Periodic self-monitoring of effluent quality and quantity is required with reporting of results monthly. The permit is scheduled to expire February 28, 1986.

(9) APPLICANT NAME: Moorcroft Sewage Treatment Facilities

MAILING ADDRESS: P.O. Box 96
Moorcroft, Wyoming 82721

FACILITY LOCATION: Crook County, Wyoming

PERMIT NUMBER: Wy-0021741

The wastewater treatment facilities serving the Town of Moorcroft, Wyoming, consist of a single cell non-aerated lagoon of approximately 3 surface acres. The discharge from the lagoon enters Rush Creek (Class IV Stream) and flows approximately $\frac{1}{4}$ mile before entering the Belle Fourche River (Class II warmwater stream). Because Rush Creek generally has no flow other than Moorcroft's effluent, and because of the short distance the effluent travels before entering the River, the Belle Fourche is considered to be the receiving stream.

The existing permit was written at a time when the State of Wyoming had in-stream Water Quality Standards for ammonia in Warm-Water Streams. However, in 1979 those Standards were eliminated and before it is now necessary to modify the Town's permit to eliminate any effluent limitation on ammonia.

The proposed permit requires that the existing facilities be operated at maximum capability and efficiency until a new or upgraded plant capable of meeting National Secondary Treatment Standards is put in operation. The Town is now in the planning stage of upgrading its wastewater treatment system and the proposed permit requires completion of preliminary plans by March 1, 1981. The proposed permit also requires the Town to submit deadline dates for each item in the planning, design, and construction process as the project proceeds.

Self-monitoring requirements in the proposed permit require the monitoring of all limited parameters on a routine basis with reporting of results quarterly. The proposed permit is scheduled to expire on January 31, 1986.

The Town of Moorcroft has been exempted from meeting Federal effluent requirements by July 1, 1977 since, in accordance with Federal requirements, it specifically requested an exemption due to the previous unavailability of Federal construction grant funds. In addition, the Town requested and received a less stringent limitation on total suspended solids. This modification is allowed by Federal regulations if the method of treatment is stabilization ponds and the design flow is less than 2 MGD.

(10) APPLICANT NAME: Town of Saratoga - Wastewater

MAILING ADDRESS: P.O. Box 486
Saratoga, Wyoming 82331

FACILITY LOCATION: Carbon County, Wyoming

PERMIT NUMBER: Wy-0021491

The wastewater treatment facilities serving the Town of Saratoga, Wyoming consist of a 2 cell stabilization

pond in which the first cell is aerated. The second pond discharges to an unnamed drainage which flows approximately $\frac{1}{4}$ of a mile before entering the North Platte River (Class I Stream).

When the existing permit was drafted in 1979 it was assumed that the wastewater infiltrated into the ground before reaching the river. Subsequent investigation has revealed that this is not the case and that the effluent reaches the North Platte River via surface flow. Therefore, because this portion of the North Platte is a Class I Water and because in Class I Waters increases in pollutant discharges are prohibited, it becomes necessary to modify this permit. In this proposed permit the quantities of BOD₅, Total Suspended Solids, Fecal Coliform Bacteria, and Total Residual Chlorine are limited to those quantities which were being released at the time this portion of the river was designated as Class I (July, 1979).

The proposed permit contains a schedule of compliance which requires completion of preliminary plans by May 15, 1981. The proposed permit requires submission of item by item completion dates as the planning, design, and construction of updated facilities proceeds. During the interim period the Town must operate its existing facilities at maximum capability and efficiency.

The proposed permit requires periodic self-monitoring of effluent quality and quantity with reporting of results quarterly. The permit is scheduled to expire February 28, 1986.

(11) APPLICANT NAME: Town of Lyman - Wastewater

MAILING ADDRESS: P.O. Box 328
Lyman, Wyoming 82397

FACILITY LOCATION: Uinta County, Wyoming

PERMIT NUMBER: Wy-0020117

The Wastewater treatment facilities serving the Town of Lyman, Wyoming consist of a three cell stabilization pond system in which the first two cells are aerated. The third cell is followed by a chlorination system. The facility discharges to Lyman Draw (Class IV Water).

The proposed permit requires compliance with National Secondary Treatment Standards and Wyoming's In-stream Water Quality Standards effective immediately. Self-monitoring of effluent quality and quantity is required on a regular basis with reporting of results quarterly. The permit is scheduled to expire March 31, 1986.

(12) APPLICANT NAME: City of Rawlins - Wastewater

MAILING ADDRESS: P.O. Box 953
Rawlins, Wyoming

FACILITY LOCATION: Carbon County, Wyoming

PERMIT NUMBER: Wy-0020427

The newly constructed wastewater treatment facility serving the City of Rawlins, Wyoming consists of three aerated lagoons with a total surface area of approximately 15 acres followed by two settling lagoons with a total surface area of approximately 70 surface acres followed by 2 storage lagoons with a total surface area of approximately 45 acres. The facility will discharge to Sugar Creek (Class IV Water).

The proposed permit requires compliance with National Secondary Treatment Standards and Wyoming's In-stream Water Quality Standards effective immediately. Self-monitoring of effluent quality and quantity is required on a regular basis with reporting of results monthly. The permit is scheduled to expire March 31, 1986.

(13) APPLICANT NAME: Wright Water and Sewer District - Wastewater

MAILING ADDRESS: P.O. Box 239
Wright, Wyoming 82732

FACILITY LOCATION: Campbell County, Wyoming

PERMIT NUMBER: Wy-0025992

The wastewater treatment facilities serving the Town of Wright, Wyoming and operated by the Wright Water and Sewer District consist of a three cell aerated lagoon system followed by a chlorinator and chlorine contact chamber. The final cell discharges to Hay Creek (Class IV Water).

The proposed permit requires compliance with National Secondary Treatment Standards and Wyoming's In-stream Water Quality Standards effective immediately. Self-monitoring of effluent quality and quantity is required on a regular basis with reporting of results quarterly. The permit is scheduled to expire March 31, 1986.

(14) APPLICANT NAME: Town of Saratoga

MAILING ADDRESS: P.O. Box 486
Saratoga, Wyoming 82331

FACILITY LOCATION: Hobo Swimming Pool, south side of
the Town of Saratoga, Carbon
County, Wyoming

PERMIT NUMBER: Wy-0025968

Facility is a swimming pool located on the south side of the Town of Saratoga. The pool is owned and operated by the Town. Flow to the pool is approximately 95 gallons per minute from a natural hot spring. After flowing through the pool the water is discharged to the North Platte River (Class I Stream). The pool is not chlorinated. Facility does not pose a significant pollution problem and no effluent limitations or monitoring requirements are proposed. Permit will expire March 31, 1986.

(15) APPLICANT NAME: Bower and Huber, Inc.

MAILING ADDRESS: Hotel Washakie
Worland, Wyoming 82401

FACILITY LOCATION: South side of Worland, Washakie
County, Wyoming

PERMIT NUMBER: Wy-0022136

The Bower and Huber Feedlot is located on the south side of Worland, Wyoming, adjacent to the Holly Sugar beet processing plant. The applicant is engaged in the feeding and sale of cattle and sheep, and the lot has a capacity of 6,000 cattle, and 8,000 sheep.

The lot is located on extremely flat terrain and is a considerable distance from any receiving water. These factors preclude the need for any specific runoff control structures. If runoff did reach waters of the State they would be the Big Horn River (Class II Water), the Lower Hanover Canal (Class IV Water) or tributaries to these waters.

The permit will require that no discharge to waters of the State occur except in cases when a precipitation event exceeds the one in 25 year - 24 hour storm (2.0 inches). In cases where a precipitation event exceeds 2.0 inches only the amount in excess of 2.0 inches may be discharged.

(16) APPLICANT NAME: L.U. Sheep Company

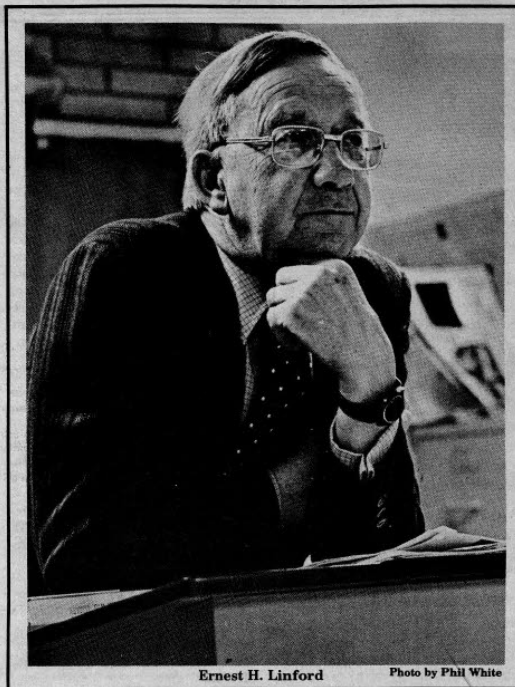
MAILING ADDRESS: Box 699
Worland, Wyoming 82401

FACILITY LOCATION: Approximately ten miles south of
Worland, Wyoming, on U.S. Highway 20

PERMIT NUMBER: Wy-0022489

The L.U. Sheep Company feedlot is located approximately ten (10) miles south of Worland, Wyoming, on U.S. Highway 20. The feedlot can hold up to 1,500 calves, 1,000 sheep, and 130 cows and bulls at one time.

Linford's pen still pursues West's polluters



Ernest H. Linford Photo by Phil White

by Philip White

LARAMIE, Wyo. — "We live to the hilt for two old-timers" Ernie Linford says as he moves newspapers, books and magazines off a living room chair. Lala Linford, his partner in marriage for nearly 50 years, reaches down beside her chair and brings forth a stuffed pink pig she has created in anticipation of the birth of their first great-grandchild.

The Linfords live close to the University of Wyoming campus where they met as students after growing up in western Wyoming. Ernie's resume says he retired in 1973 after 38 years as reporter, news editor and editorial writer in Laramie, Cheyenne and Salt Lake City and six years as UW journalism professor and department head.

But this man is not retired. With the help of Lala, editor-in-chief at the Linford house, he writes weekly columns for the *Laramie Boomerang* and the *Salt Lake Tribune*. They read four daily newspapers and innumerable periodicals. Linford carefully researches his material at the university library and rides a bicycle to his daily swim at the university pool. He was again recalled by the journalism department this year to serve as faculty

advisor to the campus newspaper. In his spare time, Linford freelances on a variety of topics.

The eldest of eight children, Linford first came to Laramie in 1926 intent upon a career in fiction writing. During his junior year in college, he was hired as campus reporter for the *Boomerang*. When the paper's chief newsman retired a short time later, Linford quit school to fill that slot. He intended to resume his schooling when times got better but never did. In 1967, when he became UW's journalism department head, he was a striking anachronism in an age when academic credentials often mean more than merit.

In 1946, after 14 years on Laramie and Cheyenne newspapers, Linford won an award that would expand his horizons considerably, a Nieman Fellowship to Harvard. Among the great minds he encountered there was Bernard De Voto.

"DeVoto was writing his famous 'The West Against Itself' columns for Harper's at that time and I went to his house one day to show him he was wrong about Western stockmen ruining the ranges and about Eastern monied interests controlling western development," Linford says.

"He was an aggressive, profane, loud

man and he ate me alive. But he had the documentation and he convinced me."

CLOUDS OF CINDERS

When Linford returned to the *Boomerang* in 1947, he brought his new, larger view to bear on regional concerns. He wrote a series on soil conservation and attacked the railroad for clouding Laramie's skies with cinders. He defended the Jackson Hole National Monument when Wyoming's lone Congressman introduced a bill to abolish it. Such editorials earned him the first of many awards for conservation writing, the Sigma Delta Chi "Courage in Journalism" award.

Linford was the first to attack the UW Board of Trustees' appointment of a panel in 1947 to search social science textbooks for subversive and un-American ideas. Since the principal stockholder of the *Boomerang* was a trustee, Linford's views were not appreciated by his publisher. Linford moved his thoughts to a signed column entitled "One Man's Opinion." Then Linford was told to submit his editorials to the publisher for review before publication.

"That was totally unacceptable," Linford says, "so I started looking for another job." The next year he joined the editorial staff of the *Salt Lake Tribune* and for nearly 20 years worked to establish a conservation conscience in Utah.

RANCOR FROM RANCHERS

His editorials supporting the U.S. Forest Service's moves to reduce overgrazing in the Wasatch Range not only gave him a bad name among the powerful stock interests in Utah, they won him the American Forestry Association's conservation service plaque in 1953. Other such awards followed: from Utah State University, from Scripps-Howard, from the Wildlife Society.

But Linford was not always on the side of the conservationists. He had serious questions about establishing an official wilderness system. He strongly supported water projects such as the proposed Echo Park, Flaming Gorge and Glen Canyon dams. He thumped for more recreational developments.

In a 1955 essay supporting the Colorado River Storage Project, Linford lined himself up behind Theodore Roosevelt's concept of conservation: "Conservation is not locking up natural resources and throwing the key away but putting them to wise use and enhancing their benefits for this and future generations."

If today's conservationists would be upset by some of Linford's early stands, they would be amazed by the current relevance of others. Consider the Sagebrush Rebellion for instance. This is what Linford had to say on the subject

Feb. 6, 1981—High Country News-13

in an editorial for the *Salt Lake Tribune*:

"Until it can be shown that another agency will pursue its duties with equal skill and responsibility, the *Tribune* is strongly opposed to reducing the Forest Service's authority or to any wholesale 'return' of public lands to states or private groups which really never had legal right to them.

"We call on municipal and county officials...true sportsmen, educators, church groups and all interested in keeping this country strong and healthy to join in resisting efforts to grab special privileges on the national forests."

That was printed Dec. 12, 1952.

The hallmark of Linford's conservation editorials throughout his career has been a commitment to land and water conservation. In the 1950's, the threats were, by today's standards, more easily attacked: overgrazing, human-caused range fires, too many deer in certain areas, government-sponsored conversion of grasslands to dryland farms leading to "black blizzards" after droughts.

That commitment continues today, but Linford's recent columns address a mind-boggling array of forces inimical to ecological health: nuclear and toxic wastes, synfuel development, brown clouds, indoor pollution, tropical deforestation, acid rain, seabed mining, and so forth.

In 1967 Linford traded his Utah typewriter for a professor's lectern at Laramie. When he left full-time teaching in 1973, he resumed writing columns for the *Salt Lake Tribune*, championing the region's national parks.

Saying the parks should remain "24-karat, unspoiled offerings," Linford wrote in January 1980: "Rather than permitting the national parks to become debased and uglified by smog and noise pollution, Congress should reclassify the parks so that exploiters aren't given the green light to defile the grandeur of our most scenic treasures. Neighboring communities and the states should fight for the parks' integrity and do all possible to keep adjacent areas from becoming future tourist slums in the way that the Jackson Hole area is becoming a condominium boomtown."

In recent columns, Linford is not optimistic. On the last day of the 1970's, he wrote:

"The pendulum that brought us relatively clean air and water has begun to swing back. Astutely the business-industry forces are zeroing in on the Environmental Protection Agency and other regulators rather than the regulations themselves. As the gas-guzzling public is squeezed out of free mobility by soaring fuel prices, a scapegoat will be sought out and it will turn out to be the long-term anathema of big oil and big politics — environmentalism."

Dikes have been constructed to prevent runoff from the feedlot from entering either the Big Horn River (Class II Water) or the Bluff Canal (Class IV Water). The proposed permit allows no discharge of feedlot runoff to waters of the State except in cases where precipitation exceeds the one in 25 year - 24 hour storm (2.0 inches). In cases of such a precipitation event, only that quantity in excess of 2.0 inches may be discharged.

STATE-EPA TENTATIVE DETERMINATIONS

Tentative determinations have been made by the State of Wyoming in cooperation with the EPA staff relative to effluent limitations and conditions to be imposed on the permits. These limitations and conditions will assure that State water quality standards and applicable provisions of the FWPCA will be protected.

PUBLIC COMMENTS

Public comments are invited any time prior to March 9, 1981. Comments may be directed to the Wyoming

Department of Environmental Quality, Water Quality Division, Permits Section, Hathaway Building, Cheyenne, Wyoming 82002, or the U.S. Environmental Protection Agency, Region VIII, Enforcement Division, Permits Administration and Compliance Branch, 1860 Lincoln Street, Denver, Colorado 80295. All comments received prior to March 9, 1981 will be considered in the formulation of final determinations to be imposed on the permits.

ADDITIONAL INFORMATION

Additional information may be obtained upon request by calling the State of Wyoming, (307) 777-7781, or EPA, (303) 327-3574, or by writing to the aforementioned addresses.

The complete applications, draft permits and related documents are available for review and reproduction at the aforementioned addresses.

Public Notice No. WY-81-003

14-High Country News — Feb. 6, 1981

Trackings

followups on previous stories

Coyote control

(see HCN 10-3-80 for previous story)

Advocates of controlling coyote populations with the poison 1080 have gained a new friend in Washington, D.C. Incoming Secretary of Agriculture John Block said this week that he "had a bone to pick with coyotes" because he, as many Western ranchers, blames the animal for killing domestic livestock.

Block said he will review a proposal to move the federal predator control program into his department from the Department of Interior. This was suggested by 1080 proponents because of former Interior Secretary Cecil Andrus' emphasis on finding alternatives to the poison. The new Interior secretary's philosophy may make the switch unnecessary, said Block.

Garrison trade

(see HCN 12-12-80 for previous story)

No deal, Canadian officials have said to a U.S. proposal to trade their approval of the Garrison Diversion Project for permission to build a Canadian-sponsored hydroelectric transmission line through North Dakota.

Backers of the controversial Garrison water project in North Dakota need Canada's O.K. because it would affect

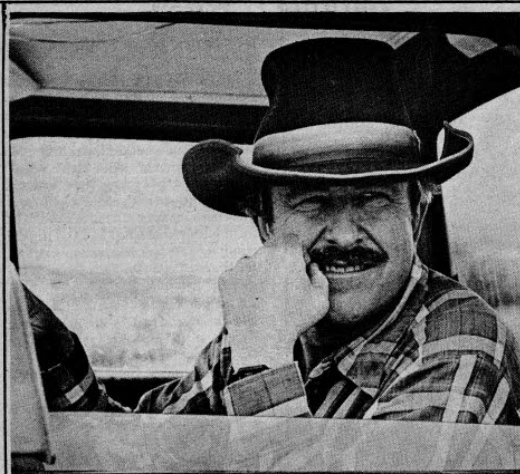


Photo by Jeannette Germain

IDAHO STATE SEN. JOHN PEAVEY (D-Carey), who Idaho conservationists called the "only shining ray" in that state's election, will keep his new seat. The state senate has rejected charges from Peavey's opponent that there were voter registration irregularities in the election. (See HCN 1-9-81 for previous story).

waters flowing north into that country. Canadians, meanwhile, are seeking Dakota permits for a proposed 500-kilovolt transmission line, the

Mandan line, that would run through North Dakota on its way from Manitoba to markets in Nebraska.

Canadian Energy Minister Don

Hazardous waste

(see HCN 11-28-80 and 12-12-80 for previous stories)

New hazardous waste disposal operations at Denver's Lowry landfill have been given "excellent" marks by a Colorado Health Department official, the **Denver Post** reports.

Inspector Ken Waesche, who checked the site on Jan. 8, said the waste reprocessing facility managed by Chemical Waste Management and two other disposal operations at the site are running "in accordance with the approved report and plans." County officials, unpersuaded, are continuing their court battle to close the operations.

The state legislature, meanwhile, is trying to come to grips with hazardous waste management throughout the state. Several bills are being considered to locate and regulate facilities (including S.B. 12, S.B. 200 and S.J.R. 8). Local control of the issue is expected to be a key part of the debate.

None of the legislation thus far, reports the Colorado Open Space Council, encourages recycling or waste reduction.



Craig said he could see some benefits from the Mandan line for both countries. "But on Garrison," he said, "it's all deficit."

Bulletin Board

WESTERN ARCHAEOLOGY

Crow Canyon Interpretive Tours, a not-for-profit education group, is offering low cost tours of a variety of archaeological features in the West. Included this year are: photographing ruins in the snow (Feb. 20-22); Pinyon Pitch trading on the Hopi mesas (March 20-22); Mining and Machines in Telluride, Colo. (July 3-6); Ute history in Mancos Canyon (Oct. 3-5). Contact Fred Blackburn, P.O. Box 782 Monticello, Utah 84635; (801) 587-2886.

LOONEY LIMERICKS

by Zane E. Cology

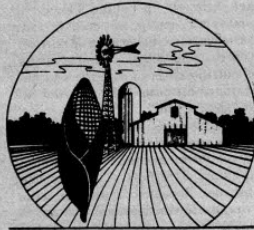
They fought very hard for an ore tax,
To help ease the pain of the boom ax.
But with bad calculations,
And poor regulations,
All the dough seems to flow through the cracks.

MANAGING WILDLIFE

The U.S. Fish and Wildlife Service wants to hear from you on how it should manage its wildlife refuges. The agency has more than 400 refuges, encompassing some 89 million acres, and a management scheme has been drafted that discusses land acquisition, master planning, pest control, hunting and fishing, grazing, environmental education and other policy issues. Copies of the manual can be reviewed at area offices. Individual chapters can be obtained by writing Refuge Manual Coordinator, U.S. Fish and Wildlife Service (RF), Department of Interior, Washington, D.C. 20240. The comment deadline is April 27.

FARMLAND POLICIES

Getting other federal agencies to help protect farmlands is the goal of a new Department of Agriculture study. "A Time to Choose" is available from USDA, 14th and Independence Ave., SW, Washington, D.C. 20250. The Farmers Home Administration has responded to the study, saying it will neither approve nor fund projects that would lead to the conversion of these land uses or encroachment upon them. Comments on FmHA's proposed policy are due March 13. Contact John Hansel (202) 447-3395 for information.



PROTECT YOURSELF...

...from accidents, Black Lung and other mine-related hazards with a new handbook published by the Center for Law and Social Policy. "Inspectors and union representatives are vitally important, but protecting yourself is a do-it-yourself project," say the publishers of *Miner's Manual*. The guide includes a plethora of health and safety rules in 350 pages and is available for \$5.55 postpaid from CLSP, 1751 N. Street, NW, Washington, D.C. 20036.

STRIPPING FARMS

Protecting prime farmlands from surface coal mining was one of the key issues addressed by the 1977 Surface Mining Control and Reclamation Act. A subsequent court ruling, however, challenged that part of the act and the Office of Surface Mining has now responded with amended rules. Among the concessions are a "grandfather" clause exempting operations under permit when the law was enacted and a tighter definition of farmland. The rules, which OSM says are now final, were published in the Jan. 22 *Federal Register*. For more information from the agency, contact Donald Smith, South Bldg., 1951 Constitution Ave., NW, Washington, D.C. 20240.

SHALE LINES

An industry proposal to build a 350-mile shale oil pipeline in Colorado and Wyoming has prompted the Bureau of Land Management to hold public hearings on the project. According to the agency, the Houston-based firm La Sal Pipe Line Co. wants to pipe 500,000 barrels of oil daily from the Colony Oil Shale project in Garfield County, Colo., to Casper, Wyo. The BLM wants to hear from the public about which issues to analyze in its planned environmental impact statement on the line. Hearings are scheduled for early this month; more information is available from James Dean, (303) 837-3515.

WOODFUEL COOPS

How to set up a consumer woodfuel cooperative in the West is the subject of a March 25 training workshop in Pocatello, Idaho. Sponsored by the Western Solar Utilization Network, the course will offer advice on financing, organizing and securing wood supplies. Contact: MCC Associates, 1533 Red Oak Dr., Silver Spring, Md., 20910; (301) 689-8130.

GEO THERMAL COMMENTS

The Bureau of Land Management wants advice on considering the environmental impacts of proposed geothermal development in the Aquarius Mountains, Mohave County, Ariz. Atlantic Richfield Co. wants to develop some 30,000 acres in the area, southeast of Kingman, and the BLM hopes to have a draft impact statement done by mid-April. Contact area manager Roger Taylor, 2475 Beverly Ave., Kingman, Ariz. 86401.

SAVING DIGS

Protecting archeological resources on public and Indian lands is the focus of new rules published by four federal agencies in the Jan. 19 *Federal Register*. Hearings are scheduled for Albuquerque on Feb. 21 and Denver on March 14. Contact Charles McKinney, HCRS, Department of Interior, 440 G. St. NW, Washington, D.C. 20243.

HOW MUCH LEAD...

...is there in air, rain, water, soils, rocks and vegetation? The U.S. Geological Survey says it knows. A 90-page report done in 1976 and recently reprinted is still up-to-date, the agency says, and contains data on lead in the environment and how it is detected and analyzed. The report, "Professional Paper 957," costs \$4 from the Branch of Distribution, USGS, 604 S. Pickett St., Alexandria, Va. 22304.

TO CONSERVE

The country's top environmental groups have coalesced into a new organization attempting to promote energy efficiency and conservation. A final agenda for the group is due this month. Membership inquiries are welcome, says the president, Jonathan Lash. Contact the Energy Conservation Coalition at 1412 16th St., NW, Washington, D.C. 20036; (202) 223-8210.

Opinion



56 FLATS

Dear HCN,

I enjoyed your article on seismographing in your Jan. 9 issue but feel several things should be added. I worked on a competing company's crew (GSI 1745) in the same area at about the same time as the author, Conrad Gilbert.

Gilbert is right that portable crews leave no damage; but Bruce Hamilton is right that what follows may.

All that I would ask of those who seek to halt such oil development around Jackson or elsewhere is that they consider who pays the price and who gets the benefit. The people in Jackson are outdoorsy sorts, and they do not want oil wells and pipelines disturbing their scenery and wildlife. This is fine, but what bothers me is that these people who live in such affluence should be so ready to ask the rest of the country to pay for their oasis.

Second, lest you worry that not enough is being done by environmentalists, let me reassure you: One morning our crew arrived at work to discover that all our tires were flat — all 56 or so, except two well-hidden spares. Rob Little and I got to where we could change four tires in 10 minutes. A few weeks later, we found our trucks had been redecorated with slogans like: "Wild and Free Forever," "Assholes Go Home," etc. An expensive helicopter "bubble door" was stolen (later recovered) and \$2,000 cables were cut.

Lastly, and most important, a matter of pure pride. Gilbert claims that his crew set "the world record for a portable crew." While I don't know what the world record is, I know it is not 112 shots, since we got 143 one day in the Gros Ventre during July.

C. LeCompte
Belmont, Mass.

WORM ADVOCATE

Dear HCN,

I think the paper you are using is better than using the "slick" kind (see HCN 1-9-81). It makes HCN "homey," and the chemicals used in making it aren't so harmful to the underground animals as the slick kind.

The papers do get to the dumps. Worms like paper very well. (People ought to have more worms in the dumps, but then the ground has to be kind of damp.)

Also, sometimes the smell that comes from the slick paper kind of magazine makes my eyes burn. I don't think it does the eyes any good in the long run. And my eyes are good.

Agnes P. Baker
Security, Colo.

TVA's 1st responsibility is to its homeland

by Marjane Ambler

Franklin D. Roosevelt would never understand the "new deal" that the Tennessee Valley Authority is offering the people of Appalachia. When TVA was created in 1933, its mandate was not only to provide power and flood control but also to raise the social and economic well-being of the people of the Tennessee Valley.

As the largest coal buyer in the country, it has been, indirectly, the largest employer of coal miners. Thus it has had a unique opportunity to fulfill both its social and economic responsibilities through its own performance and through incentives to coal producers.

Instead, TVA has wielded its federal powers like a club. While it provided paychecks, it undermined labor unions, fought clean air and reclamation regulations, and condemned land out from under family farmers.

TVA raised its social and environmental consciousness somewhat with the addition of S. David Freeman to the board in 1977. But it is continuing its commitment to nuclear power.

Adding nuclear plants to its present generating capacity should be questioned for the usual reasons — safety, cost and waste disposal. But TVA is not just expanding; it is reducing its use of coal. Thus it will be relying upon

uranium from Western states with the nation's lowest unemployment rates rather than continuing to supply paychecks in its service area.

Congress should scrutinize this policy soon: TVA has financial advantages that private companies lack, and they should not be used to expand uranium development in Wyoming, South Dakota and New Mexico at the expense of coal jobs in TVA's own region. Action should be taken before TVA's board decides what to do about four nuclear plants that it has temporarily deferred. Two years ago, work on the con-

troverial Tellico Dam was halted because of its potential effect on an endangered species, the snail darter. However, TVA convinced Congress that its dam should be completed because so much money had already been committed to the project.

If Congress acts quickly, time won't strengthen another Tellico argument.

Marjane Ambler is a former managing editor of *High Country News* who is now a freelance writer and an Alicia Patterson Foundation fellow.



REPUBLICAN MANIFESTO

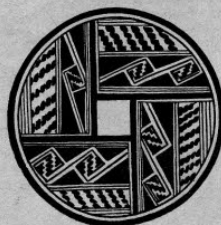
Dear HCN,

Gene Coan's article on conservatism in the Jan. 23rd issue was a breath of Class I air. It rang so true that it could have been written as a manifesto for our organization, Republicans For American Wilderness.

Although we have rallied around wilderness as a symbol of our heritage and evidence of our greatness as a society, we share equal concern for the other important, interrelated issues affecting our environment. And the positions attributed by Coan to true conservatives are closely aligned with those of R.A.W.

Responsible Republicans now have a new and greater responsibility to influence political decisions affecting our environment. Republicans, conservatives and anyone else who shares our view is invited to contact us at Box CC, Buena Vista, Colorado 81211.

Dick Sear
Republicans For American Wilderness
Buena Vista, Colo.



ASSET OF THE NATION

Dear HCN,

Your recent editorial (1-23-81) performs a real service by letting your readers know some of what is happening in Jackson Hole.

The apparent willingness to let Jackson Hole become a trendy, boom-town resort is indeed dismaying. Nevertheless, all is not yet lost! There is still today a surprising amount of ranch land in the valley, a real credit to the ranchers who have thus far chosen not to sell.

Most important, great numbers of people here and throughout the country are loathe to see Jackson Hole exploited.

Sen. Malcolm Wallop (R) has agreed to draft federal legislation to authorize purchase of easements (a voluntary program only, no condemnation authority), as well as legislation to revise inheritance tax laws to reduce pressures on heirs of large ranches to subdivide. We must all urge him to move quickly and to hold a hearing on the proposals.

Several people here are also seeking private means of acquiring conservation easements and otherwise protecting the land. We have considerable hope for that approach, although it probably can do only part of the job.

A State Wildlife Trust Fund, by providing for state easement acquisition to protect wildlife habitat, would certainly help Jackson Hole, too.

In the end, it will take every action we can think of, from every source, to stem the tide of thoughtless development on both private and public lands of the Tetons and Jackson Hole. But

Jackson Hole is a resource and asset of the entire state and nation; it is worth the effort.

Jean Hocker, coordinator
Jackson Hole Project
Isaac Walton League
Jackson, Wyo.

GROWTH ETHIC AND HCN

Dear HCN,

I have read Mr. O'Gara's report in the Jan. 9 issue. It perhaps echoes Tom Bell's announcements of some 7 years ago. I've been reading HCN since 1973. Over the years HCN has had my greatest respect as an outfit that didn't get all sucked up in one or more of the many ways that undisciplined Big Money-Big Egos are going about these days in the resource rich areas of the world.

One thing I believe we must consider: the question of growth. Is growth a good and necessary thing to ensure the survival of HCN? HCN will denounce the growth ethic that is such an obsession to outfits like Basin Electric and Kerr-McCree and Montana Power and Consolidated Coal. If HCN cannot survive in a condition of zero growth or very limited growth, then I do not believe that it is morally justified in expecting larger corporate enterprises to survive in zero growth conditions. This all comes down to a quite demanding style of self-discipline. Do not talk of expecting others to do things that you yourself are unwilling to do.

I am enclosing payment to extend my subscription to early 1983. I'm committed to doing what I can.

Donald Tobkin
Detroit Lakes, Minn.

16-High Country News — Feb. 6, 1981

Books

Going to Extremes

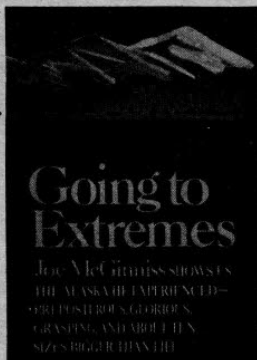
by Joe McGinniss, Alfred A. Knopf, New York, 1980. \$11.95, hard cover, 285 pages.

Review by Rosemary Harrold

A soldier on maneuvers in subzero weather takes a gulp from his whiskey flask and then drops dead, his throat frozen shut.

In Barrow, Eskimos roar mindlessly up and down the streets on snow machines. If one breaks down? Leave it. Fill it with garbage. There is plenty of government and oil money for replacements.

Joe McGinniss set out for Alaska on a whim, intrigued by all its blank spaces



on the map. He found a land and its people under attack by big business and modern technology. Everywhere he traveled, people had come to Alaska merely to cash in; nature was just another commodity.

Yet, *Going to Extremes* is not all gloom. McGinniss's sometimes surreal

sense of humor permeates the book. He notes the absurdity of British Petroleum's planting one tree, the northernmost tree in the world, in Prudhoe Bay. The tree stands alone, bent under a glass roof in a town packed in by polar ice on the edge of a continent.

In another shabby village, one of the dozens McGinniss visited, an Eskimo family sits glued to the TV, smiling and nodding. They don't understand what the people are saying, but they love it anyway. The program is "Book Beat." Saul Bellow is being interviewed. Later the family watches "Macbeth." The father is disappointed; he prefers "The Six Million Dollar Man."

Ultimately, McGinniss travels take him to the Brooks Range, the fabled wilderness north of the Arctic Circle resembling "the world in its youth." Here, among massive cliffs, he finds the "real" Alaska he had imagined.

A corridor through the solid rock leads McGinniss and his companions to an enchanted, grassy meadow with a creek meandering through it and emptying into a tiny lake. He comments, "We were not sure whether we had en-

tered a cathedral or whether we had stumbled across the gateway to a lost, forbidden land." One of the hikers struggled to describe the phenomenon, "a symphony in rock, a petrified thunderstorm." Whatever it was, there was reason to believe they were the first humans to see the valley, to set foot on the meadow. The group sat in silence, awestruck, for the rest of the afternoon.

Many of the chapters in *Going to Extremes* do not add to the movement of the story; they merely delay the climax, the epiphany in the Brooks Range. John McPhee's *Coming into the Country* is still the book on Alaska. But I do recommend *Going to Extremes* as a supplement. Despite the length, the occasional intrusion of self-conscious writing, the many intentional sentence fragments and the overdramatized clichés, McGinniss' genuine curiosity and wit provide the reader with a candid account of America's last and possibly lost frontier.



by Hank Fischer

Like most people, you may let Groundhog Day slide by without the proper observance. Some Westerners think Groundhog Day was foisted upon us by the East and thus give it little attention. But we are actually one up on the Easterners, who have only the common woodchuck to praise, while we can boast of two groundhogs — the hoary marmot and the yellow-bellied marmot.

The hoary marmot inhabits areas above timberline in Montana, Idaho, Washington, Alaska and Canada and is somewhat rare. The yellow-bellied marmot, much more common, can be found in rocky areas and mountains in every Western state.

Despite the myth that has made Groundhog Day famous, nobody, it seems safe to say, stakes out groundhog holes on Feb. 2 to tell the weather. We prefer the newspaper, the Farmer's Almanac, the wooly worms, or some equally reliable prophet. Therefore, Groundhog Day is best honored by the telling of groundhog stories.

These can be akin to stories of Montana furbearing trout, Flathead Lake monsters, or herds of jackalopes, if your mind runs that way; my own tale is true.

My personal groundhog was special, and I truly admired him. As a boy of 14, I often had occasion to watch this great hulk of grizzled fur; my bedroom overlooked his kingdom, the orchard, and his castle, the woodpile. Despite his buck teeth and unintelligent face, I felt him wiser than myself. I envied his self-assurance and lordly manner.

It was easiest to observe him when I first woke up in the morning, as he prowled for fallen fruit. With legs so short his belly scraped the ground, he certainly wasn't awesome. But when he stood up on his hind legs and gnawed at

one of our Golden Delicious apples, he had all the serenity of a great brown-cloaked monk. He was the master of the orchard, and the rabbits and robins knew it.

I'm sure he would have lived out his entire seven or eight years in our orchard had not dark thoughts overtaken me. As much as I respected and enjoyed that burly woodchuck, I was filled with the compulsion to shoot him.

Looking back, I can't say why: Perhaps to demonstrate my skill as a hunter, although he wasn't a difficult quarry. My parents certainly would have disapproved. I'd never heard of anyone eating a woodchuck or wearing its hide. Perhaps it was just an adolescent need to assert dominance over the lord of the orchard. Maybe I thought that by killing it, I could capture some of its elegant wildness, make it my own.

The weapon was within my reach. My father had a .22 caliber rifle with a 4X scope, which he used for hunting. The life of the hog was in my hands.

A few days later, opportunity came. My parents weren't home, and the stout chuck had assumed his sitting position next to the woodpile. I took my father's suddenly heavy gun from the closet, my heart pounding a little harder. Guilt tried to catch up with me, but something inside drove me to move ahead of it.

As I loaded the gun, I wondered for a fleeting second if I'd enjoy the apple and plum trees as much without him. I wouldn't let myself ponder that point any further. I started my stalk. Stealth wasn't necessary; the chuck was accustomed to people and paid me little mind. I sat down with my back to a tree, only 30 yards from the unpretentious ruler of my backyard.

Resting my elbows on my knees, I peered at the chuck through the telescopic sight. He looked as big as a grizzly bear. Though I'd never noticed it from my bedroom window, he was quite a handsome fellow. Dark, wooly hair coated his back and sides, while finer, lighter-colored hair covered his chest and belly. The tips of his hairs were gray, like the short hairs around his muzzle and jowls. His dark brown eyes watched me but showed no fear. I played the crosshairs up and down the chuck, savoring the close-up view.

I slowly eased the safety off my gun. If I got to know this creature any better, I was going to lose whatever it was that made me want to kill him. As I pulled the trigger, something unconscious — as unconscious as the drive that compelled me to shoot — jerked the hand that was steadying the gun, and the bullet split wood from the chuck's house. He stared at me for a second and then shuffled into the woodpile.

That was the last I saw of him; he

abandoned the orchard and the woodpile soon after. Woodchucks are used to such inhospitable treatment, and I suspect he bore no grudge against me. But he had his revenge. The orchard was never quite the same without him.

Hank Fischer is the Montana representative for Defenders of Wildlife. This article was paid for by the HCN Research Fund.

