

High Country News

In the News

ROUNDUP

Drilling Teton oil ... Idaho water laws wither ... Solar polls well ... Business loans dry up ... BLM nominee fends criticism ... and

SHALE BAKE

The recipes for oil shale all call for doses of water, salts and social impacts. But the technical trick is in the baking, geologist Bob Anderson reports in part two of "Oil Shale Future."

AUCTION ACTION

at a local ranch sale, and with years of experience plus a five dollar bill, Harry Lindeaur snags the deal of the day - a summer's supply of



WILD WARFARE

Unsatisfied with only preserving existing wild lands, a new group of radical conservationists wants to re-create some lost wilderness. Their slogan: Earth First! Their first target: Lake Powell and the Glen Canyon Dam.

Dear Friends	2
Hotline	
Barbed Wire	5
Classifieds	10
Reporter's Notebook	11
Books	12
Bulletin Board	13
Opinion	14
Letters	15
Afield	16

Tax forecloses inheritance dream



AN ABANDONED Wyoming homestead

by Michael Moss

When Reno Chace died two years ago, the 87-year-old sheep grower left a healthy ranch. Since 1949, except for two troublesome years, his 74,000-acre spread near Medicine Bow in southcentral Wyoming was operated in the black, debt free. But on his death, the inheritors of

Chace's estate ran into a web of financial hazards that in two quick years all but ruined his life's work. A mammoth \$670,000 inheritance tax sunk the estate into mortage. Soaring operating costs required another \$375,000 loan at lofty interest rates.

Finally, unable to make ends meet on either debt with the low prices his sheep were getting, Reno's successor, Harry Chace, 57, gave up, sold the ranch to a neighbor, and bailed out of the agricul-

ture business entirely.

The Chaces' financial plague was caused by several factors acting to-gether to raze the balance sheet. The initial stumbling block and the one getting the most complaints from agricul-turalists is the inheritance tax. Congress is now considering legislation to ase this burden.

The first inheritance tax (also called estate or death tax) was passed in 1862 to help pay for the Civil War. Sub-

sequent taxes were enacted to finance the Spanish-American and World wars, although by 1942 the federal estate tax system was redesigned to reflect President Franklin Roosevelt's emphasis on redistributing wealth and stemming

the accumulation of "great" wealth. The 1942 design remains largely unaltered today. But other factors, includ-ing the structure of American agricul-ture, have changed dramatically.

There's a well-worn axiom in agricul-ture that a farmer or rancher will live a pauper and die a millionaire. That paradox stems from the dominance of land values in a farmer's assets. Indeed, an equally cited axiom is that one doesn't make money by farming but rather by simply owning agricultural

Many Rocky Mountain cattle ranchers last turned an operating profit in 1973, running on a traditional 10 year cycle in which two or three goods ones make up for the rest. Since 1973, however, while income has been depressed land prices nationwide have quadrupled.

Coupled with inflation and a general

increase in farm size, those soaring agricultural land values have altered Roosevelt's vision of "great wealth." Yet inheritance taxes remain tied to the 1940s scheme.

The average age of farmers and ran-chers has also risen, nearing 60 in many areas. This latter trend more than any other is bringing the inheri-tance tax issue to a head.

tance tax issue to a head.

Three years before his death, Reno
Chace was advised to take some drastic
steps to prepare his estate. One suggestion was to give the ranch to his heirs,
then and there, paying a much smaller
gift tax and avoiding the inheritance pitfall.

But Reno was a "stubborn old-timer," according to his nephew Harry, and he resisted. The estate planning he did finally accede to was largely negated by federal rules requiring that such affairs be handled at least five years before death. The bill to Harry was stagger-

That \$670,000 was all the ranch was worth," he said bitterly of the inheri-tance tax on the Chace estate. "The trouble is that Uncle Sam is not an ac-countant; he's a tax collector."

REFORMS AFOOT

Malcolm Wallop (R-Wyo.), a member of the Senate Finance Committee, agrees and has again introduced legisla-tion to reform the federal inheritance tax law. "In too many instances, the

(continued on page 10)

Dear Friends.

at High Country News' door ready to make the "miracle" work. This month she cleared her desk of earplugs and safety pins and moved on to her new job.

As oldtimers remember, their do-nations kept the paper afloat back in 1973 when Tom Bell was nearly forced to fold. The money — known to the staff as "the miracle" — also to the staff as "the miracle hired Joan and her husband, Bruce Hamilton. Tom left the paper to tham a year later, saying, "Play" them a year later, saying, "Pla with it until the string runs out Thanks to Joan's cautious spending as managing editor and to her strong editorial leadership, the string stretched and stretched.

When her daughter, Kate, was when her daugnter, Kate, was born in October 1979, we watched her grow up at HCN and down the hall at the Sierra Club where Bruce now works. Joan resigned from the managing editor position but stayed on as reporter and copy editor. She figured out how to nurse, holding Kate with one arm, while she cra-dled copy and an editing pencil with the other. Sometimes she or Bruce was discovered reading im-pact statements to Kate to put her

Joan's desk was covered with the usual piles of copy and letters, but mixed in were pacifiers, and a baby mobile dangled above her head. Still she found time for her other passions — jogging, tennis, back-packing, birding and music.

Although Joan was eager to launch her freelancing career, she stayed with the paper, gracefully withdrawing from her former leadership role, until a new copy editor could be trained. Now she is divid-ing her time between freelancing and family. But she still stops by, a baby on herhip and pencil behind

Last, we want to give a word of thanks to the folks who put to-gether Not Man Apart, the fine weekly publication of the national environmental group, Friends of the Earth. When HCN went public with its financial woes a few months ago, NMA responded with a prominently-placed message to its readers, telling them of our plight and urging them to sub-scribe. We read NMA regularly and have helped ourselves to story and format ideas in the past. We hope they'll take some of our ideas in return, and we urge readers to have a look at NMA. A subscrip-tion is \$15 from Friends of the Earth, 124 Spear St., San Francisco, Calif. 94105.

— the staff

Western Roundup

BLM nominee defends leases

Despite fears of a conflict of interest, national environmental groups including the Sierra Club have not opposed the nomination of Colorado rancher Bob Burford to head the federal Bureau

Bob Burford to head the federal Bureau of Land Management.

Burford, former speaker of the Colorado House, now holds grazing leases on some 32,000 acres of BLM land near Grand Junction. The Denver Post reported last week that in 1979 Burford was fined \$169 for letting his leases area. Further, stray out of his lease area. Further, stray out of his lease area. Further-, Burford has had repeated run-ins with the agency over management policies, and a 1976 BLM report found the public land used by Burford to be "overgrazed" and in a "deteriorated

range condition," reports the 1 co.

These and other concerns were raised by the Sierra Club in testimony before the Senate Energy and Natural Re-source Committee hearings on Bur-ford's nomination last week. But the group has not taken a position either for or against Burford, according to Northern Plains representative Bruce Hamilton

Asked by a panel member, Sen. Dale Bumpers (D-Ark.), to elaborate on the conflict of interest concerns, Burford told the committee that over the long run his leased grazing land has actually improved and that it was not uncom-mon for cattle to stray off of lease areas. However, David Jones, manager of the BLM's Grand Junction office, told the Post that the district averages only one such fine annually among the 250 ran-chers holding leases, implying that if it is common, few ranchers are caught. Burford told the Senate committee



that if confirmed, he will transfer his grazing permits to his three sons. He left open whether he would subsequently buy back those leases after leaving office.

Much of the concern from environ-

mentalists centered around Burford's support for the Sagebrush Rebellion He sponsored a bill in the state legisla-ture to study the transfer of federal lands to the state.

lands to the state.

Burford now says the measure was simply a "method of getting the attention of the federal government." He reassured the Senate committee that while he sympathizes with the Sagebrush Rebellion because the federal government has been "arbitrary and captions" in managing nublic land he ricious" in managing public land, he believes federal land should stay under federal ownership.

Idaho water users face budget drought

With its budget slashed to last year's levels, the Idaho Department of Water Resources will be unable to keep on top of a host of water quality issues threatening the state, says agency director Ken Dunn in Boise

Some \$500,000 of the agency's re quested \$3.6 million budget was cut by the dollar-conscious state legislature last month, translating into 20 percent less personnel and the curtailment of many programs.

Abandoned, says Dunn, will be the agency's efforts to enforce the new Stream Channel Protection Act (which protects rivers from dredging and channelization), monitor wells at the Idaho National Engineering Laboratory (suspected of leaking low-level radioactive water into the Snake River aquifer), and give timely attention to water rights and development applica-

"At a time when we're facing innumerable threats, from interbasin transfer schemes to increased mining and irrigation activity, the agency's budget has been seriously undercut," said Paul Cunningham, special assistant to Gov. John Evans (D).

Also critical of the budget cuts is Sen. Also critical of the budget cuts is Sen. John Peavey (D-Carey), who said the agency's subsequent rollbacks would be especially painful for farmers and ranchers seeking water rights assistan

A water rights protest case now takes some 120 days to process, said director Dunn, but his new budget will mean delays of up to one year. Water rights applications have jumped to 1,600 this year from 1,125 this time last year, and Dunn predicts a record breaking

Only a three-month processing delay would cost the state's water users some \$8.5 million, predicted director Dunn's predecessor, Steve Allred. Allred res-igned the post last month. Although he stressed that the budget cuts did not move him to quit, he was highly critical of the legislature's action.

To Allred, the most serious threat facing Idaho water comes from California and the Southwest. "They've got to find a new water supply; they've got no choice," he told the Idaho Statesman. With many federal resource agen-cies now headed by Southwestern con-

gressmen, he fears Idaho's water will be come a target.

Congressmen join in 1080 appeal

The nation's woolgrowers are getting support from several Western consupport from several western con-gressmen in their efforts to regain the use of poisons in fighting coyotes. The congressmen, led by Rep. Larry Craig (R-Idaho), wrote to Interior Secretary James Watt, saying that cattle and sheep valued at \$115 million are being lost each year due to a "lack of predator control."

The woolgrowers are seeking an emergency release of the poison 1080 this spring to protect their flocks. Former President Nixon banned the use of 1080 in an executive order in 1972 because it is not selective and can kill badgers, marmots, bears, and foxes as well as the intended target, coyotes. Dick Randall of Defenders of Wildlife

in Rock Springs, Wyo., opposes lifting the ban. "The average Wyoming voter

does not believe that poisoning meat-eating wildlife is a good way to go about managing predators," he said. "Poisons should not be strewn across our Wyoming land

Both Watt and Secretary of Agriculture Bob Bergland reportedly favor the use of 1080, citing cost savings over other, non-chemical control methods

High Country News

The independent ral resources biweekly of the Rockies

Single copies 75 cents.

Published biweekly at 331 Main, Lander, Wyo. 82520. Telephone 307-332-4877. 087480). All rights to publication of articles herein are reserved. nd class postage paid at Lander. (USPS No

Publisher Editor Staff Writer Associate Editor Contributing Editor Correspondent

Business Manager Production Manager Production Assistant Circulation

Jazmyn McDonald Kathy Bogan Cyndy Simer Betsy Schimelpfenig

Call for permission to reprint any articles or illustrations. Contributions (manuscripts, photos, artwork) will be welcomed with the understanding that the editors cannot be held responsible for loss or damage. Articles and letters will be published and edited at the discretion of the editors.

retion of the editors. To have a sample copy sent to a friend send us his or her address. Write to Box K, Lander, Wyo., 82520. ISSN: 0191-5657

Mine act contested

Several companies with coal interests along the Tongue River in southeastern Montana have filed a lawsuit challenging the unsuitability provisions of the federal strip mining control law. The litigation was promp-



Teton oil prospect springs wild suit

Saying that Interior Secretary James Vatt "won't vigorously defend the public interest," a group of five environ-mental groups has asked to intervene in a lawsuit that would require oil and gas leasing in the Teton Wilderness Area in northwestern Wyoming.

The lawsuit was filed in January by Cheyenne, Wyo., attorney James Learned on behalf of himself, the Kansas-Nebraska Natural Gas Co., The Williams Companies, Petroleum Exploration Inc. and others. It challenges a Bureau of Land Management decision not to issue petroleum leases in the Teton Wilderness. The area comprising the wilderness, which was offi-cially designated in 1964, has been withdrawn from leasing since 1947. Then-Interior Secretary J.A. Krug halted earlier lease attempts because of the scenic, recreation and wildlife at-tributes of the area. BLM re-affirmed that decision last year by rejecting leas ing applications.

Now, however, a number of prom ing oil and gas finds have been made in the Overthrust Belt, a geological structure in western Wyo., that underlies the Teton Wilderness. The plaintiffs in Act compels leasing in wilderness areas until 1984.

Sierra Club regional representative Bruce Hamilton said, "The reasons for keeping the Teton Wilderness off limits to development are still valid, but with Watt actively trying to pry open the Wilderness System for mineral development we are concerned that he won't vigorously defend the public in-

Before becoming Interior Secretary, Watt headed the Mountain States Legal Foundation which was instrumental in bringing several lawsuits to open wilderness to oil development. Hamilton said, "This is clearly a sweetheart lawsuit. With Watt being sued by his former friends, clients and contributors, the Teton Wilderness and the entire wilderness system are in deep trouble. Watt is supposed to be the guardian of these areas, but instead he has been acting as a salesman.

Other groups joining the Sierra Club in its petition to intervene are the Wilders Society, the Jackson Hole Alliance for Responsible Planning, the National Parks and Conservation Association and the Izaak Walton League.

Federal loan cuts favor energy firms

May 10 opens the annual Small Business Week, but for many firms in the Rocky Mountain region not in energy-Rocky Mountain region not in energy-related fields, this year's celebration will be dimmed by substantially lower federal loan support.

The Reagan administration has

ed cutting the federal Small Business Administration (SBA) loan prog-ram by nearly 40 percent for the remaining year, with next year's budget cut to 1980, pre-inflation levels. Those reductions will not require

shutting down any regular business loans at this point, said SBA Regional Director Ted Lindhorn in Denver. But in Wyoming, where nearly one-half of the agency's loans and loan guarantees go towards energy-related industries, agency policy decisions will probably give energy firms an even greater share of the remaining funds, said SBA loan specialist Henry Ise in Casper.

We're going to be more selective." he said, "concentrating on businesses proven successful and having the greatest employment opportunities. In Wyoming, energy firms are a best bet."

Nationwide, the SBA made 250,000 Nationwide, the SBA made 250,000 loans last year valued at \$13.3 billion to "small" businesses, which it defines as including retailers with less than \$2 million in sales, manufacturers with up

in the same in a manufacturers with up to 500 employers, and contractors with less than \$10 million in business. In Wyoming, where the proposed cuts translate to roughly \$6 million, over half of the total \$19.5 million loans paid for land and buildings. While much of that money went to oil and gas development firms, said Ise, other successful applicants included solar



nerchants, auto dealers and one attorney. All but the oil and gas developers will find it increasingly difficult to tain loans or guarantees from SBA, Ise said. Brand new enterprises will have virtually no success, he predicted.

virtually no success, he predicted.

Regional Director Lindhorn said
most lusinesses will have to turn to
commercial lenders, including banks.

"Like marketing anything, you have to
prove to the bank that you can make
money and pay back the loan," he said.

Risky, new innovative enterprises,
he said will fare provil, as the propery
he said will fare provil, as the propery

Risky, new innovative enterprises, he said, will fare poorly as the money supply remains tight.

SBA loans in Rocky Mountain states last year ranged from 155 loans (for \$19.5 million) in Wyoming to 707 loans (for \$71 million) in Colorado. Montana applicants received \$55 million; Utah, \$39.5 million; and the Dakotas roughly \$25 million each

area along the Tongue River be dearea along the Tongue River be de-clared unsuitable for mining. The suit was brought by Montco, which is planning a strip mine north of Birney, Mont; Wesco Resources, which owns part of the railroad that would serve the mine; and several cattle companies with coal interests in the vicinity. They say the unsuitability execution.

ted by a petition from the Northern Plains Resource Council asking that an

ity. They say the unsuitability section of the Surface Mining and Reclamation Act is unconstitutional and takes prop-

erty without just compensation.

The Northern Plains Resource Council — a Montana ranchers group — and its three affiliates say the area could not be reclaimed because of the high levels of sodium in the area. They also say the river and its tributaries would be degraded.

Wyoming regulators rejected a strip wyoming regulators rejected a strip mine proposal along the same river, saying the mine would violate state and federal laws prohibiting mining allu-vial valley floors. However, the com-pany that owned the land, Whitney Bepefits, Inc. of Sheridan, is now seek nerits, inc. of Sheridan, is now seeking \$232 million in compensation from the state. The Wyoming attorney general is considering whether the claim has any standing.

Law clinic sieged

University of Oregon basketball players and Idaho salmon have more in common these days than quick move

nder pressure.
Efforts by the school's Environmental Law Clinic to protect the salmon have upset some university financial supporters and one sugar daddy is witholding a \$250,000 donation for a new basketball pavillion until the

clinic shapes up.

At issue is a lawsuit prepared by student lawyers last year challenging Forest Service timber harvest levels in Forest Service timber narvest levels in Idaho. The cutting would degrade sal-mon spawning streams, they claim, and the clinic intervened on behalf of the Idaho Wildlife Federation to force rewriting of the agency's environmental impact statements

Set up five years ago and largely funded by the National Wildlife Feder ation, the clinic has also brought sev-eral controversial administrative appeals of Bureau of Land Manage and Forest Service dec

In a letter to school officials last De cember, a lawyer for Evergreen Forest Products called the situation "incredibly antipathetic to the interests of the bly antipathetic to the interests of the University...since many of the large supporters...are to be found among (natural resource industries)." To em-phasize that point, Eugene lumberman Aaron Jones is withholding the quarter of a million dollar donation for the payillion, rallying other school backers to help curb the clinic.

School officials are publicly backing the clinic thus far, although Clinic Di-rector John Bonine says he fears that "if money talks, there may be enough spent to destroy this program."



Solar poll finds homeowner interest

Homeowners strongly prefer solar energy over other energy alternatives, but they are leery about the initial costs and reliability of solar energy systems, according to a Gallup poll conducted last fall for the Solar Energy Research

Two interesting general findings are that 57 percent of the respondents said they expect the energy situation to im-prove over the next five years, while only 27 percent expect it to worsen. Also, nearly two-thirds of the homeowners said that the energy situation has not affected their lifestyles. Only nine percent said they've had to make serious changes in their daily habits.

A remarkable number of people — 77 ercent — told Gallup that they favor the use of solar energy in general, while 58 percent want to use solar in their own homes. Most people also felt that solar energy was both commercially and economically feasible, as well as reliable over the long haul.

Substantial concern remains over the feasibility of purchasing solar systems, however. Well over 80 percent of the people had concerns about warranty coverage, initial costs, frequency of repair and reputability of solar energy firms. In fact, private industry got low marks among the homeowners on ques tions about its ability to solve any of

People have been very slow to act on their opinions, the survey showed. Only four percent of those polled said they definitely plan to invest in solar energy systems. Fourteen percent said they've considered the idea and may invest, and 68 percent said they have not even considered the idea

Western Roundup

Pact reached on uranium cleanup

Western Nuclear, Inc. has reached an agreement with the state of Wyoming after arguing for a year and a half over water pollution from the company's uranium tailings dam at the Split Rock mill. The mill is the oldest in the state.

In November 1979, the state of

In November 1979, the state of Wyoming issued a cease and desist order when Western Nuclear expanded a tailings dam without the state's permission. The state was concerned that the rate of pollutants migrating toward the Sweetwater River would be exacerbated.

Now the company has agreed to install monitoring wells, sample ground-water, map existing water wells, and pump groundwater out if pollution problems occur. If the uranium market recovers and the company decides to add to its tailings dam, it must construct a barrier to prevent migration of tailings pond seepage.

E. Montana lures synfuel interests

Eastern Montana is becoming a hothed of synthetic fuels activity. Mobil Oil Corp. has told the state Department of Natural Resources and Conservation that it is considering a 40,000 barrel per day coal liquefaction plant in Dawson County. And Tenneco Coal Gasification Co. is considering building a 280 million cubic foot per day coal gasification plant near Wibaux.

Tenneco has asked the government's new Synthetic Fuels Corp. for a \$3.8 billion loan guarantee to build its billion project, which it is also considering locating in Golden Valley, N.D.; Campbell County, Wyo.; or one of three sites in Mississippi.

Tenneco has some water rights on the Yellowstone River, but if built in Montana the plant would be located in the Little Missouri River Basin. Consequently, the Montana legislature would have to approve an interbasin transfer of the water. Tenneco said it is still considering a site near Glendive, Mont., if the interbasin transfer is not approved.

The U.S. Department of Energy last December approved a \$20 million loan for basic engineering, site selection and environmental work for the plant. However, Reagan administration budget cuts have scrapped the loan. Tenneco said it plans to proceed anyway, though at a slower pace, and will have the plant at full capacity by 1990.

Mobil has filed a water application to take 400 cubic feet of water per second from the Yellowstone River in Dawson County—also near Glendive—to supply its proposed liquefaction plant. The company wants to produce 40,000 barrels daily of unleaded gasoline, using about 14 million tons of coal annually. Mobil already has coal leases in the area containing an estimated 395 million tons of recoverable lignite. Its plant won't be on line until about 1992, said company spokesmen.



New hangars given green light

The U.S. Interior Department and the Jackson Hole (Wyo.) Airport Board have settled a lawsuit which will allow some construction at the airport but which fails to address the issue central to the future of the facility — whether the federal Park Service has the authority to disapprove the local board's plans.

The case concerned the board's request to build hangars and a ramp extension at the airport, which is located in Grand Teton National Park. Under the lease with Interior, the Park Service must approve any plans for new construction. The airport board, however, argued that "approval" meantjust that — the Park Service could review and approve the plans, but it could not deny them. The Park Service gave up that right when it signed the lease, the board said.

Enter the Sierra Club. The environmental group argued that the Park Service did not give up the right to disapprove construction projects within the park boundaries. Furthermore, said the Sierra Club, if there is any interpretation that the Park Service did give up that right, then the entire lease is illegal because the Park Service violated its congressional directive.

The settlement did not address the approval issue. It simply said that the airport board could build the hangars and the board withdrew its request for the ramp extension. This left the Sierra Club out in the cold. Allen Stokes, Jr., attorney for the group, wrote to Interior Secretary James Watt urging him to disapprove the settlement. "Additional facilities add to the esthetic impairment....of park resources," Stokes said, adding that approval of the hangars violates the Interior Department's statutory duty to protect the park.

An airport representative said the hangars are necessary for safety.

hotline

DIMMING WATT

The Sierra Club is launching a nationwide petition drive to have James Watt replaced as Secretary of Interior. The petition will be directed at Congress under First Amendment provisions for citizens to petition Congress for "redress of grievances." The petition says. "Watt is representing private economic interests rather than following the laws that define his responsibilities. He is sabotaging conservation goals supported by a vast majority of the American people. He is seeking to defuse decades of legislation designed to protect our natural resources..." Sierra Club spokesman John Hooper says the petition was inspired by a series of events catalogued by the group, including acceleration of offshore leasing and oil and gas leasing in environmentally sensitive areas. The group is aiming for a million signatures nationwide within the next few months.

WILDS RELEASE

In what conservationists are calling the most radical anti-wilderness proposal ever, Sen. S.I. Hayakawa (R-Calif.) has introduced a new national forest wilderness release bill. S. 842 would mandate permanent non-wilderness status for some 36 million acres of roadless lands, prohibit further studies, ban legal challenges to the controversial Roadless Area Review and Evaluation study, and set up strict deadlines for congressional consideration of other wilderness proposals. Idaho Republican senators James McClure and Steve Symms have cosponsored the bill. Sen. Malcom Wallop (R-Wyo.) is considering holding hearings on S. 842 in his public lands subcommittee as early as the week of April 20.

TRIBAL RIGHTS

Efforts to balance federal and tribal sovereignty rights have paid off at Ft. Peck Reservation in northeastern Montana. Leaders of the Assiniboine-Sioux tribes and the U.S. Environmental Protection Agency have agreed to consolidate several environmental quality programs on the reservation, giving the tribes a share of enforcement responsibilities under a new Office of Environmental Protection. Some \$126,000 in federal and tribal money will be lumped together in one program to implement the Clean Air, Clean Water, and Insecticide, Fungicide and Rodenticide Acts.

NEW WATER

In the first agreement of its kind in New Mexico, Phillips Uranium and state officials are working out a water replacement plan to compensate well-water users who lose out to the Company's Nose Rock uranium project. Uranium mine dewatering is largely responsible for lowering the region's water table by 20-25 feet each year and resulted in a new state law last year giving affected well owners compensation rights. Besides substitute water supplies, compensation may include new replacement wells, artificial recharge, or reimbursement for higher pumping costs. Notably, the new law absolves the company from responsibility in cases where it can document waivers of protection by well owners.

Spurned energy bill spurs ballot drive

Legislation to force the state's utilities to invest in the cheapest possible energy sources has failed to pass the Montana state legislature. But its sponsor, Rep. Jim Azzara (D-Missoula), says he'll try for a 1982 voter referendum on the issue.

The legislation, H.B. 780, would have required the state's three major utilities and the Public Service Commission to determine the most cost-effective alternatives for producing and conserving energy resources. If those studies gave high marks to residential insulation, district heating or small insulation, district heating or small co-generation schemes, the utilities would have been required to invest in those sources and not in traditional projects such as coal-fired power plants.

PSC member Tom Schneider said the bill "laid the groundwork for the best piece of comprehensive energy legislation I've seen." But testifying before the Senate panel that tabled the bill, Montana Power Co. representative Bob Gannon said his utility already had some of the lowest utility rates in the country. The legislation, he charged, would add yet another delay to the "tremendous problems" the utility is already having in getting permits for the proposed Colstrip 3 and 4 coal-fired generating units.

generating units.

Montana-Dakota Utilities representative John Alke also pointed out that the Montana PSC would have a virtual veto power over facilities constructed in other states, even though Montana residents would finance only part of the

Not so, said the bill's sponsor Azzara.
"They could still build them if they
want, but they couldn't charge Montana ratepayers for their cost."
Azzara said he believes the utilities

Azzara said he believes the utilities decided to oppose the bill once they realized it might reduce their sales volume. "In the end, it boiled down to basic greed," he charged.

- C. Peter Nielsen



BOAT DOCKS GALORE

Recreation facilities at dam sites were to have received the sharpest water resource budget cuts this year, but the Colorado River Storage Project in western Colorado has escaped in grand style. A contract topping \$4 million was awarded this month to Grand Construction Co. of Montrose, Colo., to upgrade the Curecanti National Recreation Area, west of Gunnison. Servicing three reservoirs, the new facilities will include 170 campsites, a ranger station, two amphitheaters, fish cleaning sta-tion, boat dock, breakwater, a historic train exhibit, and a pedestrian under

URANIUM SLIPS

Bowing to the depressed uranium market, in which yellowcake prices have fallen from \$43 to \$25 per pound in the past year, the Cotter Corp. is laying off 75 of its 200 workers at the Canon City, Colo., mill. The 12,000 pounds of yellowcake it produced daily, used to yellowcake it produced daily, used to fuel Commonwealth Edison nuclear power plants in the Midwest, has been cut to 5,000 a day. Exxon Minerals Co. is also cutting back operations at its Is also cutuing back operations at its Douglas, Wyo., mine, reducing surface mining by 50 percent and planning to halt underground mining entirely by 1989

FAST DRIVING

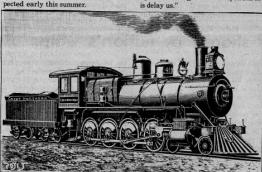
Just weeks after Utah Gov. Scott Matheson (D) vetoed a similar bill, the Colorado Senate has approved legisla-tion easing the penalty for driving up to 70 mph. The bill, SB 80, would eliminate speeding's current effect in raising insurance premiums, limiting the pen alty for exceeding 55 mph to a \$25 fine. Matheson believed the Utah law would have violated federal rules

OVERTHRUST GUSTS

Not only is the Overthrust Belt rapidly expanding in latitude, its wealth is also on the rise. The original deposit of oil and gas is concentrated in a 200-mile area in southwestern Wyoming, eastern Idaho and north-eastern Utah. But energy companies have found the term "overthrust" to be an almost magical lure for investors and new thrust belts are being reported from the Gulf of Mexico to Alaska. Now, the U.S. Geological Survey reports the original belt may contain three billion barrels of crude oil — two billion more than originally estimated. Rising prices should continue to make yesterprices should continue to make yester-day's uneconomic sources today's prize.

POLITICAL PREY

The future of plans to expand the Snake River Birds of Prey National Conservation Area in southern Idaho continues to wallow in state politics.
The state Land Board, voting along party lines, has requested Secretary of Interior James Watt to rescind an order by his predecessor, former Idaho Gov. Cecil Andrus, that expanded the original 31,000-acre refuge to 400,000 acres and limited new development ac-tivities. Democrats, including current Idaho Gov. John Evans, voted no, while the panel's majority Republican mem-bers supported the motion. Regardless of Watt's decision, Congressional hearings on the expansion question are ex-pected early this summer.



MOVING COAL I

In an effort to drum up support for a new railroad line from Wyoming's Powder River Basin to Nebraska, Wyoming coal producers are blaming rail transportation for its losing strug-gle to meet production goals. Gov. Ed Herschler (D) has predicted annual coal production of 300 million tons this decade. But Bill Budd of the Wyomi Mining Association says only half that goal will be reached because railroads are inadequate. Union Pacific spokes-men have responded to the charge by asking for support for several expan-

NEW WELLS ABOUND

Some 1,650 oil and gas wells have been drilled so far this year in the Rocky Mountain region, surpassing last year's total by 50 percent and setting the industry on its way to complet-ing a record 7,674 wells this year, re-ports the Petroleum Information Corp. Drillers in Colorado, New Mexico and North Dakota have been particularly busy, with Colorado explorers completing 428 wells.

MOVING COAL II

RIGHT-OF-WAY FARM

Plans to run a 290-mile transmission line through nine western Colorado counties have sparked bitter comments over right-of-way acquistion, with one targeted landowner lamenting, "I don't own a ranch, I own a 'right-of-way' farm," and another, "The right-of-way

men promise you the moon and never even give you a star." But you're wast-

ing your breath, the landowners were told recently by the project's spokes man, Colorado-Ute Electric Associa-

tion President John Bugas. Bugas,

ports the Denver Post, bravely said at

a public meeting: "The worst you can do

Meanwhile, U.S. coal exporters are blaming "unreasonable" railroad charges for their headaches in supply-ing new foreign markets. Overseas shipments of coal increased by two-thirds last year to 72.8 million tons, and estimates predict 134 million tons in exports by 1990. Charging the railroads with monopolizing the market, the U.S. Coal Exporters Association said rail costs are skyrocketing in the absence of competition. The group has asked the Interstate Commerce Commission to investigate, using the panel's regulatory powers bestowed by the 1980 Staggers Rail Act.

COLO. SENATE REBELS

Voting 25 to 9, the Colorado Senate has endorsed the Sagebrush Rebellion. The bill, SB 170, would also set up a panel to establish management proce-dures should Colorado receive the 16 million acres of U.S. Forest Service and 8 million acres of BLM lands within its borders — a decision that rests with Congress. The bill is now being considered by the House.

barbed wire

Things we are happy to hear: "The gravest conceivable accident to a nuclear reactor is far less de-structive than the detonation of a nuclear weapon..." — Summary headline in a Scientific American article entitled "Catastrophic Re-leases of Radioactivity."



Here is a regulatory success story from the South Dakota legislature. Under a new law passed this ses-sion, ranchers wishing to run cattle fences across streams may do so, but only if they install gates mid-channel to allow canoeists to pass. Whoever said there was no middle ground, or middle gate, between



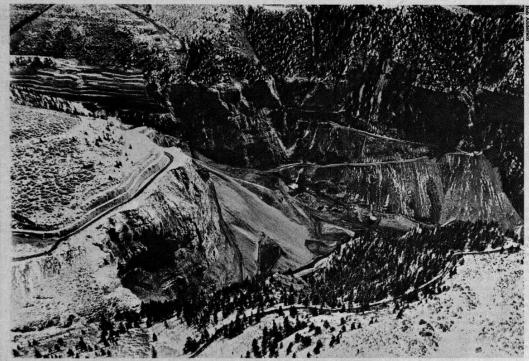
Interior Secretary James Watt is apparently bored by the Grand Canyon. Addressing the Conference of National Park Concessioners in early March, Watt said, "I went in September on the Grand Canyon Colorado River and the test, of course, is whether we ought to keep the motors on those rafts or not. The first day was spectacular. I'll tell you it was a thrilling day. The second day started to get a little tedious, but the third day I wanted bigger motors to move that raft out. There is no way you could get me on an oar-powered raft on that river — I'll guarantee you that. On the fourth day, we were praying for helicopters, and they came



neighbors in Gunnison County, Colo., where the postal service has converted rural route and box numbers to modern, multiple-digit street addresses. The sequential system, says official Glen Mallory, "...will be a definite help in issuing building permits."



The Montana Legislature is con-The Montana Legislature is considering a bill that would provide for exporting Montana wilderness areas via slurry pipeline, according to the April 1 newsletter of the Montana Environmental Information Center. "Wilderness slurry is the answer to the land management problems that plague the ment problems that plague the West," said Rep. Eminent DeMain. The discussion reached an impasse, however, when committee members questioned how long it would take to slurry the Bob Marshall Wilderness to downtown Newark. In the same issue, the Montana EIC reported that the state senate passed a bill that would eliminate air in the state. "Montana's clean air is just another tool for environmental obstructionists," a proponent said.



COLONY OIL SHALE mine and retort facilities are located here on the middle fork of Parachute Creek. Mine wastes will be disposed of in

the valley to the left, Davis Gulch. The mahogany zone is the steepest part of the cliffs.

Oil shale risks shared by nation's water users, taxpayers

by Bob Anderson

(Ed. note: Bob Anderson, a geologist from Colorado, examines the future of oil shale in the Rocky Mountain region in, a two part story. In this issue, he explores the water, reclamation and technological questions that must be resolved.)

Part two of two parts

If residents of Halfway, Oregon; Wolf Point, Mont.; and Cibola, Ariz., think oil shale is somebody else's problem, they'd better look again. Water binds their interests to those of people in the oil shale basins in Colorado, Utah and Wyoming.

Wyoming.
Oil companies have been slurping up water rights there since the early shale days of the 1920s. No one really knows how much water they now control, but it is estimated to be enough to support a half million barrel per day industry — a small fraction of what would be needed for maximum development.

Some of the operations will use underground water, but this could never make up the difference between the industry's needs and the water available in the shale area. Thus in its 1980 white paper Exxon revived the spectre of inter-basin water transfers.

inter-basin water transfers.

The Columbia River system of the Northwest and the Missouri River system of the Northern Plains still have enough aqueous comph to reach the sea, which the Colorado River has not

done for over a decade. So whenever a thirsty project comes along in the Colorado River Basin, someone gets the idea of piping water across the mountains. So far, the residents of the other river basins have been able to fight off the covetous entrepreneurs, but they watch warily whenever the idea comes up.

The Colorado doesn't just lack comph: the water portion of the solution is dwindling as its salinity grows. Already much of the lower Colorado River is too saline to use, as many residents of Arizona, California and Mexico know too well. Without dilution by the purer pasin waters, it would be worse.

Arizona, California and Mexico know too well. Without dilution by the purer upper basin waters, it would be worse. However, oil shale development could use up much of the purer water. In addition, it is expected to degrade the waters that will flow into the Colorado. The first reason, and by far the larger problem for the region, is the salts that will leach from spent shale piles. Preventing this is the companies' and the regulators' biggest task in planning reclamation. The second reason, which is more significant for local people, results from the underground profile.

The mahogany zone, where most of the oil shale lies, divides two underground water bodies. The upper aquifer carries waters that are sweet and pure; the lower waters are filled with sodium salts. Mining the mahogany zone could contaminate the upper aquifer, which won't make local ranchers who depend upon wells or springs from that aquifer happy.

happy.

Mines that cut through the aquifer will fill with water, which will lower

the local water table. Rio Blanco Oil Shale Co. is artificially recharging the aquifer near its C-a site to alleviate this problem, but it is too soon to tell whether this will be successful.

RECLAMATION

Water contamination can be a problem whether the wastes are crammed back underground, as some companies are proposing, or stacked on the surface.

Underground, it is virtually assumed that the salts from the spent shale would leach into the groundwater. Officials of the Colorado Mined Land division believe that if it is on the surface, they can isolate the wastes from the surface drainage systems.

State and federal reclamation specialists prefer putting the wastes at the top of drainages. In an arid region, flash floods are common. The waters gain destructive strength as they proceed down a valley. Wastes stored lower become a plug that would be highly susceptible to erosion. At the top, such floods pose less of a danger.

But due to the volume of spent shale contemplated, the suitable hollows in the vicinity would soon be filled. One unit-sized plant (50,000 bpd) would produce enough spent shale in a week to cover a football field 30 stories deep Tendril-like gulches would be replaced with flat planes of waste banks.

Yet something will have to give. Like the claws of a crab, nature's hydrological fingers regenerate, which will eventually threaten the stability of the fills, potentially spilling harmful leachates into the waterways.

Because of such problems disposing of wastes from underground mines, Steve Richardson of the Colorado Mined Land Reclamation division prefers working with open pit mines. Wastes are more isolated from the surface drainages since they can be left in the pit. But contamination of groundwater is still possible.

THE MATCH BELT

While hollows are being stuffed with spent shale, the towns are filling with the workers and those who serve them. Colorado Gov. Dick Lamm (D) calls the arid West the Match Belt. In contrast to the Sun Belt and the Frost Belt, the towns here often flicker to life, burn brightly and then are snuffed out.

Yet, he points out, if you have to choose between boom and bust, towns usually choose boom. In shale country, this tendency is reinforced by the fact that many of the towns, especially in Colorado, have been preparing for the expected shale boom for years. Using money from a state oil shale trust fund and other sources, they paved streets, built libraries and improved local services. Local private developers were also busy buying up property and building. When interest waned in 1976 and several shale companies withdrew, they waited and worried although they continued growing as a result of other energy development in the area.

In western Colorado, Rifle's population leaped from 1,200 in 1972 to 4,000. Meeker grew from 1,800 to 2,600 in 10 years, Rangely from 1,500 to 2,000. In Utah, Uintah County's population doubled over the last 10 years.

Exxon predicted in its 1980 white paper that 450,000 new jobs would be created by the shale industry alone. The Colorado Department of Natural Resources' estimates are more conservative, calling for 240,000 people in the area in 1990, including all those working in oil shale, coal, uranium, oil and their families. Even that is more than a 200 percent increase over the present population.

EXTRAVAGANT ALCHEMY?

Water, reclamation and social impact problems will depend partly upon the technology used in different areas to extract the oil from the shale.

Critics se turning rocks into oil as an exotic, improbable and extravagant alchemy. Industry, however, is fascinated at the prospect and determined to pursue it. Some of the oil companies involved in the 1950s and 60s have abandoned shale to pursue less risky technologies, but others have taken their places.

their places.
While federal interest in subsidizing the industry vacillated, the technology also had its ups and downs. Since oil can neither be dissolved nor squeezed out of the rock, it must be heated (pyrolyzed) at temperatures above 900 degrees F. The generic term for the vessels used in this heating process is the "retort." Each company has its own retorting process, which is either above ground (the AGR's or conventional retorts) or underground (in situ).

At this time the above ground retorting technology seems to be closer to proven: The pyrolysis reactions are better controlled; more oil is recovered (90 to 100 percent as compared with 30 percent or less); and it does not depend upon risky assumptions about the structural strength of rock far underground.

In the Paraho technology, for example, one of several patented processes, crushed oil shale is fed into the top of a tall cylinder. As it descends, the temperature increases. Once it reaches a steady state, the energy for the system is supposed to come from the burning of the coke that coats the particles of rock. Gases and oil vapors are tapped off near the top of the chamber, and the shale oil is condensed from the vapor.

The spent shale from the bottom of the retort, which is very alkaline, is disposed of either back in the mine or in a nearby valley

disposed of the cher above ground technologies use heat from an external source. The alkalinity of the wastes and the degree to which pyrolysis can be controlled vary. They can use shale mined from either underground or open pit mines.

Because in situ retort is so inefficient and unpredictable most companies have abandoned it. Over the past decade, they have developed a modified process that involves mining some of the oil shale (which is either retorted above ground or disposed of), breaking up most of the rest of the shale and then retorting it underground.

This approach developed because of problems with the integrity of the rock when in situ retort was first tried: It is naturally too impermeable to allow either the proper flow of gases needed for pyrolysis or the proper draining of the shale oil product. Faced with the problem of making the rock more porous, the industry came up with several ideas, some of which have been tested.

The most dramatic concept was nuclear detonation. Under its Plowshare program — peaceful uses of nuclear energy — the Atomic Energy Commission would have cooperated on the project, which would break up the rock using nuclear devices exploded underground. Several factors torpedeed the project, including growing environmental concern over radiation and the fact that similar detonations designed to stimulate flow of natural gas were all flops.

The Department of Energy and Geokinetics, Inc. are now attempting to

the pyrolysis zone are controlled by adding air and steam through pipes from the surface. Oil vapors condense and drip down through the broken up shale to be collected at the base of the retort.

Since the shale is heated hotter and for a much longer period of time than in other methods, the process is expected to produce more oil and fewer leachates. But so far, the results have been disappointing. While more oil is recovered than in the in situ processes, the modified process still releases only 30 to 40 percent of the oil. The differences between these levels and the 90 to 100 percent yields that the above ground recent yields that the above ground retorting processes claim seems to be the lack of precise control over underground operations and the fact that a large percent of the shale must be left under-

April 17, 1981 — High Country News-7

ran- trace white market with

substantially. Two companies are interested in improving their returns by producing other minerals—dawsonite and nahcolite— with the shale oil. Dawsonite is a carbonate of both aluminum and sodium and is found in vast quantities beneath the Piceance Basin mixed with the other minerals in oil shale. Nahcolite can be used in the glass and chemical industries, including as a scrubber agent in coal-fired power plants.

The aluminum and sodium recovery could improve the economics substantially. In fact, early company brochures before the return on oil skyrocketed said the sale of the two minerals could enhance the economics threefold, essentially demoting shale oil to a byproduct of the process.

But both companies — Superior Oil and Multi-Minerals Corp. — have land problems. MMC, which was formed by a former Superior Oil employee, has no land. Superior's land is not consolidated enough, and the company is seeking a land exchange to make development feacible.

The most dramatic proposal for breaking up the shale was underground nuclear detonation.

use superheated steam, which would be pumped down bore holes. Geokinetics hopes the steam, which is pressurized to reach temperatures above 212 degrees F., will penetrate the oil shale and provide the heat necessary to pyrolyze it. Unfortunately, the process consumes huge quantities of water.

DISAPPOINTING RESULTS

Industry hopes the modified in situ process can provide more oil than the completely underground retorting has, but there have been problems with this process, too. Generally 20 to 30 percent of the oil shale is mined and retorted outside. Shale is broken up and ignited below, leaving some of the shale to serve as the walls and roof of the underground retort.

Occidental Oil Shale Inc., a subsidiary of Occidental Petroleum Corp., has developed and patented the most widely accepted modified in situ technology. Occidental foresees clusters of vertical retorts, in which natural gas is used to initiate the pyrolysis at the top of the chamber, and the combustion moves downward a few feet a week.

When the coke in the shale begins to burn, the burners are shut off. The temperature and rate of movement of ground to serve as the walls and ceilings of the retort. The fire can "pipe"—burn quickly through a narrow zone of the rubble while leaving the rest unheated.

neated.

In addition, operation of Occidental's test retorts has been marred by several incidents, some of which bode ill for scaled up modified in situ operations. The largest of the retorts to date, number 6, was being inspected soon after its ignition on August 28, 1978, when a small hole was seen opening on the surface just above the retort. As the hole quickly grew, the visitors beat a hasty retreat, and the entire roof sill, or bulkhead, collapsed into the burning retort. This reflects, some feel, a fundamental inability to predict large scale structural strength of rock.

While Rio Blanco (Gulf and Standard of Indiana) is trying out Occidental's patented modified in situ technology, Rio Blanco officials freely admit that an above ground retorting process would be vastly preferable. However, because it could not get the land necessary for above ground retorting and because of certain lease payment stipulations, Rio Blanco has proceeded with the modified in situ process.

Shale oil production is a risky business, which is why it was not close to economic until OPEC raised oil prices

LOOKING AHEAD

David Stockman, now director of the federal Office of Management and Budget, wrote an article in December 1979 for the Readers Digest entitled "Why the Senseless Rush to Synfuels?" Then a member of Congress, Stockman said in the article, "Unfortunately, the ease of taking giant risks with other people's money leads bureaucrats and politicians to overlook crucial distinctions that private investors can overlook only at their own peril...."

President Reagan indicated when he took office that he agreed with such skepticism and that less federal money would be spent on synthetic fuels.

There were rumors that the Synthetic Fuels Corporation would guarantee only 60 percent of each operation's loans instead of 75 percent. However, this has not changed yet, and Cathedral Bluffs Shale Oil Co. (Occidental and Tenneco) was first in line to seek a 75 percent guarantee.

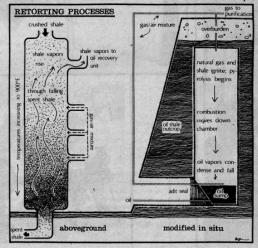
Now some Western environmentalists are concentrating their efforts on federal leasing policies, where they think the public could have the most influence on the size and the impacts of the oil shale industry. More than 80 percent of the oil shale resource is on federal land.

Congress is now considering legislation that would establish a major commercial leasing program. This would mean companies could lease more than one tract and increase the scope of their operations from the prototype — demonstration — size they are limited to now. Meanwhile, the Department of Energy is proceeding with a plan to auction four more prototype leases.

Kevin Markey, Colorado representative for Friends of the Earth, argues that only one more lease is needed — to test a multi-minerals technology.

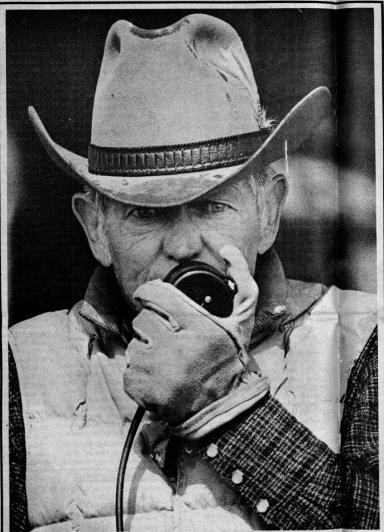
Oil shale development involves "giant risks" — economic, social, hydrological and environmental. But the fact that there will be an oil shale industry is no longer in doubt. How big the industry will be—and whether the risks will be warranted—are still to be determined.

This article was paid for by the HCN Research Fund.

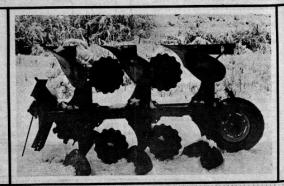


Selling the ranch for a ho









opper of dollars

by Michael Moss

Photos by Kathy Bogan

LANDER, Wyo. — "It's 10 o'clock straight up. Let's let her rip." And with that, Jared Nesset rolled into a practiced cantus that for the next seven hours beckoned, cajoled and steered the crowd into an unabashed buying spree. Nesset's shielded eyes scanned the

Nesset's shielded eyes scanned the faces for movement. His amplified voice reported the frustrated numbers as they reached for ever-new heights, while his right hand, leather-gloved and seldom still, clearly ran the show, spurring and tracking the bids. Deals were closed by a quick jab and a speedy, "Sold, to number 24 for 60 dollars."

The crowd, whipped to a froth, loved it. They went home with land levelers, tumblebug plows, lawn furniture, whiskey barrels, ancient English riding saddles, fire extinguishers and all of the other apparatus needed to run one of the largest ranches in Fremont County. "As is," was the unspoken rule; and a spouse's ire was the risk if a bargained couch was too long, a riding lawnmower too extravagant, or a stuffed trophy unappealing.

Nonetheless, it was serious business up front, where bidders outdid one another for the pleasure of Nesset's acknowledging jab. Prices soared. Towards the rear, seasoned auction goers snickered. "Plumb crazy," said one rancher standing in line for the outhouse (to use, not buy). "I saw some guy carrying off a stack of hose that hadn't been good for two years." Said another, "I could have bought that for less, brand new, in town." While a third, tickled by a particularly flighty run of bids, turned to no one in particular and laughed, "Believe it's time for me to go home."

"Sometimes you just get took," said Harry Lindeaur, 72, whose pickup has hauled home a bidder's share of auction acquisitions. "The worst I ever did, and I've been around here since 1929, was to buy a D-8 tractor with a 14-foot dozer for \$6,500. Still don't know why I got it. I've only used it a couple of times to plow my neighbor woman's garden."

blow my neignoor woman's garden. Earlier that cold morning, even a' thermos of hot coffee brought its owner a jestful offer. The curious rummaged through the near vacant ranch house, poking into cupboards, inspecting the fixtures, sizing up the merchandise and occasionally the previous owners. "That's a nice hardwood lamp," a man said to his companion, "but why'd they put that damn brand on there?" A woman guarded an assembled box of

woman guarded an assembled box of kitchen gadgets with a watchful scowl. Five minutes before 10, rumor had it, the sellers would have taken \$10,000 for everything in the house. But by noon, the dining room set alone had brought in \$3,500, and everything else in the house, including the lamp with the brand, drew some \$40,000 in bids.

Out in the fields, meanwhile, people checked over the ranch equipment metal sculptures of every function set up like exhibits in a farmyard museum. In the sheds, a collage of tools lay sorted, waiting; tractors warmed up.

Everywhere, there was speculation. "What'd be a steal on that?" one would ask, getting a reply of, "Anything under 400."

A steal, however, was the one item hard to find. An electric butter churner brought \$50. The ranch's three-quarter-circle brand went for \$750. Nesset's right hand index tapped \$12,500 for a small Ford tractor. Total sales topped \$120,000.

A spring, wet snowfall the previous night had turned the chugwater-red dirt to mud. Yet still they came, abandoning all but the most essential Saturday chores to drive up the North Fork Road to the Boeseke place, just past where Mexican Creek slips into the North Fork of the Popo Agie (po-po-ja) River. Nearly 2,000 people in half as many vehicles turned fields into parking lots; the ranch house carpets suffered mud-caked boots. If there were ghosts left to guard this ranch, they were in hiding.

There was, in fact, very little left of the Boeseke spirit. When asked about the previous owners, Helen and Elmer Boeseke, the auction goers expressed little sympathy. They were long dead and were hardly paupers needing commiseration. Elmer had emigrated into the canyon a decade ago from an oil-rich Southwestern estate. Unsettled by retirement, he chose to run a working ranch, acquiring neighboring parcels until his land grew to 14,000 acres, three times the average ranch size in Wyoming.

An exception to the crowd's disinterest in the past was Corky Facinelli, the Boesekes' ranch manager for most of its life. He stood quietly through the day, watching. But even Facinelli cracked a faint smile when a well-used post hole digger was sold. "If there's anything I'm glad to see go," he murmured, "it's that thing."

With bargains going fast, little thought was given that day to the ranch's uncertain future. The consensus around town is that it will be divided into parcels. The Boesekes left no children, and heirs sold the estate to 11 local people, who formed the North Fork Land & Development Co. Shareholder Ted Seely says they don't have much development in mind; they may divide it into two or three working ranches.

Nonetheless, the ranch is fertile ground for growing ranchettes, here in the Wind River foothills and only a dozen miles from Lander. County zoning, as in much of the Rocky Mountain region, is non-existent, and a developer enjoys a hassle-free ticket to subdivide, needing to meet only perfunctory minimum road widths or lot size restrictions.

Even if the Boesekes had left descendants able and willing to run the ranch, the temptation to sell would have been great. There'd be an inheritance tax to swallow, operating capital to muster, and falling cattle prices to face down.

and falling cattle prices to face down.
Such pressure has always suffered
the family farmer, however, and the
oldtimers at the Boeseke sale remem-



bered auctions past — auctions marking bitter homestead failures, at which tools went cheap and lost dreams brought nothing.

But memories didn't distract Harry

But memories didn't distract Harry Lindeaur when the deal of the day appeared. He snapped up a box of preserves for a five dollar bill — enough sweet stuff to last him, "a man who loves his jelly," until fall. As for me, I almost caught an oval loop rug. As is.



Help Protect Alberta's Wilderness Heritage



The Alberta Wilderness Association was formed in 1968 to:

- safeguard Alberta's remaining wildlands from the destructive hand of man so that this and future generations may continue to enjoy our Wilderness Heritage.
- provide a vehicle through which Albertans may speak to their elected representatives and government officials on matters concerning wilderness conservation and management.
- iii) attempt to educate members of the public in matters pertaining to wilderness use.

To this end The Association has attempted to persuade the government to pass a Wilderness Areas Act that provides for primitive recreational pursuits as well as ecological or benchmark wilderness. Currently Alberta's Wilderness Act provides only for the latter.

Join Now

Receipt #			Expiry			
ALBERTA WILDERNESS ASSOCIATION MEMBERSHIP Box 6398 Stn. D. Colgany, Alberta, Canada 129 2E1 Pease return this cold with your membership lea						
NAME (Please Print)	No.					
ADDRESS						
	Postal Code					
TELEPHONE: RES.		BUS.				
is this a GIFT MEMBERSHIP for in address on the back of this co Do you wish to be billed for ren	d for annou	incement purposes				
☐ Single - 1 year membership	\$8	☐ Institutional	\$25 \$25			
☐ Single - 2 year membership ☐ Family - 1 year membership	\$14 \$10	☐ Supporting ☐ Contributing	\$25 \$50			
☐ Family - 2 year membership	\$18		\$100			
☐ Student/Sr. Citizen	\$5	□ Donation	(Income tax deductible)			
(Note: Any amount over the basic	single fee	is tax deductible.)				

EXECUTED WITH WHICH WITH

TAXES...

(continued from page 1)

estate and gift taxes are not just preventing the excessive accumulation of wealth; they are actually interfering with the transfer of small businesses and farms from one generation to the next," the senator said when he announced his bill, S. 395.

The amount of inheritance tax a heir will be charged increases on a sliding scale with the value of the estate. A host of legal shuffles, including incorporation, collectively can reduce the tax. But even with careful estate planning, an inheritance tax of one-quarter the estate's worth is not uncommon; without any planning, the tax is often as high as one-half.

Wallop's bill would exempt estates valued at \$60,000 or below. (Currently, farms and ranches valued below \$176,000 are exempt.) It would also allow more operations to be taxed for inheritance on their value as working operations, rather than their higher, speculative land values.

speculative land values.

Wallop would also eliminate the controversial "widow's tax." A wife's non-monetary contributions to unincorporated farms are not presently recognized by the IRS, and she often must pay substantial inheritance taxes on what she thought was equally here.

what she thought was equally hers.
Wallop's staffer Bob Reynolds said he is optimistic the bill will pass; it now has 29 cosponsors, including most Rocky Mountain senators. But similar legislation failed to pass the last Congress; a companion bill is yet to be introduced on the House side; and the issue of inheritance taxes is not on President Reagan's narrowly restricted tax

reform agenda for this year.

State inheritance taxes are also a factor, in many cases reaching levels of one-half the federal taxes. However,

agriculture commissioners in several Rocky Mountain states predict state inheritance taxes would conform to changes in the federal law.

changes in the federal law.

The Idaho legislature, in fact, approved a bill this year to reduce its scale, from \$40,000 to \$25,000 on a \$500,000 estate. Because the state tax is normally simply credited to the larger federal tax, however, the new adjustment will have no practical effect until the federal scale is changed, said Deputy Agriculture Commissioner Level 1964.

land Fife.
"We're going to have to make it easier to pass on a farm," he said. "If we don't, farms will keep getting larger. New farmers will keep getting scarcer. And the days of the two-bottom plow will be gone."

Wallop's reform bill is supported by most farm groups, including the Farm Bureau and the National Farmers Union. But some land use reformers concerned about preserving the smallest possible family farm are wary.

on. but some and use reformers concerned about preserving the smallest possible family farm are wary.

To Chuck Hassebrook of the Center for Rural Affairs in Walthill, Neb., reducing or eliminating the inheritance tax may be a devil's bargain that would help fuel the trend towards larger farms to the detriment of smaller operactions. Increasing exemptions, he argues, will allow large estates to remain intact while giving the heirs new financial footing to expand even further.

"However, if our choice is between a few very large family farms and an investor-corporate controlled agriculture, assisting large family farms to remain intact and grow would probably be preferable," he wrote in a recent agricultural tax law analysis. To Harry Chace, that choice was not

To Harry Chace, that choice was not relevant. Would he have kept ranching had the estate tax been manageable? "I think so," he said, "although I sure don't miss the money worries."

classifieds

Classified ads cost 10 cents a word. They must be prepaid.

BUSINESS MANAGER for High Country News. Job includes bookkeeping, administration and financial planning. Begins May 15 at latest. Salary 8650 per month plus health benefits. Opportunity to steer a growing business. Send resume to Geoffrey O'Gara, HCN, Box K, Lander WY 82520.

HIGH COUNTRY NEWS needs black-andwhite photographers. Energy-related topics, resources, wildlife in the Rocky Mtn. region. Ability to do assignments on short notice and-or accompany reporters on stories helpful. Please send sample of work to Kathy Bogan, HON, Box K, Lander, WY 82520.

2ND ANNUAL NAVAJO COUNTRY TRAILRIDE. Bring your horse and ride the Lukachukai Mountains and legendary Canyon de Chelly, June 1-5. Sponsored by Navajo Community College. "Master"s Level" in difficulty. Limited openings. Marci Matlock, Box 295, Tsaile, Arizona 86556. 602-724-6227.

FARM HAND seeks summer work in S. Montana — N. Wyoming. T. Robison, 4229 Clark, Great Falls, Montana 59405.

MY HISTORICAL BOOKS and novels about Wyoming. Send for list. Mae Urbanek, Lusk, Wyoming 82225.

INTERNSHIPS. Applications are now being considered for summer and fall internships at HCN. Applicants should have some experience in either journalism or the environmental-energy field. The position is unpaid and provides experience in writing, production and research.

LITERATURE OF THE ENVIRONMENT. Seeking short fiction, poetry, autobiographical material which tell the story of the resource exploitation and environmental degradation of the American West, as well as the ongoing movement to save it. For publication in anthology. Payment negotiable. Buys F.N.A.S.R. Send complete Ms. or contact for information, Reuben Ellis, Star Rt. 1 Box 100, Bonners Ferry, ID 83805.

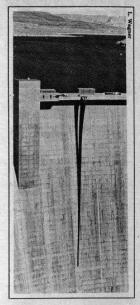
JAZZWORKS INSTRUCTORS WANTED. To instruct an exercise to music program. Previous experience in dance, exercise, or cheerleading helpful. Have a pleasant personality and be in good physical shape. (Have fun staying in shape while you earn money, have flexible hours.) Audition and interviews after free demonstration to be held. Fri., April 24, 7:00 pm, in Riverton at the High School Gym Jazzworka, 821 W. 45 St., Casper, WY 235-5530.

RUNNING THE RACE. The staff of HCN, our spirits buoyed by the spring weather, invite one and all to the Firth Annual High Country News Footrace Saturday, June 13, 6 p.m. in Lander. You can run, walk or chaperon children through the five-mile scenic loop and afterwards languish at a post-race polluck dinner. Lace 'em up.

RURAL NETWORK: growing group for single, country-oriented people. "Going it alone" is easier with cooperative efforts social support. Information and sample newsletter for \$1 (refundable with membership). Rural Network, Rt. 1, Box 49B, Dept. HC, Avalon, Wi. 53505.

EAT MIGHTY MUFFINS for the health of it! These all natural carrot muffins supply complete nutrition. High in protein, calcium, iron. Ideal breakfast, snack, backpack meal. \$\$ mis bakes dozen delicious muffins. Add \$1.50 shipping. MIGHTY MUFFIN BAKING COMPANY, Route 1 Box 299C, West Point, Va. 23181.

reporter's notebook



On the first full day of spring this year, six environmental activists crossed a locked gate at an access road to Glen Canyon Dam near Page, Ariz. The six carried a 100 pound roll of black plastic, 300 feet long, 12 feet wide at the top tapering to about two feet at the

They walked out on to the top of the dam - an illegal act of trespass - and rolled the plastic out on the downstream side of the dam. Accompanied by shouts of "Free the Colthe plastic rolled orado," the plastic rolled down the front of the dam, simulating (they hoped) a crack in the huge concrete structure. From the walkway of the Colorado River Bridge just downstream, about 75 people looked on, many shouting, "Earth First!"

The "cracking" of Glen Canyon Dam was the work of Earth First! (please include the exclamation point), a selfdescribed radical conservation group with an emphasis on wilderness pre-servation — or, rather re-creation — that was started a year ago.

According to Howie Wolke, one of the Earth First! founders, the Glen Canyon Dam event was their first public action. "We are going to use civil disobedience and make radical proposals, speaking solely in terms of the interest of the earth without political considerations,"

The first Earth First! newsletter said, "Lobbying, lawsuits, magazines, press releases, outings and research papers are fine. But they are not enough. Earth First!...will also use demonstrations, confrontations and more creative tactics and rhetoric. It's time to be passionate. It's time to be tough. It's time to have the courage of the civil rights workers who went to jail....

"Protection of some of our remaining wilderness is not enough. Protection of all of it is not enough...It is time to reeate wilderness: identify key areas,

Earth First! says it's time to be tough

close roads, remove developments and reintroduce extirpated wildlife."

Visible radicals in the environmental movement have been largely nonexistent since its founding. With the notable exception of the anti-nuclear movement, there has been very little in the way of the civil disobedience that characterized a number of other major social movements in the past 30 years, such as the anti-Vietnam War protests and the Civil Rights movement

On those few occasions it has been attempted, there have been qualified ises. In the late 1960s, there were sit-down protests in front of logging trucks coming to cut giant redwoods in Marin County, Calif. There were a number of arrests. But some of these trees still stand, partly as a result of the civil disobedience.

One man chained himself to the rocks

in the unfilled reservoir behind the New Melones dam on the Stanislaus River in California about two years ago. The Corps of Engineers reluctantly agreed not to drown him, and the reservoir was not filled.

However, such dramatic action has not accompanied most environmental protests, which have usually taken more traditional routes through the Congress or the courts.

Speaking to Earth Firstlers at the Glen Canyon Dam, Edward Abbey, author of The Monkey Wrench Gang and spiritual leader of the group, said. "Oppose the destruction of our homeland by those alien forces from Houston, Tokyo, Manhattan, D.C. and the Pentagon. And if opposition is not enough, we must resist. And if resistance is not enough, then subvert, de-lay, until the empire begins to fall."

But does such an attitude — subvert, delay — have any effect in the current political atmosphere? "Yeah sure," said political atmosphere: Tealistic, and tealing of the Earth's Not Man Apart. "You have to look at it from two different perspectives. As an individual expression, it makes a difference. And, it makes the stances of the moderate groups look more reasonable. Russell Train, when he was head of the Environmental Pro-tection Agency, once said, Thank God for Dave Brower (head of FOE) — he makes it so easy for the rest of us to appear reasonable.' Earth First! could

"However, from an organizational point of view, it's a different matter. It is FOE's policy not to condone illegal activity. We go to court to get the government to obey its own laws. It would be a difficult position to defend if we said that they have to obey the law, but

The founders of Earth First! are a highly experienced group of wilderness and environmental activists. The organization's board of directors - called the "Circle of Darkness" - includes three former regional representatives of The Wilderness Society, two former representatives of Friends of the Earth, a wildlife photographer, a former Yip-pie leader and a well-known Con-gressman identified only as Raoul. So, are they serious? "Yes," said

Wolke. "We think there is a large constituency out there that is tired of being 'reasonable' in the face of the onslaught the public lands being orche

to the public lands being orenestrated by Reagan, Watt and the rest of the rape-and-run crowd." Dave Foreman, one of the Earth First! founders and a former Southwest representative and Washington issues coordinator for The Wilderness Society, said, "Is the Moral Majority timid? Is the National Rifle Association apologe-tic? Are the Sagebrush Rebels hesitant? It's time for us to fight."

Apparently some people agree. Since Earth First!'s initial newsletter in November, about 400 people have put up the \$10 membership fee.

At the parking lot in the visitor's center at Glen Canyon Dam where Abbey was speaking, police cars pulled in, lights flashing. They questioned me of the organizers:
"No, we don't have a permit to con-

gregate here."
"No, we're not from around here."

One advantage a group like Earth First! can enjoy that the environmental movement cannot is that its activities are very visual — like the simulated crack in Glen Canyon Dam. Ever since that event, Wolke said, he has been barraged by requests from the elec-tronic media for information about the next such activity.

next such activity.

The media, particularly television, have a difficult time presenting detailed analyses of complicated issues like wilderness, air pollution or water policy. It is hard to get dramatic film of water policy. Television thrives on action and confrontation. It gives a visual context to complex stories. It makes, as

they say, "good television."

By presenting a simple confrontation as an event, television is more likely to cover it, giving the event more legiti-macy than it might otherwise have. In his thought-provoking book Four Arguments for the Elimination of

Television, former advertising man Jerry Mander points out an example of TV's bias toward confrontation. He wrote, "An attempt by the SDS faction at Columbia University to block the re-gistration of students in September of 1968 involved, according to my observations, ... hours of milling about ... and about one minute of violence. However, when the happening was reduced to a two-minute news story for the NBC Evening News, the editors routinely retained the violent scenes, building up to them with quick cuts of speeches and crowd scenes

So, simple, confrontational tactics like Earth First! proposes could get en-vironmental news out of the inside pages of environmental impact state ments and onto the CBS Evening News. The type of coverage generated would undoubtedly displease the moderate groups, but Earth First! has already disavowed them.

A Monkey Wrench Gang T-shirt worn by one of the protesters caught the eye of police officer E.C. White. He said, "Hey, I've read that book."
"What?" said the shirt-wearer.

"I've read that book," said White, "I liked it."
"Well, the author of it is right over

there giving the speech."
Officer White made his way through

the crowd to the pickup truck from which Abbey was speaking. "Mister Abbey," he said, shaking the author's hand, "Nice to meet you. I've been a fan of yours for a long time."

There were no arrests.

Now Earth First! is circulating petitions asking Congress to breach Glen Canyon Dam and drain Lake Powell "to allow the Colorado and San Juan Rivers to cleanse their canyons and begin to recreate their wilderness."

Dan Whipple

Freelance writer Louisa Willcox con tributed to this article. A Frontier Love Story BENEFIT: JACKSON HOLE ALLIANCE 7:00 PM - THURSDAY APRIL 23 - TETON THEATR for details: 1(307) 733-9417 ADMISSION: \$4 (REGULAR) and \$15 (SPECIAL)

books

Bankers and Cattlemen

Gene M. Gressley; Alfred A. Knopf, New York; 1966; 320 pages.

Review by Michael Moss

Old Jack draws out a small notebook and a pencil. The notebook is half filled, but there are only figures, no words. How many steers he had, what he paid, what they weighed when he sold them and how much they brought. This is where Old Jack figures how things are going on his farm, and he never quits figuring.

Old Jack is a Kentucky dirt farmer in Wendell Berry's novel, In Memory of Old Jack. But figures, whether etched into scraggly notebooksor drawn across the boards at the Chicago exchange, also control nonfictional ranchers throughout the country. At no time did the barbed bottom line take a greater toll than in Rocky Mountain cattle industry from 1870 to 1900.

Historian and author Gene Gressley begins and ends Bankers and Cattlemen on Wall Street, tracing the flow of Eastern and foreign capital as it rode the ranchers' 30-year boom and bust cycle. Gressley directed the Western History Research Center at the University of Wyoming and taps a rich vein of historical documents.

There was the Cheyenne Club, the "pearl of the prairies," where dusty cattlemen would meet with silkstockinged New Yorkers over bourbon. There were cowboy strikes, over wages as well as culinary disputes. And there were even attempts at gun control.

But Gressley stays clear of the folk dramas (he scarcely mentions the Johnson County Wars) to portray, with surprising literary eloquence, the power brokers and their financial intrigues.

There was corporate lawyer Samuel C.T. Dodd, father of Standard Oil and the "trust"; entrepreneur Henry Baldwin Hyde, founder of the Equitable Life Assurance Co.; financier J. Pierpont Morgan, monarch of the Gilded Age; and mountaineer Clarence King, who entertained the lot with tales of the West.

To lure the eastern investor, there were publicists like Owen Wister, master of the "30-day" book. To pull federal strings, there were politicians like Sen. Francis Warren of Wyoming. To run the Western cattle companies, there were ranch managers, crafty, and not overly honest. And to guide the whole

show there were innumerable commission firms, loan companies, banks, cattle trusts, partnerships, and even cooperatives.

The era was filled with simple struggles over balance sheets — financially dismal wars between expenses and income in which success was ultimately viewed as being able to bail out without losing everything. When the Easterners went home, the West was left scorched and eroded.

The story told in Bankers and Cattlemen, however, goes beyond 19th century cattle. As the author claims, it's a study of Eastern capital in a frontier economy, and the parallels to today's Rocky Mountain economy are striking and disturbing.

Rocky Mountain economy are striking and disturbing.

Faced with liquidation, the giant cattle companies broke their holdings into smaller parcels, sold off their water rights, and redirected their investments from a renewable resource to mining.

The same trend is occurring today. Faced with rising feed costs and falling eattle prices, today's family rancher is also tempted by the profit in subdividing for urban growth or selling water rights to mineral and energy interests.

That choice, however, may not be the ranchers' to make, but rather the banks'. The Rocky Mountain region is still a frontier economy. Eastern and foreign money is still pulling the strings. To rub out a rancher, one needn't wait for a drought — just dry up the loan market.

GRESSLEY

Gressley calls the switch from ranching to mining a bridge into the 20th century, and speaks warmly (in 1965) of the Eastern investor's overall contribution to the West. The question, of course, is whether the West needs and wants such a bridge into the 21st century.

People Heaters

Alexis Parks; Brick House Publishing Co.; 1981; \$4.95, paper; 120 pages.

Review by Peter Wild

To write People Heaters, Alexis Parks asked herself how the average family could keep warm if conventional power sources failed. What she has come up with, then, is a

What she has come up with, then, is a book not so much for the foresighted people who are building windmills and complex solar collectors, but rather for the alarming moment when we push up the thermostat and nothing happens. Her suggestions can be equally applied

Her suggestions can be equally applied to cut fuel costs during normal times. People Heaters is more than an informative, money-saving guide. Parks, former director of the Boulder Office of Energy Conservation in Colorado, uses wit, historical tidbits, and a series of surreal but telling collages to make her point: We must give up the wasteful practice of heating entire houses and instead concentrate the heat on people.

For instance, we might bundle up, even wear mittens inside a house, but still feel cold. The reason is that we lose much of our body energy from the tops of our heads. The solution is simple: Wear a hat indoors. That's sensible enough, and we might have hit upon it on our own, but the writer also takes us back into the history of clothing. We learn when and why "the wearing of a hat indoors became a distinct sign of low breeding." We're also beginning to see that keeping warm is largely a pro-

cess of undoing our prejudices.

Intent on using whatever works, either from past or present, Parks ranges through the inventions that people are coming up with to combat soaring utility bills. Their simple, original beauty is born, one suspects, as much from the fun of creating as from necessity. For two hours' work and about \$40, a person can construct a solar-heated window box that will warm a room on a sunny though cold day. More complicated is the Frenette Furnace: The fireless device spins a drum inside a larger one containing hydraulic oil; heat is generated by the friction of the moving liquid.

None of this will achieve the ideal house envisioned by the soft-technology buffs. But for those of us not so avid in our search for energy independence, Alexis Parks' book teaches how to make our lives more comfortable in simple ways that go easy on nature and on our pockethooks.

Keeping warm has much to do with psychology as well. A room may seem cold when it actually isn't. Proper colors, decorations, and arrangement of furniture can make us happy by creating a feeling of snugness.

Regardless, we can only wear so many sweaters and hats; we can only fool the mind for so long in a cold house. Parks' most intriguing suggestions concern inexpensive, low-technology items from the past. Often she follows a tongue-in-cheek example — the hot potatoes our grandparents carried to school to warm their hands through blizzards and later eat for lunch — with more effective tips from yesteryear. Heated blocks of soapstone, "sad" irons, even bags of cherry pits, are portable heat sources as effective today as they were a century ago.



book notes

Important Resource Problem Source Document, U.S. Fish and Wildlife Service, Washington, D.C., 20240: 1980.

This new, free book with an awful title lists, in order of the agency's priority, the 78 top wildlife problems facing the United States today. Endangered species are naturally a concern, but so are game species, commercial species, and non-endangered, non-game species. Some of the identified problems, such as acid rain (priority No. 10), are nationwide concerns, whereas others, such as preserving Nevada's Cui-ui fish (No. 54) or the Tennessee River's mollusks (No. 65) are more limited.

Each is treated to a single page that describes the problem and the changes that must be made to correct it. It is interesting to compare the agency's priorities with those of conservation groups. Some recurring themes, such as Alaska, stand out strongly in both camps. Others reflect a wide gap, indicating a need for more coordination in this overwhelming conservation

agenda.

Copies may be requested from: Wm.
Mangun, Div. of Program Plans, U.S.
Fish and Wildlife Service, Washington,
D.C. 20240.

- Gordon Rodda

Water Fit to Drink, Carol Keough; Rodale Press, Emmaus, Penn.; 1980; 265 pages; \$8.95 hardcover, \$5.95 paper.

It's pumped, screened, stirred, fil-

tered, chlorinated and refiltered, and still the stuff that comes out of our taps is more than water. The list of contaminants is long, and the danger is unsettling. But refreshingly, Water Fit to Drink goes beyond the gloom to offer steps towards cleaning up the problem, including advice on testing (both home and laboratory methods), purification techniques, and when all else fails, bottled alternatives. (Perrier scored "hefty" amounts of calcium, while Vichy Mineral Water had an "astounding" sodium content and traces of lots of potential toxics.) This book is not for researchers, just people who drink wa-

Environmental Quality - 1980, The Eleventh Annual Report of the Council on Environmental Quality; U.S. Government Printing Office, Washington, D.C. 20402; 1980; 497 pages.

It's too early to predict how the Council on Environmental Quality will fare in the new administration, but even if this latest CEQ report becomes a collector's item, it's far too valuable to stash away. It belongs next to your Almanac of Facts. This 497-page tome is loaded with information on current global and North American natural resource and environmental quality issues, You'll find reports on AID in Sri Lanka, new sources of food, dissolved oxygen in U.S. streams, the BLM's rangelands programs, and cost-benefit analysis in the courts. An effective table of contents, an index, and a 17-page highlights section lead you quickly to the data. The references, including the text of the National Environmental Policy Act, are

Bulletin Board

STAGE III
The Wyoming Water Development Commission, members and staff, will seek public opinion at four upcoming meetings on the proposed Stage III of the Little Snake River proposed Stage III of the Little Snake River Water Management Project. The meetings will be April 21 in Casper and Rawlins, April 22 in Baggs and Rock Springs. Contact the commission in Cheyenne at 307-777-7626 for more information.

WATER WAYS

The Reagan administration's proposals to increase waterway user fees and allocate water project construction monies in block grants will be among the water resource issues considered April 21-23 at hearings in Washington, D.C., before the Senate Subcommittee on Water Resources. Panel chairman James Abdnor (R-SD) plans additional field hearings this summer; other panel members include Pete Domenici (R-N.M.) and Max Baucus (D-Mont.).

TAILINGS TALKS

The U.S. Environmental Protection Agency's proposed rules for cleaning up uranium tailings from inactive mill sites (see Federal Register, Jan. 9) are the sub-ject of public hearings on April 24-25 in Salt Lake City, April 27-28 in Durango, Colo., and May 14-15 in Washington, D.C. Contact EPA for more details: 303-837-2221.

ENDANCERED RECONSIDERED
The U.S. Fish and Wildlife Service is reviewing and updating its list of endangered
or threatened species, with a particular eye
toward re-evaluating necessary critical
habitat. Persons having "pertinent" information are invited to contact the Director
(OES). U.S.F.W.S., Department of Interior,
Washington, D.C. 20240.

TO SHALE.

TO SHALE...
...or not shale is the question to be posed by
the Colorado Open Space Council at a May 2
conference on oil shale development. Speakers include Jan Bell of the Service
Employees International Union, Luke
Danielson of the National Wildlife Federation, and Denis Hayes, director of the Solar
Energy Research Institute. The conference
will be held at the University of Colorado at
Boulder; for more information contact Nels
Tamplin, Cu Environmental Group, UMC
331A, Boulder, Colo. 80309; 303-492-8308.

UTAH PSD

UTAH PSD

Regulating the air shed over special areas in Utah to prevent "significant deterioration" of air quality (PSD) is the aublect of a series of hearings May 5-6 in Salt Lake City and other communities. Send requests for speaking time and written statements to: Executive Secretary, Utah Air Conservation Committee, P.O. Box 2500, Salt Lake City 84110; the proposed rules may be obtained from the Utah State Division of Environmental Health, Room 420, 150 West North Temple, Salt Lake City Temple, Salt Lake City

ROCKY FLATS
Converting Rocky Flats Naclear Weapons
Plant near Denver to peaceful, non-nuclear
enterprises is the continuing goal of the
Rocky Flats Coalition, and this year's rally
to further the cause will be held April 25 on
the state capital steps. Contact the group at
303-443-0887.

WILD RIVERS

New guidelines on selecting, classifying and managing rivers in the National Wild and Scenic River System are out (see Federal Register, Jan. 28), and comments are being solicited. Contact Secretary of Interior James Watt, 440 G Street, NW, Room 203, Washington, D.C. 20243.

ENERGY CHANGES

Managers in the energy industry are invited to attend a May 20-21 conference in Denver entitled "Strategic Planning for Energy Companies." Topics are to include allocating financial resources, competition within the industry and from unexpected sources, planning for growth, environmental scanning and forecasting. The fee is \$425. Contact the sponsor, Executive Enterprises, Inc., 33 West 60th St., New York, N.Y. 10023.

MAKING WAY

Trail blazing isn't what it used to be, and proving that point are meetings planned soon to discuss the proposed Continental Divide National Scenic Trail. The U.S. Forest vide National Scenic Trail. The U.S. Forest Service plans public hearings in Rock Springs April 27 and Jackson, Wyo, April 28 to discuss how to best involve all in-terested local, state and federal agencies in designing the trail. Contact Fred Kingwill at 307-733-2752.

DIGESTING METHANE

DIGESTING METHANE
All you ever wanted to know about digesting methane gas but were afraid to burp is the promise of May 22 and June 26 seminars offered by Bio-Gas of Colorado, Inc. The hardware, operation, cost, end use and feasibility of producing methane from agricultural and industrial wastes will be covered, for a workshop fee of \$125, not including meals. Contact Bio-Gas, 5611 Kendall Court, Arvada, Colo. 80002; 303-422-4354.

LAST CHANCE DUMP

A subsidiary of Browning-Ferris Industries, Inc., a major hazardous waste disposal firm, has applied to the Colorado Department of Health to build a new waste dumpin Adams County near Last Chance. The first public meeting is scheduled for May 27, 7 p.m., at the Woodlin School, Last Chance.



Clivus Multrum

Teton Tinkers & Traders
Box 91, Victor, ID 83455
(208)787-2495

An environmentally sound, water less waste treatment system for homes, cabins and campgrounds. Composts toilet wastes and organic garbage into a rich fertilizer conserving nutrients, water and nergy.



FOR INFORMATION AND NAME OF NEAREST DISTRIBUTOR CON-TACT:

Clivus Multrum Northern Rockies 205 Meadows Rd. Whitefish, MT 59937

(406) 862-3854

Summer

Yellowstone

Join the Yellowstone Institute this summer for field seminars in Yellowstone National Park.

National Park.
1981 courses include:
Large Mammals
Camhones and Raptors
Birds of Yellowstone
Wildflowers
General Geology
Geothermal Geology
Calderas and Hydro-Thermal
Systems
Grizzy Bear Biology and Ecology
Horsepacking
Yellowstone Lake by Canoe

Yellowatche Labe y Carole
Plus other shorter courses on
fishing, photography, art
and history.
Courses vary from one to
six days. Most may be taken
for academic credit.

ATTHE YELLOWSTONE Institute

Yellowstone National Park, Wyo. 82190 (406) 443-0861

DEMONSTRATE YOUR DRY HUMOR



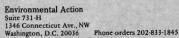
Protest acid rain every time it rains. Carry your own **ACID RAIN** UMBRELLA

A great gift for eco conscious friends and family

> Windproof 50" spread Wood handle Sturdy tan nylon Brown lettering



TO ORDER: Send \$12.97 plus \$2.00 shipping (D.C. residents add \$.78 tax for each umbrella). Checks, money orders, Master-Card and VISA accepted (give account number and expiration date). Please include phone number. Allow up to five weeks for delivery.



Exxon, Standard Oil of California, Peabody, Consol, Amax, Cities Service, and Montco...

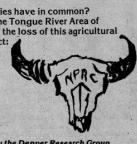
What do all these companies have in common? They want to strip mine the Tongue River Area of Southeastern Montana. If the loss of this agricultural land concerns you, contact:

Northern Plains **Resource Council**

419 Stapleton Building Billings, Montana 59101 (406) 248-1154

JOIN US

This ad was donated by the Denver Research Group



Opinion

Guest editorial

Clean Air Act should not be de-clawed

by Mark Fuller

Last month, the National Commission on Air Quality significantly improved the odds that the Rocky Mountains will someday host a semi-permanent brown cloud to rival Denver's state-of-the-art model. The commission recommended revisions of the federal Clean Air Act that, if enacted, will amount to a virtual abandonment of the national commitment to clean air.

The Clean Air Act was originally passed in 1963 as one of the first legislative responses to this country's growing environmental awareness. Since then the act has been renewed, revised and strengthened as the magnitude of the problem and the technology needed to control it have become more clearly defined. The latest revision of the act in 1977 imposed strict performance standards and compliance deadlines on pollution sources and gave the Environmental Protection Agency wide enforcement authority over both polluting industries and state governments that failed to control "non-point" sources such as automobile emissions. It was this authority that forced the Colorado legislature to finally address Denver's brown cloud last year.

These measures and others like them have dragged industry kicking and screaming into an era of environmental responsibility. To this, they have responded with a barrage of antienvironment publicity, charging that onerous regulations are responsible for every national ill from inflation to the return of the Red Menace.

No one argues that the price of pollution control is high whether paid for by manufacturers in the form of control devices or by society as a whole in the form of after-the-fact cleanup campaigns. However, since 1974, the public has realized a \$17 billion savings in health care costs; 14,000 lives saved or prolonged because of cleaner air; a tentot twentyfold net gain in employment as jobs in pollution control replace jobs lost due to regulation; and a net gain of \$4.5 billion in clean air benefits over the cost of regulatory compliance.

Despite these signs of progress, the National Commission on Air Quality has apparently capitulated to industry pressure by recommending that the Clean Air Act be de-clawed when it comes up for renewal this year. The report recommends:

— that calendar deadlines for compliance with clean air standards be replaced by "technology reviews." This would remove the strongest incentive for the continual improvement in control technologies.

- deletion of Class II and Class III increments from the prevention of significant deterioration (PSD) program. Class I is pristine air, and it allo imal increase in pollution. Class II allows for some pollutant increases and applies to most of the country. Class III allows for greater amounts of pollution. Elimination of the latter two categories would allow most of the nation's air shed to deteriorate to the lowest common denominator, the National Ambient Air Quality Standard. This standard allows for a total level of particulate pollution (for example) seven times greater than the incremental increase allowed in Class II areas.

 allow states to revise or amend local control plans without congressional, judicial or public review.

The commission rationalizes the revisions by contending that deadlines are ineffective and that current regulations are too complex to be enforced efficiently. Considering that the deadlines on performance standards have been in place for barely three years, this hasty abandonment would seem premature at best.

Moreover, the industrial development delays that are so often blamed on environmental regulation are often due more to industrial opposition to control requirements than to the requirements themselves. As of now, EPA is up against more than 50 industrial challenges to its regulations. The industrial strategy of stalling on compliance and then blaming the costly delays that result on "environmentalists" is beginning to pay off.

The saddest part of this whole story is the apparent complicity of Colorado's Sen. Gary Hart (D) in the commission's recommendations. Hart fought for strictly enforcing the Clean Air Act in 1977, and, as the commission's chairman, he was expected to defend those regulations this year. Instead, he has reversed his stand. His defection has given industrial interests cause to rejoice and environmentalists cause to mourn. All of us who breathe should be mourning as well.

Mark Fuller is the Pitkin County (Colo.) Environmental Coordinator. The views presented here are his own and not those of Pitkin County.



vironmental issues came as a member

of the Energy, Transportation and

State Affairs Committee in the Col-

orado State Legislature where she

served from 1976 to 1980. There she

was frequently at odds with environ-

mentalists. In particular, she was in-

strumental in stopping state participa-

tion in EPA's hazardous waste prog-

"The Colorado Open Space Council

gave her successive vote ratings of poor,

poor, good and average." The article

points out Gorsuch's nomination was

reportedly urged by James Watt and brewer Joseph Coors.

For the next four years, those who

consider the natural beauty of the coun-

try and its ecologic balance worth more

than a balanced budget are going to

have to take a personal stand and let their views be known. Our land is going

to be around a lot longer than 4 years

Let's let it be known we want it treated

Scott Mensing

Covelo, Calif.

etters

GRIZZLY STORY MISLEADING

Dear HCN

I was mildly surprised and moderately irritated when I read the article by John Roberts concerning grizzly bear in Colorado. I had seen a previous draft of the article and was disappointed that its misleading tone was not changed prior to publication.

Many of the problems would not have arisen if Mr. Roberts had informed me that he was writing an article when he interviewed me. When he came into my office he only identified himself as an "interested" individual. I would not have changed my statements, but I certainly would have supplied him with more detail.

There are far too many misleading statements in the article for me to address here, but several points need to be clarified. The report by Ron Zaccagnini is a Colorado Division of Wildlife document. Mr. Zaccagnini was hired by us for the express purpose of following up and evaluating grizzly bear sighting reports in our files.

Many of the sightings given in the Roberts article were considered to be very good. Unfortunately, Ron used the word "confirmed." The fact remains that any sight record unaccompanied by physical evidence would not be classified as officially "confirmed," no matter how reliable it might be. By policy only records with the animal in hand or an acceptable photograph are considered confirmed.

Contrary to Mr. Roberts' article, we do keep records of sightings and, when possible, do follow up the more reliable reports. I would point out that the problem of misidentification is not new. Biologist E. Royal Warren wrote in 1906, "One often hears of grizzly bears being killed in (Colorado), but they almost always turn out to be some form of the black bear."

My other concern is the separate article, "The Wiseman grizzly." This incident was subject to an exhaustive investigation by a number of professional law enforcement agencies. The outcome of that investigation was the exoneration of Mr. Wiseman of any wrongdoing. Obviously, the article is of extreme disservice to Mr. Wiseman and also to HCN readers. It leads them to believe that a crime was committed and that official agencies are either covering up or failing to take proper action. This is simply not the case.

The editors state that their purpose in publishing these articles was to raise important issues and questions. I believe they have failed. The misleading titles in your newsletter — "Extinct' grizzlies sighted in Colorado" and "The Wiseman grizzly; Hunting or heroism" — bring to mind the old headline gag, "Geven uninjured as stove fails to explode."

Steven J. Bissel Nongame Wildlife Specialist Colorado Division of Wildlife Denver, Colo.

(Ed. note: John Roberts says he never interviewed Bissell in his office, only over the phone, and that when he did, he identified himself as a freelance wri-

DEALING WITH GRIZZLIES

Dear HCN

I am writing to take exception to the article "Extinct' grizzlies sighted in Colo." (3-20-81). The implication of the article is that the Colorado Division of Wildlife has refused to deal with the grizzly bear situation.

Until the 1979 incident involving Ed Wiseman, the last positive proof we have had of grizzlies was the one trapped in 1952 by Lloyd Anderson. Nevertheless, there have been reports, and based on the concern of several of our offices in the San Juan Mountains, we initiated a study in 1956 to determine if there were any grizzlies surviving. The results were negative.

The Division of Wildlife has begun a three year study in the San Juans again to try to determine if there are any remaining grizzlies. DOW research biologist Tom Beck is in charge of the study and has employed the assistance of several people who have had experience working with grizzlies in the wild. I assure you that you will have to look long and hard to find a person more enthused about the possibility of finding grizzlies in Colorado than Beck.

I would like to point out that your article failed to mention an article. "Are there grizzlies in Colorado?" which appeared in the January-February 1980 issue of our magazine, Colorado Outdoors. I think that article and the forthcoming study should satisfy any concern that we are not dealing openly with the situation.

Geoff Tischbein Colorado Division of Wildlife Fort Collins, Colo.

FREEDOM FOR THE POWERFUL

Dear HCN

Having read carefully the article about John Baden (3-6-81), I am unable to find anything new in his doctrine. What he advocates is simply the same 200-year-old laissez-faire capitalism, the dog-eat-dog rapacity, which has made America what it is today — a polluted, strip-mined, clear-cut, overgrazed, dammed-up, over-populated, socially-unjust, urbanized, indus-

trialized, Europeanized mess. Baden's familiar "entrepreneurialism" has given us—to name but a few counts of the indictment—the poverty of Appalachia (where I was born and raised), the squalor, clamor and misery of the cities, the near-obliteration of the family farm, and the domination of our economy, our culture, our government by the national and international corporations.

The "freedom" which Baden pretends to promote means a further concentration of economic and political power: freedom for the powerful and dependency for the rest of us. A technocratic feudalism.

Friends of Liberty, beware: The Empire, aided by hired retainers like Baden, Is Striking Back.

Edward Abbey Oracle, Ariz.

BADEN ON TRACK

Dear HCN

Huzzahs for your article on John Baden and Montana State University. They are definitely on track!

> Bennett B. Quillen Warson Woods, Missouri

ONE OF A KIND

Dear HCN

that way.

ram.

Congratulations on the wonderful tribute by Philip White to Ernest H. Linford (HCN 2-6-81), who is absolutely one of a kind as a journalist and educator. Mr. White's photograph showed the true Linford in all his glory: modest but resolute, principled, serious and searching.

Erne Linford and his work through the years, writing editorials and columns for the Salt Lake Tribune and teaching journalism at the University of Wyoming, reflect credit on the West as well as himself. I wish that some publisher would put together a selection of his writings.

> Michael Frome Alexandria, Va.

GORSUCH NOT SO GOOD

Dear HCN

The 3-6-81 HCN Western Roundup had a short article on Anne Gorsuch, President Reagan's nominee to head the Environmental Protection Agency. You stated she had received a "good" rating from the Colorado Open Space Council and that she had supported the EPA - required emission control program for Colorado.

I was a little surprised to see this report since a few days prior I had read another article on Anne Gorsuch, this one from Science magazine, a periodical published by the American Association for the Advancement of Science. The following excerpt reveals more information concerning the background of the woman nominated to protect our environment.

"Her only previous contact with en-



What do you see when you poke your head out your front door?

High Country News can add to your perspective by bringing you the region's natural resource news every two weeks. News of projects that may even alter what's across the road from you: proposed mining and dam sites; oil and gas exploration and wilderness reviews. And looking farther down the road, HCN covers the new angles in government regulation, land-use planning and alternative energy sources.

Take a good look at HCN — only \$15 for one year (25 issues). It will broaden your view.

Name				
Address -				
City —				
State & Zip				
	*****	** * *	11117 0050	

Mail to: HCN, Box K, Lander, WY 82520.





by Howard E. Evans

I have always been hooked on ca-I have always been mode on tea-nyons. Not necessarily great canyons— the Grand Canyon of the Colorado leaves me breathless, searching for words. Smaller canyons, however, have an intimacy I can take to heart.

Lately we have been exploring some of the minor canyons that traverse the foothills of the northern Colorado Rockies, some so inconsequential that no one has bothered to name them. Many one has bothered to hame them. Many have only intermittent streams, here persisting as pools sprinkled with water striders, there sinking into the ground to reappear further down, like a dream suddenly remembered.

dream suddenly remembered.
It's never the same arrangement of
living things upon the non-living: a rotting stump along a gulley; a contorted
juniper writhing for a last gasp of sunlight; a miniscule water fall guarded
by a squadron of midges; a mourning
cloak butterfly leaping from a log; a
green splash of watercress.
A canyon can seem quiet with only a
faint tinkling in the streambed. Yet on
a summer evening after a thun-

faint tinkling in the streambed. Yet on a summer evening after a thun-derstorm, great torrents must rush down the canyon, deepening the gash in the mountains by a millimeter or two. If the hills are the mother of canyons, the storms are their father. And out of an orgy of torrent and rock, in time, a harebell springs from a mossy bank. The memory of canyons sticks. I re-member Canyon de Lobos in Mexico, where great clouds of butterflies

where great clouds of butterflies

greeted us; Madera Canyon in Arizona, a shady sanctuary after a scorching day in the desert; Sitting Bull Canyon in New Mexico, blocked by a great mass of tufa over which the stream tumbled in a thousand droplets reunited in quiet pools below; the Black Canyon of the Gunnison — as if some deific but nervous surgeon had sliced the earth's skin and revealed its black soul.

In Canyonlands, Utah, we found images painted on canyon walls — hun-ters and their prey. These people were practical and exploitative in their rela-tion with nature; yet they fell before a still more predatory race. Here and there we found bits of chipped jasper, remains of their weapons, and deep in the canyons remains of their homes built into cavities in the walls.

It was in a remote and now renowned canyon, Olduvai Gorge, that Louis Leakey found evidence of a very much more ancient race of man, a tool-maker dating from more than a million years ago. Olduvai Gorge is in a rift valley in the northern part of Tanzania, not notable for its natural beauty but teeming with the bones of extinct animals.

So man has been around a while. Yet

on a time scale of the earth, man spans a thin but recognizable layer, with civilized man the thinnest of veneers on

Nowhere do I feel so great a respect for the history of the earth as in Utah's Canyonlands. Here canyons are the norm, the space between them often no more than ridges or pinnacles of red-dish sandstone crowned with resistant dish sandstone crowled with resistant white caprock. From the canyon floor, slabs of slick rock soar above, in places admitting sunlight only at midday. How many tens of thousands of years it must have taken to lay down such great thicknesses of sandstone, and how many more tens of thousands, in a land of so little rain, to carve it into such a

labyrinth

Our last trip to Canyonlands was in March, when it was still cool enough to march, when it was still cool enough to enjoy climbing about. A few wild flow-ers were already in bloom, and canyon wrens were in full song — a burst of notes descending the scale, like a drip-ping of water from the cliffs, like the history of the canvons themselves, down, down, down.

I cannot conceive of a more worthless and impracticable region than the one we now find ourselves in," wrote Captain John Macomb, one of the early explorers of Canyonlands in 1859.
True, it is not a place to plant soybeans or to start a discotheque. Thank God for worthless places, places immune to human "development." These canyons much as the Indians must have found them when they first mov south from their pilgrimage over the Bering Strait from Asia, and the rock walls document times when man was still a highly improbable product of earth history.

How much the rocks could teach us if we understood their language! Geologists have, of course, learned some of it. Study of radioactive decay now makes it possible to date the fornow makes it possible to date the for-mation of many rocks with some accu-racy, and the texture and composition of rocks tells us a good deal about how

they were formed.

We don't need an Alleyoopian time machine; we can go back in time almost anywhere. For example, start in the narrows of Big Thomson Canyon in Colorado's Front Range where, on August 1, 1976, we might have seen canyon formation at its most violent. In the narrows, we are engulfed in masses of Precambrian schists and granites, formed when even the seas were empty of any but the most tentative of or-ganisms. Driving eastward, toward the mouth of the canyon, we are suddenly in a very different world: The rocks are

stratified and tilted steeply toward the mountains. These are sedimentary rocks of a much later era that were bent upward when the Rockies were formed then eroded by streams emerging from the mountains.

Most are shades of pink or red; some are resistant sandstones that form the crests of parallel rows of hogbacks. Others are more easily eroded shales and sandstones that form the slopes and valleys between, now mostly covered with grasses. Going east from the canyon mouth, the hogbacks are of progressively more recently formed rocks passing from Pennsylvanian to Cre-taceous strata, a span of over 150 million years. The most easterly of these is the "Devil's Backbone," a long, ragged crest of resistant but decaying sandstone formed some 130 million years ago.

We climbed the Devil's Backbone on winter day. Squeezing through a cre-vice, we frightened a swirl of pigeons that have adopted it as home, consort-ing with the ghosts of dinosaurs. In fact, evidence of some of the largest di-nosaurs has come from the Morrison Formation, which forms part of the slope of this easternmost hogback.

In the mad pace of our lives, it is good now and then to stop and fondle a chunk of Jurassic sandstone, to scratch a cliff of Precambrian schist, to project ourselves momentarily into prehuman epochs when the pace was slow, the goal a small piece of the world

in which to dream and to die.

Canyons help, dissecting the earth to reveal movement of seas, heaving of mountains and sighs of wind through forests.

Howard E. Evans is a professor at Colorado State University. This is an excerpt from a forthcoming book.