

XXXXXXXXXX
XXXXXXXXXX
XXXXXXXXXX
LARAMIE, WY. 56001

11-77

560 - 566

The Environmental Bi-Weekly



Vol. 9 No. 7

Friday, April 8, 1977

Lander, Wyoming

High Country News



Will irrigation silence nature's philharmonic?

Cranes' fate depends on Platte's flow



FROGS AND TUBERS. There is evidence that the cranes need the invertebrate animal protein (such as frogs) and tubers from the wet meadows along the Platte to produce viable eggs, according to John VanDerwalker of the U.S. Fish and Wildlife Service. They can't get suffi-

cient nutrition from the stubble fields entirely, he says. However, as the flow of the Platte becomes less and less and the meadows are drained, this food source dries up.

Photo courtesy of U.S. Fish and Wildlife Service.

"Our ability to perceive quality in nature begins, as in art, with the pretty. It expands through successive stages of the beautiful to values as yet uncaptured by language. The quality of cranes lies, I think, in this higher gamut, as yet beyond the reach of words."

—Aldo Leopold
A SAND COUNTY ALMANAC

by Philip White

The redcap philharmonic is back on the Platte River to perform one of North America's most spectacular avian expositions. But observers of this year's annual spring staging routines of 200,000 lesser sandhill cranes (*Grus canadensis canadensis*) along the Platte River in central Nebraska, watch with awe tempered in foreboding.

As the ice sheets of the Pleistocene Age retreated 10,000 years ago, the cranes began using the Platte as a major stop-over

in their migrations. But today, 85% of their former habitat along the river has been destroyed by man's water and land manipulation. This has concentrated the birds into ever smaller areas, chiefly an 80-mile stretch between Lexington and Grand Island, Neb.

The remaining 15% of their former habitat is adequate to support the cranes. However, proposed upstream water projects and uncontrolled "mining" of ground water for irrigation threaten the Platte as a wide-flowing, flooding, living oasis for cranes, as well as for eagles, geese, and ducks.

The U.S. Fish and Wildlife Service (FWS) has worked for many years to preserve habitat for migratory birds, especially those species protected under treaties signed with Canada in 1916 and Mexico in 1936. FWS has purchased lands outright or acquired perpetual easements, pumped water onto wetlands, and grown feed crops for wildlife. In efforts to save the Platte habitat, FWS has proposed a national wildlife refuge along the river. The

Interior Department has since launched a three year study of sandhill crane habitat along the North and South Platte Rivers.

In December 1975 FWS proposed that a portion of the Platte be declared "critical habitat" for the nearly-extinct whooping crane, a close relative of the sandhill crane. Whoopers also rest along the Platte on their migration north. Such a designation would limit direct encroachment on the cranes' staging area and could also limit upstream developments. The Interior Department has since launched a three year study of sandhill crane habitat along the North Platte and the South Platte Rivers. FWS reports that Nebraska has had more recorded migrating whooper sightings than the remainder of the states combined; three-fourths of the sightings between 1922-1975 were along the Platte.

But these efforts may not succeed on the Platte because of an acute threat: flow depletions. The sandhill cranes need the tubers (fleshy underground stems) and frogs of

the wet meadows for nutrition and the security of submerged sandbars in a wide channel for night roosting. Both of these habitats are in short supply along the Platte and depend upon adequate river flow.

"The high priests of progress knew nothing of cranes, and cared less. What is a species more or less among engineers? What good is an undrained marsh anyhow?"

—Aldo Leopold

The FWS took a step to stop flow depletion in December, 1976, when Harvey Wiloughby, regional FWS director in Denver, argued against the Army Corps of Engineers issuing a permit to the Missouri Basin Power Project (MBPP) to build Grayrocks Dam near Wheatland, Wyo., on the Laramie River. The Laramie is a North Platte tributary.

That permit has not been issued, pending the outcome of two lawsuits. The first, filed by the state of Nebraska against the federal Rural Electrification Administration (REA), challenges REA's assessment of habitat impacts in its environmental

(continued on page 4)



Photo by John Running
BURROS in Grand Canyon won't be exterminated, as had previously been planned, until after an impact statement is done. What should happen then? See pages 7,8, and 9.

2-High Country News — Apr. 8, 1977



HCN Letters

DORMOUSE ON GROWTH

Dear editors:

With regard to Cheyenne's desire to run a pipeline across the Huston Park roadless area, many wilderness advocates have been saying that since Cheyenne is located so far from a sure water source and would have to tear up so much wild land to obtain the water, that perhaps it is unwise geographically for Cheyenne to grow to a city of 150,000 or 200,000.

Or, to use a better authority, consider the dialogue of Alice and the Dormouse during the "who stole the tarts" trial when Alice begins to grow again:

"I wish you wouldn't squeeze so," said the Dormouse, who was sitting next to her. "I can hardly breathe."

"I can't help it," said Alice very meekly. "I'm growing."

"You've no right to grow here," said the Dormouse.

"Don't talk nonsense," said Alice.

Phil White
Laramie, Wyo.

WHO IS CATTERALL?

Dear HCN:

HOORAY for Myra and the index! It will certainly be a valuable addition to my HCN library. Compiling such is a major accomplishment, and I really appreciate it.

Also want to thank you for your strong support of President Carter in Bruce's "pork barrel" editorial (Feb. 25). Although it appears now that Congress may not have the "political courage and moral conscience" of Mr. Carter, I have high hopes that his will not deter him from continuing to press for this kind of reform. But he needs all of us to tell him so.

A few questions for you: 1) In many articles you quote various references or sources of information, such as *Conservation Report*, *Borrowed Times*, *Energy Daily*, *Air-Water Pollution Report*, and others. Some I'm familiar with, many I'm not. Could you either provide a list of these with their sources on a one-time basis, or include this information in each article? 2) Who is Lee Catterall and what is his/her position in Washington that permits us to read such interesting insights to conservation issues in the Capital? 3) Who writes

the Looney Limericks? Some are quite ingenious!

One other comment — although I'm probably not Ed Abbey's greatest fan, I think Tom Lyon's assessment of him and his contributions (Feb. 25 letters section) makes very good sense. Sort of helps put him in perspective for me.

Keep up the outstanding job — all of you. And don't apologize for your price increase. HCN is still a great bargain!

Martin J. Kux
Fairfax, Va.

Editors' note: Lee Catterall is a Wyoming native who runs the one-man Mountain States News Service from Washington, D.C. He offers his column, "Reckoning," to several Wyoming newspapers as well as HCN. Catterall covers all kinds of news in his columns, but we just print his ones on natural resource issues.

The following is a list of a few of the publications we rely on for news:

Coal News

National Coal Assoc.
1130 17th St., N.W.
Washington, D.C. 20036
(free)

Coal Week

McGraw Hill publication
437 National Press Bldg.
Washington, D.C. 20045
(\$216 per year)

Solid Waste Report

Business Publishers, Inc.
P.O. Box 1067
Blair Station
Silver Springs, Md. 20910
(\$75 per year)

Land Use Planning Reports Plus Publications

2814 Pennsylvania Ave., N.W.
Washington, D.C. 20007
(\$115 per year)

Energy Daily

1239 National Press Bldg.
Washington, D.C. 20045
(\$450 per year)

The Power Line

Environmental Action Foundation
724 Dupont Circle Bldg.
Washington, D.C. 20036
(\$15 per year)

The Plains Truth

Northern Plains Resource Council
418 Stapleton Bldg.
Billings, Mont. 59101
(\$10 per year)

The Powder River Breaks

Powder River Basin Resource Council
150 West Brundage
Sheridan, Wyo. 82801
(\$10 per year)

HCN 1977



"OF COURSE, THIS IS A HABITAT. LOOK AT ALL THOSE CACTUSES AND HORN TOADS."

People & Energy

Center for Science in the Public Interest
1757 S St., N.W.
Washington, D.C. 20009
(\$7.50 per year)

Conservation Report

National Wildlife Federation
1412 Sixteenth St., N.W.
Washington, D.C. 20036

Borrowed Times

Box 1311
Missoula, Mont. 59801
(\$4 per year)

Air-Water Pollution Report

P.O. Box 1067
Silver Spring, Md. 20910
(\$175 per year)

Solar Energy Digest

7401 Salerno St.
San Diego, Calif. 92111
(\$28.50 per year)

Solar Age

P.O. Box 2245
Grand Central Station
New York City, N.Y. 10017
(\$20 per year)

Sorry, we've vowed never to reveal the real identity of Zane E. Cology, who writes the limericks. Fame might destroy his quiet life, Cology fears.

WELL-READ

Dear HCN,

I received your publication as a birthday gift from my brother. Hmmm — and I thought I was fairly well-read. Well, I can't subscribe for all the uninformed, but I can extend that courtesy in the form of a birthday gift to my son.

John W. McColm
Ramona, Calif.



SUN SIGN SUBSCRIBER MESSAGE

We're starting early to remind all you bull-headed Taurus subscribers (by our definition subscribers with a "5-77" on their address label) that it's time to renew. You're the oaks in our forest of readers, you're security in our shakey little world. Don't let us down — or make us go to the expense of having to send you a reminder about renewing. Send in your \$12 today. Thanks.

HCN moving sale

Now that we're settled into our new quarters, we find we have some old unused subscriptions lying about that we would like to sell. Send twelve dollars for one of these still servicable items. They'll provide you with good reporting, in depth articles and fine photos during the coming year.

Send me an unused subscription. Enclosed is \$12.

name _____
address _____
city _____
state _____ zip _____

Send to: HCN, Box K, Lander, Wyo. 82520
Still not convinced? Ask for a sample copy.

lifeblood

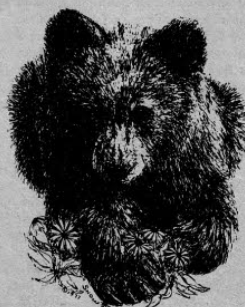
The High Country News Research Fund is many things to many people. To High Country News it is lifeblood. Money from the fund pays for research, travel, photographs and many stories in HCN.

To the donor the fund is rewarding. It is refreshing to invest and see direct results such as the story on the Platte River haven for sandhill cranes in this issue. It must also be rewarding to know that a gift to the fund is a gift of sustenance. It allows the paper to continue its work. The generosity of the donor is further compensated by a deduction on taxes.

Enclosed is a donation to the HCN Research Fund.

name _____
address _____
city _____
state _____ zip _____

Please make out checks to Wyoming Environmental Institute — HCN Research Fund and send to WEI, P.O. Box 2597, Jackson, Wyo. 83001. Thank you.



© Carol Shaw



Guest Editorials

HCN

Now that Jimmy's in power, let's take a rest

by Carolyn Johnson
Colorado Open Space Council

Now that President Carter's in office, conservationists can . . .

Relax our efforts. Carter and his several conservation-sympathetic appointees and advisors understand the issues.

Stop scrambling for money to wage the conservation battles. Now the Administration will be waging these battles with far more money than we could ever muster.

Ease up on coalition building and efforts to increase our own groups. There's no stronger coalition than making "common cause" with the President and Executive Branch.

Give the Administration a free ride. Because it has good positions or takes sound action on some of our issues, we shouldn't press on the issues that aren't being handled well.

Many conservationists, donors to conservation, and interested friends have made these or similar statements in recent weeks. None of these statements is true, and actions based on these assumptions will dangerously weaken our efforts to achieve our conservation goals. In fact, we will need to work **harder**, raise **more** money, and build **stronger** groups and coalitions under President Carter than we did under the anti-environmental administration of President Ford.

Why? First, although Carter and some of his appointees are sympathetic to conservation issues, translating sympathy and campaign promises into action must be

done on the basis of hard information and active political support. The Administration can't do that, and certainly won't do it for long, alone. We must maintain a strong advocacy voice to be heard in the design and enactment of those programs.

Second, the Carter Administration must be responsive to many interest groups in addition to conservation — labor, senior citizens, blacks, women, etc. — and, while our interests overlap on some issues, they are miles apart on others. All these groups have had sympathetic persons from within receive appointments, and all these groups are clamoring for the President's attention to their issues. Many of these groups have political expertise and clout of long standing, compared to the fairly recent arrival of conservationists as a political force. If we are not to be a passing fad of little long-term impact, then we must build our strength and maintain a seat at the bargaining table.

Third, to give any elected or appointed official a free ride, no matter what his expressed personal beliefs or history of involvement with conservation, does serious disservice to him and to us. It pays him the ultimate discourtesy of not insisting that he meet the high standards he is capable of, and which we probably criticized his predecessors for failing to meet. Implied trades of muted criticism for failure on this issue in exchange for good works on that one are worth no more than the nonexistent paper they're set down on. In political

issues such as conservation, the squeaking wheel gets the grease.

Last the Carter Administration has selected several strong people from conservation organizations for appointment to key positions, such as Cynthia Wilson (National Audubon's Washington office) as Special Assistant to the Secretary of Interior for Environmental Affairs; Gus Speth (founder of the Natural Resources Defense Council and a leading environmental lawyer) as a Member of the Council on Environmental Quality; and Kathy Fletcher (energy expert at the Denver office, Environmental Defense Fund) as Advisor to the President on Natural Resources and Environment. It took years for these appointees to develop their expertise, and they were at a peak of effectiveness as

conservation advocates. They leave gaps, and it is essential for us to train others and increase our own effectiveness. Additionally, these appointees now have jobs to do for the Administration. We cannot place the added responsibility on them nor expect that they will continue to be our spokespersons. We have to do it ourselves.

We have a big task ahead in many new issue areas and an unfinished agenda to accomplish on energy conservation and development policies, water projects, wildlife protection, land use, wilderness designation, clean air, and so forth. We will achieve less than we aim for, so we'd best set our goals high. And we should continually pose the question to the Carter Administration of "Why not the best?" and work to do our best.

Confessions of an engineer

Reprinted from the LOS ALAMOS MONITOR, 3-20-77

by John Bartlit

The masthead of one lowly anti-environmentalist gazette proclaims itself "Pro-Science, Pro-Technology, Pro-Free Enterprise." We once wrote the rag's owner and editor to say we considered ourselves to be pro-science, pro-technology, pro-free enterprise environmentalists. He flatly replied that was a contradiction in terms — no such thing was possible.

Is it? Let this writer relate a personal experience which turned him from a glib citizen-engineer into an environmental activist-engineer.

It was February, 1969, when New Mexico legislators held a hearing to discuss pollution problems of the Four Corners Power Plant. Participants were Joe Devaney with his eloquent aerial slides of the pollution vs. a line-up of six or eight officials from Arizona Public Service Company (APS). This writer attended, at the urging of his wife, as a mildly curious and innocent bystander. I knew nothing about air pollution at the time and, like most engineers, I vaguely assumed the company would do what they could and beyond that nothing could be asked.

Joe showed his slides. APS President Reilly told the legislators, yes, the company recognized there was a small prob-

lem. But, they were working on it, had made many tests, and would do the best they could, which was to collect 97% of the fly ash. (He didn't mention the remaining ash emitted would be more than is emitted by all the sources in Los Angeles). Did New Mexico want to tolerate a little ash or to go back to candles? The legislators apologized (literally) to Reilly for the rudeness of complaining about a bit of smoke — President Reilly accepted apologies with grace and good will — and all went home.

Perhaps it was the apologies were a bit too galling. Perhaps it was something in the "ash or candles" slogan.

That evening, I placed a phone call to a grad school buddy whom fate would have working in the New York City air pollution office. I related what I had heard that day.

He said we were not getting a straight story. He said power plants in New York City routinely had been much cleaner than 97% for a long time. He gave me names of leading manufacturers of air pollution controls (APS) had implied they developed the controls themselves). He recommended books to read on the subject.

I called the manufacturers. They told me a 97% clean plant was far below the best they could do. I read the books, particularly "Industrial Electrostatic Precipitation" by Harry White. They described technical details of the methods and techniques used for achieving much cleaner — 10 times cleaner — power plants. APS had said, yes, some equipment could clean better than 97%; but due to the low sulfur content of New Mexico coal this equipment would not work at Four Corners. An entire chapter (Chapter 9) in White discussed the problem of low sulfur coal and gave four or five industrial solutions developed over the previous 10 to 15 years for overcoming the problem.

Clearly New Mexico's legislators had not gotten accurate technical information from industry technologists. In fact, legislators had not gotten any information at all from industry technologists. The talking for industry was done entirely by corporate and financial executives.

Significant technical improvements were possible in 1969, but they were not achieved until technologists joined the fray on the side of environment.

Grazing good use of wilderness

by Bart Koehler
Wilderness Society representative

"I'd like to protect that area," a rancher said at a Forest Service meeting in the Pinedale, Wyo., area on a proposed wilderness study area. "But if you make it wilderness, then I'll lose my grazing permits up there. First thing you know, there'll be some backpacker complaining about my cows, and then I'll be forced out."

This statement was repeated several times at the meeting. The ranchers had good reason to be concerned. In the past, the Forest Service has revoked grazing permits in various wilderness areas in the West. In the Bridger-Teton National Forest in Wyoming, for example, the staff did curtail livestock use in a portion of the Bridger Wilderness because of an influx of recreational users who complained about the cattle competing with their horses for grazing.

The livestock were removed — even though they were in the area first.

Grazing has been an important use of the forest lands for a long, long time, and the loss of grazing permits can easily spell the ruin of a ranching operation.

The law that established wilderness areas and the regulations that guide their management and use do not endorse the steady elimination of existing grazing rights in wilderness areas — neither do I.

The Wilderness Act states that "grazing of livestock where established . . . shall be permitted to continue subject to reasonable regulations."

The regulations say that grazing shall

continue and that livestock management improvements, such as fences or corrals, that existed when an area was incorporated into the National Wilderness Preservation System may be permitted.

When conflicts of use do occur in a wilderness area, all uses must be given consideration, and there should be a recognition of the predominant uses of the area prior to designation as wilderness. At the Pinedale meeting, I made this comment: "If grazing was the primary use of an area before designation as wilderness, and if recreational use increased to the point of conflict, then the agency should consider reducing the recreational use. Why must grazing always be the one to go?"

Now, that may come as a shock for some of you, especially since I am a backpacker. I do not support overgrazing, but I do feel that the Forest Service should return to the spirit of the Wilderness Act and manage grazing in a "reasonable" manner.

Finally, I think that grazing permits within wilderness areas have more protection than those on general forest lands. At the close of the Pinedale meeting, one resident asked the Forest Service planner: "There's no guarantee that grazing permits will continue on non-wilderness lands from year to year, right?"

The old rancher then answered his own question: "Well, I guess that I'm better off having a permit in a wilderness because at least there my permit would be recognized by the Wilderness Act and have an extra measure of protection."

High Country News

Published biweekly at 331 Main, Lander, Wyo. 82520. Telephone 307-332-4877. Second class postage paid at Lander.

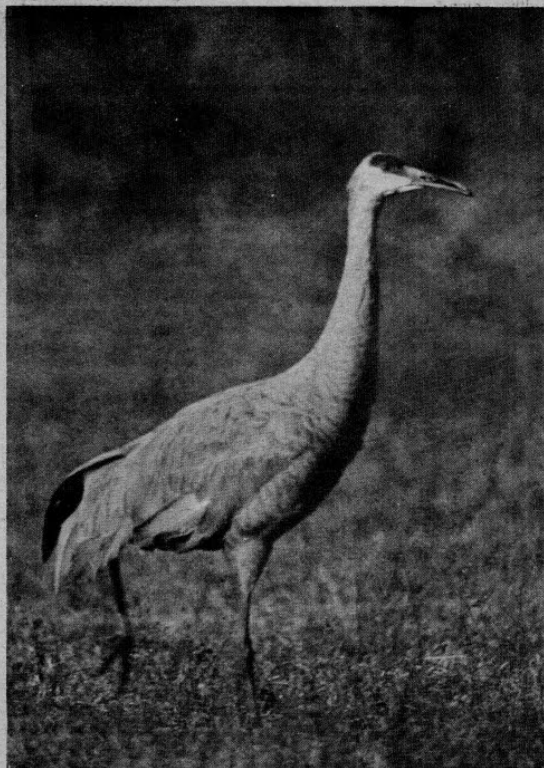
Publisher	Thomas A. Bell
Managing Editor	Joan Nice
News Editor	Bruce Hamilton
Associate Editor	Margaret Ambler
Office Manager	Mary Margaret Davis
Advertising Manager	August Daller
Circulation Manager	Georgia Nations
Editorial Assistant	Sarah Doll

Subscription rate \$12.00
Single copy rate 40 cents

Material published in High Country News may be reprinted without permission unless it is copyrighted. Proper credit should be given to High Country News, Box K, Lander, Wyo. 82520. Contributions (manuscripts, photos, artwork) will be welcomed with the understanding that the editors cannot be held responsible for loss or damage. Articles and letters will be published and edited at the discretion of the editors. To send a sample copy to a friend, send us his or her address.

Box K, Lander, Wyoming 82520

4-High Country News — Apr. 8, 1977



RED-CAPPED MUSICIAN. The lesser sandhill crane (*Grus canadensis canadensis*) has a red, unfeathered cap on its forehead, a gray bill, mouse-grey plumage, and grey legs. Photo courtesy of U.S. Fish and Wildlife Service.

Cranes . . .

(continued from page 1)

impact statement on the project. The National Audubon Society has intervened in that suit. The other suit was filed by the state of Wyoming against the Corps of Engineers, questioning its jurisdiction over the Laramie River in Wyoming.

Grayrocks Dam would impound 104,000 acre-feet of water and take 39,000 acre-feet annually from Grand Island threatens to deplete the spring-fed river by another 100,000 acre-feet annually, according to Willoughby's comments sent to the Corps of Engineers.

Much of the power will inevitably be used to pump ground water for irrigation in Nebraska. This "mining" of ground water upstream from Grand Island threatens to deplete the spring-fed river by another 100,000 acre-feet annually, according to Willoughby's comments sent to the Corps of Engineers.

Willoughby's statement also cites the Narrows Dam and irrigation project that the Bureau of Reclamation (BuRec), a sister-agency to FWS in the Interior Department, plans to build on the South Platte in northeast Colorado. Narrows would take 80,000 acre-feet annually from the river.

FWS believes that these and six other water project proposals would deplete the flow of the Platte so much "that it will cause the destruction of remaining migratory bird habitat from Overton to Chapman (Neb.) as well as most other areas." FWS recommends that these depletions be postponed until three studies can be completed:

a hydrologic study by the U.S. Geological Survey, an evaluation of "current and planned water management" by BuRec, and a detailed look at "wildlife and habitat requirements" by FWS.

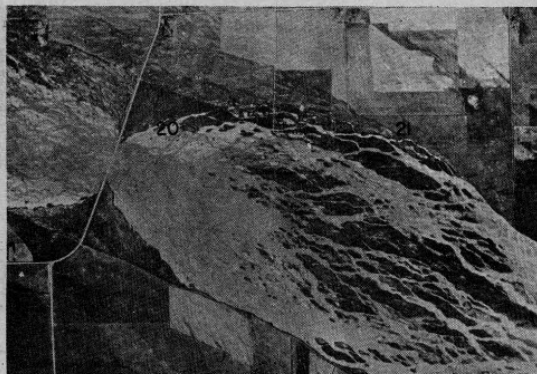
SURVIVED UNCHANGED

Why so much ado about the sandhill cranes? The answer lies partly in a history going back millions of years. According to an article by Richard S. Miller in *Natural History*, February 1974, "the sandhill crane is one of the oldest living species of bird. Bones from the Sand Creek formation in Sioux County, Neb., dating from the Lower Pliocene, are indistinguishable from those of modern specimens, suggesting that the species has survived virtually unchanged through nine million years of evolutionary history."

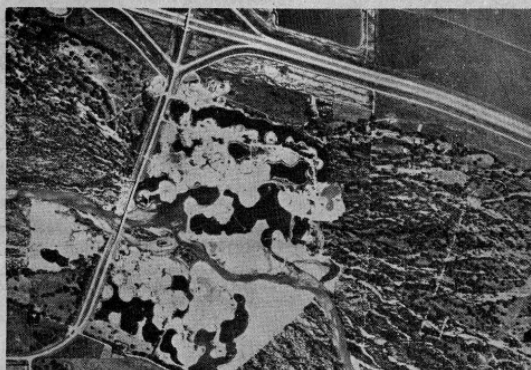
"Our appreciation of the crane grows with the slow unraveling of earthly history. His tribe, we now know, stems out of the remote Eocene. The other members of the fauna in which he originated are long since entombed within the hills. When we hear his call we hear no mere bird."

—Aldo Leopold

As white man's marsh draining and crane hunting on the North American continent increased, the cranes declined in numbers and retreated from their once continent-wide migration and nesting patterns. "Today," Miller writes, "the breeding areas of the once widespread sandhill



1930 CRANE HABITAT. In this photo of the Platte River taken in 1930, the highway bridge had not constricted the channel excessively. The shallow, spreading channels below the bridge form numerous sandbars for crane roosting at night. The wet meadows along the north part of the Platte are in good condition, and not choked by trees and shrubs. Spring floods still scour the channels free of colonizing trees and willows. Photo courtesy of U.S. Fish and Wildlife Service.



1960 CRANE HABITAT. In this photo, taken of the same river stretch in 1960, shows the river both above and below the bridge is totally channelized with no roosting sites left. Vegetation covers the former meadow areas to the right of the photo, where the former meandering channels are visible. Sand and gravel operations spread to the north and the south of the river. Photo courtesy of U.S. Fish and Wildlife Service.

crane are so reduced that only five isolated subspecies are left: the Cuban, the Florida, Texas, Colorado, North and South Dakota, and Oklahoma by 1968. Crane experts estimate that up to 12,000 birds are killed or crippled by hunters each year, and many say that crane hunting is a serious mistake (see the Miller article mentioned above and "How Many Cranes Make a Skyfull?" by Paul A. Johnsgard in *Animals*, December, 1973).

The lessers, which stand 3½ feet tall with a six-foot wingspan and weigh 8-10 pounds, number around 250,000. They have been hunted legally in eight states and Canada for the past 10 years. They had not been hunted between 1918 (when Congress passed the Migratory Bird Treaty Act) and 1961. FWS allowed a 30-day open season in New Mexico in the spring of 1961 and crane seasons were opened in Alaska, Texas, Colorado, North and South Dakota, and Oklahoma by 1968. Crane experts estimate that up to 12,000 birds are killed or crippled by hunters each year, and many say that crane hunting is a serious mistake (see the Miller article mentioned above and "How Many Cranes Make a Skyfull?" by Paul A. Johnsgard in *Animals*, December, 1973).

THE NECK OF AN HOURGLASS

The lessers winter in widely-scattered locations in the American Southwest and Mexico and nest in the arctic and sub-

arctic, some crossing the Bering Sea into Siberia. In the spring, 90% of them migrate through the Platte drainage. Thus, their migration pattern takes an hourglass shape and the tiny neck of the hourglass corresponds to the 11 major roosting sites along the Platte. Therein, according to FWS area manager for South Dakota and Nebraska, Rolf Wallenstrom, lies the rub.

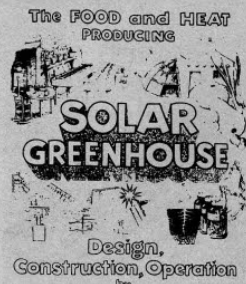
"In February and early March," Wallenstrom says, "the lessers fly almost non-stop from their wintering sites as far as 600 miles away to what remains of the suitable habitat along the Platte. They reach a peak concentration of about 200,000 during the last week in March. This same stretch of river also is used by up to 90% of the mid-continent population of 200,000 white-fronted geese and by thousands of Canada geese, pintails, mallards, and other ducks."

"The cranes arrive in a weak condition and spend six to eight weeks feeding in stubble fields and marshes, some gaining up to 20% of their body weight. The Platte is a vital link in the crane's life history since they must strengthen themselves enough to withstand both the long migration north and the nutritional stress of the nesting cycle."

This stretch of the Platte is doubly important because the cranes have never

(continued on page 5)

HCN Books



The Food and Heat Producing Solar Greenhouse
Design, Construction, Operation
by RICK FISHER and BILL YANDA
John Muir Publications, P.O. Box 613, Sante Fe, N.M., 1976, \$6 paperback, 160 pages.

Review by Joan Nice

My husband and I just finished building a small, solar-heated greenhouse. I will leave out the construction details, which include a nail through a toe and several smashed thumbs. Suffice it to say, since we are newspaper people without much experience in the practical side of life, we probably couldn't have built it without a good book or two.

To get started, we latched onto a useful one by Bill and Susan Yanda, *An Attached Solar Greenhouse* (see review in HCN 9-10-76). When we were almost finished, an even greater blessing arrived, this time from Bill Yanda and Rick Fisher, *The Food and Heat Producing Solar Greenhouse*. The second book amplifies the useful information contained in the first, and what's more, it glorifies our crude carpentry. Instead of having merely built a \$150 winter lettuce factory, we now feel we've built a prototype of what our own living space should be like. It should be solar heated, but not with collectors on the roof. Like our greenhouse, our home should be built to absorb the sun's rays in winter, change the light to heat, and put the heat

into storage — passively to as great an extent as possible. Our home should be our solar collector.

The Food and Heat Producing Solar Greenhouse is the most comprehensive book we've seen on how to design, build, maintain, and appreciate passively solar-heated spaces.

It begins with the same, clear explanation of the basics that we found in *An Attached Solar Greenhouse*. In both, the reader is offered instructions that lead, with only a few gaps in the details, from the first shovelful of earth to the last nail.

The design described in both books is based upon a model developed by Yanda for low-income people living in the mountains of northern New Mexico.

"When we began the project, some engineers and architects insisted that our simple greenhouse wouldn't lengthen the growing season even a week," the authors say. "We were told by others that the 90 degree heat produced by the units was virtually useless. Fortunately, we didn't listen to them."

Instead, they devised a simple-to-build, south-facing structure with thick walls and good insulation. Designed for the high

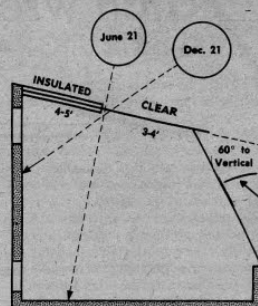
altitude, high-sunshine Rockies, the greenhouses generally give their owners from 6½ to 3½ months of extra growing season. The authors note that this is a blessing to gardeners stuck with the "pitifully short" growing season in New Mexico at 6,000 to 7,000 feet.

From our brief experience with such a greenhouse, the authors claims do not seem to be exaggerated. Even in blustery Wyoming, we've added three months onto our growing season in the spring and expect to stretch it out that much in the fall. And our greenhouse does not have the advantage of being attached to our home, as Yanda and Fisher recommend. The attached greenhouse can benefit from a boost of heat from the home on cold nights, while contributing to the home's heat during the day.

The writers' enthusiasm for hard work is infectious. They mention that you could go out and buy a greenhouse, but they are obviously trying to reach people who want to grab hammers and get their hands dirty.

"Once you start building, you'll find it addictive. We have had a love-hate relationship with it for years. It will torture your days and keep you awake nights, but you'll want to do more. You will think of all

Apr. 8, 1977 — High Country News-5



the improvements that you could make in your house and you'll be hooked," the authors say.

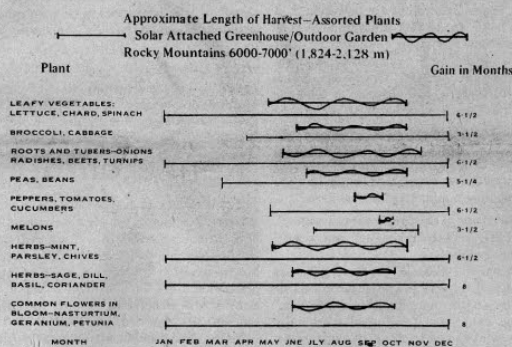
Once your appetite for engineering has been awakened, just building a greenhouse isn't enough. The authors suggest that then it's time to start adjusting the amount of heat storage material and the square footage of glass or adding louvers, solar collectors, and other ingenious devices to improve the building's heat performance.

The book moves from design, construction, and improvements to a 20-page section on greenhouse gardening. Greenhouse layout, soil, hydroponics, fertilizers, timing, and pests are briefly, but cogently, discussed.

The last section of the book is "The State of the Art," a survey of greenhouses and homes around the country, all based on the simple principles of passive solar heat collection. The authors concentrate on projects in the Southwest and ignore a few interesting ones we know about up north. However, the section includes an impressive variety of ingenious expansions upon the basic concepts.

"The State of the Art" is encouraging. It shows not only the variety of successful greenhouses around the country, but a surprising number of people who have made their "greenhouses" their homes. It's convincing proof that passive solar heating is simple, cheap, easy on the environment, good enough for tomatoes, and even good enough for some people.

"Building will torture your days and keep you awake nights, but you'll want to do more."



Cranes depend on Platte . . .

(continued from page 4)

pioneered out to other rivers or other habitat types, despite the crowding they are experiencing," Wallenstrom says.

This concentration of waterfowl worsens another menace, fowl cholera disease. "Fowl cholera killed 25,000 birds in 1975 and 11,000 last year, most of them ducks and geese," Wallenstrom says. "We could have a disastrous outbreak this year because drought conditions will deplete the flow further and increase bird concentration."

All species of birds are believed to be susceptible to fowl cholera, and wildlife officials are worried that the disease could decimate the cranes.

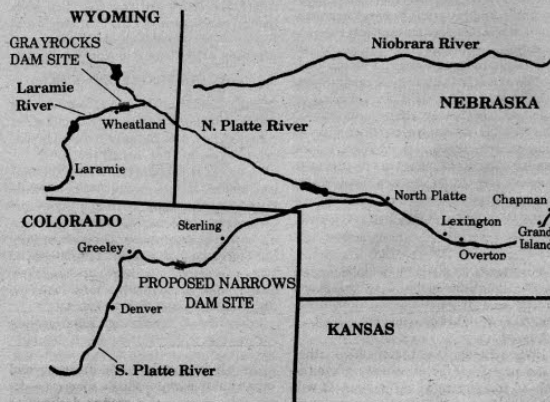
A special effort is being made to keep the endangered whooping cranes away from infected areas, as any loss to their population could be disastrous. Only 75 whoopers are known to exist in the wild, and 69 of them are in a flock that traditionally rests along the Platte in Nebraska. Last year airplanes and ground crews were used to herd whooping cranes away from potentially dangerous disease areas. Similar measures are planned for this year.

For a few years, at least, the dawn departures of tens of thousands of the tall cranes from a single roosting place will give aural and visible witness to Robinson Jeffers' idea: "is it not by his high superfluity we know God?" But with man's continual habitat encroachment, flow depletions, and hunting pressure, and the additional threat of fowl cholera arrayed against the cranes, their days as a blithe extravagance of nature may be numbered.

Their only hope lies in the efforts of conservationists who are fighting to protect habitat on the Platte. Without this protection, the Platte will no longer be the stage for the odd ballet on stilts of the birds wearing bustles and the "pandemonium of trumpets, rattles, croaks, and cries" that inspired Aldo Leopold.

"Some day, the last crane . . . will trumpet his farewell and spiral skyward from the great marsh. High out of the clouds will fall the sound of hunting horns, the baying of the phantom pack, the tinkling of little bells, and then a silence never to be broken, unless perchance in some far pasture of the Milky Way."

—Aldo Leopold



CRANE HAVEN. Ninety per cent of the world population of lesser sandhill cranes migrate through the Platte River drainage in spring. Most of them take refuge in the 80-mile stretch of river between Lexington and Grand Island, Neb.

6-High Country News — Apr. 8, 1977

Inspired by Clean Air Act

Utah wrestles with a second air quality plan

by Ann Schimpf

PSD can be achieved through BACT which is the equivalent of NSPS, according to EPA regulations.

Sound confusing? The technical jargon that has evolved around the air quality controversy is enough to make the layman throw up his hands in despair and leave such matters to the experts.

Nevertheless, some environmentalists are tackling air quality problems head on.

"Utah's air quality plan is probably the most important planning tool the state has ever wrestled with," says Jan Johnson, director of the Utah Environment Center and on the board of directors member of the National Clean Air Coalition. "So we're making sure the public has maximum input."

Johnson hopes to affect state policy by pushing for strong clean air advocates on

continues to grow and industries continue to expand. We've already been too slow in drawing up a set of comprehensive air quality guidelines."

Kent Briggs, an aide to Utah Gov. Scott Matheson, thinks the amendments will pass this year, "but we're in full support of Rickers' efforts to go ahead and get an air quality plan for Utah."

At the national governors conference in Washington during the first week in March, Matheson pleaded for maximum state controls over air quality. He was one of 16 governors appointed to come up with recommendations to Congress concerning the Clean Air Act amendments.

Not everyone wants to give full authority to the states, however. Mary Belle Bloch of Logan, representative of the Environmental Defense Fund (EDF), says "Some states will undoubtedly make every effort to draw up a plan that will protect air quality. Colorado is doing just that right now. Utah, on the contrary, drew up a plan that would put nine per cent of the state in Class I, 44% in Class II, and 42% in Class III."

Class I air allows no significant air quality deterioration. Class II air allows for air quality deterioration normally accompanying growth. Class III air allows maximum legal addition of air pollution.

"The Clean Air Act amendments must strengthen regulations (regarding state plans) so that there is consistency from one state plan to the next," Bloch says. Aware of this concern, both houses of Congress have adopted amendments to protect one state from the impact of air pollution from another state.

Kent Briggs maintains that "If the states hadn't been so slow in drawing up their plans, they wouldn't be in this mess."

The "mess" is the controversy surrounding PSD (prevention of significant deterioration) regulations.

"When the Clean Air Act of 1970 was written, it required states with polluted air to come up with plans to improve their air," Briggs said. "It did not deal specifically with what should be done in cases where air quality was already higher than national standards."

"But the Sierra Club believed the intention of the law was to prevent significant deterioration of existing clean air," he says. They took the issue to court. As a result of a tie vote in the U.S. Supreme Court, the states are now "saddled with federal regulations on PSD that they could have avoided by implementing plans soon after the 1970 Clean Air Act," he says.

ONE CONTROVERSY LEFT

The Senate Public Works Committee has nearly completed mark-up of Clean Air Act amendments, with the only remaining controversy over "non-attainment." Non-attainment refers to areas where national ambient air standards are not being met. EPA has proposed that new industries can be built in such areas if existing polluters agree to plans to reduce their emissions, but the Senate staff objects to this proposal. The bill is basically the same as last year's bill that died as the result of a filibuster by the Utah delegation.

In the House Health and Environment Subcommittee of the Commerce Committee, all efforts to weaken last year's bill have lost. Significantly for Utahns, Rep. Paul Rogers (D-Fla.), chairman of the subcommittee, has dropped Rep. Gunn McKay's (D-Utah) 1976 amendment designed to allow construction of the 3,000 megawatt Intermountain Power Project

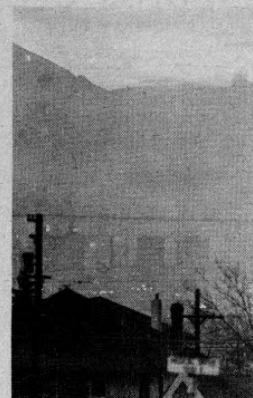
eight miles east of Capitol Reef National Park. His amendment would have allowed pollution levels in Class I (clean air) areas to be exceeded by three per cent or 11 days a year.

Another amendment accepted by the subcommittee would have significant effects on power plants now operating in the Southwest. The amendment says any existing plant that affects visibility over a Class I area will have to retrofit to clean up. Chris Goddard of the National Clean Air Coalition says the subcommittee is recognizing visibility as a national resource, and she expects the amendment to survive full committee markup when the House returns from Easter recess.

The only weakening amendment that passed was introduced by Rep. James Santini (R-Nev.). It would exempt copper smelters in non-populated areas.

Both the Senate and the House full committees are expected to complete action on the amendments soon after returning from recess. Adding impetus to their action, the U.S. Supreme Court has announced that it will review the PSD case brought by the Sierra Club. Goddard says the National Clean Air Coalition expects the court to take no action until after Congress acts on the amendments. "It's just a signal to the committees to be sure quick action is taken on the bill," she says.

(Editors' note: For readers who are still curious about the abbreviations in the lead sentence of this story, here is a translation: Prevention of significant deterioration



HELP. Environmental Defense Fund representative Mary Belle Bloch of Logan, Utah, is looking to the federal Clean Air Act, not the state, to help solve Utah's air pollution problems. The photo above shows smog on a winter day in Salt Lake City.

(PSD) can be achieved through best available control technology (BACT), which is the equivalent of New Source Performance Standards (NSPS), according to Environmental Protection Agency (EPA) regulations.)

Kennecott defies EPA air regs

A new twist has been added to the battle between Kennecott Copper Corp. and the U.S. Environmental Protection Agency (EPA) over air pollution from the firm's Magna smelter. On March 8, the company petitioned EPA for a six-month delay in coming into compliance with the national ambient air standards (see HCN 3-25-77, page 13). The deadline was originally July 31. EPA says it would have taken into consideration the company's claims that several adverse factors out of its control made it impossible for Kennecott to meet the deadline. However, Kennecott's compliance plans did not conform with EPA's requirements for reducing emissions of sulfur dioxide.

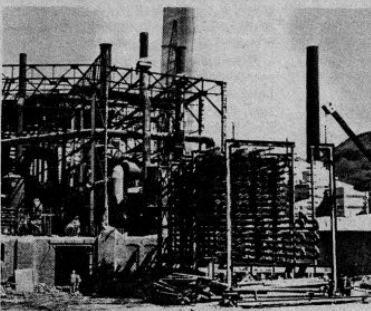
Kennecott is insisting that it can meet Utah's regulations and that that is enough. The EPA, however, has disapproved the part of Utah's clean air plan that deals with sulfur dioxide emissions — both because it

wouldn't meet national ambient air standards and because it would be unenforceable, according to EPA's legal counsel.

"What's going to happen, from a practical standpoint is that they're going to sue us or we're going to sue them," Chris Phillips of EPA's legal staff told the *Deseret News* at a recent meeting of the Utah Air Conservation Committee.

Kennecott claims it is "unlawful" for EPA to override the state air standards, according to Keith Taylor, a Kennecott lawyer. However, Lou Johnson of EPA's Denver office says EPA has no choice under the Clean Air Act if a state's plan is inadequate.

An amendment is now being considered in Congress that would exempt copper smelters from Clean Air Act requirements for several years. However, the amendment applies only to unpopulated areas and Johnson says he assumes it would not apply to Kennecott's Magna smelter.



FOR CLEANUP. Single contact acid plants and a 1,200 foot stack are part of Kennecott Copper Corp.'s air pollution control plan. The plan will meet Utah's, but not the federal government's, requirements. Photo of Kennecott acid plants courtesy of Kennecott Copper Corp.



JAN JOHNSON of the Utah Environment Center calls Utah's air quality plan "the most important planning tool the state has ever wrestled with."

the Utah Air Conservation Committee. The committee was set up by the legislature and is being appointed by the governor to make decisions on all air quality matters for the state.

Johnson is also working for hearings "that allow for more public influence" on the state's next air quality plan.

What's happened to Utah's first air quality plan? In January it was making headlines; now it has disappeared from the public eye.

Three important things are happening: 1) Governor Matheson is considering nominations to fill six of ten positions on the Utah Air Conservation Committee; 2) The state is reviewing public comments submitted on the first draft of Utah's air quality plan; 3) Congress is attempting to hammer out Clean Air Act amendments that could pre-empt Utah's planning efforts.

UTAH'S PLAN

After reading the public's comments on the last plan, the Utah Bureau of Air Quality will draft a set of recommendations for the Utah Air Conservation Committee to consider in drawing up a revised plan, according to Alvin Rickers, director of the bureau.

Rickers says Utah is moving ahead without waiting for federal guidelines because, "Congress failed to pass the amendments in 1976. They may do so again in 1977. Meanwhile our population

Debates not over

Andrus gives reprieve to Grand Canyon burros

by Marjane Ambler

Interior Secretary Cecil D. Andrus has announced that more than 2,000 burros in Grand Canyon National Park will get a reprieve. Before any action to exterminate the burros will be taken, a full environmental impact statement will be prepared and public review will be sought.

Andrus said his decision resulted from strong public reaction against the National Park Service's plan to shoot all the burros now in the park to protect native wildlife and vegetation. The park had also proposed to construct fences to prevent other burros from entering the park.

Three groups that filed suit against the plan have now dropped their suit since, they say, "Interior has thrown in the towel" and agreed to prepare an impact statement. The Humane Society, the American Horse Protection Association (AHPA), and a local Arizona group, the Committee to Save the Grand Canyon Burros, had sued the federal government over the plan. Over 9,000 people have written, most of whom opposed the plan.

Several conservation groups, including local chapters of the Sierra Club, the Friends of the Earth, and the Arizona Wildlife Federation, have supported the park's plan to eliminate the burros. Since national parks are not subject to the 1971 Wild Free-Roaming Horse and Burro Act, department approval is all that would have been necessary to implement the plan.

According to those who support eliminating the burros in the park, controversy over the plan has been fanned by public sentimentality over the "cute little burros." The American Horse Protection Association published emotive literature railing against the "massacre," saying it would turn the park into a "giant bloody butcher shop, leaving the canyon littered with the carcasses of these once free, wild burros."

The Humane Society, in less sensational terms, also emphasized in its legal arguments the emotional appeal of burros in the canyon. "The Grand Canyon burros have become a part of the American sensibility; every school child is familiar with 'On the Trail,' the most frequently played movement of Aaron Copeland's 'Grand Canyon Suite,'" it said.

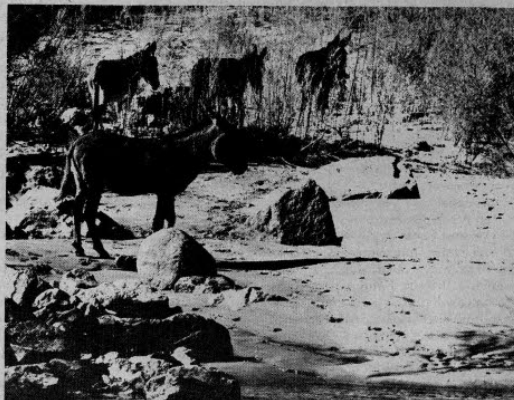
Aside from the emotional arguments, the debate centers upon how many burros are in the canyon, whether or not they are "native," and how much damage they are inflicting on other wildlife and vegetation.

The Park Service apparently figured when it released its environmental assessment that it had enough answers to those questions from research already done. The Humane Society and the other groups disagreed and mentioned several areas in which they thought more research was needed. Andrus agreed with them.

EXOTIC OR NATIVE?

To the general public, the argument over whether the burro is native to the canyon or not seems largely academic. Those who say it is not a native say that although now-extinct native burros may possibly have inhabited the canyon 8,000 to 11,000 years ago, the environment then was so much different than it is today that the modern feral burro (a wild burro that descended from domestic ones) could not fill the same "ecological niche."

The Humane Society and the other groups, however, argue that the presence of burros in the canyon today is "in fact a



FERAL BURROS along the Colorado River in Grand Canyon National Park. The National Park Service has proposed eliminating all burros in the park to protect native plants and animals.

Photo by John Running

restoration of their natural-historical relationships with the local flora and other aspects of the habitat." The groups then say that whether or not the burro is an exotic (introduced) species shouldn't matter since the public derives great pleasure from them. "The Park Service is promoting this abstract ideal of faunal purity in the face of the concrete fact of the enjoyment which people get from seeing burros in the canyons and from knowing they are there."

To the Park Service, the native v. non-native debate is crucial to its management decisions. According to Andrus, "Whenever feral species are found to create environmental problems within the parks, it has been Park Service policy to halt the problem by controlling the feral animal involved."

He thinks that question has been answered. "The burro is clearly not native to the park," he said in his announcement of the impact statement.

DAMAGE TO NATIVES

Since 1974, biologists from the Museum of Northern Arizona have studied burros and their influence on native Grand Canyon plants and animals. (See pages 8-9.) George A. Ruffner, one of the research biologists leading the study, says the research findings "clearly indicate the detrimental effects of feral burros on native Grand Canyon plants and animals." The three protesting groups disagree.

Because of the damage to vegetation, Ruffner says some researchers are afraid that burros may someday destroy their own habitat. In addition, other wildlife is affected.

The Museum of Northern Arizona study has concentrated on the detrimental effects on small mammals. However, most of the controversy on the competition question centers on the desert bighorn sheep. Some scientists, National Park Service resource managers, conservation groups, and wildlife interests argue that burros and bighorn sheep compete for food and water. Other conservation groups and scientists have disputed this.

The Humane Society and the other plaintiffs, however, think that the Park Service doesn't have enough information,

and Andrus agrees that more is needed. They criticize the study techniques and say that not enough areas in the canyon have been studied to know if there has been significant damage to the vegetation.

Concerning the alleged competition with bighorn sheep, the society says the Park Service doesn't have enough information



about the population levels or the distribution of either the burros or the bighorn sheep.

The burro population is estimated at 2,000-3,000 by the Park Service. Counting the animals is difficult over the rough terrain. The Humane Society says such a large margin of error is "not the type of data on which a finely-tuned environmental decision can be based as a matter of law or common sense." Andrus agrees that more research is needed on the population numbers for burros.

"Clearly any reasonably certain threat to the desert bighorn sheep population should be an object of grave concern," the society says. The groups charge that the Park Service ignores the possibility of reducing human or cattle use of the canyon while admitting that both have an impact on the bighorn sheep population. Using National Parks as grazing ranges for commercial cattle is "plainly contrary to the defendants' avowed policies," according to the three groups.

The society says the Park Service has not adequately scrutinized the possible effects of the proposed program on wildlife, such as the potential for a population explosion in rodents or disruption of big game by fencing.

MANAGEMENT ALTERNATIVES

The three groups admit there may be some habitat damage or some displacement of the bighorn sheep — and even that some of the burros should perhaps be eliminated. However, they say, "The solution should be made commensurate with the problem."

Instead, the Park Service is "proposing to carry out the most drastic conceivable management action (the total elimination of a species)" before undertaking the necessary studies.

Proponents of the Park Service plan are quick to point out their plan would not eliminate the species. There would still be at least 10,036 burros remaining on public lands in Arizona alone, according to Ruffner.

They say the Park Service has been trying to control burros since the early 1920s. During the period between 1924 and 1969, there were 2,608 feral burros destroyed at the park and 252 captured and removed. In 1969, the park abandoned this management policy because of negative public sentiment, but continued with its studies of the burros.

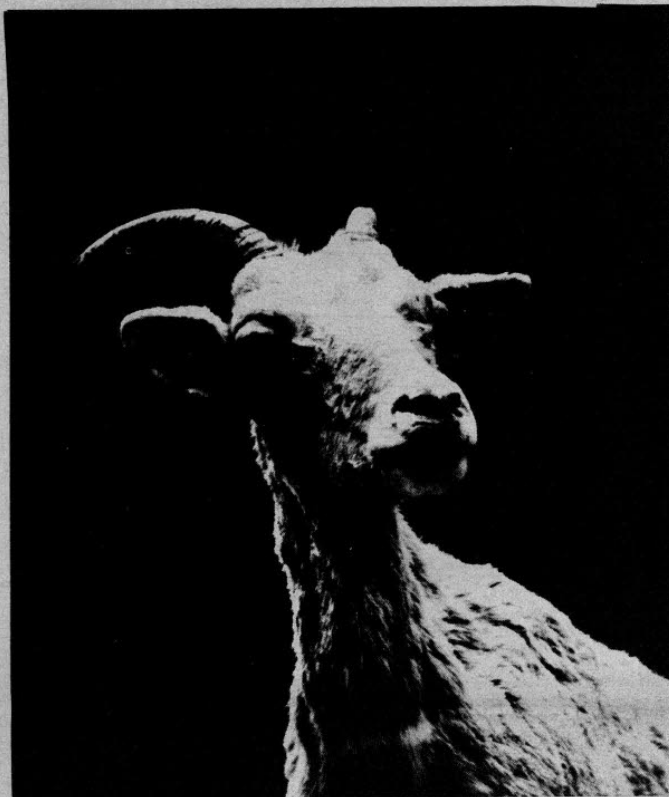
An "adopt-a-burro" program has been suggested as an alternative to the Park Service proposal. According to Ruffner, it is very difficult to capture and remove the burros from the canyon. Since 1924, only 252, or nine per cent, of the animals removed from the canyon have been taken out alive. The procedure was tried previously by the Park Service but was unsuccessful. Somewhat facetiously, Ruffner points out that if only one-third of the individuals who wrote letters opposing the management plans were to adopt one burro each, the problem of finding homes would be solved.

Reducing the park burro populations to low levels will not solve the problem either, according to Ruffner. The feral burros increase at an estimated annual rate of 20% to 30%, possibly doubling their population every four years. In 1931, resource managers mistakenly assumed that the 50 to 75 burros remaining in the park would cause no further problems; however, he says, the present population of 2,000 to 3,000 burros in the canyon are probably their descendants. Park managers had proposed a fencing program along with the shooting to keep large adjacent burro populations from invading the park.

Sterilization of burros was considered by the Park Service for the burro problem in some areas within its jurisdiction. However, the agency says this doesn't offer an answer for damage being done by the present population.

When the environmental impact statement has been completed and the public has had a chance to review it, another decision will be made. Andrus has indicated that evidence of damage to the native vegetation or wildlife will force the Park Service to do something, rather than tolerating the status quo. "The National Park Service recognizes the popular image of the burro and is attempting to balance this with the agency's obligation to protect the natural resources of parklands," Andrus says. However, he adds, "there must be a better way to resolve the problem."

8-High Country News — Apr. 8, 1977



DESERT BIGHORN, a female with a damaged horn. Biologists say burros in Grand Canyon National Park compete with native desert bighorns for food and water. The extent of the competition is the subject of controversy.

Photo by John Running

Do burros belong

Since 1974 biologists from the Museum of Northern Arizona have studied feral burros and their influence on native Grand Canyon National Park plants and animals.

George A. Ruffner, one of the leaders in the research, explains that the studies were conducted on opposite banks of the Colorado River. A group of 8 to 15 feral burros (wild burros that have descended from tame ones) frequented one area at the mouth of what is known as 209 Mile Canyon on the north bank of the river. The control area, across the river at Granite Park, had no burros present. Otherwise the two areas were similar.

Using the same techniques and procedures at each area, Ruffner says the vegetation and small mammal populations were sampled during 1974 and 1975.

The vegetation studies revealed that the 209 Mile Canyon area had one-fourth as much vegetation cover as the area without the burros. The researchers also noted that mistletoe, a plant parasite, infested over 16% of the catclaw and mesquite at 209 Mile Canyon while affecting only slightly more than five per cent of the same plants at Granite Park. Parasites usually infest organisms that are under stress.

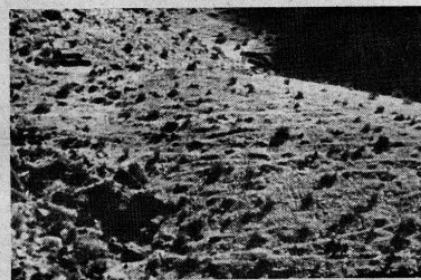
Ruffner says the numbers of native small mammals inhabiting the two areas were

drastically different. In four consecutive years, releasing small mammals during six samplings revealed that the density of small mammals was as many small mammals as at 209 Mile Canyon.

Extensive trail burros' travel according to Ruffner increased potential results of trailing, beginning to study how vegetation is

As for the impact on sheep, there is no doubt. Ruffner cites a study in the Black Mountains of Arizona, which was conducted in areas with burros and high results of this study. Half of the plants burros are sharing

To protect the Interior Department is eliminating all burros from Grand Canyon National Park. Strong public opposition has three groups fi



BURRO TRAIL SYSTEM in the talus slopes in Grand Canyon



BURRO RANGE V. CONTROL AREA. Right, the 209 Mile study site on the north side of the Colorado River. It receives heavy burro use and the vegetation shows signs of trampling. This area receives no burro use. Note the lack of trampling.



belong in the canyon?

Apr. 8, 1977 — High Country News-9

drastically different. Researchers spent four consecutive nights live-trapping and releasing small mammals on each area during six sampling periods. The average density of small mammals from all periods revealed that there were almost four times as many small mammals at Granite Park as at 209 Mile Canyon.

Extensive trail systems are evidence of burros' travel in the Grand Canyon, according to Ruffner. Soil compaction and an increased potential for erosion are two results of trailing. Researchers are now beginning to study plant growth patterns and how vegetation is affected by trails.

As for the impact on desert bighorn sheep, there is evidence for both sides. Ruffner cites a study by T. J. McMichaels in the Black Mountains of northwestern Arizona, which he says is the only study conducted in an area inhabited by both burros and bighorn sheep. He says the results of this study indicate that more than half of the plants in the diets of bighorn and burros are shared.

To protect the native plants and animals, the Interior Department had proposed eliminating all the burros in Grand Canyon National Park. However, there was a strong public reaction to the plan, and three groups filed suit against it — the

American Horse Protection Association, the Humane Society, and the Committee to Save the Grand Canyon Burros. As a result, the department called off the shooting and agreed to prepare an environmental impact statement. (See separate story on page 7.)

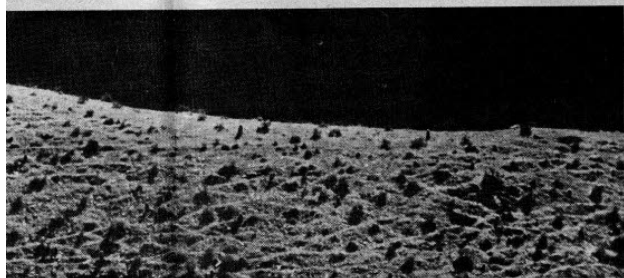
The three groups had challenged the adequacy of the research that has been done and some of the techniques used. They say the number of areas studied was insufficient, the differences cited in vegetative cover and small mammal density were statistically insignificant, and some of the data-gathering techniques are considered outmoded.

The groups charge that of the 15 studies on burro-bighorn interaction cited by the Park Service, 13 are out-of-date, written over 20 years ago; have nothing to do with the Grand Canyon's unique ecosystem; or are general interest items containing no pertinent data.

For a copy of the Feral Burro Management Plan and Environmental Assessment, which includes most of the research, write to the Superintendent, Grand Canyon National Park, Grand Canyon, Ariz. 86023.



BROKEN CATCLAW ACACIA. Researchers at the 209 Mile study site say burro grazing damages vegetation in this manner.
Photo by John Running



pes in Grand Canyon National Park.

Photo by Jim Reichman



the vegetation shows signs of trampling. Left, the control study site on the south side of the
Photos by John Running



FERAL BURRO. It looks harmless, but some researchers believe the animal destroys native wildlife habitat.
Photo by John Running

10-High Country News — Apr. 8, 1977

Cheyenne citizens to build greenhouse complex

Construction of the nation's first community solar greenhouse complex, which is aimed at providing food for low-income and elderly persons, will begin later this month east of Cheyenne, Wyo., according to Al Duran, executive director of Community Action of Laramie County (CALC).

"What makes this project unique," Duran says, "is the fact that we will incorporate a methane digester which will provide a backup source of energy in addition

to solar power."

Another aspect of the project will be the construction of four small solar greenhouses that will be attached to the homes of selected elderly persons, which will provide food as well as a backup source of heat.

"The project is also designed," Program Manager Gary Garber says, "to demonstrate the feasibility of training people from the community to design, build, and

operate a solar-reliant greenhouse and methane digester facility."

The project began in December with a week-long CALC-sponsored workshop on solar energy. A corps of "community energy engineers" consisting of students, housewives, designers, and other interested volunteers laid the groundwork for the project, Garber says.

CALC gained its first experience in greenhouse-building last summer when 15 teenagers from low-income families designed and built three small solar greenhouses.

The new 5,000-square foot greenhouse will utilize 4,500 square feet of growing space. Three adjoining structures will be constructed three miles east of Cheyenne, with each greenhouse to be used for growing different types of food.

Excavation will begin this month. Most of the volunteer engineers who started the project are still involved in the program, although Garber says more volunteers are needed.

The methane digester that will be used on the project will be a small-scale demonstration of how waste materials can be recycled into resources. Two valuable materials derived from the process will be

methane, a natural gas, and fertilizer, the end product of the sludge.

"We will be relying heavily on recyclable material," Garber says, noting that the Wycon Chemical Co. has donated 100 55-gallon oil drums that will be filled with water and used to store the solar power collected during the day.

Mike Flaherty of Panel-It has also agreed to supply a portion of the materials to the CALC project at cost.

In addition to providing food, the solar complex will also provide space for an "energy park" that will enable members of the community to research renewable energy methods.

"We are currently compiling an alternative energy library that outlines various methods of self-sufficient living," Garber says. "We will also have four demonstration projects on display at the 'energy park,' including a solar water still, a solar food dryer, water heater, and space heater."

The four display projects will all be simple enough for anyone to build, he says.

Anyone wishing to donate labor, materials, or expertise to the project, or wanting further information about the solar complex, should contact Garber at (307) 635-9291.



energy news of the Rockies and Great Plains

NO NEED FOR COLSTRIP?

A study funded by conservation groups and the federal government shows that the Pacific Northwest does not necessarily need the coal-fired power which would be provided by Colstrip Units 3 and 4 in southeast Montana. The study suggests an energy conservation program entailing energy efficiency improvements in the residential, industrial and commercial sectors and an increase in the proportion of labor intensive, rather than energy intensive, industries in the region. A 43-page summary of the report, "Choosing an Electric Energy Future for the Pacific Northwest: an Alternative Scenario," is available for \$1.50 from the Sierra Club's Northwest office, 4534 1/2 University Way N.E., Seattle, Wash. 98105. The study was funded by the U.S. Energy Research and Development Administration, the Sierra Club Foundation, the Natural Resources Defense Council, the Northwest Fund for the Environment, and the Oregon Environmental Foundation.

POPLAR RIVER DISPUTE. Montana Gov. Tom Judge has sent a lawyer to argue his state's claim to 50% of the water in the Poplar River Basin before the U.S.-Canadian International Joint Commission. Judge is worried that Canadian plans for a massive energy complex on the East Fork of the Poplar near the Montana border could threaten Montana's water rights.

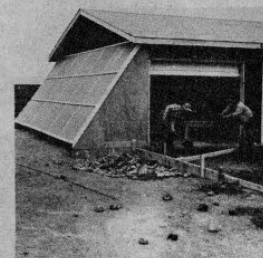
GEO THERMAL SITE. Glenwood Springs, Colo., may soon tap its geothermal resources for municipal heating, according to **People & Energy**. If a proposed test well succeeds, the city will seek federal funding to monitor and develop the resource.

SOLAR CENTER SITE CHOSEN. South Table Mountain next to Golden, Colo., has been chosen as the site for the national Solar Energy Research Institute. The U.S. Energy Research and Development Administration chose the Colorado site over 18 other proposed sites. Gov. Dick Lamm said, "This makes Colorado the solar energy capital of the world," when he heard the news.

PAWNEE SUIT FILED. Information Please, a group of Morgan County, Colo., ranchers and farmers near the site of the proposed Pawnee Power Plant, has filed

suit to stop construction of the plant until all state and federal requirements are met. The group charges that the state Public Utilities Commission prematurely granted Public Service Co. of Colorado a construction permit before approval had been granted by the U.S. Environmental Protection Agency, the Colorado Water Quality Control Commission, and the Colorado Land Use Commission.

RAWHIDE PLANT SCRUTINIZED. Citizens in Larimer and Weld Counties in Colorado have formed the 1984 Committee to study the Platte River Power Authority's (PRPA's) proposed Rawhide coal-fired power plant. PRPA plans call for construction of a 230 megawatt power plant 18 miles north of Fort Collins. The site might eventually accommodate a 750 megawatt complex, according to **Golden Triangle Review**. The 1984 Committee and other critics of the plant question whether it is needed, if sufficient water is available, if it will pollute the air, and if the project is a matter of state concern that the state Land Use Commission should review. To contact the 1984 Committee call (303) 493-5554 or write 503 Remington, Fort Collins, Colo. 80521.



SOLAR WORKSHOP & PLANS

Bill North, one of the early successful solar collector designer-builders in Colorado's San Luis Valley, will lead a solar collector building workshop at the University of Northern Colorado (UNC) in Greeley on April 29-30. The workshop is sponsored by the Solar Energy Association of Northeastern Colorado (SEANC) and the UNC chapter of the Colorado Public Interest Research Group. Registration is \$15, with reduced rates for college students and SEANC members. For details contact Doris Behring, 3820 Pueblo, Evans, Colo. 80620.

Plans for North's collector are available for \$1 from the San Luis Valley Solar Energy Assoc., P.O. Box 1284, Alamosa, Colo. 81101.

A collector designed and built by Bill North is shown above. Photo by Charles Nations.

Energy shuffle: Schlesinger deals while Andrus plays

by Lee Catterall

Interior Sec. Cecil Andrus will retain authority over where — but not how much — Western coal should be mined under President Jimmy Carter's revamped energy structure.

The House last week voted to give the President part of the authority he needs to realign the government's energy functions, putting most under a new energy department headed by James Schlesinger. Andrus has said he thinks the Interior Department should keep its authority over coal leasing in the West, and he has been successful in keeping the power to play those cards, but they will be dealt by Schlesinger.

"Dr. Schlesinger will determine how many Btu (British thermal units) America needs in the next calendar year, and then in the next five years, and then in the next ten years," Andrus said in an interview, "and he will then come up with a determination of how much of that will be supplied by natural gas, how much by oil, hydro and geothermal, and so forth."

"Then it will come to, well, we need 'x' number of Btu from coal, and then he'll say to me, 'Where can we get it?'" Andrus continued. "We will have to discuss what we think we can expect from those private lands (in the East) and then the balance will be my responsibility to go to the public domain lands, basically in the West, with a leasing program that will make available the coal that is necessary."

Coal leasing will be a matter of "coordination" between Schlesinger and himself, Andrus said. "Neither Dr. Schlesinger nor myself can operate independently of the other," he said.

During his Senate confirmation hearings, Andrus noted there are 16 billion tons of coal in the West already under lease, and that is an ample amount to supply our needs for some time.

He now acknowledges there is little he

can do to assure production from those areas. Those leases contain no requirements that the coal be mined "diligently," or at all for that matter.

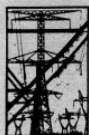
"There have been some accusations that basically some of this initial coal was leased up for speculative purposes," Andrus said. "I haven't been able to look into that. I wouldn't make that charge at all. But when the (federal) strip mine bill is passed and signed into law, we'll move on due diligence and selection of areas (for lease), and perhaps some of the other areas (under lease) that have not been producing will be removed."

"But," he added, "you've got a lease to deal with that's signed in good faith by those people and the federal government, and we'll do everything in a legal manner, but I would suspect that some of that coal that's been leased will probably not in the near future be mined."

Andrus opposes a rapid increase in Western coal development to serve Eastern markets. "Otherwise you're talking about increased transportation charges, relocation of people involved. You have fewer socio-economic problems if you can increase production in the area where your workers and your machinery and your methodology and your expertise are already located."

"There's a lot of deep mine coal that's in the East — Appalachia, basically — that is high-Btu, low-sulphur, but it's deep mine source, not stripable," he said, adding the government has a "responsibility of helping to improve the mining technology" to mine that deep coal.

However, that Eastern coal will be out of Andrus's hands under the reorganization. Unless Schlesinger battles the reluctance of Eastern utilities to use that coal, Andrus can expect to be told to come up with more Western coal than he would like to offer.



The Hot Line

energy news from across the country

BREEDER DISCOURAGED. A Ford Foundation study, *Nuclear Power Issues and Choices*, concludes that development of the breeder reactor and plutonium reprocessing can and probably should be postponed — perhaps forever — because of safety and nuclear proliferation problems. The study says planned and existing light water nuclear power plants should not be discouraged since they are equal, if not better than coal-fired power plants on health, safety, and economic grounds. The breeder will not be needed, say the Ford researchers, because by the year 2000 our proven reserves of deliverable uranium will have been expanded from three to five times our presently proven reserves. Chauncey Starr, president of the Electric Power Research Institute, told *Energy Daily* such a conclusion is "unverified and risky."

SOLAR HOT WATER PUSHED. The U.S. Energy Research and Development Administration (ERDA) has announced a \$10 million program to stimulate the purchase of solar hot water heaters. Under the plan, up to 10,000 homeowners in 10 Atlantic states and hotel and motel owners can apply for grants or contracts to pay for part of the cost of a solar water heater. "Solar energy is so close to being competitive with other fuels for heating water that a stimulus such as this could very well provide the essential market boost," says ERDA Administrator Robert W. Fri. "Our goal is to make it fully competitive as soon as practical."

SOLAR POTENTIAL. Solar power could supply 40% of the world's energy needs within 25 years and 75% in 50 years if a drive to develop it starts now, reports the Worldwatch Institute. Denis Hayes, Worldwatch researcher, says, "If the 50-year timetable is not met, the roadblocks will have been political — not technical."

FARM LAND STRIPPING BAN. President Jimmy Carter is reportedly considering a five-year moratorium on coal strip mining of prime agricultural land. The action may exempt existing operations and those with pending permits or applications. The ban would have the greatest impact on the Midwest. AMAX coal company says it would cause "severe economic repercussions in Midwest coal-producing states." Coal Week estimates the moratorium with the grandfather clause would drop production by 1.5 million tons per year in North Dakota and 500,000 tons per year in Western coal fields. The moratorium period would be used to conduct reclamation research.

LANDOWNER CONSENT. The U.S. Supreme Court has let stand a decision by Kentucky's highest court that landowners who sell the mineral rights to their land can prohibit strip mining of coal. Coal companies owning the mineral rights argued that to allow the surface owner to ban strip mining deprived them of their property. The surface owner argued that the coal could be deep mined, and to allow surface mining would deprive him of his surface property rights. In this case, the mineral rights were sold during a period when underground coal mining was assumed to be the only way to extract the coal.

PROTECT ROYALTIES. Sen. Clifford Hansen (R-Wyo.) is leading a drive to protect the states' 50% share of federal coal leasing royalties. Under a provision included in the new proposed federal strip mine legislation, part of the revenues from coal leasing could be used to reclaim abandoned coal mines, located primarily in the East. The Wyoming Community Development Authority says this provision could cost Wyoming \$18 million in lost royalties by 1985. Hansen hopes to set aside a separate fee per ton of coal for reclaiming abandoned mines rather than dip into the mineral royalties fund.

NO CONFIDENTIALITY. The U.S. Bureau of Land Management has agreed to release maps showing all tracts nominated for coal leasing, and the names of the nominators. Interior Department Solicitor Leo Krulitz told *Coal Week* the list will include tracts that the nominators had requested remain confidential. Conservationists and a North Dakota newspaper, *The Onlooker*, had requested that this information be made public.

COAL SWITCH FAILS. Federal Energy Administrator John F. O'Leary says the government has failed for three years to force a single electric utility to switch from oil or gas to coal fuel. In 1974, Congress gave the Federal Energy Administration authority to require utilities to burn coal instead of oil or gas because coal is more plentiful in the U.S.

SOLAR BURNING FOR BODIES? A design for a solar crematorium won an award recently from *Progressive Architecture*, a professional journal. Although one of the judges thought the design too morbid, the designer says it is meant to "apply advanced hardware system in such a way as to enrich the meaning of a fundamental personal and public activity." The crematorium involves many mirrors on tall stands which track the sun and focus their heat on a parabolic collecting mirror. The *Los Angeles Times* says that the architect, Frederick Fisher, 27, has "drawn a formal metaphor, in which the ultimate life-giving force completes a human cycle."



RIVER FLOW CUTS PLANNED. Due to the drought, Idaho Gov. John V. Evans and Idaho Power Co. (IPC) have announced plans to reduce the flow of the Snake River through Hells Canyon to save water for hydroelectric generation. Evans says if the water can be stored in reservoirs now it can be used to prevent power blackouts in Idaho in August and September. IPC wants to cut the present 13,000 cubic feet per second (cfs) flow below Brownlee Dam to as little as 5,000 cfs. The flow reduction could pose problems for rafts and jet boats in Hells Canyon. Hells Canyon is a National Recreation Area and the Snake River in Hells Canyon is included in the National Wild and Scenic Rivers System. Photo of Hells Canyon taken from a jet boat.

Court rules nuclear plant liability limit is unconstitutional

The Price-Anderson Act, a federal law that limits the liability of a power company in the case of a nuclear power plant accident, has been declared unconstitutional by a federal district court judge. The ruling is a major victory for anti-nuclear environmentalists and it could pave the way to a nuclear moratorium if it is allowed to stand.

Price-Anderson, passed by Congress in 1957, limits a utility's insurance liability to \$560 million in the case of a nuclear mishap. Most of this liability is backed by the government. Only a fraction is privately insured. The law was passed because utilities argued it would be too costly to obtain unlimited liability insurance.

In the case, the Carolina Environmental Study Group and about 40 individuals opposed to two proposed nuclear power plants being built near Charlotte, N.C., argued

that a serious nuclear mishap could cause far more than \$560 million in damage. Judge James B. McMillan of the Western District of North Carolina ruled that to limit liability could lead to deprivation of property without due process of the law. In the event of a nuclear catastrophe, the public could suffer billions of dollars of damages, but Price-Anderson would arbitrarily prevent citizens from ever recovering their losses.

McMillan's March 31 ruling raises major doubts about the future of nuclear power plants in the U.S. If utilities are required to purchase unlimited liability insurance, the added cost may make nuclear plants too expensive to build.

The suit was filed against the Nuclear Regulatory Commission and Duke Power Co., builders of the Charlotte nuclear power plants.

High Country News-11
Apr. 8, 1977

Reckoning

from Washington

by Lee Catterall

A dramatic shift by utility companies from the use of oil and natural gas to coal for their power plants is being cited by government and industry as the reason for Wyoming's continued coal boom in the decade ahead.

The National Coal Association, which represents mostly Eastern coal companies, points to newly-compiled figures as indication "that the rapid development forecast for Western coal will not be the result of increased demands for low-sulfur Western coal by Eastern utilities."

The Western coal boom has often been attributed to stiffer air quality standards that has caused some Eastern utilities to rely on Wyoming and Montana coal, which contains fewer sulfur pollutants. Millions of tons of Wyoming coal are shipped today to the coal-producing states of Illinois, Indiana, and Ohio.

However, a Federal Power Commission report shows that nearly nine of every ten tons of coal mined in Wyoming by 1985 for new coal-fired power plants, or plants converted so they can use coal, will be burned west of the Mississippi River. In 1975, more than a fourth of the state's coal made the long journey east.

The shift by utilities to coal is expected to be greatest in the Southwest. The FPC report says nearly 60 million tons of Wyoming coal already is under contract to be hauled yearly to power plants in Texas, Arkansas, Oklahoma, Kansas, and Louisiana. Only 26 million tons is destined for new coal-fired plants elsewhere and 7 million will feed new plants in Wyoming.

The utility industry's National Electric Reliability Council forecasts that Texas, where coal generates only 10% of the electricity today, will rely on coal for more than half its electricity by 1985. The FPC report shows that Texas is under contract to import nearly as much coal from out-of-state for new coal-fired plants as Wyoming has agreed to export for such plants throughout the country.

In Louisiana, Arkansas, Oklahoma and Kansas, where electricity today is only 10% coal-fired, nearly half the electricity will come from coal by 1985, the utilities' study projects. A large shift to coal also is expected in the plains states into the Great Lakes region, and Wyoming coal already is under contract to supply many of those new plants.

As utilities turn to coal, the government is beginning to eye Eastern utilities for their coal activities. Both FPC and the Securities and Exchange Commission are expected to create rules this year that could inhibit eastern utility involvement in western coal.

President Jimmy Carter has been emphatic in his opposition to Western coal being shipped to feed power plants that set atop coal fields in the East. Also, he has been strong in his support of utilities converting their power plants so they can use coal.

The new climate created by the shift by utilities and the slow-down in Western coal being burned in the East is likely to produce stability in Wyoming's booming coal industry. A lessening of air quality restrictions might otherwise have caused the state's coal boom to bust.

12-High Country News — Apr. 8, 1977

Idaho conservation bills: few losses, few gains

Holding ground against a hostile legislature

by Barbara Swacz

A progressive new public utilities commissioner, a power plant siting mandate, and preservation of a land use planning statute penetrated what Idaho conservationists see as a swamp of misinformation and regression that marked the 1977 Idaho Legislature.

"The Idaho Conservation League (ICL) knew this legislature was going to be tough, but we held the line on issues like land use and we scored a few victories in energy," says Jeff Fereday, executive director of ICL.

Energy policy became a major arena where the legislature and newly confirmed Gov. John Evans squared off.

Former Gov. Cecil Andrus had left a legacy of energy-related proposals, including measures for local energy districts to enable communities to develop renewable resources and protection of minimum stream flows in the Snake River. Evans supported these bills in his State of the State Message, but none survived the legislature.

ENERGY OFFICE SQUABBLES

Instead, the direction of the Idaho Office of Energy became a major issue. Andrus had established the energy office by executive order after the 1976 legislature had refused to create and fund it. When the Joint Finance-Appropriations Committee convened this year, several members attacked Office Director Earl Adams for what they called an overemphasis on energy conservation and a failure to develop new energy sources.

The committee stalled action on Evan's Energy Office budget request for \$123,000 to force Evans to change the office's direction. On Feb. 9, Evans fired Adams. He later announced the hiring of Kirk Hall of the California Energy Commission to equalize emphasis on new sources and conservation.

Evans also formed an Energy Council to oversee the Energy Office. Council members will represent state agencies, the legislature, and the governor's staff. No consumer-citizen interests will sit on this council.

After these compromises from the governor, the legislature authorized \$86,000 for the office.

PUC "JEWEL"

In an action Evans called "a jewel," the senate confirmed Conley Ward, a 29-year-old Boise lawyer and former PUC staff attorney, for a six-year term on the Idaho Public Utilities Commission.

Ward was the second nominee to come before the senate. When Andrus left office, he nominated Matthew Mullaney to fill the vacancy. The senate rejected Mullaney because of his pro-environment record.

"Ward will be interested in arguments in favor of flat or inverted rates, peak load pricing, incremental pricing, rates that encourage conservation," predicts Fereday. "In energy supply, he will likely give close attention to rate structures that fairly assess the true costs of energy among all users."

SITING'S DAY HAS COME

Power plant siting legislation sailed through the senate this year, with unanimous support. But the bill was introduced very late in the session and died when the house refused to consider it.

"Siting's day has come. It's even become



WHEN IDAHO GOV. John Evans delivered his state-of-the-state address to a joint session of the legislature (above) he called for passage of a package of energy bills. Most of the bills never reached his desk.

a Republican as well as Democratic issue," says Fereday.

The siting bill passed by the senate is the result of negotiations between public utilities, ICL, the governor's office, and the PUC. It establishes siting criteria, a time limit on application decisions (15 months with potential extensions), a filing fee to fund PUC study (\$300,000 ceiling with potential additions), and a requirement that utilities submit five-year building program plans and supply and demand estimates. The measure would apply to all proposed plants of 50 megawatts or more, and to large transmission lines 15 miles or longer.

Fereday expects the bill to move swiftly next year, but he's worried about the interim: the senate has indicated that the PUC should act on the intent of the law, even though it's not passed. "The PUC could use the hearing schedule and the criteria proposed in the bill. But studies will be necessary. Where is the money coming from?" Fereday asks.

MANDATES WITHOUT MONEY

The legislature gave the PUC a number of other mandates without money this session. Passing a "concurrent resolution" to circumvent a governor's veto, the legislators ordered the PUC to select four sites for fossil fuel or nuclear power plants by June 1. Without money or staff to conduct such a study, the PUC may have to rely on a list of sites proposed by Idaho Power Company in its 1976 Pioneer power plant application, conservationists fear.

The legislature also asked for an annual PUC report on Idaho's energy supplies and needs, to be delivered each Jan. 15. This request was not backed by an appropriation either.

While the mandates went to the PUC, the money went to an outside contractor for an economic study of Idaho energy requirements. Again using the concurrent resolution to avoid the governor, the legislature designated \$110,000 of the legislature's operating budget for the study. Money from the legislature's own budget can be awarded without the normal state competitive bidding process. It is likely to go to Barry Asmus of Boise State University, an outspoken proponent of fossil fuel and nuclear power plants.

"The legislature has a Pioneer power plant fetish. Now they're taking the authority to promote power plants into their

own hands," Fereday says. ICL will ask that the \$110,000 study be opened to a bid system.

LAND USE LAW SURVIVES

The Local Planning Act of 1975 emerged unscathed, despite several attempts to emasculate it. The legislature even enacted one land use measure that strengthened the act: it provided representation on the city planning and zoning boards to communities in areas of growth impact around cities.

One threat to the planning act did pass, but was vetoed by Evans. This bill would have allowed farmers to subdivide their land for their children without controls on the children's disposal of that land.

An attempt to repeal Idaho's land use law was defeated. "The pro-repealer people thought they had more ducks in line than they did," says Fereday. "The local leaders and city officials are very committed to land use planning. The Idaho Association of Commerce and Industry and the Idaho Homebuilders Association had to bring their repealers in through the back door by proposing amendments to make the act unworkable."

The bill that came closest to a direct repealer was a "shall to may" word change that would have made planning optional. Two such bills were introduced — one in the senate and one in the house. Both were rejected, the house version failing on a tie vote.

REAL LEADERSHIP

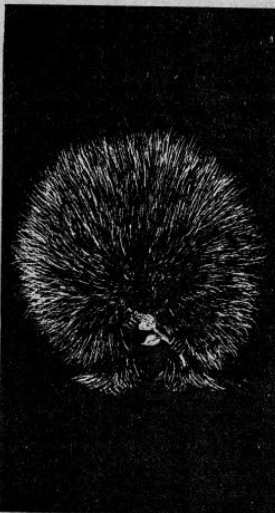
"Governor Evans' vetoes have been evidence of some real leadership and concern," says Fereday. Evans' veto saved over 18,600 acres of sand and gravel mining land from the legislature's attempt to destroy Idaho's surface mining reclamation program. He also turned back a bill that forbade the PUC to regulate any utility advertising.

ICL had hoped Evans would veto another bill — one that reduced Idaho's statewide

building code to a local option. Many major Idaho cities already have adopted a building code, but this bill may forestall new local adoptions. Instead, Evans signed the bill, making it law.

Fereday feels conservationists ran a successful lobbying program in the 1977 legislature. "ICL has a much more experienced and committee volunteer effort at the legislature this year, and a growing constituency active on our phone networks," he says. "These were the largest factors in our success. In no case are legislators ignorant of our influence."

The Idaho Conservation League will publish a conservation voting analysis in April. Copies will be available from ICL, Box 844, Boise, Idaho 83701.



© Carol Snow

Colorado legislators vote to scrap Land Use Commission

The House Local Government Committee of the Colorado General Assembly has passed three conflicting bills designed to dismantle the Colorado Land Use Commission (LUC).

—HB 1527 repeals the LUC's authority to request that local governments act on matters the LUC considers to be of state interest ("407" powers). The sponsors of this bill told the *Rocky Mountain News* that they were angered by the LUC's requests for reviews of certain projects — especially the possible review of the Pawnee Power Plant to be located near Brush, Colo. LUC supporters note that the LUC has only used this power six times since the legislation was enacted. The LUC doesn't rule on a project, all it does is ask the local government to consider if a proposed action is of state concern. The ultimate determination rests with the local government.

—HB 1542 transfers the LUC to the Department of Local Affairs. The bill eliminates the LUC's independent staff.

—HB 1557 abolishes the LUC and transfers its functions to the Division of Plan-

ning. This bill also repeals the LUC's "407" powers.

All three bills are in the House Rules Committee as of this writing. Conflicts between them may be ironed out by the committee before a house vote.

Conservationists are mounting an effort to save the LUC. Former LUC chairman Fred Sonderman says, "I believe that the disappearance of the LUC would really mean the demolition of the modest effectiveness with which Colorado now addresses its land use problems."

For more information the Colorado Open Space Council says to call David Hall at (303) 832-1927.

Sun, wind devices shrink N.D. taxes

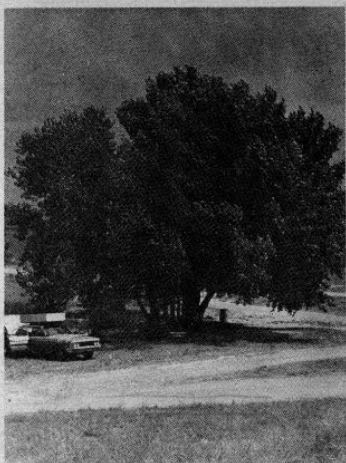
The North Dakota legislature has passed a bill which would allow income tax breaks for people who install solar or wind energy devices. The bill would provide a tax credit of 10% over two years of the total cost of such devices.

Apr. 8, 1977 — High Country News-13



Western Roundup

HCN



INVITING REFUGE. Cottonwoods now are being both cursed as water-gluttons and praised as a new timber resource in Colorado. Photo courtesy of Nebraska Game and Parks Commission.

Colo. cottonwoods culled?

Cottonwood trees, once a valued refuge on the treeless plains, are now being viewed in Colorado as a water-gulping nuisance by some and a new timber resource by others. John S. Berst, district forester for the Colorado State Forest Service in Fort Morgan, says board feet of cottonwood are now being inventoried along streams in a pilot area on the Colorado plains to prepare for possible timbering. He says he wants to be ready to do the best possible job of management not only for timber, but also for wildlife habitat, grazing, and other uses. He is considering replacing the cottonwood with a mixture of trees and said he would like to work with the Colorado Division of Wildlife on the project. The wildlife division, however, informed Berst in an indignant letter that it did not support his proposals. The letter said that such a plan could destroy riparian habitat and that previous attempts to diversify streamside forests had been unsuccessful because of fluctuating water tables and poor soil conditions, among other factors.

Meanwhile, in the state legislature, a bill is being considered that would encourage clearing out cottonwoods and other "phreatophytes" (plant life that requires large amounts of water) "in order to provide for beneficial use of all waters in this state." Critics say that by clearing such vegetation, erosion is enhanced and wildlife habitat lost.

Denver—hazard to health

The number of people who show up at the emergency room with complaints of shortness of breath, difficulty in breathing, chest pain, or asthma attacks jumps sharply when carbon monoxide levels are high in Denver, according to a study by researchers at Colorado General Hospital. These complaints begin to increase when the carbon monoxide level in the air is only about half the level that the U.S. Environmental Protection Agency (EPA) says affects health, according to a *Denver Post* report. Consequently, the researchers recommend that EPA reconsider its standards for the pollutant, which is produced mainly by automobiles. In addition to the complaints, doctors have noticed that in-hospital deaths from heart attacks and over-all death rates for the city have increased during peak periods of pollution. Denver and Los Angeles have the highest carbon monoxide levels in the nation. However, studies in mountain communities show carbon monoxide pollution there sometimes reach levels as high as in Denver.

N.D. to cut neighbor off

North Dakota is considering ways to retaliate against Minnesota, which has joined the National Audubon Society in a suit opposing the Garrison Diversion, according to North Dakota Attorney General Allen Olson. Minnesota is concerned about the ecological effects of the project on the Red River, which forms part of the border between the two states and which may be polluted. North Dakota may cut back its supply of coal and electric power to Minnesota. Or it might attempt to block Minnesota from irrigating border farmland. The project would provide municipal water to both states and irrigation water to North Dakota if completed. It is included in the list of water projects now being reevaluated by the Carter Administration, however.

Locals oppose new dams

As its present water project plans are being scrutinized by the Carter Administration, the Army Corps of Engineers is moving ahead with plans for additional projects. More than 25 reservoir sites are being considered along the Columbia River and its tributaries. However, a public meeting in Missoula, Mont., recently showed little evidence of support for projects proposed on the lower Flathead River. Critics of the project included farmers, whitewater boaters, students, teachers, representatives of conservation groups, a geologist, and several professional wildlife experts, according to the *Missoulian*. Their criticism centered on many of the same points that have inspired the re-evaluation of other water projects. A farmer said a dam on the Flathead would inundate most of the land that could be irrigated. Others questioned the economics and environmental impact of the dams, safety, whether they would actually reduce flood danger, and whether energy conservation wouldn't be a better alternative than additional hydroelectric power.



Board sues on EIS delays

The Denver Water Board has filed suit objecting to delays caused by environmental impact statements on a water project. The board says it must begin construction immediately on the Foothills water treatment complex, insisting that the project is not connected with other plans to increase water supplies as critics of the impact statement allege. However, approval of the project has been delayed after a draft environmental impact statement — the third written on the project — was deemed inadequate. The project was first approved by voters in 1974. The water board is seeking \$20 million in damages because it says the city is losing \$864,000 each month the project is delayed. Environmentalists, however, say the board would not have been delayed if a complete impact statement had been written initially. The suit was brought against the Secretary of Interior, the director of BLM, a former assistant secretary of the Interior, and the Colorado state director for the BLM. Denver Water Board President Charles F. Brannan says the suit was necessary because BLM, which prepared the impact statement, was acting in concert with "no growth" opponents of the project.

Ladron — 1st wilderness?

Ladron Mountain in New Mexico could become the first wilderness area under the new organic act for the Bureau of Land Management. The BLM is looking at 18,300 acres. However, the New Mexico Wilderness Study Committee says the BLM is alienating area ranchers by including several ranch roads in its proposal, whether on purpose or not, according to the *New Mexico Independent*. The mountain is said to be one of the wildest, most rugged places left in New Mexico.



PEACEFUL APPEARANCE — but Lake Sakakawea has been the source of continuous conflicts between the tribes on the Fort Berthold Reservation and the federal government since the government built the Garrison Dam 20 years ago. Photo courtesy of North Dakota Travel Department.

Indians split on Carter's water projects decision

Indians have taken both sides in the battle over President Jimmy Carter's decision to re-evaluate several federal water projects, which would affect Indian tribes in the West. The Ute Indians in eastern Utah say they are ready to sue the federal government if the Bonneville Unit of the Central Utah Project (CUP) is not built since the tribe had signed an agreement to restrict its use of the water until the unit was built. The agreement provided for development of water storage facilities for the Indians. However, the Americans for Indian Opportunity agree with Carter's decision to re-evaluate several projects that could affect other tribes and want to be sure Indians get to participate in the re-evaluation. They men-

tion the Central Arizona Project, which would wipe out almost the entire Fort McDowell Reservation and would result in a loss of water rights for several tribes; the Dolores Project in Colorado; the Fruitland Mesa Project in Colorado; the Garrison Diversion Unit in North Dakota; and the Oahe Unit in South Dakota. The group points out that in the past, Indians have been ignored during the planning and construction of federal water projects, and Indian lands have been flooded when there were other areas where the projects could have been built. When the Garrison Dam was built, for example, more than 90% of the people of the Fort Berthold reservation had to be relocated.

14-High Country News — Apr. 8, 1977



HCN

Bulletin Board



LOONEY LIMERICKS

by Zane E. Cology

When it comes to the cranes on the Platte
We just got what it was we begat.
We dried up their haven
For ditches and pavin'.
If we soak up much more, they'll fall flat.

ALTERNATE ENERGY FAIR

AERO-WEST, Missoula Tomorrow, and the County Extension Service are sponsoring the New Horizons Fair II on May 7 at the Horizon House, 323 W. Alder, Missoula, Mont. The fair will feature skits and plays by the New Western Energy Show, a solar workshop where the public will help build a solar collector, booths featuring local artists and craftsmen, and a contest for high school and vocational students in wind and solar energy design. For details contact AERO-WEST, 323 W. Alder, Missoula, Mont. 59801 or call Scott Sproull at 728-0015.

NAVAJO GASIFICATION EIS

The final environmental impact statement (EIS) on a proposed commercial coal gasification complex on the Navajo Indian Reservation in New Mexico has been released by the Department of the Interior. The project is a joint venture of El Paso Natural Gas Co. and Consolidated Coal Co. Copies of the EIS are available from the Bureau of Reclamation, Room 7622, Washington, D.C. 20240.

BLM LAND USE PLANS

The Bureau of Land Management has scheduled five public meetings and hearings in Wyoming to review five different land use plans. The meetings will be held between April 22-28 in Rawlins, Kemmerer, Rock Springs, Gillette, and Douglas. For more detailed information contact a local BLM office or Jim MacNair at the state BLM office (307) 631-9651.

GRASSLAND INSTITUTE

Geology, archeology, history, and biology will be featured at the Grassland Institute June 12-19 sponsored by the Denver Audubon Society in cooperation with the University of Northern Colorado. Seven days of camping on the prairie, a float trip, and a barn dance are part of the program. The cost is \$140 and college credit is available. Registration deadline is May 13. For more information write Dr. Jim Wright, 1227 So. Quince Way, Denver, Colo. 80231.

IDAHO AIR POLLUTION

The Feb. 1977 issue of the Idaho Environmental Council newsletter has an excellent section on air pollution in Idaho — what the problem is and what you can do about it. For a copy, send your request (and a donation if you can afford it) to EIC, P.O. Box 1708, Idaho Falls, Idaho 83401. Memberships in IEC are \$10 per year.

INSTREAM FLOW NEWS

The U.S. Fish and Wildlife Service (FWS) is now publishing a newsletter on instream river flow. The newsletter lists conferences, publications, and research findings relating to minimum stream flow requirements. To get on the mailing list, write: Instream Flow Service Group, FWS, Room 206, Federal Bldg., Fort Collins, Colo. 80521.

PLANET-DRUM

The Planet-Drum Foundation is preparing a "bundle" of writings, art, and information about the Rockies. "Backbone — The Rockies" will include poetry and material on native plants and solar heating. Advance sale price for "Backbone — The Rockies" is \$2.50. Yearly memberships, which include "bundles" and newsletters, are \$10. Write Planet-Drum Foundation, Box 31251, San Francisco, Calif. 94131.

CONSERVATION BUILDING

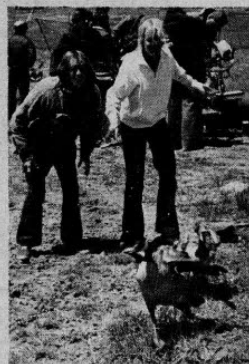
Building in the North is a 66-page publication on building insulation, water supply, and waste management in the North. HCN reader Douglas McIntosh says, "This book has the best treatment of home insulation for cold weather I've seen so far. The sections on permafrost and water supplies are not of interest to Wyoming residents, but the rest of the book will be useful to anyone designing for minimum heat loss." Copies are \$4 each from Geophysical Institute, University of Alaska, Fairbanks, Alaska 99701.

ENERGY-ENVIRONMENT CENTER

A regional energy-environment information center for the Rocky Mountain states will open in Denver in May. The center's staff will provide information-search-and-retrieval services, as well as person-to-person referrals to federal and regional experts. The U.S. Energy Research and Development Administration and the U.S. Environmental Protection Agency are providing funds for the center. It will be located in the Denver Public Library's Conservation Library.

WIND CONFERENCE

The American Wind Energy Association will hold a national conference on wind energy in Boulder, Colo., May 11-14. The program includes technical sessions and a field trip to the Rocky Flats Wind System Testing Center. The public is invited. For information on fees and accommodations call 1-303-447-0820 or write P.O. Box 905, Boulder, Colo. 80302. Sessions will be held at the Harvest House Motor Hotel in Boulder.



WYOMING CONSERVATION CAMP

The Wyoming Game and Fish Department is sponsoring two week-long conservation camps sessions for teenagers in Sybille Canyon north of Laramie, Wyo., this summer. Girls' camp will start June 12 and boys', June 19. Twenty of the state's top girl scouts and Horizon Club members and 20 of the top boy scouts and Future Farmers of America members will be selected for the camp. Girls must be at least 14 years old and boys at least 15 years old by June 15 to be eligible. The week sessions cost \$15. For more information contact Wyoming Game and Fish Department, Education Section, Cheyenne, Wyo. 82001.

The photo above shows two of last year's campers releasing Canada geese that they banded. Game and Fish Department Photo by Joe Vogler.

WILDERNESS CONFERENCE

The National Outdoor Leadership School (NOLS) is holding a wilderness conference in Lander, Wyo., on April 23-24. Speakers will address wilderness carrying capacity, Bureau of Land Management wilderness, the impacts of clearcutting, citizen action to protect wilderness, and other issues. Cost is \$1 per day. For details contact Candice Carpenter, NOLS, Box AA, Lander, Wyo. 82520.

BUDWORM EIS

The U.S. Forest Service has released a draft environmental impact statement (EIS) on management of the western spruce budworm. The EIS proposes several management alternatives to control the budworm, which now infests 3.2 million acres of forests in Montana and Idaho. Copies of the EIS, and copies of an illustrated booklet on the budworm ("Western Spruce Budworm in Idaho and Montana, 1976") are available from most Forest Service offices in Montana and Idaho or write U.S. Forest Service, Forest Insect & Disease Management, Federal Bldg., Missoula, Mont. 59801. Comments should be sent to the above address by April 19.

PRAIRIE ENERGY FAIR

The Southeastern North Dakota Community Action Agency is sponsoring a prairie energy fair to increase awareness of energy conservation and alternative renewable energy sources. Local and regional experts will attend and there will be

booths and displays. The fair will be held May 6-7 in the Fargo Civic Memorial Auditorium in Fargo, N.D. For more information contact David Hilde, 311 Elm St. South, Moorhead, Minn. 56560 or call (218) 233-2515.

ALTERNATE ENERGY DIRECTORY

Synergy has prepared a directory with over 2,500 entries on alternate energy books, reports, conferences, manufacturers and facilities. Subscriptions for individuals are \$8 per year or \$5 per copy. Also available are three separate lists of manufacturers for solar, thermal (geothermal, methane, wood), and wind systems. They are \$2.50 each or \$6 for all three. Write: Synergy, P.O. Box 4790, Grand Central Station, N.Y., N.Y. 10017.

RADIOACTIVE WASTES

The Environmental Protection Agency will hold a workshop for the Western region in Albuquerque, N.M., April 12-14 to discuss environmental protection criteria for radioactive wastes. The workshop will be at the Albuquerque Inn and Convention Center. It is open to the public.

BLACK THUNDER ASSESSMENT

The University of Wyoming has released a final environmental assessment for the Black Thunder mine site in Campbell County, Wyo. The four volume report was prepared for the Atlantic Richfield Company and the Wyoming Environmental Institute and is said to provide the most comprehensive evaluation yet published for any of the planned surface coal mines in Wyoming. It will soon be available at libraries at the university, at county libraries in the Powder River Basin, and at the state library in Cheyenne.

Service Directory

Hillcrest Antique
Jim and Ann Fontaine
Rt. 63 Box 16 Dept. H
Lander, Wyo. 82520
(307) 332-3682
"Wood heating at its best."

70 expeditions and outings
to remote wilderness areas of the world.
Write for free 64 page illustrated catalog.

Mountain Travel
1398 Solano-HC71, Albany, CA 94706 (415) 527-8100

Shaw's Fireplaces

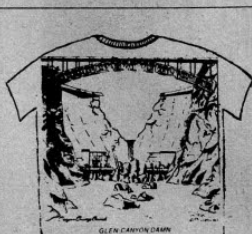
Efficient—burns at 70-80% efficiency
Safe—withstanding 3200° F.
Easy to install—wood framing
Durable—stainless steel firebox

For information write to:
Cole's Fuel Economy Store
218 Main Street Dept. C
Lander, Wyoming 82520
"Efficient Heating"

LARSEN'S BICYCLES

233 EAST 2nd — PHONE 754-5481
POWELL, WYOMING 82435

RALEIGH



Buying a Jim Stiles T-Shirt won't bring Glen Canyon back. It will, however, help support the Canyon Country Council in its efforts to preserve the remaining wilderness resources and wild & scenic rivers of the Colorado Plateau region. Support CCC. Buy a dam T-shirt.

Canyon Country Council
Box 613, Dept. S-1
Moab, Utah 84532

Please send me _____ Glen Canyon
Damn T-shirts at \$4.95 each, plus 55¢
(postage & handling) per order.
enclose check or money order
size: x-1g, lg, med, sm. (circle one)
yellow shirt, black design

Name _____
Street _____
City _____ State _____ Zip _____

(Utah residents please add 30c for sales tax.)



Eavesdropper

environmental news from around the world

"STALE CASE." The Sierra Club's battle to prevent Walt Disney Productions from building a ski resort in the Mineral King Valley in California has been dismissed as a "stale case" by a U.S. district court judge in San Francisco. In dismissing the case the judge said the Sierra Club had failed to prosecute. The *Wall Street Journal* reports that Disney interests are no longer interested in the Mineral King site and are looking at the Independence Lake area north of Lake Tahoe. Sierra Club attorney Larry Silver says the club will revise its suit when and if the Mineral King project is revived.

NAWAPA REVIVED. The present drought in the Western states and the drive for energy independence has brought about renewed interest in diverting water from Alaska to the Lower 48. The plan, known as the North American Water and Power Alliance (NAWAPA) calls for diverting 160 million acre-feet of water to users in Canada, the U.S., and Mexico. The hydroelectric generating potential of such a plan would be 70 million megawatts, according to the promoter — the Ralph M. Parsons Co. of San Francisco. Col. Robert Reiner of the U.S. Army Corps of Engineers told Associated Press the project would be "a classic one for the Corps." The

diversion would create a 500-mile-long reservoir from central British Columbia to Idaho. It was first proposed 10 years ago and rejected on environmental and economic grounds. The cost would be about \$100 billion.

ANDRUS FOR STATE CONTROL. Interior Secretary Cecil Andrus says states should generally be given an opportunity to adopt their own land use planning programs without federal involvement, according to *Land Use Planning Reports*. However, he thinks that some states may not take the initiative without incentives from the federal government. He would not speculate on what the Administration's formal position on land use will be.

CLASS I FOR PARKS. The National Park Service is now considering requests from two regions, the Northwest and the Southeast, for designating air over parks as Class I, which would allow almost no degradation of air quality. The Northwest regional office of the Park Service asked that all national parks and national park areas except the smallest and closest to cities be included. The Northwest region includes Washington, Oregon, and Alaska. The Southeast regional office listed several parks, preserves, monuments, and national river areas that it wants included.

COMPUTER TO THE RESCUE. The National Wildlife Federation is putting a computer to use to help preserve the bald eagle, which is considered endangered in most of the Lower 48 states. A computerized referral system would tell who is doing research in each state on bald eagles and other birds of prey. The information center would also collect and classify data, encourage research, operate educational programs, and give awards for information leading to the conviction of people who shoot eagles. Several \$500 awards have already been given, according to Jeffrey Lincer, who heads the center.

Classifieds

FOOTRACE. High Country News is sponsoring the First Annual Lander Citizens' Footrace to be held on June 5, 1977. The five-mile race will be run over a course to be announced later. Classes of competition will be announced when the amount of interest has been determined. A \$1 entry fee will be collected, and the winners of the various classes will divide the proceeds. If you are interested in entering, please call Sarah Doll at 332-3929 or Joan Nice at the HCN office, 332-4877. (A pro class, with appropriate fees shall be added if the need arises.)

"CANYON COUNTRY HIKING AND NATURAL HISTORY." Barnes, 176 pages, illustrated, \$3.95ppd. Hiking trails and routes in southeastern Utah. F. A. Barnes, Box 963, Moab, Utah 84532.

HELP WANTED. Executive Director-Organizer, Montana Wildlife Federation. Provides organizing and technical assistance to local affiliates, responsible for organizing new affiliates, setting-up membership drives, and monthly newsletter. Requires travel throughout Montana. Salary: \$5,500 plus expenses. Reply to Montana Wildlife Federation, c/o David Hunter, 715 Highland, Helena, Mont. 59601.

PHOTOGRAPHY WANTED. Faces of Women By Women. Now accepting photographic submissions for exhibit, book. Alexis Parks, Box 1917, Boulder, Colo. 80306.

HERBS. We'll send you 6 (six) different herb teas for \$1.00. Lonely Mountain Herb Co., Box 23A, Radium Springs, N.M. 88054.

GUIDE FOR USING HORSES IN MOUNTAIN COUNTRY SECOND PRINTING — 15 pages; available from The Montana Wilderness Association, Box 84, Bozeman, Montana 59715. Single copy \$1.75, 2 to 10 \$3.50 ea, 10 to 100 \$3.50 ea, 100 plus \$2.00 ea. Postpaid. (Proceeds go to MWA.)

Carter's crew emerging

The Carter Administration has filled several key environmental posts in recent weeks. Among his choices:

—The Senate has confirmed Carter's appointment of Douglas M. Costle as administrator of the Environmental Protection Agency and Barbara Blum as deputy administrator. Costle, a 37-year-old lawyer, headed the federal study that shaped the EPA in 1970. He has also been head of the Connecticut Department of Environmental Protection and was on Carter's transition team for government organization.

Blum, 37, has experience in small business, social work, and environmental activism. She has been chief lobbyist in the Georgia legislature and in Washington, D.C., for SAVE (Save America's Vital Environment) since 1972.

—Carter has nominated Guy-Richard Martin of Juneau, Alaska, to be assistant secretary of the Interior Department for land and water resources. Martin, a lawyer, is currently Alaska's commissioner of natural resources.

—Carter has nominated Robert L. Herbst to be assistant secretary of the Interior Department for fish and wildlife and parks. Herbst is commissioner of the Minnesota Department of Natural Resources and was formerly executive director of the Izaak Walton League of America. In the federal post, Herbst, would supervise the National Park Service, the U.S. Fish and Wildlife Service, and the Bureau of Outdoor Recreation.

The Sierra Club supports the nominations of both Herbst and Martin. However, in testimony before two Senate committees Brock Evans of the club's Washington, D.C., office said he hoped that both men would reflect the concerns of a broader constituency than they had in their state jobs. Evans says that Martin's position on new parks and wildlife refuges in Alaska was tailored to appease the mining industry. And he says wildlife protection organiza-

tions have criticized Herbst's wolf management policies in Minnesota.

—Strong environmentalists have been suggested to fill the three top posts on the President's Council on Environmental Quality (CEQ). Chairman will be California Assemblyman Charles Warren, who was a sponsor of stiff nuclear power industry regulation in his state. J. Gustave Speth, a lawyer and economist who has worked for the Natural Resources Defense Council for eight years fighting the breeder reactor and plutonium reprocessing, is the second member of the council. The third is expected to be Marion Edey, director of the League of Conservation Voters.

—Well-known environmentalists have also been tapped for top Interior Department posts. John Lesby, an attorney for the Natural Resources Defense Council, will be Interior's Associate Solicitor for Energy and Resources. Cynthia Wilson of the Audubon Society's Washington, D.C., office, will be Special Assistant to the Secretary of Interior for Environmental Affairs.

—Jim Moorman, Sierra Club's general counsel, will join the Justice Department as assistant attorney general for Land and Natural Resources.



LILY WHITE
Field Station
EASTERN OREGON STATE COLLEGE
LA GRANDE, OR 97630

Field courses in Bird Identification, Flowering Plants,
Ecology, Geology, Wilderness Survival Skills

WALLOWA MOUNTAINS
HELL'S CANYON
EAGLE CAP WILDERNESS AREA

GRASSLAND RESOURCES, INC.

Wholesale & Retail

Best Prices

Largest Inventory



P.O. Box 1596
Santa Fe, N.M. 87501

SEEDS

For Hay, Pasture and Range
(505) 983-2601

In The Old Railway Yard

Now Enjoy Your Very Own...

HUMMINGBIRD CIRCUS

Giant Quart — 8 Feeding Stations — 4 Perches

Tough bottle refillable without removing from attractive durable base. Complete brochure includes bibliography and recipe. Hanging accessories included. FREE VITAMIN SUPPLEMENT SAMPLE WITH EACH FEEDER! 5 oz. jar will supplement more than 10 gallons of nectar!

Ask for information on BIRD'S exotic new CIRCUS wild bird seed feeder with BIRDBATH and cat and squirrel-proof pole! Your own 3 ring circus and a novel year decoration!



DEALER INQUIRIES INVITED

Please rush the following, which I understand are PROMPTLY SHIPPED & UNCONDITIONALLY GUARANTEED. ☐ Giant quart @ \$9.95 ppd. ☐ 5 oz. Vtn. Supp. \$6.95 ppd. BOTH FOR ONLY \$15.90 ppd.
Name _____
Delivery address (not best) _____
City _____ State _____ Zip _____
BankAmericard/Mastercharge—Exp. date & A/C# _____

BIRD PRODUCTS

Box 2645 L 303/245-1616
Grand Junction, Colo. 81501

THE CLASSIC...

For over 30 years, Jøtul (Yotul) No. 118 has set a standard by which all other box stoves are measured. Many imitations and modifications later — No. 118 still can't be improved upon. Wood burns from front to back like a cigar... burns longer... large areas can be heated efficiently. Traditional Norwegian Basrelief design. Send for free brochure or send \$1 for Woodburner's Resource Guide to Jøtul wood heaters, fireplaces, coal heaters and combifires.

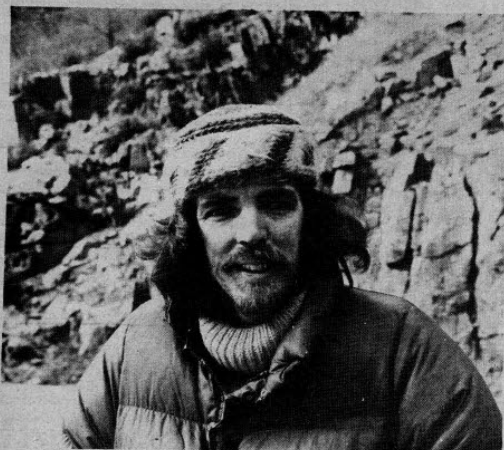
Hillcrest Antique

Jim and Ann Fontaine
Rt. 63 Box 16 Dept. H
Lander, Wyo. 82520
(307) 332-9611 or 3682
"Wood heating at its best"

16-High Country News — Apr. 8, 1977

Road to ruin?

Mark Skrotzki cuts his teeth on Glenwood Canyon



Story and Photo
by Mark Peterson

Mark Skrotzki

An old silver trailer rests on a Colorado hillside overlooking the Roaring Fork Valley. Inside the tiny shelter are stacks of highway designs, traffic statistics, and environmental reports. In these cramped quarters, Mark Skrotzki pores over the statistics of nearby Glenwood Canyon, the recently-chosen corridor route for the Interstate-70 segment between Glenwood Springs and Dotsero, Colo.

"Words can't describe the Glenwood Canyon, and money can't value it. It's just something you've got to see," says Skrotzki referring to the colorful gorge where the rushing Colorado River shares the canyon floor with the existing two-lane U.S. highway 6 and 24.

Skrotzki is afraid pushing a standard four-lane interstate through the canyon could ruin it. He has been spearheading the effort to find a sound design that would "preserve the grandeur of this canyon while installing a safe, efficient highway."

In 1974 Skrotzki became involved in the controversy when three planning firms, commissioned by the Colorado State Highway Department, each presented their design proposals for routing I-70 through the canyon. These plans ranged from a relatively conventional interstate

design to a double-decked highway.

Fearing that these construction designs would badly scar the canyon's majestic 3,000-foot walls and destroy plant and animal communities found on the canyon floor, Skrotzki formed the Citizens for Glenwood Canyon Scenic Corridor in September 1974. The group, believing that "less was better," sought an alternative to the standard four-lane interstate concept. "We want to fit the highway to the canyon," Skrotzki says, "not the canyon to the highway."

The group's first task was to obtain federal "scenic corridor" legislation, permitting the U.S. Secretary of Transportation to waive interstate specifications for the 13 mile length of the canyon. With this designation, interstate highway trust funds can be applied to a highway of less than interstate standards. The idea was patterned after the only scenic corridor in the country — the 12 mile Franconia Notch along Interstate 93 in New Hampshire.

A massive petition drive, headquartered in Skrotzki's tiny trailer, was begun to seek this designation. Skrotzki made numerous appearances on television, radio, and in schools. A 60-second television public service announcement with John Denver, popular singer and environmentalist, also helped round up 53,000 petition signatures and 3,000 letters of support. These were

sent to the Colorado congressional delegation, which sponsored scenic corridor legislation. On May 6, 1976, President Gerald Ford signed the scenic corridor legislation for Glenwood Canyon.

With this new flexibility, Skrotzki and local architect Donald Ball set out to design a highway that would be safe and efficient, and would be "in keeping with the special nature of Glenwood Canyon."

Many factors had to be examined. "Safety is the big emotional issue," Skrotzki says. "We wanted to find out what the causes of accidents on the current road going through the canyon were, and what the solution is."

After much research and study, their design proposal was released in October 1976. A book entitled, *Glenwood Canyon: An Alternative* was written by Skrotzki. "To be effective, you can't always say 'no.' We wanted to present a positive alternative here, blending together transportation and beauty," says Skrotzki.

An Alternative calls for a divided two-lane highway with guardrails for six miles in the center of the canyon. This would keep vehicles from running off the road or into the opposing traffic — a major cause of fatal accidents in the canyon today. For three miles on each end of the canyon a narrowed four-lane road is proposed which would not encroach on the river's edge. Four tunnels in the canyon would eliminate some of the most dangerous curves. Additional features would include a bike-way along the revegetated river banks, and hiking trails from the canyon floor into the surrounding mountains. At an estimated cost of \$72.9 million, the project would cost

half of what some designers estimated the cost of a standard interstate in the canyon would be.

This design concept was presented to the Glenwood Canyon Citizen's Advisory Committee (CAC) formed by Colorado Gov. Dick Lamm in April of last year. The panel, whose job it is to advise the Colorado Highway Commission on this issue, includes diverse members (two architects, two bankers, a contractor, a housewife, and Skrotzki) who have fought on opposite sides of the canyon controversy. CAC adopted many of the points in *An Alternative* in their recommendations to the state highway commission.

But, almost ignoring these suggestions, the highway commission went on record last December opposing any modifications in interstate standards. It said, "No variance from normal interstate standards will be considered unless it is clearly demonstrated that a safety hazard has not been created and that no reasonable alternative exists."

Skrotzki, disappointed with the commission's decision, wonders, "Who will make these determinations?" Meanwhile, the commission, which had already spent \$270,000 on design plans three years ago, will now hire a design firm again. Gov. Lamm promises CAC another hearing before the commission. With four new members now on the commission the outcome is uncertain.

"I wish I had done something else like this before the Glenwood Canyon issue came along," says Skrotzki. "Glenwood Canyon is just too important to cut your teeth on."

Artist's conception of two-lane portion of I-70.



Dear Friends,

Burro management is not an easy question. On the one hand, our sympathies go to the burros: free-roaming desert spirits; symbols of the days of pioneers; living creatures who have the right to exist.

Yet on the other hand, from the photographic evidence alone, it looks as if there's something awry. There are too many burros in the Grand Canyon, they're seriously disrupting the fragile desert web of life.

Or so it seems. We wholeheartedly support Secretary Cecil Andrus's decision to call for an environmental impact statement (EIS) to be doubly sure of the extent and cause of the damage. The Park Service was foolish to even consider killing 2,000 to 3,000 burros without an EIS. The action is certainly controversial and definitely will have a major impact.

We can also confidently point out some of the areas where more research is needed. The study should look at the alternative of reducing cattle or human use of the canyon, if that would help the desert bighorn. Before any

fences are built to keep burros from the surrounding area out of the national park, the impact of the fences on wildlife migration should be studied.

But then comes the hard part. If serious damage is documented, and if no new solutions (such as 2,000 to 3,000 people eager to adopt the burros) are found, then the only alternative, as we see it, involves killing burros.

If only some of the burros are killed, then the problem will soon become severe again because of their prolific reproductive rate. Consequently, the resulting situation will require man's constant intervention — just so a crea-

ture that man introduced can remain.

Which leaves only the choice recommended originally by the Park Service — killing all the burros. It certainly is not an appealing option. As Andrus says, "There must be a better way."

If there is a better way, we think the only method for finding it is through thoughtful consideration with all the facts before us. Inflaming the public with talk of "massacres" and "blood filling the canyon" without offering creative solutions won't make the problem go away. —the editors.

In
The News


Sandhill cranes
need Platte preservation. 1

Burros
oops, no EIS. 7
studies describe
Canyon devastation. 8

Idaho legislature
earns faint praise 12
Canyon saver
Mark Skrotzki. 16