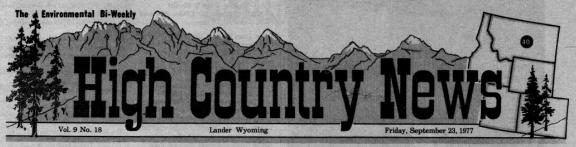
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11-77



Flathead Coalition primes for battle with Canada



NORTH FORK of the Flathead River, and Glacier National Park. The Flathead Coalition is trying to protect the unspoiled areas of the Flathead drainage.

The North Fork road produced another new rattle in my car as I drove north from Columbia Falls, Mont., toward Canada. Out of Columbia Falls the pavement abruptly ends, and the road quickly becomes a dirt and rock obstacle course. It is just the way a road should be in this remote, wild section of northwestern Montana.

Across the North Fork of the Flathead River, to the east, rises the Livingston

River, to the east, rises the Livingston Range of Glacier National Park, its peaks patched with snow melting fast this time of year—the snow drips, trickles, pours, then gushes into the North Fork. The river is incredibly transparent turquoise, a legacy of the glaciers that feed it. (The Water Quality Bureau assures us it is safe to

drink.)

The North Fork of the Flathead forms the western boundary of Glacier National Park, an International Peace Park and a World Biosphere Reserve — an untrampled place designated as a "reserve" by the United Nations because of its unique environment. The North, Middle, and South Forks of the Flathead are all protected by the Wild and Secuic Rivers Act.

Yet the area is threatened.

Yet the area is threatene

Millions of years ago a great mass of rock slid eastward over this range and stopped to form what is now Glacier National Park. It is likely that the folding and buckling of

the earth that accompanied that gigantic slip has trapped oil and gas beneath the Whitefish Range and the land to the east of whiteisn range and the land to the east of the Middle Fork. Texas Pacific, a sub-sidiary of the Seagrams whiskey corpora-tion, believes so strongly in that possibility that it has applied for leases to drill for oil and gas on 236,000 acres along the North and Middle Forks.

and gas on 239,000 acres along the North and Middle Forks.

The Forest Service, as a result of pressure from a Montana group known as the Flathead Coalition, currently is rewriting its environmental impact statement (EIS) for the lease applications. The Forest Service's original EIS recommended granting many of the required leases, but the regional forester agreed to review the EIS following a legal appeal by the Flathead Coalition.

The Flathead Coalition is an unlikely group of individuals and organizations, ranging from the Kalispell, Mont., Chamber of Commerce to the local chapter of the Sierra Club. The coalition is dedicated to the goal of "zero population" in the unspoiled portions of the Flathead River drainage. In order to achieve that goal, to protect the Flathead from pollution and

Hardin attacks freedom,

@1977 by Peter Wild

He sits contentedly sawing away on his violin with another scientist and two philosophers of the Salsi Puedas (get out if you can) Quartet. In this setting, the amateur music lover seems innocent

enough.

"He wears a string tie," comments Ralph Miller, a young journalist expecting other than the benign veneer, "and sports coat with a tiny gold pin in the lapel, a circle-and-arrow that look like a Volvo ad but is really some sort of ecology symbol. If it were a Masonic pin instead, you'd take Garrett Hardin immediately for a tourist from Kalamazzo...."

In fact, the inconspicu In fact, the inconspicuous ornament is a vasectomy pin, a reproduction of the male symbol used by biologists, but with a slice missing from the circle. It is a quiet reminmissing from the circle. It is a quiet remin-der of the professor's career as an iconoc-last. The images he is helping to break are many, the sacred cows that Western civili-zation worships. In the process he manages to pique racial minorities, sociologists, churchmen, political liberals, and conservatives alike. In earlier times he might have ended his days tied and burning at a stake. As it is, Norman Cousins scourged the Santa Barbara professor from the editorial pages of the Saturday Review: "Hardinism can become a wild infection in the moral consciousness." the moral consciousnes

Cousins was reacting to attacks on the shibboleths of Western society: freedom, philanthropy, technology. In the Hardin

"Every time John Birch sits down on the toilet, he becomes a socialist."

view, overpopulation and freedom are mutually exclusive. A surplus population degrades the environment, depriving indi-viduals of a quality life. Besides this, as

populations grow they become more com populations grow they become more com-plex, requiring restrictions on political rights. In Hardin's words, "Democracy is impossible with large numbers because the communication load goes up as the square of the population size."

Considering the environmental aware-ness of the mid-20th century, there is little shocking in the view itself. What stirs op-position is the difficult change: Hardin-position is the difficult change: Hardin-

philanthropy

shocking in the view itself. What stirs op-position is the difficult changes Hardin sees as necessary for society. People no longer should have the right to raise as anny children as they wish because, "Loss of freedom to breed is less horrible than massive death by starvation, epidemics, social chaos, and insanity." In other words, society must yield one freedom in order to protect the others.

If the observation displeases some groups, other Hardin stances inflame them. Current welfare practices are absurd because they don't link rights with responsibilities: "In a welfare state everybody pays part of the cost of unwanted children,"

(continued on page 6)



SIGN on a tree near the Cabin Creek

growth, the coalition is prepared to engage itself in a legal battle with Canada. It started in the fall of 1974 when an article appeared in Montana Outdoors, a magazine published by the Montana Fish

(continued on page 4)

(This article is reprinted from the Mountain Gazette, 2025 York Street, Denver, Colo. 80205.)



by Dr. John R. Bartlit of N.M. Citizens for Clean Air and

San Juan Branch College, Farmington, N.M., was the scene of the Fourth Battle of Four Corners, Aug. 17-21 — namely per-missible sulfur dioxide emissions from the huge, coal-fired blunderbuss of a power

The major participants were four: Arizona Public Service (APS), the N.M.

Arizona Public Service (APS), the N.M. Environmental Improvement Agency (EIA), Public Service Co. of New Mexico (PNM), and the joint forces of NMCCA&W and Rio Grande Chapter of the Sierra Club. The positions taken up by the four were not entirely the usual ones occupied by such forces at such hearings. There sat the EIA alongside APS supporting 60% removal of APS' 410 daily tons of sulfur dioxide emissions. There were we, supporting the emissions. There were we, supporting the support the supporting the supporting the support the supporting ide emissions. There were we, supporti 90% removal. And there was PNM, alrea committed to 80 plus per cent removal, barking at us a bit, barking at the EIA a bit. And there was the Environmental Improvement Board — starting out with five

members, dwindling to two — which must make a decision in October.

Our case was a simple one, consisting of

1) 80 to 90% removal of sulfur dioxide is arguired to meet the ambient air quality standards, according to the best air dispersion modeling calculations;

2) such control of sulfur dioxide emissions is technologically feasible; and

3) such control is economically reasona-

Needless to say, APS disagreed with us on points No. 1 and No. 3, but did agree that such control was technically feasible. The economic argument, Point No. 3,

was presented by Dr. John Bartlit. The facts came mostly from the Federal Power



production costs for every generating unit in the U.S. The most telling statistic is that the APS plant produces power for one-half the cost of the PNM San Juan Plant and

one-third to one-fourth the cost of the clean gas-fired plants used throughout Arizona and California. The 90% effective controls we advocate would not raise APS's costs up

we advocate would not raise ArS s costs up to PNM's costs even if PNM spent nothing on it voluntary cleanup program. APS's cleanup costs, when spread over all the customers served by the ditty Four Corners plant, would increase their electric bills

about two per cent, using APS's own fig

Hearing room scuttlebutt had it that

DISILLUSIONED

Dear HCN,

In your publication of July 15, 1977, page In your publication of July 15, 1977, page 9, a picture of two antelope with the following caption appeared: "WILDLIFE HABITAT in Wyoming may be significantly imperiled by strip mining. The Bureau of Land Management estimates that 67,000 acres of land will be affected in southwest Wyoming, only three to five per-cent of which can be restored to wildlife

I would like to correct the above statement if I may. According to the Wyoming Environmental Quality Act of July 1, 1973, (Article 4-"Land Quality" and 35-502.2-"Policy and Purpose"), all affected lands and adjacent lands to any mining operation will be fully reclaimed to the original use or a higher use by the operator of the mining operations. I ask you, how can the BLM make such a statement when the state of Wooming requires an acceptathe state of Wyoming requires an accepta ble and feasible reclamation plan to be de veloped before any disturbance is allowed

to occur?

If only five per cent of the 67,000 disturbed acres (3,350 acres) can be restored to wildlife use, the mining operators will not only lose \$19,955,000 from state bond forfeitures but also will lose the chance for any future operations in the state of Wyoming. What corporation can afford to take such chances?

The Lucky Mc Uranium Corporation's Lucky Mc Mine is located in central Wyoming, which has a large number of different wildlife populations — antelope being the most numerous and noticeable. According to the wildlife surveys which Lucky Mc conducts, there are larger numbers of antelope on our 11,000 plus acres of "disturbed" land now than when operations were started in 1955. Two main reasons contribute to this fact: (1) Due to mining operations, year-around water is available

unts of fresh green browse are available throughout the spring, summer, and

As both a biologist and mining engineer, I believe I am qualified to discuss such to-I believe I am qualified to discuss such to-pics. The mining profession has stood silent long enough and has put up with enough unqualified abusive statements made by amateur "environmentalists." The man in the street is going to have to realize that as the population of the world increases in an exponential function, more demands will be made for our natural resources, and ore land and water areas will have to be sturbed to satisfy the growing popula-

As I read the vast amounts of propaganda published which attempt to make the modern "mining industry" an obscene phrase, I have become very disillusioned and disappointed in the public's attitude towards the industry that supplies life-sustaining products for the world's needlene.

Environmental and Mining En Lucky Mc Uranium Corporation ental and Mining Engineer Riverton, Wvo.

Editors' note: The three to five per cent figures used in the story were from a BLM preliminary draft environmental impact statement, according to Harry Harju, Wyoming Game and Fish biologist. Harju explains that the land is to be reclaimed, but that plans provide for reclaiming it to grassland, which is valuable for cattle and sheep but "not worth a hoot for most wildlife."

The state law is ambiguous about whether wildlife habitat must always be provided for in reclamation plans although the Wyoming Department of Environmental Quality says it is an important consideration in practice.

FLOOD MONEY

Dear HCN:

turbed" land now than when operations were started in 1955. Two main reasons contribute to this fact: (1) Due to mining operations, year-around water is available for animal consumption, and (2) Due to our reclamation work on disturbed areas, large

and the failure of the Teton Dam was a screw up by the bureaucrats.

screw up by the bureaucrats.

The government has admitted its guilt by spending hundreds of millions to restore the Teton Valley, when spending almost nothing at all in comparison in helping the victims of the Big Thompson disaster.

Jon M. McMillan, M.D.

GOOD WATER MANAGEMENT

Dear HCN:
Publication of the two Dan Ray articles,
"California Leads the West in Water Saving Ideas" (May 6) and "Some Ways to Lose
Those Lack of Water Blues" (July 1) is a
significant contribution to the cause of

good water management.
Your assistance through devoting space
to this subject is appreciated.

Gerald H. Meral, Ph.D. Deputy Director California Dept. of Water Resources

HCN MIDWEST

Dear HCN,

Living in the second most industrialized state of the union (Ohio), it is good to see, (through the constant environmental news reporting from HCN) that other states are

reporting from HCN) that other states are more concerned about short-term and long-lasting environmental degradation—and are doing something about it.

It would be nice to have a HCN for the Midwest. When will you set up an office here!?! Again, keep up the good work.

Marvin D. Sigal. Dayton, Ohio

Hearing room scuttlebut had it that APS spent in excess of \$200,000 on the hearing. We spent \$3,100 (that's 1,033 §3 memberships), plus the contributions of dedicated volunteers from Los Alamos, Sante Fe, Albuquerque, and Farmington. (The column above was reprinted from the Los Alamos Monitor.) Presenting!

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three pages.

What would a one hundred dollar donation to the HCN research fund pay for in HCN? About three whole pages of freelance writing in High Country News, that's what. That's how far your gift dollars stretch. Not bad at today's

prices.
For example, two stories in this issue of HCN were paid for, in part, with monies donated to the research fund: Flathead River mining threat by Glenn Oakley, and Lamb's Quarters by Carl Brown.
If you would like to make a tax-deductible donation to the fund, make out a check to: Wyoming Environmental Institute — HCN Research Fund, and send it to WEI, P.O. Box 2597, Jackson, Wyoming 83621. Thank you.





'Insurmountable' opportunity?

Conservationists are experiencing what some of their most active members are calling "insurmountable opportunity." (The cartoon character "Pogo" first coined the term, we understand.)

If conservationists have felt misunders-tood and neglected in the past, this new problem must be refreshing. The same pubproteen must be retresning. In esame pub-lic agencies that used to respond only to the wielders of money and power now seem eager to listen to the conservationist point of view. If they had the time and the stamina, most conservationists could make a full-time job of going to public meetings and registering their opinions. What's more, conservationists have friends at the top of many of the natural resource agen-cies. At the very top, even Jimmy Carter seems genuinely sympathic to their con-

cerns.

It is an excellent time to set up a preser vation system for some of the remainir wilds of Alaska, to reassess our wilderne wilds of Alaska, to reassess our wilderness system, our national water policy, our energy policy, our mining laws, and our grazing regulations. It's also a time when we can be hopeful about implementing a new strip mine bill, the clean air act amendments, and a new mandate for the agency that manages more public land than any other, the Bureau of Land Man-agement (BLM). It is evidence of the grow-ing acceptance of what Aldo Leopold called a "land ethic" that these opportunities are even before.

But, what worries us is that most of these things are mere opportunities, not positive change in themselves. If, for instance, the Forest Service holds a meeting on wilderness, and only loggers and miners show up what will a corrections. what will a conscientious, open-minded bureaucrat do? If conservationists don't



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make sure it is strictly enforced on the land, what good will we get out of a federal strip mine law? With a growing circle of friends in government and their new initiatives, conservationists participation is as vital as ever and could bring greater rewards than ever before.

Fortunately, talented, energetic volunteers have always been the wealth of the conservation movement. The movement doesn't appear to lack the people power to confront the opportunities ahead. But it is becoming more and more difficult for volunteers to decide how they can be effective in the new arena. Clearly, no one group or individual can effectively dabble in everything anymore. The opportunities are to thing anymore. The opportunities are

great.

An ability to set priorities may be the test of conservationists in the future. Conservationists with a wide range of responsibilities may need to consider narrowing them, so they can be thorough and tenacious on a few key issues. Or they may need to become coordinators, pointing out to other volunteers what issues do and do not need attention. need attention.

need attention.

Another option for people in the West is to become local watchdogs, linked to the conservation movement as a whole, but basically responsible for only one small piece of public ground. Instead of spending all their time at hearings in Denver or writing letters to Washington, watchdog conservationists might have frequent all their time at nearings in Denver or writing letters to Washington, watchdog conservationists might have frequent chats with local officials and visits to local places. In short, they could adopt a forest, a park, or a BLM district to protect, nurture, and enjoy. They would learn what local officials are trying to do. They would give local officials a chance to hear the conservation message before their minds are set on an issue — before the public hearing or the comment period.

By specializing, coordinating, or concentrating on local decision-makers, conservationists may be able to avoid that feeling of futility that comes from reacting to an overload of crises, rather than taking positive actions. And perhaps they'll be able to avoid being struck numb by that newest (and most pleasant) of conservationists' problems — insurmountable opportunity.

—JN





Margaret and Olaus Murie Photo by Phyllis Stevie

Inner ingredients inspire others

by Margaret Murie

The letter from Connally Mears The letter from Connally Mears (HCN-Sept.) asks a very legitimate question, but one which I have been trying to answer for myself for years—one which is hard to answer because it touches on the inner spiritual ingredients of a human being and is almost impossible to put into words.

words.
(Mears asked how Olaus Murie, who was featured in the July 1 issue of HCN, was able to motivate others to join him in the

able to motivate others to join him in the conservation cause.)

When Life Magazine was doing an article about Olaus, the young writer who came out here to our home at Moose asked me: "If you were writing an article about your husband, what would you give as his most important contribution?"

Without hesitation I answered: "His influence on young people."

But, to analyze this: As nearly as I can express it, I feel that Olaus motivated others mostly by what he was, rather than by any specific words he uttered. I think people could feel his absolute belief in the necessity of wild places for the sanity of the human race, and his absolute onfidence that people were good and worthy of a good human race, and his absolute confidence that people were good and worthy of a good future and capable of making that future for themselves if they would. He believed that even with the very worst forecast possible for the future, it was more fun to take part in the battle for what you believed in than just to stand on the sidelines wringing your hands.

Of this Jast! think he did convince many young people, because, with all the work,

he obviously had such joy in living that perhaps they could feel the battle was perhaps they could feel the battle was worth taking part in. If they knew him longer, they surely sensed that under the continuous gentleness and lack of frustration under pressures, there was the steel of belief, of unshakable confidence, of stubbornness if you will, in the cause he believed in.

All this may be too vague to be helpful, but if our activists today believe strongly enough and can avoid being frustrated by all the adverse pressures and happenings, they will I feel sure, touch others deeply and be building up, "enlarging the corps" as Connally Mears says.



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We also know that you're a passionate person and hope you have adopted some of the causes mentioned in HCN as your own. Don't inadvertently sabotage your own sense of purpose by

sabotage your own sense of purpose by allowing your subscription to lapse. We'd miss you.

Flathead

continued from page 1)
and Game Department, informing readers
of plans for an extensive coal-mining operation in British Columbia, across the
Montana-Canadian border—an operation
many Montanans believe would ruin the
natural state of the Flathead drainage.
Following the publication of the article
in Montana Outdoors, meetings were
hurriedly called in the Flathead Valley as
concerned citizens attempted to learn more
about the proposed project, advanced by
Sage Creek Coal, Ltd., and to see what, if
anything, could be done about it. At one
meeting. Wayne Herman of Kalispell,
president of Flathead Wildlife, called for a
show of hands from people interested in
organizing a "coalition" to deal with the
issue. "A lot of hands went up," Herman
recalled. recalled

Individuals with special skills were apinduviduals with special skills were ap-pointed to a steering committee: a lawyer, a limnologist, experienced conservation activists, and so forth. The result, Herman said, "was a heavy preponderance of en-vironmental people." That seemed normal but the founders saw a need for a group with a broader base, so chambers of com-merce and other business groups in the merce and other business groups in the area were invited to join. Herman believed that if a bunch of "environmentalists" went to the U.S. State Department to complain about trans-boundary pollution, the federal officials probably would roll their eyes back in a we-have-heard-all-this-before gesture and sneak out the nearest door. "But if you've got the Lions Club and the Kiwanians," Herman said, 'well, then they think you've got an issue." think you've got an issue."
Today the coalition claims some 30

member organizations, representing the broad-base support it sought. It is, how-ever, a core of about 20 individual members who regularly attend the monthly meet-ings, organize fund-raising activities, and

ings, organize fund-raising activities, and perform the basic chores required to keep such an organization functioning.

The coalition, although formed to investigate the proposed ooal project in British Columbia, was barely a year old when Texas-Pacific applied for the oil and gas leases along the North and Middle Forks. Aside from a concern about the ramifica-

Aside from a concern about the ramifica-tions of such exploration, the leases, if ap-proved, threatened to jeopardize the coalition's battle against coal mining prop-osed by Sage Creek Coal, Ltd.

The coalition realized how difficult it would be to ask the Canadians not to mine their coal for the sake of Montana's envi-ronment, while at the same time bulldozers ronment, while at the same time buildozers would be in the Montana wilderness munching away at the land in search of oil and gas. (The coalition was also active in seeking inclusion of the three forks of the Flathead River in the Scenic Rivers Act.) Sage Creek Coal, Ltd., is a subsidiary of two companies: Rio Algom, Ltd., which is a subsidiary of Rio Tinto Zinc of London, a multi-national mining and manufacturing

multi-national mining and manufacturing corporation, and Pan Ocean Oil, a sub-sidiary of Marathon Oil of Ohio, another sunary of Marathon Oil of Ohio, another multi-national corporation. If the world market "looks good," then the metallurgi-cal coal market will "look great" and Sage Creek Coal will begin decapitating two mountains in British Columbia, mountains known affectionately by the company as "North and South Hills." Exploration by Sage Creek Coal has revealed that 132 the two mountains

I drive on toward Cabin Creek, a tribut-ary of the North Fork that courses between the two coal hills. Dense stands of the two coal fills. Dense stands of lodgepole pine that form a tunnel over the road give way to meadows dotted with aspen and abandoned homesteads. The peaks of Glacier National Park are closer, poking holes in the thunderheads that form as the moist, warm air rolls up their

I pass Polebridge, the largest settlement along the road (population four). Another 22 miles and I arrive at the Canadian border. The stars and stripes and the red maple leaf fly over log cabins marking the world's longest friendly border. The Cana-

million tons of metallurgical coal underlie to wash dishes. Stepping over the bank I to wash dishes. Stepping over the bank I am stunned. The creek, clear a few hours ago, is running brown and thick. After crawling over logs and wading through willows for an hour upstream, I see where Cabin Creek flows into Howell Creek. They are easy to distinguish - Cabin Creek is gushing a brown sludge while Howell Creek, upstream of the confluence, is clear. As they join, a definite line of brown and clear water flows parallel downstream, the brown erasing the clear water within 75 yards of the merger. Although the stream is shallow, the rocks on the bottom can no longer be seen. I turn back, too intimidated by the thick brush and sinking sun to fol-low Cabin Creek to the source of this mess.

Back at camp, I hear a truck coming

The Parkette Co.

HOWELL CREEK at its confluence with Cabin Creek, which enters from

dian customs official asks me where I am going. I should have no trouble finding Cabin Creek, he says: There is plenty of traffic going in and out of there.

The road winds on, crossing clear mountain streams with narrow wooden bridges. I stop at Howell Creek to camp. Howell Creek flows to the north of the purposed Creek flows to the north of the propo mine site, and Cabin Creek flows into it one and a half miles upstream of my camp. About six miles downstream, Howell Creek pours into the North Fork.

The country here begins to look and feel like the far north woods. There is no one around. Jagged conifers silhouette against the skyline, with mountains, rising above timberline, surrounding it all. Moose tracks, dried in the dirt road, lead into marshy meadows where clumps of aspen are attempting to take over. And mostilles, measuring the fearmen man or his quitos — mosquitos that fear no man or his bug sprays — fill the air. After dinner I walk over to Howell Creek

down the road. It stops on the bridge over Howell Creek, and I walk over. It is the

Canadian customs official.

"Do you know why the creek is runbrown?" I ask.

He nods his head upstream. "It's those characters."

"Sage Creek Coal?"
"Uh-huh."

He is not surprised to see Howell Creek flowing with mud: he's seen it before. Be-cause the existing bridges are too frail and narrow for the heavy machinery Sage Creek Coal uses in its exploration, the drilling rigs and bulldozers are driven through the streams. It is cheaper than building

the streams. It is cneaper than business sturdier bridges.

"I've been up here since '62," he says, "when the Cabin Creek road was a dirt trail. Used to be osprey, moose, animals of all kinds. They'd come down to the sulfur

all kinds. They'd come down to the sulfur licks. It's all gone now."

The sulfur comes from the coal and it is ironic that the source of the licks, which once attracted the animals, is now the cause of their demise.

The customs official is pessimistic about the future. "They're practical people," he says of the company. "If they can make a buck, they will, and there's too many bucks to be made to let it lie." And when they

ne, he adds, "there will be more than

mine, ne adds, there will be more than mud coming down."

I have a pamphlet from Rio Algom assuring everyone that the company "has always had concern for the environment." It says, "Run-off water can be a problem. . . It says, "Kun-off water can be a problem... It can pick up silt from the mine face. It can swell the stream. A way will have to be found to deal with that problem." The pamphlet adds, "If you have questions or suggestions, please get in touch with us." It think I will write and suggest a b-r-i-d-g-e. But this is just the exploration. The mining would remove the mountains, covering 2.100 acres with wester more. Howell Creak.

ing would remove the mountains, covering 2,100 acres with waste rock. Howell Creek would be diverted. New roads would be built, others "improved." Railroad tracks would be laid through what is now essen-tially wilderness to connect the mine site with the main line to the north. A town to accommodate the estimated 3,000 mine workers would be built along Cabin Creek. The instant town would run on electricity generated by a small coal-fired generating plant at the mine site.

The company admits it does not know ow to prevent run-off water, laden with silt, heavy metals, and other poisons, from running in to the creeks—and into the North Fork. If there is a way, it will surely cost more than the building of a few bridges, which the company refuses to do

And these are merely the immediate ef-ects. New and improved roads would invite all the darker aspects of society—sub-divisions, Winnebagos, clear-cutting—to the North Fork. Flathead Lake in Montana, the largest fresh-water lake west of the Mississippi, is fed by the North Fork. It is not known what would happen to Flathead Lake if coal is mined at Cabin Creek in Canada, but steady doses of phosphorous, silt, and other chemicals will certainly not enhance the water quality.

The next morning Howell Creek is running clear again. So what does it matter if the creek is muddied? It clears in a day. It is something like having your oxygen supply cut off for 15 minutes with the promise of getting it back. I drive up the road a few

getting it back. I drive up the road a few miles and turn at the Cabin Creek road. There is a sign on a tree, something like a realtor's sign, that says "Beautiful British Columbia" with "SOLD" stamped over it. The road climbs a short way, then drops down into a valley. The "North and South Hills" rise ahead, with Howell Creek looping before them. Another wooden bridge crosses Howell Creek. To the side of the bridge, tire and bulldozer ruts enter and re-emerge. Over a rise the company has graded off a few acres where fuel tanks, cable, and machine parts are scattered. Five whitetails play on the edge of the cable, and machine parts are scattered. Five whitetails play on the edge of the clearing, unafraid of me and my rattling car. I think it would make a good publicity photo for Sage Creek Coal Ltd. "Yes, we at Sage Creek Coal Ltd. care about God's littered." tle wild creatures. Deer thrive on our mine

tle wild creatures. Deer thrive on our mine sites, happily munching oal, which is high in carbohydrates..."

Leaving the deer to play amongst the diesel drums, I follow one of the many roads that lead away from the equipment site. The company has built roads everywhere on the two mountains. Roads plow 30 yards into the hillside and stop. Roads parallel each other for 30 yards, 15 feet away, then rejoin. Roads vanish over ridges. Occasion-ally, the roads expose coal seams. These are ally, the roads expose coal seams. These are ally, the roads expose coal seams. These are easy to spot because everything downhill from them — the dirt, the rocks, the plants, the trickles of water — is black, coal black. At some of the coal seams the road cut has tapped ground water. At these places the company has driven metal pipes, about four inches in diameter, into the ground, and the water trickles downhill, eventually to the creeks.

Walking up the road I follow heat.

Walking up the road, I follow bear tracks: They are a black bear, although grizzlies do roam here, along with wolves,

The Flathead Coalition is dedicated to the goal of "zero population" in the unspoiled portions of the Flathead River drainage.

elk, moose, peregrine falcons, and "coal-loving" deer. I jump a moose, and it trots away with the usual nonchalance of an animal seven times the weight of a human. Considering what the mine could destroy, many individuals, such as the customs offi-cial, seem surprisingly resigned to it. Perhaps the members of the Flathead Coalition are naive optimists, but they be-lieve they can stop the mine, or at least have stringent safeguards placed on the operation.

Naive? Optimistic? Perhaps the coali-Naive? Optimistic? Perhaps the coalition members are, for they are attempting to place controls on a Canadian firm operating in Canada. Because of that, a good many observers considered the coalition's efforts to be hopeless. But Jim Cumming, an attorney for the coalition, wrote a proposed bill designed to give Montana the legal means of prosecuting any Canadian or Canadian corporation polluting Montana's air or water. The Montana State Legislature passed the bill. It is, of

course, controversial: One Saskatchewan official just laughed when he heard about it. The U.S. State Department resents its existence, and a good many Montanans continue to believe their state has no jurisdiction in British Columbia.

diction in British Columbia.

Montana attorney Bob Lohn explains that Montana realizes it can take action only within its own boundary. But Montana's position is that the state could sue an entity in Canada, and if the company didn't appear in court in Montana, then the state could take action against any property the company might have in the state, such as a truck sent down for repairs.

repairs.

The county attorneys of the Montana counties that would be affected by the law appear to have little understanding of it, however. Lake County Attorney Richard Heinz could be called upon to "impose, assess and collect the civil penalties" against Sage Creek Coal, Ltd. "Iremember reading something about questioning the prudence

of this," he said. As far as Heinz is concerned, the "best way" to resolve the Cabin Creek conflict was to let the U.S. government negotiate with the Canadians.

Indeed, the U.S. Constitution prohibits states from formally negotiating with foreign governments. But Cumming conceived his bill to avoid acquiescence to the U.S. State Department. "Instead of suching up to the State Department and begging their leave," he said, "Montana can act to protect its own interests."

Cumming does not trust the State Department. He points to the Poplar River region in northeastern Montana where, to the north, the province of Saskatchewan is constructing a coal-fired generating complex. Until the State Department was forced into action by the protests of the region's representatives, Cumming claims it did little to protect the region, which is agriculturally based, from potential air pollution and loss of water (see HCN, 6-3-77).

Speculation exists that the State Department of the confidence of the con 6-3-77)

Speculation exists that the State De speculation exists that the State De-partment is willing to overlook coal mining in the Cabin Creek area if the Canadians are willing to overlook the possible conse-quences of a project called the Carrison Diversion. The Garrison Diversion is a Corps of Engineers project to divert water from southern to northern North Dakota for irrigation. Run-off irrigation water from the project (which has been shelved from the project (which has been shelved for the time being by President Jimmy Carter) would enter the Red and Souris Rivers of Canada, carrying silt, pesticides, herbicides, and other such pollutants from

State Department officials see such "trade offs" as the Garrison-for-Cabin-Creek affair (if a "trade off" indeed exists)

Sept. 23, 1977 - High Country News-5

as "negotiations." Those American officials are not too pleased about individual states meddling in their affairs. State Department officials expressed their resentment unofficially to Bob Lohn, the chief legal counsel for the governor of Montana, arguing that the Montana law could undermine the friendly relations existing between Canada and the United States.

Cumming, the author of the law, mair tains it could not cause an international dispute. Steve Brown, legal counsel for the Montana Department of Health and Environmental Sciences, disagrees: "Yeah, definitely it would become an internadefinitely it would become an interna-tional dispute. That's a pretty significant drainage, the Flathead River." Brown went on to say the department is ready to use the law finecessary, but added that he wonders what the reaction of the federal government will be.

Meanwhile, Sage Creek, Ltd., is proce Meanwhile, Sage Creek, Ltd., is proceeding slowly and cautiously, backing off
when the heat from the coalition becomes
too intense, then re-emerging after things
have cooled off. It may be years before the
company decides to mine at Cabin Creek—
or it may be months. While the company
bobs and weaves to the jabs of public opinion, the coalition is researching other legal
methods to stop the mine.

Perhaps the stiffest test for the Flathead Coalition will be keeping itself alive over the years of waiting. Without the continu-ing vigilance, a drive up the North Fork in five years may leave one gazing at a black pit where mountains once rose. And the water, assuredly, won't be safe to drink.

IJC shoots down Garrison

The International Joint Commission The International Joint Commission (LJC), the group that arbitrates boundary water disputes between the U.S. and Canada, has recommended against proceeding with 80% of the proposed Garrison Diversion in North Dakota, according to Sen. Quentin Burdick (D-N.D.). Burdick called the decision a "devastating blow," saying that saving the project will be "an uphill battle."

The LJC said, "because the 'closed system' and the McClusky Canal fish screen cannot with any certainty prevent biota (animals and plants) and disease transfers (animais and plants) and disease transters which would cause severe and irreversible damage to the ecceystem, and in particular the commercial and sport fisheries in Canada, both portions of the Garrison Diversion Unit which could affect waters flowing into Canada should not be built at this time. This is not intended to preclude construction of the Lonetree Reservoir."

The commission said that, "if and when the governments of Canada and the United the governments of Canada and the United States agree that methods have been proven to prevent the transfer of biota" then construction of the unit could be com-pleted. Also, the LIC said that any agreepleted. Also, the LJC said that any agreement to the solution of the biota problem should be incorporated into the construction of the two countries. tion agreement between the two countries.
Agreement should be reached on the reduction of highly saline soils, destruction of wetland habitat, and lining one of the project's canals before construction could

begin, the LJC says.

The impact of the LJC findings, according to Burdick, is that 200,000 acres of what had been planned as a 250,000 acre irrigation project would have to be cut, if the two

tion project would have to be cut, if the two
governments accept the recommendations.

According to the Dickinson Press, the
North Dakota Congressional delegation
has vowed to fight the limits set by the
international commission. Rep. Mark Andrews (R-N.D.) said that the LJC's claim
that damaging plant and animal life would
move into the Red and Souris Rivers in
Canada wes "as far-fathed and phony as a

move into the Red and Souris Rivers in Canada was "as far-fetched and phony as a \$3 bill." Sen. Milton Young (R-N.D.) merely called the report "discouraging." Richard Madson, regional representative of the National Audubon Society, said that the recommendations reinforced the contentions of conservationists about the adverse impacts of the project. The society has filed a lawsuit asking for a moratorium or construction of the project will the on construction of the project until the completion of the full environmental im-

The IJC decision is only the latest in a series of setbacks for the project. The Gar-rison Diversion had originally been on President Jimmy Carter's "hit list" of irrigation projects, but Congress overrode his objections and appropriated full fund-

ing for the project.

Nevertheless, in a negotiated settlement of the lawsuit brought by the Audubon Society, the Administration agreed to limit construction until the EIS was complete.



FORD AT CABIN CREEK. Trucks and bulldozers drive through the creek

Board votes to shut down Utah Environmental Council's office

Friends of the Utah Environmental Council (UEC) who have tried to call the UEC office during the past two months have been disappointed. There is no one there. The UEC voted July 15 to abruptly close the office on July 31, seven years after

close the office on July 31, seven years after the organization incorporated.

Jan Johnson, director and the only full-time staff member for the last three and a half years, says she was surprised and very disappointed by the board's decision. The group is the only Utah-based membership group. The board hopes the organization will continue through the efforts of volunteers, she says, but Johnson isn't optimistic about that potential. As far as she knows, members have not even been notified of the decision.

While Utah is usually considered a very hostile atmosphere for environmental groups, Johnson is quick to say that the group's demise does not portend the same group's demise does not portend up fate for any new group that might start. In fact, she and several others are now in the process of incorporating a new group.

Instead, she blames the make-up of the UEC board. When it was incorporated in 1970, it was decided that the board would 1970, it was decided that the board would include representatives of various interest groups to keep communications open among mining, timber, industrial, and environmental interests. Consequently, the board now includes a representative of Utah Power and Light, Kennecott Copper, and other corporate interests. While Johnson says she thinks it is essential to keep communications open he now questions. communications open, she now questions the advisability of having such a broad-based board. "They never came to any policy decisions so I was left to do what I felt was right," she says. When she issued policy statements, however, she was often reprimanded by her board.

While at one time there were many volwhile at one time there were many vol-unteers, they became frustrated by the board's refusal to allow the organization to be an activist group instead of just an in-formation group, and most quit. For exam-ple, several volunteers put together a grant application for community workshops in

some of the energy boom areas of southern Utah, but didn't get the board's support.

Members of the board could not be reached for comment but Johnson says the board's decision to close the UEC office was prompted by debates over money raised by a premiere showing of a Robert Redford movie. Redford had offered the movie, with the stipulation that proceeds could only be used for activist causes — not just for information.

Now there are only two paid environ-

mental staff members in the state: Mary Belle Bloch with the Environmental De-fense Fund and Dick Carter with the Wil-derness Society, both national organiza-

derness Society, both national organiza-tions.

Johnson says some people are looking for funding from foundations for a new group that she say will focus on energy develop-ment and will hopefully have field offices outside the Salt Lake City area. This group, she says, will be an active lobbying group.

native plants

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Hardin attacks.

(continued from page 1)

children who place demands on an already overburdened environment. Sensible peo-ple limit their families, notes Hardin as he presses the argument, yet they are forced to subsidize the ecological mistakes of the fast breeders. He looks with sorrow on the

to subsidize the ecological mistakes of the fast breeders. He looks with sorrow on the starving poor of the world but concludes that their plight is hopeless. As to technology, people have persuaded themselves that it will save them from the ecological sin of overpopulation. Such agricultural innovations as the Green Revolution require huge amounts of capital, fertilizer, and machinery, while ignoring the fundamental problem. The Santa Barbara professor shows statistically that the present population explosion is an historical perversion, a cancer. He irks some humanitarians by warning that. "You can't cure a cancer by feeding it."

Personally good-natured, Hardin couches the urgency of his message in witty statements and cunning metaphors. The mutually antagonistic ranting of superconservatives and leftists are silly, because in practice the two systems overlap: "Every time John Birch sits down on the toilet, he becomes a socialist." he says. Further, both

becomes a socialist," he says. Further, both political beliefs are environmental negapointical betters are environmental nega-tives, since they promote growth at the ex-pense of limited resources.

His basic metaphor for current world problems — whether they be overpopula-



tion or pesticide pollution — is the commons, a public pasture once shared by stockmen in England and in some parts of the American colonies. In "The Tragedy of the Commons" (Science, December 13, 1968), he explains that the commons system will work, but only as long as the number of cattle does not exceed the carrying capacity. If a farmer increases his herd
— which he is likely to do, given human

— which he is likely to do, given human greed — his quick gain means loss to others in the eventual overgrazing of the pasture. In other words, "Freedom in a commons brings ruin to all." The earth's soil, minerals, water, and air make up one vast but exploited commons. Calls for voluntary restraint, however morally appealing, are ridiculous. Those with consciences play the fool, outbred and outpolluted, as the case may be, by the conscience/ses. The only hope is regulation by law. "mutual coerhope is regulation by law, "mutual coer-cion, mutually agreed upon."

As Gifford Pinchot found when he

brought regulation to the national forests, it is a lesson that goes down hard in the

Behind Hardin's middle-aged celebrity es a somewhat plodding if satisfying academic career. He was born in Dallas, Texas, but his father's clerical job with the Illinois Central Railroad required fre-quent moves throughout the Midwest. Polio crippled the boy in 1919 at the age of

Polio crippled the boy in 1919 at the age of four. Still, the youth became an expert swimmer, and after high school in Chicago he considered becoming an actor — a career he abandoned because his shortened right leg would limit his stage roles. Instead, perhaps remembering pleasant summers spent on his grandfather's farm in Missouri, he majored in zoology at the University of Chicago, then went on to receive his Ph.D. in biology from Stanford in 1941.

Five years later he gave up research on rive years later ne gave up research on producing food from algae — an early sign of his intellectual independence. More food, he reasoned, only worsens the world's population problems. Regardless of the stance, his activism lay far in the future. The next 15 years were spent upgrading the biology offerings at the University of California's Santa Barbara campus. Har-din made educational films, introduced closed circuit television to the classroom, and wrote a widely-used text, Biology: Its Human Implications (1949). A 1959 book, Nature and Man's Fate, deals with book, Nature and Man's Fate, deals with the social consequences of evolution. Along with a course in human ecology he developed a year later, it shows a shift in the biologist's concerns.

The rebirth of conservation — and the accelerated social changes that are its matrix—began after World War II and came to fruition in the 1960s. Hardin chides himself-frame to experience to experience to experience of the conclusion of the social conclusion.

fruition in the 1960s. Hardin chides himself for not coming to his ecological conclusions earlier. A tongue-in-cheek Hardin formula explains his slow development: "It takes five years for a person's mind to change." In his case it took a succession of five-year changes that paralleled the general environmental awareness growing across the nation. He became an activist at a time when ideas were "ripe for the pick-

ble to outside politics and internal squab-bles as are other institutions. With others of his generation, Hardin had labored through the Depression to his Ph.D. in an-ticipation of a relatively secure teaching position. Over the years, he had served Santa Barbara, a small liberal arts college when he joined the faculty, well. After the war, however, college enrollment soared. Ambitious college presidents, their eyes on

"You can't cure a cancer by feeding it."

equally burgeoning expenses, changed the rules. Education became big business, now

emphasizing success in money-generating research rather than in the less measurable fruits of successful teaching. In the meantime, Hardin had quit laboratory work entirely because "I saw no signs that I had any great talent as a laboratory researcher." Instead he turned his energies to execulariting science among his study. to popularizing science among his stude and with the general public.

Not that he was in immediate danger of losing his job. The tenure system offered some protection, barring an academic con-viction of malfeasance. Then, too, by that viction of malfeasance. Then, too, by that time his worthy though unglamorous teaching accomplishments had been awarded by his rise to the highest pedagog-ical rank, a full professorship.

Still, America was just emerging from the McCarthy era. Censorship, though not openly condoned, was practiced. In recounting his environmental emergence in Stalking the Wild Taboo (1973), Hardin asks for a leap backward in the imagina tion: "It is essential that the reader recog nize that abortion was a strongly tabooed nize that abortion was a strongly tabooed topic in 1963. So much has the world changed in the past decade that this recognition takes a bit of imagination, but you can't understand history without imagination. Most newspapers in 1963 would not print the word 'abortion,'; even those that would avoided the subject if they could. It was no light matter for a professor in a state university — my situation — to take a public position against the prohibition of abortion."

Yet that's what he did. When the faculty invited him to give a university-wide lecinvited him to give a university where the construction of the chose the topic of population control through legalized abortion. Noting the public's reluctance to examine taboos, a fellow academician has dubbed Carrett Harmon and the construction of the construction

din "one psychologically brave, but professionally foolish soul."

During the 1960s California "discovered the Frisbee, embraced vodka, and popularized credit cards," as Time magazine puts it. The state also was the crucible of deeper intellectual changes. Despite his fears, "hate mail and vituperative phone calls" didn't materialize after the phone calls" didn't materialize after the speech. Instead, the audience honored him with intense questions, both pro and con. He was especially impressed, however, during the following days, when "emi-nently respectable women" congratulated him on the street and told him about their own secret abortions. Apparently, abortion was a reality that the public chose to ignore. He started digging into history books to ferret out the story of the earth's popula-

He found that for thousands of years disease, starvation, abortion, and widespread infanticide had kept the earth's population relatively stable, with a yearly average increase of 0.032 per cent. Though people tend to accept present situations as normal for all times, the current two per cent for all times, the current two per cent growth rate, seen in the perspective of his-tory, is abnormal. It would have people oc-cupying every square foot of land in a mere 615 years. Hardin's population articles joined Famine-1975! (1967) by William and Paul Paddock and The Population Bomb (1968) by Paul Ehrlich in warning that the world had overburdened its life-teness of the part of support systems. Mass starvation had started in Indian and Africa. s. Mass starvation already

Yet he had a further step to take: what is to be done about the situation? His posi-tions often make Hardin seem callous to suffering, though he counters the charge with the maxim, "we can never do no-thing." Either we take fate into our own s or our lack of action will increase the suffering when nature solves the popula-tion problem by its own means — as it has done heartlessly time after time in the

If his view of abortion that, "Smashing acorns is not deforestation; scrambling eggs is not gallicide," offended right-to-life groups and some religious leaders, his next proposal brought some fellow scientists who had supported him to their feet in rage. Appearing in the October 1974 issue of Bioscience, "Living on a Lifeboat" proposed a solution through another Har-din metaphor.

Hardin is a wide-ranging reader, an asset for the generalist. He quotes George Eliot, George Bernard Shaw, and W. S. Gilbert with ease in backing up his arguments. The earlier "Tragedy of the Com-Gilbe ments. The earner fragecy of the Commons" owed its inspiration to a tract by the obscure 19th century amateur mathematician, William Forester Lloyd. For "Life on a Lifeboat" the biologist drew on an unusual bit of naval history.

In the last century the William Brown and Sparinger charge to a single way.

sank. Survivors clung to a single wooden boat, so overloaded that it in turn threatened to founder. In order to keep the threatened to tounaer. In order to keep the craft afloat, leaders ordered a number of the passengers killed. Though morally ir-reconcilable, the immediate choices were clear: either some must be sacrificed or all the pas

clear: either some must be sacrificed or an would drown.

The Bioscience essay likened the environmentally overburdened world to the plight of the shipwrecked: "Metaphorically, each rich nation amounts to a lifeboat full of comparatively rich people. The poor of the world are in other, much more crowded lifeboats. Continuously, so to speak, the poor fall out of their lifeboats and swim for a while in the water outside, hoping to be admitted to a rich lifeboat, or

"Loss of freedom to breed is less horrible than massive death by starvation, epidemics, social chaos, and insanity."

United States, a nation with a history of laissez-faire settlement. There, quips Hardin, the modus operandi was to live, "Like laissez-taire settlement. There, quips riardin, the modus operandi was to live, "Like
gorillas: make enew nest every night, crap
all over everything, then move on."

and light. Despite their high purposessi

ing," to use his own words. Yet there were dangers.

lifeboats must abandon the poor in order to fair to the victims, but he reminded readers save themselves. Otherwise no one will survive. Hardin analyzed the list of pos-sibilities for helping the earth's overpopu-lated countries: technology, world food



banks, immigration. Each draws on the limited resources of the rich, causing more suffering in the long run and resulting in everyone's demise. The lifeboat, like all ecological systems, is a finite commons Hardin admitted that the solution was unthat, whatever their sentiments, survival in nature is not based on a system of justice. In the next few months letters and arti-

cles hotly disputing his thesis appeared in popular magazines and scientific journals. Norman Cousins railed from two editorials Norman Cousins raised from two editornals in the Saturday Review against "the notion that some people have the right to decide whether others should live or die"—ignoring the fact that the United States already is forced to do so in allocating its

limited surplus food.

Others attacked the metaphor with greater skill. In the May 1975 issue of Bioscience, members of the Hudson River Ecological Survey compared the world's nations to mountain climbers connected by safety ropes. The survival of the group de-pends on the survival of each climber. Critical mineral and oil deposits held by third-world powers, plus the proliferation of nuclear weapons, make cooperation, rather than exclusion, a necessity in the interconnected world.

Whatever the detractions, Garrett Hardin continues to plunge on, often jovially, ahead of his critics. Exploring New Ethics for Survival: The Voyage of the Spaceship Beagle (1972) illustrates what

on science fiction. In the future setting of on science recommends and control setting of the story, advocates of growth have "tired of the apocalyptic rantings of Paul Ehrlich" and castrated Garrett Hardin "with a dull aluminum spoon." However, growth mania has run its course; confronted with an uninhabitable planet, earthlings send a sample of their kind off in search of a home in space. Unfortunately, they must take along with them their all too-human frail-

Stalking the Wild Taboo (1973) echoes Freudian psychology while debunking popular myths. It maintains that Western ciety, with its faith in technology, otivated by its own set of superstitions. motivated by its own set of superstitions. It believes that quantity is better than quality, that knowledge is better than ignorance, that science can solve human problems. Hardin suggests that the space program is a form of fantasy, an escape from earthly realities orchestrated by the modern equivalents of witch doctors. He chastizes sociologists and biologists, two tribes disputing overlapping territories. In the Hardin view, society can not insure its environmental future until it comes to terms with such prejudices.

with such prejudices.
It is difficult to say how literally Hardin aceship Beagle (1972) illustrates what intends his metaphors or how seriously he sees as new moral dictates by a takeoff takes his own arguments. However, he has

Sept. 23, 1977 — High Country News-7 succeeded if his purpose is nothing more than to push critical situations into the forefront of controversy.

Along with other conservationists — John Wesley Powell, Gifford Pinchot, and

"Smashing acorns is not deforestation."

Bernard DeVoto - Garrett Hardin has Bernard DeVoto — Garrett Hardin has been attacked for reminding the public of ecological necessities. With them he has shared the epithet of insensitive elitist. In John McPhee's Encounters with the Ar-chdruid, David Brower explains that deep human concerns for the future are the basis for Hardin's controversial theories. Refer-ring to the destructive impact of comments of for Hardin's controversial theories. Refer-ring to the destructive impact of a growing population on the nation's limited and fragile wilderness heritage, Brower notes, "I have a friend named Garrett Hardin, who wears leg braces. I have heard him say that he would not want to be able to come to a place like this by road, and that it is enough for him just to know that these rountains saying as they are, and he here mountains exist as they are, and he hopes that they will be like this in the future."

Lowly lamb's quarters provides food and drugs

Lamb's quarters is a weed. It germinates before our crops and persists past harvest; it is a plant with which to do battle.
But lamb's quarters also has a noble side.

It is both a bridge to the past and an ecological link that holds together the present Lamb's quarters was once an important food for people throughout the West and, until recently, an irreplaceable medicine for the entire nation. It is an important

resource for other forms of life as well.

Lamb's quarters is a member of the goosefoot family. It is cousin to spinach and beets and, like them, is a green vegetable high in vitamins A and C. In the Northern Rockies and Great Plains, lamb's quarters added variety to a meat-oriented diet. Na-tive people ate it with animal fat the same way we eat spinach with bacon. Lamb's quarters was important enough to the Flathead Indians of Montana that they distinguished it from all other greens and gave it the name "sumqulet." The flavor of lamb's quarters is so unique, so enjoyable, that it has been introduced to France, where it is a popular gourmet vegetable known as "maches."

Known as 'maches.'
The importance of lamb's quarters as a
green is insignificant when compared to its
use as a food by Great Basin cultures that
lived on the plateau between the Wasatch
Mountains and the Sierra Nevada. Compared to northern tribes, these people were protein-poor. Big game was a rare luxury. Meat came to the menu as jackrabbit, ground squirrels, reptiles, and insects— and even these were vulnerable to cycles of feast and famine. The most dependable source of protein was the seeds of lamb's quarters and of two close relatives, salt-

quarters and of two close relatives, salt-bush and glasswort.

Seeds were harvested in specially woven baskets, ground on metates and stored like flour. This in turn, was the base for gruel and for a simple flatbread. The Gosiutes, who roamed the high desert between Great Salt Lake and eastern Nevada, harvested "kumuntsia" as they called it. In contrast, the more stringers, Pueble culture of the the more stationary Pueblo culture of the American Southwest assured themselves a convenient supply of lamb's quarters by cultivating it alongside their beans and

Approximately 20 species of lamb's uarters grow in North America. This in-



cludes a group that secretes resin from tiny glands and hairs on its leaves and stems. Because of the rank odor of this group, it is shunned as food.

However, one species, wormseed (Chenopodium ambrosioides), was a valuable medicine. Wormseed is a vermituge; it expels human roundworms and hookworms. Today, wormseed is a fairly common weed across North America. But ethnobotanists believe wormseed was introduced from Central America by Mayans flexing from the Searing for the Searin fleeing from the Spanish conquest. It was passed from tribe to tribe until it was a standard medicine all the way to New Engstandard medicine all the way to New Eng-land. American physicians quickly adopted wormseed as their own. From 1820 to 1960, when it was finally synthesized, oil of chenopodium was an official phar-maceutical.

Lamb's quarters is also an important wildlife food. According to U.S. Fish and Wildlife Service data, it ranks above such better known plants as wild rice, maple, willow, elderberry, and duckweed. Lamb's quarters is especially important as a winter food for songbirds. Each plant holds tens of thousands of tiny black seeds, and it holds them well into winter and high above

mon redpoils is lamb's quarters seeds.

Lamb's quarters seeds are also sought by
chipmunks, pocket gophers, and several
species of kangaroo rats. They are particularly important to two species scurrying
about on opposite ends of the Rockies. The
Richardson ground squirrel gathers lamb's
quarters seeds on the prairies of Nevada,
Wyoming, Montana, and the Dakotas; the
Marriam kangaroor rat sathers them on the Merriam kangaroo rat gathers them on the desert washes of Arizona and New Mexico. All told, at least 40 species of songbirds and small mammals eat lamb's quarters.

Lamb's quarters has potential as a gar-en vegetable, particularly at higher elevations where it resists early frost and of-fers great quantities of greens weeks before spinach and beets are ready. And fight it as you may, lamb's quarters comes back. Un-like most weeds, the richer the soil, the

early snowpacks. They are a significant part of the winter diet of snow buntings, goldfinches, horned larks, Oregon juncos, several species of sparrows, and, at times, mourning doves. Up to 25% of the winter diet of white-crowned sparrows and common redpolls is lamb's quarters seeds.

Lamb's quarters seeds are also sought by chipmunks, pocket gophers, and several species of kangaroo rats. They are particularly important to two species scurrying about on onposite ends of the Rockies Them.

and stems are light green. The undersides, in particular, look as is they were sprinkled with powder. Plants grow to five feet tall. Flowers are inconspicuous and held in clusters in the axes of the leaves and at the tip of the plant.

Lamb's quarters is a weed only in the ense that we don't have to strain our backs and brains to reap its benefits. More im and orains to reap its benefits. More impor-tantly, lamb's quarters is an ecological link holding together the complex world we enjoy. It is an everyday reminder that many other such links are still to be disco-vered.





Mount McKinley

The keen observations of a bedroll scie

by Jim Scott

When naturalist Adolph Murie first pas-sed through the gates of Mt. McKinley Na-tional Park in 1922, nine years had passed since the enormous ice mountain had first been climbed. Since the ascent the park had lain virtually untouched. Murie was

The young biologist had good reason to be. The 3,030 square mile wilderness boasted the most stunning geography and wildlife of any park in North America; natural predators such as wolves, grizzly bears, wolverines, and lynx — rare or extinct in all other preserves — abounded in McKinley Park. McKinley's inaccessibility had protected its purity well; less than 60 tourists visited it that year.

As employes of the U.S. Biological Survey, Adolph and his brother Olaus (later to become a nationally-acclaimed field biologist and conservationist) spent the spring and summer in the park carrying out wildlife field research. Late in the autumn the two men headed north for the Brooks Range on a dogsled.

Adolph could never quite shake the McKinley mystique from his memory, however. Accompanied by his wife and two children, he returned to the park in the winter of 1939. Still employed as a federal biologist — now with the National Park Service — Murie had come back to study timber wolves within the park. His family settled into a log cabin on Igloo Creek and Murie set out after the wolves. By his own account he walked,

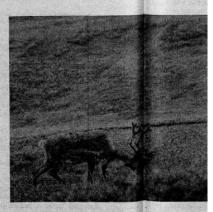
snowshoed, and skied over 1,700 miles that snowshoed, and skied over 1,700 miles that year, recording his numerous encounters with McKinley's wolves and other wildlife. The end result, a book entitled The Wolves of Mount McKinley, is one of the most exhaustive and delightful studies of animal behavior ever written.

"The modern study of American wildlife may be said to have begun with Adolph Murie," says writer Edward Hoagland. He calls Murie among the "best of the bedroll scientists."

scientists."
Murie's lifelong dedication to the preservation of the wilderness carried him from Guatemala to the Arctic Circle over the next several decades. He died in August of 1974 in Moose, Wyo., at the age of 75. Although the man is gone, his work remains a treasure for those who seek an understanding of wildlife habits.



"When all the details of his appearance are assembled, the moose become a second of the second of th





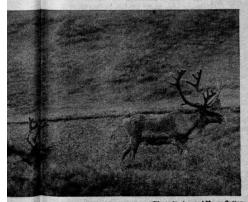
oll scientist, Adolph Murie



"He had no special interest in me and passed by, stopping to sniff the delicate odor of a clump of chiming bells, as though enjoying the tundra flowers — a beautiful thought — but the next moment he shamefully substituted his own scent."



"It occurs to me that no one has ever seen a small bear. All the story bears are big, and I have observed a keen ability to estimate accurately the height and the weight of a bear. This can be accomplished at surprising distances."

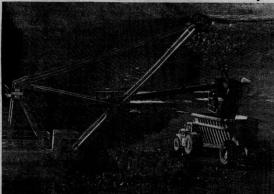


"My bear rose up on his hind legs, and he looked big. He dropped down on all fours again and, after a long, sober look, came toward me, but only at a walk. I reversed my direction and matched his stride in, I hoped a casual manner, taking tion and matched his stride in, I hoped, a casual manner, taking care that I did not give him the impression that I was fleeing, or that he was chasing me, but rather that we were out for a walk together, and perhaps were going to the same blueberry patch."



view as a seine stantag to picture capitolis and front Atlogat martie store, in MATURALIST IN ALASKA

Miners attack coal strip mining law



STRIP MINING LAW. Details about how the new federal strip will be implemented were discussed at a hearing in Denver Above is the Decker mine in Montana.

With the federal strip mine bill finally restoration is physically impossible in voted into law, the U.S. Interior Department has published its interim regulations Many industry representatives had

for coal surface mining.
At a hearing in Denver this month, mining industry representatives were highly critical of the regulations and of the law they were designed to implement. Environmental representatives seemed generally in support of the rules, although a Sierra Club spokesman called them "the erally in support of the rules, although a Sierra Club spokeman called them "the Coal Operators Association, said that it minimum necessary" to fulfill the intent of the bill.

Sections requiring reclamation of mined lands and protecting the underground water system drew the most fire from industry. The law states that underground water may not be diminished in quality or "The sections of this society."

The act does not specifically require the require that a coal operator: restoration of groundwater aquifers," said —restore mined land so that it can support a spokesman for Cordero Mining Co. "Such its original use.

more general objections to the regulations, stemming from their resentment of the bill itself. They argued that the law was strong enough to reduce or stop coal production, which is the cornerstone of U.S. energy pol-

some sections of this society."

The regulations discussed in Denver and at three other meetings around the country

Concerned about project deficiencies

BLM delays Warner-Allen

show that two power plant projects proposed on public lands in the West can mee

osed on public lands in the West can meet the requirements of the National Enterprisonmental Policy Act. Until the projects' backers come up with more information, the U.S. Bureau of Land Management's uccision-making process is at a halt. Nevada Power and Light Co. is a partner in both of the proposed plants — the 500 megawatt Warner Valley plant in the southwestern corner of Utah and the 2,000 megawatt Harry Allen plant near Las Vegas, Nev. The cities of Los Angeles and St. George, Utah, are also partners in the Warner Valley project.

Because of the deficiencies found by BLM's Washington, D.C., office in the proposals for both plants, "the next step is up to the participants," says Dave Everett, team leader for the BLM's Allen-Warner Valley environmental impact statement. "We are waiting to see what actions they will take to resolve the problems."

One of BLM's major concerns about the Harry Allen plant is that 80% (or 1,600 megawatts) of the power to be generated by the plant is unallocated. Before making a decision about this plant, BLM wants to know where the power, and the transmission lines associated with it, are going.

The Warner Valley plant is facing only



according to Everett. BLM studies indicate that the reservoir associated with the plant might threaten the woundfin minnow, an species Act prohibits a federal agency from permitting any action that would increase the risk of extinction for an endangered

Other project deficiencies cited by BLM

include:

—Coal to fuel both plants will come from federal leases in the Alton coal field, which extends within two miles of Bryce Canyon National Park. The National Park Service is concerned about the effects of the 60,000 pounds of explosives per day that will be used to strip mine the coal.

—A proposed onal altury nineline to sup-

—A proposed coal slurry pipeline to sup-ply the Warner Valley plant would parallel the Honeymoon Trail, which has been nominated to the National Register of His-

remove topsoil and save for later us -minimize damage to the hydrologic bal-

ance.
—design, maintain, or remove mine waste

-control use of explosives and require cer-tification of persons conducting blasting

operations.

—provide permanent vegetative cover on affected areas.

—carry out special protective provisions relating to mountain-top removal, alluvial valley floors in the West, and prime farmlands.

The act required that interim regula-tions would be promulgated within 90 days of the passage of the bill. Final regulations are due within a year of passage of the act, but a state's own regulations may take pre-cedence, provided they are at least as stringent as the federal regulations.

The proposed interim regulations were

The proposed interim regulations were published in the Federal Register Sept. 7. Public comments are due Oct. 7 to the Di-rector, Office of Surface Mining Reclamation and Enforcement, U.S. Department of the Interior, Washington, D.C. 20240.

Tribes want strip mine control

Several coal-rich Indian tribes are dis-Several coal-rich Indian tribes are dis-pleased with the federal strip mine bill as it relates to Indian lands. The law does not permit the tribes to administer and regu-late strip mining on their own lands, but rather leaves it to the federal government. Eric Metcalf, a spokesman for the North-ern Cheyenne in Montana, says that the tribes will seek new legislation to give them control over mining on their lands.

them control over mining on their lands. He says that the tribes pushed for an "Indian Lands" portion of the bill, but that it was rejected by the conference committee after passing the Senate.

Metcalf says that the amendment was

dropped from the bill "without discussion," because the legislators apparently feared that there would be a jurisdictional conflict between the state of Montana and the Crow tribe over the mining on the Crow Ceded Strip. Since the tribe owns the coal, but not the surface, the conference committee de-cided to avoid the issue altogether and eliminate the Indian lands section of the

Instead of that provision, the law mandates a study to determine the capability of tribes to administer the act on reservation lands. Metcalf say that several tribes, in-cluding the Cheyenne, Hopi, Navajo, and Crow want to set up their own codes and enforcement. Metcalf says, "We'd love to tackle it."

Now, however, the tribes must wait the Now, nowever, the tribes must wait the outcome of the federally-mandated study, and then seek amendments to the federal law before they can get control over the mining. The study is scheduled to be completed by Jan. 1, 1978.





Hot Line

energy news from across the country

The Hen

SOLAR SECOND FIDDLE. The new Department of Energy's organization chart reflects a bias toward nuclear and fossil fuel technologies, according to eight Con-gressmen and Colorado's two Democratic gressmen and Colorado's two Democratic Senators, Gary Hart and Floyd Haskell. The lawmakers had requested that the de-partment include an assistant secretary for solar paragraphy. olar energy. Instead, solar energy has seen placed under an assistant secretary for energy technology. The lawmakers also pointed out in a letter to energy chief James Schlesinger that a section of the organization chart lists 15 priority projects that involve coal or synthetic fuel technologies — but not solar power.

SENATE SCRAPS RATE REFORM. The Senate Energy Committee has dis-carded an important element of the Carter energy program, a revamping of utility rate structures to promote energy conservation. The Administration proposed barring utilities from offering cheaper power to large consumers and requiring them to offer cheaper power during times of day when demand is low. According to the Sierra Club's National News Report, public utilities and large industrial users of electricity have made defeat of this provision of the National Energy Act their highest legislative priority. In contrast to the Senate, the House accepted most of Carter's rate reform proposals and strengthened some of them.

CARTER LIKES ALCAN. President Jimmy Carter is supporting a natural gas pipeline that will go southeast across Alaska to Fairbanks and then parallel the Alcan Highway. The route is cheaper, less environmentally damaging, and closer to markets than the alternatives, he says. Congress has 60 days to approve or reject the President's recommendations. The Na-tional Audubon Society favors the Alcan route over an alternative that would have cut a swatch through the Astric Netions. cut a swath through the Arctic National Wildlife Range

GAS GUZZLER BAN. The second major element of President Jimmy Carter's com-prehensive energy legislation has cleared the Senate — an energy conservation bill.

It includes many energy conservation
measures already approved by the House,
but is stronger than the House provision on
gas guzzling autos. The Senate bill bans gas guzzling autos. The Senate bill bans gas guzzlers (by 1980 it would be illegal to sell a car that doesn't get at least 16 miles a gallon); the House bill merely places an energy tax on them. The Senate will consider bills on natural gas pricing, utility rate regulation, and energy taxes before the differences between the House's comprehensive bill and the Senate's five-part package on the invaned on the senate's five-part package on the invaned on the senate's five-part package can be ironed out.

WATCHING OVER STRIP REGS. Two environmental lobbyists who worked for passage of the federal strip mining bill, Carl England and John McCormack, are directing a Citizens Coal Project. The pro-ject was created to persuade the Interior Department to adopt strict interpretations of the new trip mining the properties. or the new strip mining law, according to the Associated Press. Although the bill is very detailed, some questions remain that will be determined in the regulations— such as how much protection alluvial valleys will get.



COAL MINED DESPITE TAX. The coal COAL MINED DESPITE TAX. The coal industry claims that Montana's 20-30% coal tax has discouraged mining. Nevertheless, the amount of coal mined in Montana has increased by 39% since the law was passed in 1975, according to state Sen. Tom Towe. Coal company projections indicate another 50% increase in the next two years, Towe says. Montana's tax on coal is the highest in the nation.

FEARS DEPENDENCE ON WYO.
Arkansas Gov. David Pryor is concerned
about his state's potential dependence on
Wyoming coal to fuel its electric generating plants. "We don't have any more control of the price of Wyoming coal than we do
foreign oil," he said, according to United
Press International. His remarks were inspired by Arkansas Power and Light Co.'s
decision to import Wyoming coal for a new decision to import Wyoming coal for a new plant rather than using Arkansas lignite.

posing as a customer for home insulation received bids from companies in the De-nver area ranging from \$300 to \$2,000 for the same job. He also found a proliferation of new, small companies with little know-ledge of fireproofing techniques and qual-ity control. The official, Philip S. Stern of ity control. The official, Philip S. Stern of the Boulder County district attorney's of-fice, presented the findings of a year-long investigation of the insulation industry to the U.S. Consumer Product Safety Com-mission in August. The study was promp-ted by consumer complaints and reports of house fires linked to insulation.

SORRY ABOUTSERI? A recent General SORRY ABOUT SER17 A recent General Accounting Office (GAO) report questions the need for the newly established Solar Energy Research Institute (SERI) in Golden, Colo. The report suggests to Congress that existing facilities run by the U.S. Energy Research and Development Administration could handle to government's solar energy research. Two members of Colorado's Congressional delegation Rep. Tim Wirth (D) and Sen. Gary Hart (D), attacked the report, saying that it ignores the National Academy of Science's recommendation in 1975 that solar energy research needs be met "by a single solar research needs be met "by a single solar research needs be met "by a single solar energy research institute with a number of relatively small field stations under its di-

CAVEAT EMPTOR. A Colorado official RURAL POWER SUBSIDY. A Carter posing as a customer for home insulation Administration task force is scrutinizing Administration task force is scrutinizing the practice of subsidizing rural power cooperatives by offering them low-interest loans. The effort may mean that Carter is trying to end or reduce the government's 40-year-old Rural Electrification Administration loan program, according to Farmland News. The Administration is expected to ask the rural electric cooperatives to use more of their own and private capital, a request that is bound to make rural electricity more costly.



POWER THROUGH SPANISH PEAKS. In what is considered a blow to environmentalists, the Montana Board of PEARS. II White to the Montana Board of Natural Resources and Conservation approved two controversial power line routes at its meeting Sept. 16. One line will run along the east side of the Bitterroot Valley from Hamilton to Bonner, Mont. The other, a system of lines, will run from Gardiner to the Bozeman area to Dillon. The most hotly that all portion would serve the Big Sky contested portion would serve the Big Sky ski resort in Gallatin Canyon with a line crossing the roadless Spanish Peaks area in the Madison Range.

Sept. 23, 1977 - High Country News-11

Reckoning From Washington

by Kay Coates

Major oil and natural gas companies are delighted with at least part of the Senate's first energy bill, the Coal Conversion Act — the part where they crushed an amendment to keep them from expanding their coal and uranium holdings.

Sen. Edward Kennedy's (D-Mass.) proposition halt the purchase of coal and

Sen. Edward Kennedy's (D-Mass.) proposal to halt the purchase of coal and uranium reserves by big oil and gas companies sent a chill down the spines of every lobbyist from Exxon, Texaco, Mobil, and many other big oil companies.

Three major oil companies sent a letter to their stockholders warning them of implicant danger. Chief executives of the

minent danger. Chief executives of the nation's 22 biggest oil and gas companies flew into Washington to defeat the prop-

Kennedy's amendment, defeated 62 to 30, was viewed as the first step toward di-vestiture, a proposal which would force oil companies to sell holdings in coal and

uranium.

In a letter sent to all members of the Senate, Kennedy said the big oil and gas companies have rapidly increased their coal and uranium holdings in the past 10 years. They now own nearly half the privately-held coal reserves and more than half of the uranium reserves.

Kennedy argued that price competition is being lost. If coal mines and oil wells were owned by competing companies, the

is being lost. If coal mines and oil wells were owned by competing companies, the price of both might be held down, but that's not likely when both are owned by one company, he said.

Sen. Malcolm Wallop (R-Wyo.) sent a three-page letter to all the members of the Senate urging them to vote against Kennedy's amendment. Wallop said that there are enough laws on the books to insure interfuel competition. For example, the Coal Leasing Act limits the acreage that an individual or company can hold, he said.

said.

A member of Kennedy's staff said that sooner or later the Administration would have to face the problem and act on President Jimmy Carter's campaign promise to deal with horizontal divestiture. As chairman of the Senate's antimonopoly subcommittee, Kennedy plans to push divestiture legislation later in this Congress.

As passed by the Senate, the Coal Conversion Act prohibits new power plants from using oil or natural gas. Existing power plants will not be able to use natural gas after 1990.

As part of the Coal Conversion Act, Sen.

As part of the Coal Conversion Act, Sen

As part of the Coal Conversion Act, Sen. Cliff Hansen (R-Wyo.) tried to push through repeal to an amendment of the Clean Air Act.

Through the amendment Hansen would have allowed utility companies and other major coal users to purchase their coal needs anywhere they could find a seller. He lost that attempt, but the amendment was later added to the energy conservation bill and sent to conference committee.

The amendment to the Clean Air Act.

The amendment to the Clean Air Act could cut off big markets for Wyoming coal unless Hansen's amendment gets through

In a letter to his Senate colleagues, Han-sen complained, "an industry or utility could be ordered to purchase locally or reg-ionally produced coal despite the fact that it had ay mus contract for or could more cheaply pushase coal from distant fields."



Substitutes leasing, royalty system

Andrus proposes mining law repeal

Long considered the scourge of both environmentalists and bureaucrats, the 1872 mining law is being challenged by a bill submitted to Congress by the Carter Ad-

submitted to Congress by the Carter Administration.

The bill would replace the 1872 law with a law establishing leasing and royalty systems for publicly owned hardrock minerals, including copper, lead, uranium, gold, silver, nickel, iron, and zinc. Existing law gives hardrock miners access to public lands on a first-come, first-served basis, without any federal controls.

Through the leasing process, the Ad-

Through the leasing process, the Administration bill would establish strict

ministration bill would establish strict standards for protecting and reclaiming land worked by hardrock miners. Through royalties, it would 'provide a fair return to the American people for the leasing of their public lands and the sale of minerals in those lands," according to In-terior Secretary Cecil Andrus. Rep. Morris Udall (D-Ariz.) and Sen. Le-Metralf (D-Mort) have each introduced

Metcalf (D-Mont.) have each introduced similar legislation, but Udall recently withdrew his support from his bill, dim-ming conservationists' hopes for quick Congressional passage of a mining law re-Congressi form bill.

form bill.

At an August meeting with the Arizona Mining Association, Udall said that reform of the existing "location" system, rather than instituting a leasing system, is the best way to proceed. He plans to use the American Mining Congress bill introduced by Rep. Phillip Ruppe as a starting point. "Without Udall's support, the Administration and Sen. Lee Metcalf (D-Mont.) face an almost insurmountable task in pushing a leasing bill through Congress this year—

a leasing bill through Congress this year — and for the forseeable future," says Public Lands News.

The Administration's proposed new law would allow the secretary of the Interior Department to issue an exclusive license to Department to issue an excusive itense to any qualified person to explore for one or more hardrock minerals on federal lands. Where lands were classified as suitable for competitive bidding, the secretary would issue exploration licenses only after cometitive bidding. No person would wed to control exploration licen ould be al-



HARDROCK MINING. The "location system" prescribed by the 1872 ming law has led to chaotic development and scars on the land. The pho ing law has led to chaotic development and scars on the

more than 5,120 acres in any one state. A be not less than \$25 an acre license would run for five years and could be extended for another five. It could not apply to more than 1,280 acres, and would

st \$5 an acre a year. Under the bill, a lease application to de Under the bill, a lease application to develop and produce the mineral would have to include information on the probable extent of the mineral deposit, the mining milling, and transportation methods, and the expected environmental and social impacts of development. No person would control leases on more than 51,200 acres, and no lease could be issued without the public having an enought product of the produc

Royalty payments would be a minimum of two per cent of the gross value of the output of a mine.

output of a mine.

Alicensee or lessee would have to submit exploration or mining plans describing possible surface disturbance. The secretary would issue regulations to insure that prospecting, exploration, development, and production are conducted "in a manner that minimizes to the maximum extent feasible environmental damage."

the expected environmental and social impacts of development. No person would control leases on more than 51,200 acres, and no lease could be issued without the public having an opportunity for a hearing.

A lease would require diligent development and continued operations by the operator. Annual rental for a lease would of the public having an operator which are as strict or stricter than federal which are as strict or stricter than federal strict or stricter than federal which are as strict or stricter than f

Mr. & Mrs. Sunshine take gospel to Wyoming

by Mariane Ambler

Charles and Frances Nations have a mission. They believe that by destroying a few myths, they can soften the chill—and the cost—of the harsh Wyoming winter.

Recently convinced that low-cost solar energy is feasible now, they're spreading this gospel to towns scattered throughout Wyoming. They started with a slide show of what individuals are doing in southern Colorado to ease their fuel bills with home-built solar devices. Later, after word of the Nationses' mission spread, they were granted funds from the Federal Energy Administration to prepare a slide show of what Wyoming inventors and experimenters were doing. ters were doing.

The slide show was well received at the

Wyoming Governor's Conference on Wyoming Governor's Conference on Energy Conservation, and many groups—including service clubs, school classes, church groups, and rancher organizations—were eager to see it. (See HCN, 2-11-77) But the Nationses soon realized that the people of Wyoming needed something more to nudge them into actually tackling their

own projects.

Under the auspices of the Central
Charles started solar Wyoming College, Charles started solar workshops, so people could take up ham-mers and saws and actually build collec-

The response to the workshops proved, people were ready. On the morning of the first workshop last February in Lander, the Nationses expected 20 or 30 participants, but soon there were 62. "It scared us to death," Frances said. However, among to death, 'Frances said. However, among the group were several people who, although they knew little or nothing about solar energy, had building skills and could help other students. Since then the Nationses have reached 295 people with the workshops, and Charles has earned a reputation as "Mr. Sunshine" in the state's newspapers.

energy published by commercial firms—
and from many government publications—
they have the impression that it is too
complex and expensive for them now. They
have little faith in their own abilities, so
they sit quietly while he shows the opening
slide show of what others have done.

"But when the sawing and hammering starts, they change completely," he says. They get serious — and competitive — to see who can build the most efficient air or water collector. Almost everyone pitches in. In fact, he says, one girl wouldn't pay her tuition fee until she was assured she wouldn't be forced to stand back and "watch the men do it."

"It is good to see all those people, shoulder to shoulder in their working clothes, solving the problem. Their solutions will be better than a hundred expensive ERDA (Energy Research and Development Administration) federa grants," the Riverton (Myo.) Ranger said of the workshops in an editorial.

Charles, himself a retired Air Force technician in his 50s, says the people who show up are of all ages and interests — professors, ranchers, doctors, housewives, carpenters, students. Some have no building skills, but he teaches them the basics — how to sweat solder copper fittings, rivet sheet metal, caulk, paint, and staple on a flexible plastic covering. He supplies all the tools and is paid for his time and mileage, usually by a community college. The classes built two air collectors and two water collectors, using materials bought



INTO HOT WATER. Charles Nations built this small demonstration solar INDUITY WATER. Charles Nations built this small demonstration solar collector using a copper plate from a steam table that he and his wife, Frances, found at the county landfill. The whole thing cost about \$21, they figure, since he had to buy new plastic to cover it and handles to carry it. Within a few minutes, they were ready to serve the photographer tea from water heated in the collector. Water collectors can be used for heating water and for space heating.

materials aren't necessary.

After one and a half days of work, the Nationses find the participants compare efficiencies and flows like a bunch of solar energy experts. They say most of them come because they are curious or interested in lowering their fuel bills — not terested in lowering their fuel bills — not because they are necessarily energy conservationists. "Many of them would be shocked if they heard themselves referred to as environmentalists," Frances says. The Nationses take delight in listening to the new solar "experts" brainstorming on what materials they could use for collectors after participants set a grasp of some

tors after participants get a grasp of some

of the basic concepts.

One remembers a useless sheet metal building he could use and another the hoper off a combine. One man suggested using old energy engine oil as a medium to move heat in the collector. "It dawned on one old gal that she could heat up her cist-ern full of water, which is naturally insu-lated by the ground around it." Charles says. He says all of these ideas could be

Both the Nationses are advocates of scrounging for "recyclable materials." stribution of the recyclative materials. Their own solar projects include treasures discovered in regular pilgrimages to the Lander landfill. A recent trip yielded a steel cot, hunks of plywood, six rabbit cages, and a steel fence post "that just needs a little straightening."

The Nationses are regularly renewed by ne enthusiasm of the new solar disciples. the enthusiasm of the new solar disciples. But they say it scares them sometimes thinking what they're getting into. Just before talking with HCN, they received a call from a former workshop participant asking for help. The man had invested his time and money into building four collectors and needed advice on where to find a blower to force air through all four in a series. Charles explained to him that it

from a local lumberyard to prove exotic materials aren't necessary.

After one and a half days of work, the distribution and a half days of work, the state of the same and a half days of work, the same alternative suggestions.

They say the risk of misunderstandings is inherent in the short workshop format. They try to avoid them by emphasizing several times to the participants that they several times to the participants that they should form solar groups and work to gether on small demonstration projects before tackling larger collectors. This way they can get a better grasp on what works and what doesn't before investing money into the materials to build a large collector. The Nationses also display several books and catalogs showing narticipants where

and catalogs showing participants where they can write for more information. "All you really need to construct your own solar heating device is the ability to read and write, some basic carpentry skills,

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and enough guts to try it," Charles says.

While spending their time building collectors for others, they haven't had the opportunity to add one to their house in

portunity to add one to their house in Lander yet. "Everyone asks us that, it's getting real embarrassing," Frances says. In addition to their workshop trips, the Nationses help out with repairs on HCN equipment, HCN stuffing parties, with the senior citizens' center which their daugh-ter directs, and watch over their grand-children when their daughter-in-law, Casaria Nations, works are, time at HCN Casaria Nations, works are, time at HCN Georgia Nations, works part-time at HCN.

Another current project is to install a big wood-burning cook stove to soften the chill of the harsh winter in their own home.

big woodstanding of the harsh winter in their own nome. Through their efforts, however, others will have lower fuel bills. Jim Downham, who attended the Lander workshop, says who attended the Lander workshop, says that solar energy came across as something that's "very, very practical and easy to do." As a direct result of the workshop, he is insulating his own home, since Charles emphasized the importance of insulation prior to any solar improvements



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Western Roundup





SCENIC BEAUTY in Jackson Hole, Wyo., below the Grand Tetons will be preserved if Congress funds a proposed plan for scenic easements.

Teton County seeks scenic area funds

The Teton County (Wyo.) Commissioners have adopted a resolution endorsing U.S. Congressional legislation to create a Jackson Hole Scenic Area, the first such designation in the nation. The legislation will be introduced by Sen. Malcolm Wallop (R-Wyo.) and Rep. Teno Roncalio (D-Wyo.) before Congress adjourns Oct. 9. The bill would appropriate \$200 million to purchase scenic easements to preserve as much open space as possible, while leaving the privately-owned lands in private own-ership. The government would purchase ership. The government would purchase only the development rights to a piece of spring

property. The easement could also be do-nated, with the owner receiving tax advan-tages, making it more economical for the owner to continue agricultural use of the-

The major roadblock to the bill, according to the Jackson Hole News, is the \$200 million Congress is asked to appropriate. Though both Roncalio and Wallop like the concept of the bill, Wallop commented, "This will be a difficult bill to sell. There's no sense fooling ourselves about that." Hearings on the bill could begin next spring.

Utah cancer up from Nev. bomb tests?

Fallout from nuclear testing in Nevada years ago may have resulted in dramatic increases in cancer in residents of five southern Utah counties. A 1970 study uncovered by the Deseret News shows that leukemia deaths in that region over a 20-year period were nearly twice the state and national averages in the counties downwind from the nuclear testing carried

As a result of the study's publication, several Utah cancer experts contacted by the News requested a new study be conducted to determine the correlation between the testing and increased leukemia incidence in the area. The doctors pointed out, however, that because the population of the region is so small, only one or two cases could easily push the death rates for the county over the national average.

Sierrans sue to clean up canyon

Grand Canyon are dirty, noisy, and stripped of vegetation in popular camping spots, the Sierra Club says.

The club filed suit Sept. 19 in U.S. District Court in Arizona against the National Park Service's management of commercial river running-on the Colorado inside Grand Canyon National Park.

"The issue is not stopping river running," says Ed Hawkins, chairman of the club's Grand Canyon Chapter. "Rather it is, ultimately, what kind of river and environment we will have to enjoy. The increasing environmental degradation must be remedied by immediate changes in the present nature of operations permitted on the river."

The banks of the Colorado River in popular sites; and require commercial trips to carry their human wastes out of the ca-

to carry their human wastes out of the canyon.

The club alleges that the Park Service, by failing to carefully manage use of the river, is violating its statutory duties and trust obligations to protect the country's parks. The club also charges that the contracts and permits renewed by the Park Service with river running companies this spring should have been accompanied with an environmental impact statement under the requirements of the National Environmental Policy Act.

As evidence of serious problems in the canyon, the Sierra Club's formal complaint cites a document produced by the Colorado River Research Project, which was sponsored by the Park Service.

"All phases of this research project show in the canyon."

House enacts new wilderness legislation

The U.S. House of Representatives has passed the Endangered American Wilderness Act of 1977 by a vote of 380 to 18. The new wilderness areas created by the bill total 1.7 million acres, drawn from 56 million acres of largely roadless areas that were not included in the original 1964 wilderness areas designated, totaling 262 000 acres, and Oregon acres near Salt Lake total 1.7 million acres of largely roadless areas that were not included in the original 1964 wilderness areas designated, totaling 262 000 acres, and Chama River Canyon, 50,300 acres near Albuquerque.

Under the House bill, the areas that would be included in the wilderness system in the West are: Montana, Welcome Creek, 28,400 acres in the Lolo National Forest; Wyoming, Savage Run, 15,000 acres in the Medicine Bow National Forest; Colorado, Hunter-Fryingpan, 67,000 acres near Aspen, Colo.; New Mexico, Manzano

On the Pacific Coast, California would have three new wilderness areas designated, totaling 262,000 acres, and Oregon would get four new areas, totaling about 515,000 acres.

Rep. Teno Roncalio (D-Wyo.), floor manager of the bill in the House, pointed out that over 600,000 acres of land had been eliminated from the bill, in response to the concerns of the timber and mineral intustries. The legislation will now be considered by the Senate.

Drought forces Idaho range closures

Idaho rangeland near Boise has been so affected by the drought that large amounts of the public land have been closed to grazing. The Boise Bureau of Land Management district ranger estimates that two million acres of the district's 5.5 million grazing acres are affected, though not all of that acreage will be closed.

So far, about 300,000 acres have been closed south of the Snake River and west of



GOLDEN EAGLE with rabbit prey. Eagles and other raptors are being accidentally caught in game traps in North Dakota.

Raptors trapped accidentally in N.D.

The accidental ensnaring of raptors in The accidental ensnaring of raptors in North Dakota. In a report prepared for the North Dakota Chapter of the Wildlife Society, there were 38 cases reported of leghold trapped raptors between October 1975 and January 1976, and 46 raptors caught between October 1976 and an January 1977. These accidental captives included a total of 55 golden eagles and 12 bald eagles.

sent nature of operations permitted on the river."

Through the suit, the club hopes to toughen existing river running rules. It is that irreversible physical and ecological rate be included in the 1977 trapping procasking that the Park Service control ranching that the Park Service control ranching that the research foot travel through trails, signs, and other methods; eliminate motorized trips; disperse camping to less project report states.

To address the problem, the North Dakota Audubon Society suggested that a rule be included in the 1977 trapping procasking that the Park Service control ranching the Service research project show a round proposed to the suggested that a rule be included in the 1977 trapping procasking that the Park Service control ranching the Service research project show a result of the lamination prohibiting the placing of traps leaves the problem, the North To address the problem, the North To address

thur Link refused to sign it, saying that he had not heard of the change and wouldn't approve it until there had been discussion.

Stuart said later that he had told Audu-bon that while he would include the rule-he never promised to support it. The Bismarck Tribune quotes Stuart saying. "There's no way to enforce it (the 30 foot requirement). There's no reason to put laws and regulations on the books that defy enforcement."

U.S. Fish and Wildlife Service agent Joel Scrafford said he would urge the U.S. attorney to go to federal court to prevent a trapping sesson from beginning if the birds were not protected, as required by the Endangered Species Act.

and other methods; eliminate along the Countries and trips; disperse camping to less project report states. water collectors, using materials benefit sortes. Charles explained to him that it



Hen Bulletin Board



LOONEY LIMERICKS

by Zane E. Cology

Some say we're on the same boat, Each human and turkey and goat. Were it not for our greed We'd have all we need. As it is, we're not sure we can float.

LAND USE PLANNING
The 9th Annual Statewide Land Use
Symposium will be held in Albuquerque,
NM., on Oct. 27 and 28. The main topic of
the meeting will be "Drought: Our Heritage," and discussion will center around
controversies about the use of water. For
more information and registration contact
Mally Rile Chairman 1053 Governor Mally Ribe, Chairman, 1053 Governor Dempsey Drive, Santa Fe, N.M. 87501.

CLEAN AIR WORKSHOPS Clean air workshops are scheduled at four Western cities to help individuals unto the western cities to help individuals understand how to put the new Clean Air Act amendments to work protecting their air. The workshops will be held Oct. 7 at the Central Clearinghouse in Santa Fe, N.M. (contact Brant Calkin at (505) 982-4349 for time); Oct. 8 at Salt Lake City, Utah (contact Mary Belle Bloch at (801) 753-3985 for time and place); Oct. 9 at Billings, Mont. (contact Pat Sweeney at (406) 248-1154 for time and place); and Oct. 10 at the Denver Botanical Gardens at 7 p.m. (contact Kevin Markey at (303) 321-6588). Rafe Pomerance from the National Clean Air Coalition and a representative of the House or Senate staff will give the work-

Service Directory



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MAJOR NORTHWEST OVERHAUL

MAJOR NORTHWEST OVERHAUL.
What the Bonneville Power Administration (BPA) has described as "a major overhaul" of the Northwest's power system will
be discussed at a public meeting in Boise
Nov. 1 at 7 p.m. at the Rodeway Inn. The
meeting is one of 28 scheduled by BPA in
conjunction with the agency's environmental immeet statement on the future role of tal impact statement on the future role of BPA. The impact statement will help plan the Northwest's energy system for the next 20 to 30 years.

Researchers from the University of claska's Cooperative Wildlife Research Unit are attempting to trace the migration route of the sandhill cranes from the Yukon-Kuskokwim Delta to the southwestern U.S. and Mexico. Researchers have banded 125 birds with yellow collars and leg bands with black numbers. Anyone sighting one of the banded cranes is re-quested to note the date and location, the leg on which the bird is banded and, if pos-sible, the number on the collar band. Then, contact Cheryl Boise, Wildlife Research Unit, 209 Irving Building, University of Alaska, Fairbanks, Alaska 99701. Tel: (901) 479-7673 or 479-7178.

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ALASKA CRANE RESEARCH

should be received by Oct. 17 by Greg Franta, Box 3102, Aspen, Colo. 81611. FOREST SERVICE PLANNING

SOLAR LOGO CONTEST
The Colorado Solar Energy Association
(CSEA) is having a graphic design contest
for an official CSEA logo to be used on

stationery, newsletters, and other printed materials. The winner will get a five-year honorary membership in CSEA (worth

\$50), including the monthly newsletter, announcements of meetings, and discounts on workshops and publications. All entries

GUIDES

The comment period on preliminary area-wide plans to guide Forest Service management has been extended to Oct. 30. The preliminary guides propose Forest Service program direction for three broad geographic areas — the Central Rockies, the Southern Rockies, and the Great Plains. Copies of the guides can be obtained from Regional Forester, 11177 W. 8th Ave., P.O. Box 25127, Lakewood, Colo. 80225. Comments should be sent to the same address. GUIDES

IDAHO WILDLIFE CONFERENCES

IDAHO WILDLIFE CONFERENCES
Five regional conferences on wildlife
have been set in Idaho beginning in September. The meetings are the offshoot of a
statewide conference on the theme "Wildlife Tomorrow" held in Boise last Spring,
which discussed the future of the state's
wildlife resources. The regional conferences will follow up on the work begun at
the initial meeting. They begin Sept. 24 in
Lewiston on the Lewis-Clark State College
campus. Others will follow Oct. 8 in Coeur
d'Alene at the North Idaho College; Oct. 21
in Boise at the Rodeway Inn; Oct. 27 in
Tocatello at Idaho State University, Nov.
12 in Idaho Falls at a site yet to be chosen; 2 in Idaho Falls at a site yet to be chosen; and Nov. 19 in Twin Falls at the College of Southern Idaho.



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From Norway Jim and Ann Fontaine Rt. 63, Box 16, Dept. H.



Thank you for your help so far. Our victories are slowly mounting. Our legal contest with American Smelting and Refining Company (ASARCO) has been decided in our favor! A battle won but not the war. ASARCO was claim jumping on our mining claims in the Scotchman's Peak Wilder-

Another contest is pending over a decision by the Bureau of Land Management. For this and other fights sure to arise, the company is offering the above mining certificates for sale. Cost is \$5 each. The certificates are non-voting, non-revenue-producing. Join us in our pick and shovel attempt at mining with an environmental conscience. For a certificate, write to Northwest Citizens for Wilderness Mining Company, Inc., Star Route, Noxon, Mont. 59853. Thank you.

was incorporated for the purpose of engaging in mining activities in potential or wilderness areas in such a fashion that their wilderness character remains



MAGPIES ARE SO "HUMAN"

by Myra Connell

Readers of this column, assuming there are any, may be startled by the title. However, magpies resemble people in numer-

ous ways.

The Corvidae—jays, crows, ravens, and magpies—are sometimes placed at the top of the birds' evolutionary scale. They have the greatest brain development of any family of birds, and some of their behavior shows remarkable intellect.

snows remarkable intellect.

For example, in providing shelter for the family the mappie couple follows much the same pattern as human parents. They choose the safest place to be found, prefersibly an impenetrable mass of thorny brush. Human families, too, like a safe abode, guarded all round about by army, navy, and marine corus.

The magpie's house is constructed with



CORNER

extreme care: the base and outer walls are of heavy material; inside the base, a cup of mud is held together with vegetation. Both front and back doors are provided, plus a dome-shaped roof over their heads. The cradle is softly lined, often with rabbit fur — "a rabbit skin to wrap the baby magpie

Magpies are believed to mate for life, a custom that human beings sometimes ob-

Consider the basic necessity, food. Mag-Consider the basic necessity, 100d. Mag-pies are omnivorous eaters, enjoying fruit, grain, seeds, grasshoppers, and caterpil-lars, but like many people, much prefer-ring meat. For this reason they are fre-quently seen feeding on the dead rabbits and other creatures slaughtered on the

highways.

Magpies, like humans, are adaptable, resourceful creatures. If they were not, they could never have survived the organized campaigns that have slain many thousands of them. But the enmity of man has failed to decrease their numbers. And like people, they are conortunists, taking like people, they are opportunists, taking advantage in every way they can. No doubt they instinctively ate eggs of other birds from time immemorial, but robbing the from time immemoria, but robbing the homesteader's chicken house had to be learned. Members of the Lewis and Clark expedition related incidents of magpies in-

ding their tents, snatching meat from

the dishes.

Like people, magpies are highly vocal
and garrulous. They carry on conversations among themselves with a wide varitety of notes and accents and sool di numitakable manner when annoyed. Long ago,

takable manner when annoyed. Long ago, a neighbor of ours tamed a young one for a pet and taught it to say "Hello, Myra," so plainly that it was uncanny.

If some of the foregoing seems incredible, the following will seem more so. Magpies conduct funeral services for their dead. I can vouch for one incident.

A magpie had been killed and its body tossed in the grass near a big cottonwood. Soon the tree was swarming with magpies,

Sept. 23, 1977 — High Country News-15

squawking, gabbling, and chattering in great excitement. After a little while, one flew to the ground near the deceased and gave a little speech while the audience in the tree listened; then he flew back to his seat. One after another single birds flew to the ground and had their say, (praising the good deeds of their fellow magpie?). This went on for some time, then after more vocalizing in unison the entire flock flew off, leaving the departed to the elements.

In his book Song and Garden Birds of North America, Alexander Wetmore says that magpies "are to be lived with, under-stood and appreciated. What our American outdoors would be like without their vital-ity, I cannot imagine."

I wonder if the magpies feel that way

about us!

Classifieds

THE COLORADO CONSERVATION FUND, a newly established non-profit or-ganization, seeks a full-time executive di-rector to be responsible for the develop-ment and implementation of fund raising programs for a wide variety of environmental concerns. Applicants must demonstrate a degree of experience in the de-velopment and implementation of such programs, a high degree of initiative, judgment and imagination, skill and in-terpersonal relations, and commitment to environmental activities. Salary: \$12,000 to \$15,000. Submit application letter, re-sume, and references to: Colorado Conser-vation Fund, 2239 East Colfax, Denver, CO

POSITIONS AVAILABLE. The Idaho POSITIONS AVAILABLE. The Idaho Conservation League, a citizens' organiza-tion, is accepting applications for the fol-lowing positions: a field organizer in North-Idaho, two community educators in South-central Idaho, a researcher for Idaho energy and utility issues in Boise, and an office manager in Boise. ICL is a grass roots organization whose primary purpose is to involve citizens in the decision making process for state and local issues. ss for state and local issues

Job descriptions will be sent to in-terested persons on request. To apply, send resume with references to ICL, P.O. Box 844, Boise, Idaho 83701 (208) 345-6933 as soon as possible. Please indicate for which position you are applying.

"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.

ALTERNATE ENERGY EXPO 77 will be held at Expo Square in Tulsa, Okla, Nov. 11, 12, & 13, 1977. The Expo will be a people centered event geared to educate all of us on ways to improve our lives and our environment. It will present the latest innovations in the fields of solar, wind, wood, methans, etc. The expo will also focus on wethers. methane, etc. The expo will also focus on conservation of energy, health, ecology, education, wilderness skills & much more. education, windermess skills & much more. This exposition will be the largest of its kind ever held in the Midwest, with over 200 display booths and parking facilities for 25,000 cars. For further information, contact Ron Surface, Liberty Enterprizes, Inc. 7729 E. 21st., Tulsa, Okla. 74129 918-663-2291

POSITION AVAILABLE: Assistant Professor of Environmental Studies and Coor-dinator of the Environmental Studies Program at University of Northern Col-orado.

orado.

To be considered an applicant or candidate, the following minimum qualifications and experience must be demonstrated or documented: Involvement with and concern for the welfare of the environment; environmentalist with an earned doctorate or evidence of substantial progress toward doctorate of an interdisciplinary nature combining the social and natural sciences; experience in the deress toward doctorate of an interdisciplinary nature combining the social and natural sciences; experience in the development and coordination of environmental studies programs of an interdisciplinary nature is preferred; experience in working with community agencies and professional organizations; teaching experience is preferred.

Instructional responsibility will include development and teaching of introductory and advanced courses in environmental studies and advising minors and interdisciplinary majors in environmental studies. Administrative responsibilities will include overall coordination for the Environmental Studies Committee, development and supervision of the internship program, and serving as Iliaison with community-based organizations.

Starting date is January 1, 1978. Salary from \$11,780 to \$12,300. The university partially pays for health and life insurance premiums as well as contributing to the retirement preverse.

premiums as well as contributing to the retirement program. Contact Mr. Paul Richard, Fraiser Hall, P.O. Box 43, University of Northern Colorado, Greeley, Colo. 80639. Deadline is November 11, 1977. An equal opportunity affirmative action employer.
".tsed an its gailean book"

Eavesdropper



RECYCLED AUTOS are being considered by the Oregon state legislature, proposing a \$100 refundable deposit on all vehicles. Environmental Action re-is that Americans discard 6.5 million cars annually, each averaging 3,300 pounds containing 2,475 pounds of steel.

AP TO

AG LAND TRUST DILUTED. A plan to invest corporate monies in agricultural land is being reviewed by Merrill Lynch, Pierce, Fenner & Smith, Inc. officials. The Pierce, Fenner & Smith, Inc. officials. The firm originally planned to purchase con-tiguous tracts and farm them on a large scale, cutting small farmers out of competi-tion. The new program allows for Merrill Lynch to lease land to young farmers and provide funds for investment in expensive farm machinery.

AGENT ORANGE TO BURN. The En-AGENT ORANGE TO BORN. The En-vironmental Protection Agency has ap-proved a request by the U.S. Air Force to incinerate at sea the herbicide "Agent Orange." The burning will be conducted aboard a special incinerator ship in an iso-lated spot in the Pacific Ocean. Approval was extended after the U.S. Air Force con-ducted a successful test burn in July.

THE ENDANGERED SPECIES ACT is stirring up controversy among some legislators, especially when it threatens projects planned in their districts. Con-struction on the Tellico dam in Tennessee, for example, was ordered stopped to save the small snail darter. U.S. Rep. Robin the small snail darter. U.S. Rep. Robin Beard (R-Tenn.) has co-authored a bill probeard in Telm. has co-autored a bin pro-serve dam projects already underway. But most members of Congress show little en-thusiasm for changing the act, since changes would require an almost case-by-case approach, according to Land Use Planning Reports.

FILTHY FIVE. Paper mills, steel blast furnaces, chemical factories, oil refineries, and electric power plants together account for 63% of all industrial facilities violating federal clean water laws, according to a national group called Environmental Action. The group has dubbed these indus-tries "the Filthy Five" not only because of

their pollution, but because they are lobby-ing in Congress "to make dirty water a permanent U.S. policy." The Filthy Five can be stopped, according to the group, "but it will take a real outcry from the American people.

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Charlee Belding and his Graphic Arts Center ublishing Company of Portland, Ore. have unerously allowed High Country News to have all e retail profits from the sales of the book de-clibed here.





Beyond Repair The Ecology of capitalism by Barry Weisberg

Beacon Press, 1971

Review by Mike Jakubcin

As an independent observer following the development of the environmental movement in the U.S., I've wondered at how its various thinkers could continue to ignore the larger social implications of what they are saying about our physical environment. Now, after reading this book by Barry Weisberg, I realize that they have apparently ignored at least one direct challenge to their strategies. Published six years ago, the book stands as one of the most carefully written, radically conceived approaches to protecting the environment As an independent observer following approaches to protecting the environment this country.
After describing the spiritual values giv-

After describing the spiritual values giving rise to the current environmental crisis in Western civilization, Weisberg moves to an eye-opening discussion of the early "conservation" movement, which he sees as having been part of a "larger, more fundamental event, the economic consolidation of private capital through public means." In supporting this view, he relies heavily on Samuel Hays's Conservation

and the Gospel of Efficiency. According to Hays, conservation in its early stages was concerned with progress through bet-ter management rather than with a proper balance physically and socially.

Weisberg sees contemporary conservation groups as a direct reflection of this
earlier period. As such, "they are without
exception white, affluent, and professional
in orientation, resembling something more
of an elite outdoor club than a movement
for social change." They "view problems in
the defensive, seeking most often to repair
damage already done, rather than
eliminating the source of that threat. Their
actions are fragmented, attacking isolated
problems and situations rather than complex patterns of social and political behavior which are the source of all particulars."

While to some extent the latter descrip tion is not so accurate as it was in 1971, I still see little inclination on the part of environmental groups to get at the fundamental causes of the problems they combat. Obviously, they are not concerned with the radical social transformation which Weisberg feels is essential.

That such deep, fundamental change is ecessary is the main thrust of the book. In necessary is the main thrust of the book. In a fairly detailed examination of the U.S. economy, attention is focused on the automobile and petroleum industries, which Weisberg regards as "the most dominant influence upon, and the most cohesive element of the American economy." In his opinion, the issue is ultimately one of control and decision-making. From the ample presentation of data, it is not difficult to understand how thoroughly the executives of large corporations control the paths of development in the U.S. and internationally.

This is not a matter of pollution control devices and air bags, but rather one of total systems. "A diversified transport system will not be developed unless the forces that prohibit it, such as the military, the Big

Four, and Boeing, are fundamentally altered or eliminated," he says. To improve our transport system adequately, decentralization is necessary, and yet, as Weisberg sees it, the existing urban arrangements are "the inevitable consequence of the capitalist mode of accumulation."

To counteract this mode requires not "mational superplane," but increasing lead

"national superplans" but increasing local political autonomy. The fact that the U.S. has been so slow in developing the various clean, renewable energy sources Weisberg attributes to the political controls exerted by the oil industry.

Weisberg's data is quite clear and sup-portive of his conclusions; some of his re-lated detail is downright tasty. An out-standing example is his sketch of Robert O. Anderson, chairman of the board of Atlan-tic Richfield, in which it is noted that among Anderson's myriad activities was his role as "chief financial backer for David Brower's John Muir Institute and the Friends of the Earth."

In addition to his analysis of the economic power structure, Weisberg clarifies some of the arguments and rela-tionships which often tend to cloud one's ises a future work examining the "ecology of socialism." Fortunately, his belief in the efficacy of socialism is not for the heavily centralized, hierarchic forms so familiar in Europe. Rather, he hopes change will occur in this country through self-reliance, diversification, decentralization, and self-determination. He cites as harbingers of such a movement the proliferation of "communes, collectives, food co-operatives, craft guilds, and rural-urban collectives" as well as "the growth of community development corporations... and a variety of community and neighborhood organizations."

cialist development." Indeed, he

Always the realist, Weisberg states.

"There is no way to transform the required productive capacity of the United States in order to provide for basic services without presenting a challenge to the organized mechanisms of centralization which determine productive priorities." He also understands that it will not be sufficient for some of us to go off in our own corners, "For some of us to go off in our own ormers, "For on matter what autonomy a local community may achieve in regard to services... as long as a productive apparatus exists which continues to produce anything like the present level of commodities, ... the biological balance of all people and all living communities will be threatened."

In reviewing this book, I have emplastized the author's existing of president of the present level of the production of the producti

phasized the author's criticism of environ-mental groups. Weisberg sees serious en-vironmental problems, as most environ-mentalists do, but he perceives the causes more deeply and holistically. Such insight demands wider-ranging ac-

tion to remedy the problems, and perhaps environmentalists feel such action is outside their proper realm. It is not. The environmentalist perspective needs to be broadened, so as to be able to join forces. with movements that are contending with other facets of the same economic, social, and political structure.



understanding of the economy. He spends considerable time refuting the argument of the "population bombers" that the individual is responsible for the environmental crises, that "we have met the enemy and he is us." Weisberg says that the growth in per capita consumption of energy is far more significant than absolute increase in populations. ase in popu tion as a factor in accelerating reso satura as a factor in accelerating resource exhaustion, and that such per capita in-creases are the responsibility much more of the affluent than of the poor. Population growth and imbalance today is not the cause of current environmental problems,

cause of current environmental problems, but a manifestation of them, all of which have their roots in social imbalance.

In his final chapter, "The Conditions of Liberation," Weisberg describes briefly the manner in which agricultural and industrial productivity have grown in balance with the eapacities of the natural environment in the Soviet Union, China, and North Korea. While he acknowledges shortcomings in these socialist societies, he shortcomings in these socialist societies, he feels the heavy anti-communist sentiment in the U.S. has blinded us to their productive achievements. In describing condi-tions in these countries, Weisberg hopes to "illustrate the basic ecological stability of

Dear Friends .-

In this issue, we've included two con-liciting viewpoints that we found stimulating. We hope you do, too. While the questions they deal with are global in scope, they relate directly to some of the changes this region is experiencing. On the one hand (page 1), there's Gar-rett Hardin telling us that overpopula-tion is the root of the world's trouble and that the way to salve it is through limit.

tion is the root of the world's trouble and that the way to solve it is through limiting people's freedom to reproduce.

On the other (page 16) we have Barry Weisberg refuting what he calls the "population bombers." He contends that population is not the problem — that social imbalance caused by capitalism is. He says the answer is decentralization. He says the answer is decentralization, diversification, self-reliance — a kind of community-centered socialism.

community-centered socialism. Hardin, we've been told, is a very controversial figure even among the population activists because of the extreme solutions he proposes. We find it impossible to argue with his basic premise — the lifeboat (Earth) is indeed finite. Our resources can't be stretched beyond certain limits, despite the improvements in technology. The population push to the West now is reminding us of the limits of water, for example, even in the wide open spaces.

We also agree with Hardin that regula tions become more and more necessary as the population increases. We can't de-pend upon voluntary restraints any more but must enact land use planning, carefully allocate our limited water, and even ration our wilderness. "Mutual coercion, mutually agreed upon," Hardin says. We can't endorse all his proposed solutions,

Weisberg disagrees with Hardin's focus on the population problem. He says the way to find ecological stability is through a kind of "small-is-beautiful" socialism. This, he asserts, would lead to socialism. This, he asserts, would lead to less per capita consumption. In effect, it would allow more people to live on the lifeboat in harmony. At the same time it would benefit some of the rich passengers who are now filling their tables with fat-loaded protein and dying from gluttony, otherwise known as high blood pressure.

Weisberg despaired in his book about the environmental movement's focus on the symptom — various forms of pollution — rather than on what he considers the more basic social and economic issues. We would assume from reading the book review that he would have been reassured recently by seeing the growing number of disciples of Amory Lovins and the late E. F. Schumacher. Environmentalists have been their staunchest supporters. While Lovins and Schumacher may not advocate as drastic a political change at the national level as Weisberg would like, they do preach the self-reliance, decentralization, and diversification that Weisberg espouses. —the editors



population theorist

Flathead River

Utah office closed UEC board too diverse?

Victory in N.D. IJC nixes Garrison

The Nationses

12

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