

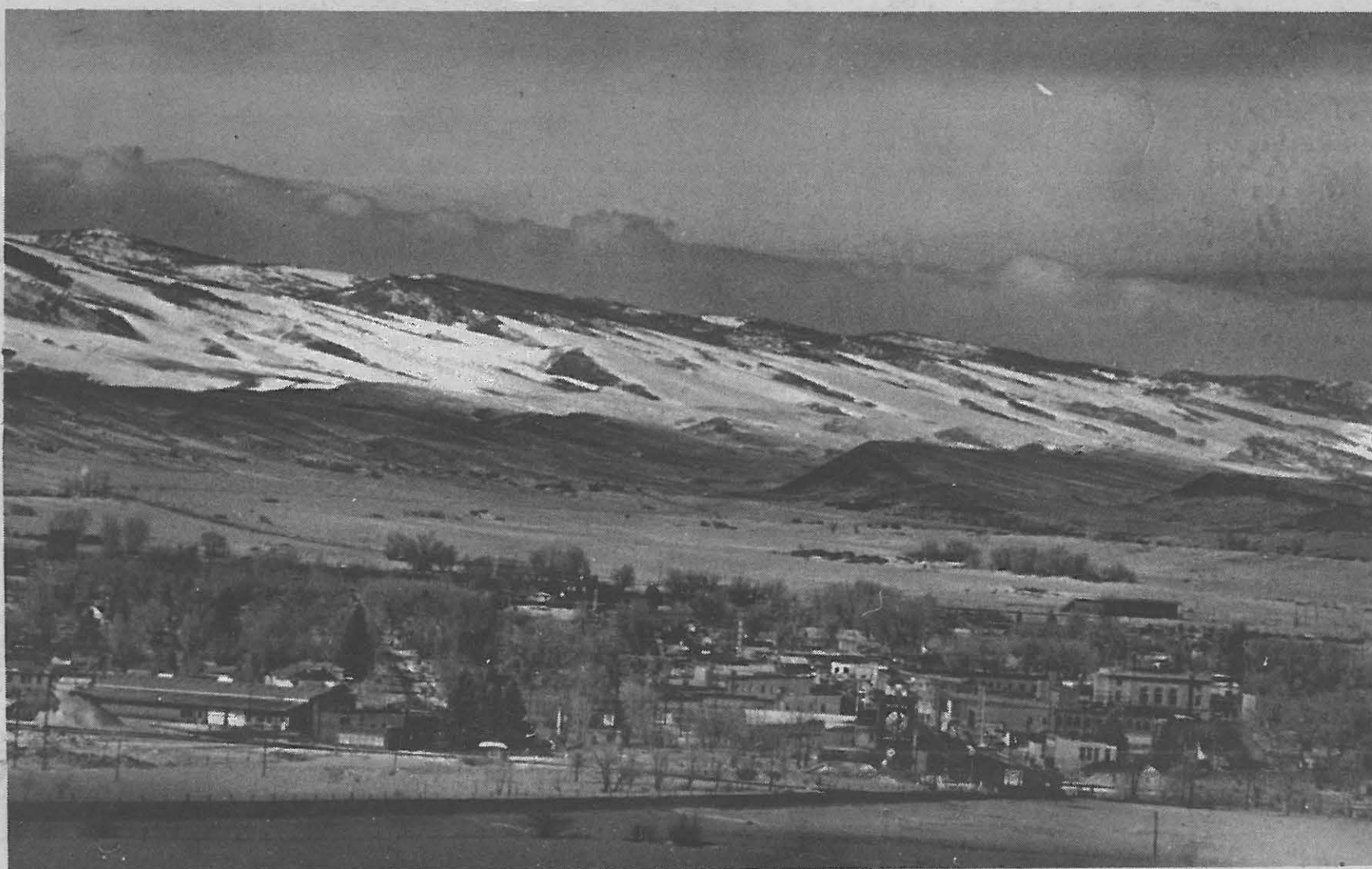
High Country News

The Outdoor and
Environmental Bi-Weekly

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Friday, Mar. 17, 1972



LANDER, WYOMING, AS IT APPEARS FROM THE HILL EAST OF TOWN. For readers of High Country News who have never been to Lander, or through it on the way to

Yellowstone Park, this is the setting at the foot of the great Wind River Range.

Photo by Bill Sniffin

Last Chance for Wilderness

by Tom Bell

"Wilderness Areas Are Best" - "Multiple-use Areas Are Best." Such are the quotations set off in bold type above a Federal Timber Purchasers Association quarter-page ad in the Sheridan, Wyoming, Press.

The ad is only one example of a red-hot controversy stirring the West. It has erupted into bitter and acrimonious debate at Livingston, Montana; Saratoga, Wyoming; Ouray, Colorado, and several points in between.

Differences in land-use philosophysurfaced again at Jackson, Wyoming, and Idaho Falls, Idaho, over wilderness designations and national park management for Yellowstone and Grand Teton Parks.

Center of all the controversy is the home-stretch drive to consider all remaining primitive and roadless areas for wilderness designation. A 1974 deadline under the 1964 Wilderness Act is only two years away.

After eight years of almost total inaction, the National Park Service has suddenly come up with a flurry of hearings on wilderness. Those hearings on Yellowstone and Grand Teton National Parks have been held in conjunction with master plans.

Environmentalists are generally in accord with the proposals. Large areas of wilderness are proposed for both parks. But where National Park Service Director George Hartzog plugs for interior enclaves and exterior buffer zones, wilderness advocates differ emphatically. They can see no reason for the exclusion of these areas, or the justification for them.

A large delegation from the Cody, Wyoming, Chamber of Commerce, and a state representative from that area appeared at the Jackson hearing to protest possible curtailment of automobile travel and the alternative institution

of some form of mass transit. A similar protest from similar groups was lodged at the hearing at Idaho Falls.

Governor Cecil Andrus of Idaho endorsed proposals for wilderness in both parks. Wyoming's Governor Stankley K. Hathaway took the exact opposite point of view, saying we had plenty of wilderness already - no more!

Spurred by a directive issued by Chief Forester Ed Cliff last fall, the U. S. Forest Service has been busy during the winter months identifying roadless areas. The Service began public hearings on these late in February. Depending upon the Forest and Forest region, such public hearings received little publicity in many areas. When there was publicity on some forest districts, it turned out to be almost all one-way - straight to the commodity users and especially the timber interests. Other forests and forest regions, such as the Intermountain Region out of Odgen, have been extremely cognizant of public interest. That forest region has gone to great lengths to inform the public and provide for participation.

The roadless areas are those areas where there are no roads, no timber has been cut, and the quality of the environment is such that each could qualify for wilderness. Any area of 5,000 acres or more qualifies for study as a "candidate" area. Other areas of less than 5,000 acres, if they are contiguous to designated primitive or wilderness areas, are also candidates. Designation as a candidate area in no way signifies that the area will eventually become wilderness.

Purpose of the study and debate on roadless areas is to fully consider the quality of an area for all uses, but before commodity uses can render the areas unsuitable for wilderness. A wilderness use is only one one of many multiple

uses, but, even then, a wilderness designation provides for many other multiple uses. Included are such important ones as watershed protection, scientific study areas, back-country recreation, grazing where it is an established use, and the quality of wilderness itself - beauty, solitude, isolation from other humans, and a chance to test oneself against the elements. Americans are sure to find more and more need for the latter as populations continue to grow and our technological society becomes more complex.

Wilderness advocates correctly point out that the remaining wilderness, primitive, and roadless areas are all that we will ever have. The wilderness resource has been almost entirely exploited. What our children and their children can enjoy is what can be saved in the next few years.

The advocates see the roadless area review as the last-ditch chance to save and protect this remaining resource. And they are not happy to see the review being done in a matter of a few months. The review was initiated in the fall of 1971, after the field season had ended for those who might want to go on the ground to see the areas firsthand. All recommendations of the regional foresters must be in by June 30, 1972, before most forest areas open up so they could be seen on the ground.

Hearings have been held, or are scheduled, for almost every ranger district on the forests of the West. Such a flurry of hearings put environmental groups at a distinct disadvantage in participating. At the same time, it affords commodity users a chance to exert undue influence.

The special - interest, commodity users have been quick to exploit the advantage. Well-heeled

(Continued on page 3)

HIGH COUNTRY

By Tom Bell

One day the touch of Spring is a soft caress. The next, it is a mighty wind that topples majestic spruce from their thaw-softened holds on the breast of Mother Earth.

A whistle of wings on high mark one of the mysteries of life on this planet. The pintails are once more heading North. From whence cometh, and whither goest? What Great Power guides them unerringly to ancestral breeding grounds.

Like the flow of sap in the trees, lengthening days stimulate the flow of hormones in untold creatures. Pairs of hawks wheel and tumble in nuptial flights. It is an age-old, instinctual call for procreation. A continuation of that slender thread of divinity known as LIFE.

High above the valley, beneath the towering cliffs of Sinks Canyon, a pair of rock wrens scolded small son, Vic, and I. What tiny, fragile bits of fellow creature to be so far north so early. Can it be that they sense something we cannot? Is an early spring really possible?

It was the first good outing Vic and I had had since last summer, a pleasant interlude of a few, fleeting hours. How wonderful to be far-removed from the cares of an un-ending parade of copy and deadlines. And yet not so far removed from other cares.

Vic is a normal, healthy boy; full of the essence of living and the curiosity of his kind. And as he lays there on the sun-drenched rock telling me how much he likes this adventure, my heart cries out for all those other little boys whose only life is the spectre of a ghetto.

Worse still, I can see no hope for them, and more born tomorrow, and the day after, until greater tragedy strikes us all. The flood of information which crosses my desk is convincing. There isn't much future for the next generation unless we make radical and sincere changes in our life styles. And the next generation is still my own, for those are my grandchildren.

It seemed only yesterday that Wyoming seemed a world apart, a place where my children and grandchildren would be forever insulated from the horrors of a ghetto-like world. But time and troubles are telescoping on us. There are no islands, in fantasy or otherwise, in today's world.

Suddenly, the realization has burst upon many others that rapid change is irrevocably altering our lives. Call it emotional environmentalism if you will but a life style is being altered for many people whether they like it or not. The environment they have known and loved is going to be no more.

Take the Wagon Wheel project just across the Wind River Mountains from us. Fifty miles away, as the crow flies, they are preparing for an "atomic device." That was the sort of thing once dropped on an alien people another world away. Now, it is being dropped in our laps.

People who never dreamed that their lives would be so disrupted have awakened to a nightmare. Ranchers who have lived a quiet life, close to the land which has sustained them and their fathers, will be "evacuated" from their homes when 500-kilotons of nuclear device is detonated. That is only an experiment. If it is successful, it will be followed by 100 or more additional "shots."

They are reassured that there will be "little" damage to their property, but also told highway bridges in the area will be damaged. It is not very reassuring, and as one local resident has said, "I did not ask to take this risk."

Far to the west, in California, scientists and planners have proposed a solution to air pollution in the great cities - liquefied natural gas for all those automobiles. So the gas under the Green River Valley will be taken - by nuclear stimulation.

The Powder River Basin of Wyoming and Montana contains one of the world's concentrations of strippable coal. It is estimated that when (not a matter of if) all the coal has been taken from Campbell County, some 43 percent of the land surface will have been disrupted or destroyed. Ranchers whose lands are taken will probably be well compensated. But their way of life will have been destroyed.

Far to the east, in Minneapolis and St. Louis, the lights can burn a little longer - thanks to those who have had to give up their lives on the land.

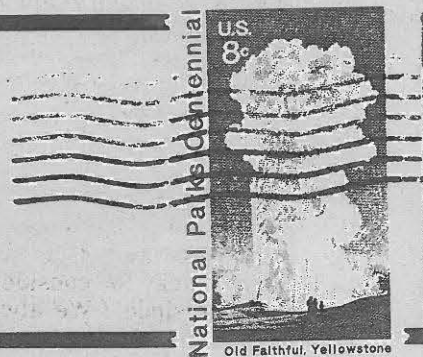
But in board rooms far removed from the peaceful Green River Valley and Powder River Basin, the decisions have been made. We are told that this is progress, that we cannot stand still.

And so my children and grandchildren, and those of many more, move closer to that day of reckoning. What kind of life will it be for them? I can only think the worst, but hope for the best.



The adventure of mountain trails beckons small boys and large. Here, Victor Bell surveys the high country with wondering eyes.

Letters To The Editor



Editor:

Enclosed my ten dollars for renewal to the High Country News.

I think your paper one of the finest I have had the privilege to read. My family and I are campers and we think its great how your state fights for conservation and the pollution problem. Keep fighting so you won't have what we have in Indiana, and I hear its even worse yet in other states.

Mrs. A. Stanger
Martinsville, Indiana

Editor's note: Thanks for your renewal, your compliment, and your encouragement. There aren't all that many who fight for what we feel is right for our kids, but we don't let power, prestige or numbers daunt us.

Editor:

Enclosed please find a check for ten dollars and renew my subscription to High Country News for another year. After seeing the expiration date on a recent issue I have decided to spare you the time and expense of sending out a renewal notice.

I truly enjoy your publication . . . both for its excellent articles and beautiful photographs. I spent an entire summer out there at geology field camp (northwest of Dubois) a few years ago traipsing through the Wind Rivers, and Brooks Lake and Palisades areas so pictures of these places bring back many fond memories.

I am presently completing my Master's degree in physical geography at Miami



HIGH COUNTRY NEWS

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EDITOR Thomas A. Bell
OFFICE MANAGER Mary Margaret Davis
CIRCULATION MANAGER Marjorie Higley
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University and have attended the University of Virginia's Dept. of Environmental Sciences. Hopefully I'll be able to find employment with the Environmental Protection Agency this fall. Best wishes for continued success.

Yours truly,
C. T. Perin
Oxford, Ohio

Eidor:

Economically, I cannot afford another subscription (\$10) to anything. Environmentally I cannot afford to not support your excellent paper. My conscience as a conservationist would be troubled by the possibility of your decreasing coverage as a result of my failure to support your efforts.

Thank you for the fine job you're doing for all of us.

Sincerely,
D. W. Johnson
Assistant Professor
Idaho State University
Pocatello, Idaho

Editor:

I was appalled when I read in "Science News" (March 4) of the proposed power-generation complex that may be built in the southeastern Montana and northwestern Wyoming areas.

In my own area, there is controversy over a proposed nuclear energy plant, but its possible hazards are quite minor compared with the detrimental damage that I believe could be done in your state and Montana if the power comp is built.

I'm extremely interested and I was hoping that you could send me some information about it.

Thank you so much.

Sincerely,
Miss Elizabeth Hughes
Elk, Calif.

Editor's note: The information is on its way. Thank you for writing. Hopefully, enough people will be appalled that we can somehow buy the time to escape catastrophe.

Editor:

Enclosed is \$10 for renewal of our subscription to High Country News.

We enjoy your paper and appreciate the work you are doing and know it is having great impact

(Continued on page 15.)



BY TOM BELL

Our Editor Says...

Another six months have passed since I reported to you, the readers of HIGH COUNTRY NEWS, on the state of the paper. It doesn't seem possible that a whole year has flown by since we changed to subscription only, with no advertising. The work is engrossing and all consuming. But thereby hangs a tale.

As editor, I have become so concerned with environmental developments that I may have missed a point. The paper has become so all-environmental that I think we have lost readers. There are still beautiful places to see, fun things to do, and interesting places to visit in the great West. I fear the paper has slighted that aspect. I would like to hear from some of you on this point. But in the meantime, I will begin to insert items which will tell you where you might find a pretty rock, where to catch a golden trout, where to photograph a coyote or wild horse, or any other interesting activities for you if you are planning a trip into the Rocky Mountain region.

Some have wondered why we don't carry some advertising that would in no way jeopardize the position of the paper. We debated this question at great length just a year ago, and we have gone back to consider the possibility several times since. We always arrive at the same conclusion. Unless we could consistently fill the paper with ads (40-50 percent of content), advertising would not pay. The cost of making ads up, the cost of billing and collecting, and added costs of mailing offset income. As it is, the paper is clean and uncluttered, without the fuss and the muss. It seems that most of our readers like it so.

I would have to repeat myself from six months ago. The long-term outlook for the paper is good. No other paper is doing quite the same thing in the area of concern. Certainly, no paper in Wyoming can compare for an over-all view of environmental matters. We think this will continue to be the case for some time into the future. So it serves a real purpose in informing and alerting our people here - the ones in the long

run who must act.

The short term outlook continues to be not so good. If it had not been for one important benefactor, the paper would have passed out of existence. That person has loaned \$7,000 in the past year. Six other persons have loaned \$800. And of course, without all of your constant support in the form of renewals and contributions, the paper would have died. To all of you, I am grateful.

Our circulation is approximately the same as six months ago, 1810. However, in that six months, we have lost many subscribers who originally bought subscriptions at \$3.75 or \$5.00 when the paper was slanted more toward recreation and less toward the environmental issues. The new subscribers are those more aware of the issues, more concerned with them, and therefore more apt to renew next year.

We have had excellent renewal from subscribers who rallied to our call just one year ago. We expect the renewal rate to be excellent from here on out. So our circulation should now begin to slowly build to that figure which will sustain the paper.

Six months ago, I said I could not continue much longer without income. But my family and I have. We just draw the belt a little tighter and continue. I drew \$700 in salary in all of 1971 and have drawn none to date in 1972. But the battle becomes a little more grim each day.

We of course are caught up in the same circumstances which plague all conservation and environmental groups. There is a chronic lack of enough funds to do what needs to be done.

As a result of lack of enough money, the paper is really not as good as it should be. It is most frustrating to be aware of so many pressing issues which need publicizing and not have enough time to do them justice and get them out to you. On the other hand, there is a corps of good writers shaping up. You will see their by-lines more and more.

Our copy is set and the paper is printed for us



Editor Bell with two daughters, Rachel (left) and Chris.

by the local WYOMING STATE JOURNAL. We are now in the process of leasing our own copy-setting machine which will relieve a critical dependency upon the local paper.

Our staff remains the same. Marge Higley does all the circulation work, all the dark-room work, and now does a page in the paper. She and Mary Margaret Davis do all the copy proofing and the myriad of little things which go into a paper. Mary Margaret does all my secretarial work, keeps the books and serves as copy "boy."

Marge lost her husband a few weeks ago. You probably never noticed any difference in her sense of humor and keen wit which is displayed in her column and elsewhere.

My wife and I accepted a little more responsibility during the past year. Adopted son, Vic, whom we got as a baby had always wanted a little brother. But the Good Lord works in wondrous ways and instead of a brother, Vic got two half-sisters, Rachel, now 5, and Christine, 4. The girls have been with us almost a year and have won our hearts.

The paper will continue, one way or another. Of that, I have been assured by friends in the great, national conservation organizations. And I will in turn assure you. As long as I have my good health, loving family, and faithful co-workers, the paper will continue to come out every two weeks. (And more often if we can ever afford to do so.)

Last Chance for Wilderness...

and organized, such groups as the Federal Timber Purchasers Association can afford to place large ads in newspapers and take to the airwaves. It was such groups that also converged on Washington to help kill the proposed executive order on clear-cutting.

Their ads are quite often fraudulent and deceptive. The ad in the Sheridan Press said, "since commercial operations are strictly forbidden, you receive no income from the land, and jobs are non-existent. There are now over 1.25 million acres of Wilderness Area in Wyoming." What the ad does not point out is that most of the 1.25 million acres in Wyoming is the rock and snow above timberline. Wilderness advocates facetiously refer to these as "wilderness on the rocks."

The National Outdoor Leadership School, based at Lander, makes it a business to guide and teach some 1,000 young people in the ways of the wilderness each summer. There are literally hundreds of wilderness guides and outfitters who make part of their living taking people into wilderness areas. There are now hundreds of thousands who take to the wilderness at every chance they get. Their economic impact on surrounding communities has never really been considered.

As to need for more wilderness, Wm. O. Deshler, supervisor of the Bridger Forest and world-famed Bridger Wilderness Area, has announced restrictions on the use of the wilderness beginning in 1972. His public announcement says, "The steadily increasing number of people using the Wilderness is resulting in conflicts..."

The timber purchaser's ad also says, "Under Multiple-Use, the Forest Service manages your lands to promote every type of recreation - and to preserve the beauty and productivity of the land." Anyone who has seen clearcutting, even at its best, will question the verity of such statements. And then any doubters should visit the Stillwater area of Montana to see how mining interests protect the beauty and productivity of the land.

At Livingston, Montana, Burkland Studs, Inc., dropped a bombshell. The company announced that if the proposed Absaroka Wilderness Area were approved, they would have to close their plant. That would mean 100-150 people would lose jobs. The company manager told the city-county planning board, "You people are about to lose some industry."

Shortly thereafter, the mayor of Livingston, who is an employee of Burkland Studs, pleaded the case in the local newspapers. His pleading was a case-study in emotional diatribe.

Nowhere in any of the early public proceedings was the fact brought out that milling capacity greatly exceeded the sustained-yield capacity of the forests. The mayor himself pointed out in a letter to Montana's Congressional delegation, and printed in the Livingston Enterprise (Jan. 27, 1972), that it took "approximately 78 million board feet to operate the seven mills in the Gallatin District last year."

And then he said, "Only 7.7 million board feet are being offered for sale in 1972, phasing out to 5.4 million board feet over a five-year period to run through 1977." He said such a shut-down will inflict "a tremendous economic loss to Livingston."

His words would lead one to believe that the designation of a wilderness area would be the direct cause for severe economic dislocation. The truth of the matter is that when all the timber had been stripped from all forested areas, there would still be a shut-down - strictly from lack of resource.

A headline in The Denver Post (March 8, 1972) says, "Environmentalists Cast Logger in Villain's Role." The logger being interviewed for the article says environmentalists seeking bans on clearcutting and seeking more wilderness threaten his livelihood. The logger presents some cogent arguments for his particular area on the Medicine Bow National Forest of Wyoming.

However, environmentalists investigating many of the particular instances find the buildup of milling capacities was based on inflated and

unrealistic assessments of what forests could produce. Now, in a more realistic light, the milling capacities are found to be highly over-rated. Such may be the case with the 35-million-board-foot-per-year mill of the Edward Hines Lumber Co. at Saratoga, Wyoming.

It is also proving to be the case with the U. S. Plywood-Champion Paper Mill at Dubois, Wyoming. There, the unrealistic appraisal of the timber resource led to a 50-million-board-foot-per-day mill. When it drastically reduces its capacity or shuts down as the current timber supply runs out, the environmentalists will be blamed for "locking it up." Two wilderness areas, mostly glacier, snow and rock are nearby.

The Forest Service has identified some 11.9 million acres of what it calls "unroaded and substantially undeveloped" lands. It says of these lands, "Basic management alternatives relating to economic use and development, service to the public, and the quality of life are important and must be considered."

Environmentalists and wilderness advocates agree. But they do not agree that a review of some 11.9 million acres can be accomplished in such a superficial manner.

Wildlife-2000, a Denver based research organization, has written a strongly-worded letter to Agriculture Secretary Earl Butz challenging the Forest Service's "Inventory of Roadless Areas." It says the inventory is "hopelessly inadequate to prepare informed decisions on the future of our country's wilderness and wildlife." The letter says that the situation forces one to question the motives and competency of the people carrying out the program on the proposed schedule.

Board chairman of Wildlife-2000, Don Tesitor, has further charged that the Forest Service is working behind a facade "to placate and mislead the American public." He says his group is convinced that this fiasco cannot be carried out on any reasonable and timely scientific basis.

Michael McCloskey, executive director of the Sierra Club, has expressed the concern and

(Continued on page 15.)

The Environmental Effects of Nuclear Power

This is the second in a series by Pete Henault, nuclear scientist at the National Reactor Testing Station in eastern Idaho, and a director of the Idaho Environmental Council.

by Pete Henault

It takes about nine septillion fissions every day, or more than a billion trillion every second, to produce the power of today's large nuclear reactor. Even with the atom as small as it is, one might suspect these fissions would produce a lot of radioactive waste.

Most of the waste of serious concern is separated into "low-level" and "high-level" waste, terms which refer to the intensity of radioactivity per unit volume. Another term that is used is "unrestricted waste" and refers to the waste having concentrations of radioactivity so low, that it offers no environmental threat or hazard based on all available information. There are no restrictions, from the radioactivity standpoint, on the disposal of these wastes.

Still another type of radioactive waste, and the one which many consider the most hazardous is "alpha waste," the waste containing small amounts of plutonium. Plutonium is an extremely hazardous material because of its radioactivity and the fact that on entering the human body it concentrates in the bones and is excreted very slowly. The time for any amount of plutonium to decay to one-half of its original amount is 24,400 years.

There are two types of "disposal" methods for radioactive waste: (1) dilution and controlled dispersion to the environment; and (2) concentration and burial or storage. High-level and alpha wastes are invariably buried or stored. The term "high-level" is often used to refer to both.

Although nuclear power plants are the source of nearly all the radioactive waste (some radioactive waste comes from the concentration of naturally-occurring radioactive atoms during the mining and fuel-fabrication processes), the plants themselves release only the tiniest fraction of the waste to our environment. More than 99.9 per cent of the radioactivity generated by a nuclear plant remains locked in the fuel elements until they are reprocessed to restore a high grade of heavy, fissionable atoms. The end product of the reprocessing, therefore, makes up most of the radioactive waste.

The problems associated with control of the low-level waste at the reprocessing plant are similar to those of the operating nuclear plant. The environmental concern is the possible, long-term, gradual effects on human health and our ecosystem. But of even greater concern is the high-level and alpha waste.

We know that these wastes contain the potential to completely destroy or change all life as we know it today. And we know that the alpha waste will not completely decay for hundreds of thousands of years. What we do not know is whether we can adequately package all this waste and guarantee that it will never escape into our environment.

The need for a national radioactive waste disposal site, called a "repository" by the AEC, has been growing more critical every year. A report released two years ago showed that 93 million gallons of high-level liquid waste was then stored at the Hanford, Wash., Savannah River, S. C., and Arco, Idaho, site.

A good deal of this has been leaking into the ground from the Hanford site, where most of the waste is located. As much as 227,400 gallons have been reported to have leaked from 10 of the 49 underground storage tanks which did not have provisions for secondary containment.

At the Savannah River plant, where 17 million gallons were stored, leakage occurred from four tanks, but only in one case did high-level waste seep into the ground. None of the 1.6 million gallons stored in Idaho leaked.

The AEC has been studying the problem of permanent disposal for the high-level radioactive waste for many years. It established several important criteria: The site must be in a location that would be stable for a million years or more and would not be affected by earthquakes, war, natural disasters, or sabotage. The waste must not be able to come in contact with man's water supply or his food chain. It must be free of surveillance and maintenance and the cost must not be prohibitive.

For the past 16 years the AEC has been studying one proposal that has appeared increasingly more promising. It proposed to bury the waste in vast salt beds just outside of Lyons, Kansas, a town of 4,300 about 60 miles northeast of Wichita.

The salt beds are located far from the ear-

thquake zones of America's mountainous regions and are known to have been stable for 250 million years. If left undisturbed by man there is no reason to believe that they wouldn't remain stable for another 250 million years, well beyond the potentially hazardous lifetime of the radioactive waste.

This sounded pretty good and when the AEC told of its plan at various international meetings, the world was impressed - and jealous. Few locations can be found in the world with such stable deposits of any substance.

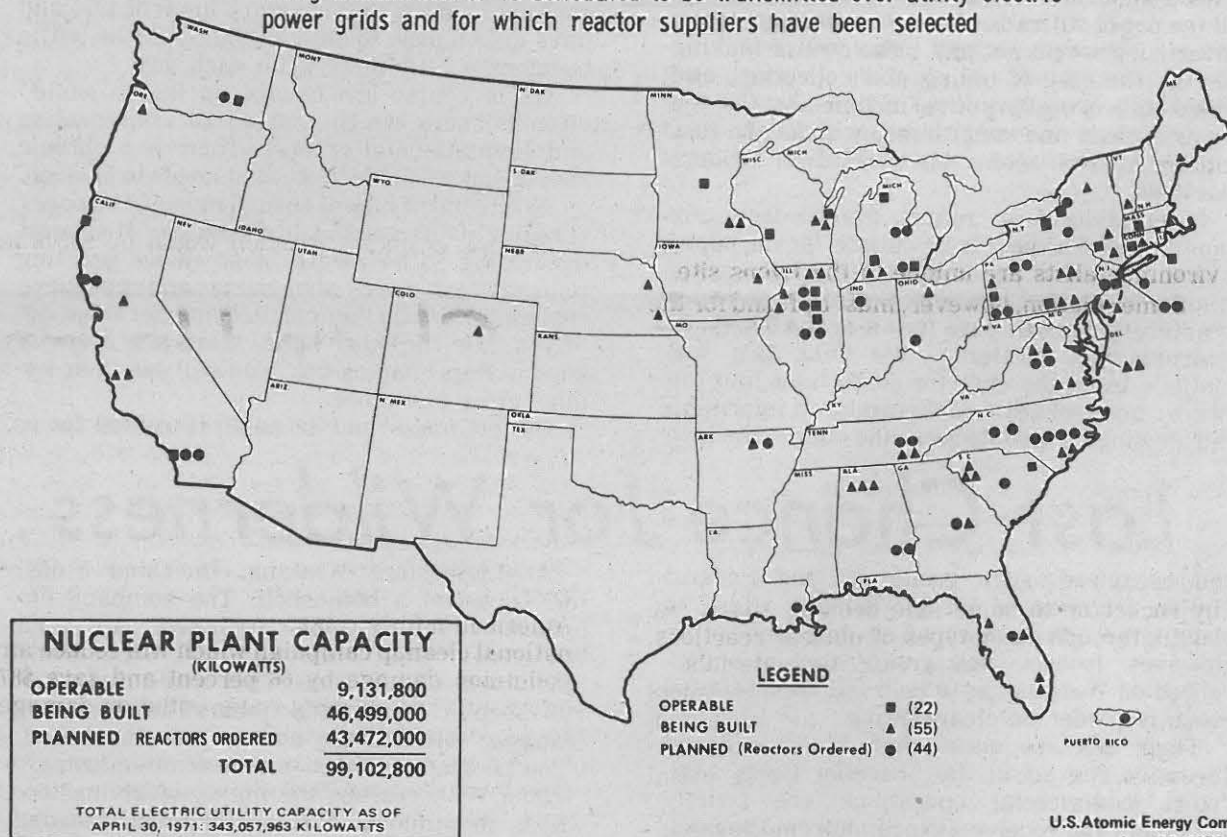
The AEC plan called for converting the liquid waste at the reprocessing plants into a solid ceramic material, about one-tenth the liquid volume, and encasing it in stainless steel cylinders 10 feet long and six inches in diameter. The cannisters would be transported by rail from reprocessing centers in New York and Illinois to an abandoned salt mine near Lyons which would serve until the year 2000. The cannisters would then be lowered into holes in the floor of an excavated room in the mine 1,000 feet below the surface.

Because the decaying waste generates an extensive quantity of heat, 20 of the cylinders in a 30 by 300 foot room would produce an ambient temperature of 400 degrees F. The room would be back-filled with loose salt and sealed off. Heat would cause the back-fill to recrystallize and flow plastically, causing it to merge with the bedded salt thus sealing off the waste.

The salt beds seemed to be the answer.

NUCLEAR POWER PLANTS IN THE UNITED STATES

The nuclear power plants included in this map are ones whose power is being transmitted or is scheduled to be transmitted over utility electric power grids and for which reactor suppliers have been selected



But the Kansas Sierra Club and a number of other state and citizen environmental groups didn't feel good about the AEC's proposal.

They discovered that a number of test holes had been drilled through the salt beds in search of oil below. While most of these had been mapped and later leased, not all were recorded. What if ground water seeped down through these holes and dissolved large portions of the salt below?

Then they discovered that the steel containers in which the high-level waste was to be stored would corrode within as little as six months. The combination of heat, salt, and 0.5 per cent water naturally occurring in salt would make short work of the stainless steel. The waste would then be left as bare, localized deposits in the salt. What if something happened someday to crack or dissolve the salt beds, maybe something in 5,000 years that we can't even imagine now?

The AEC replied that there was no intention of ever relocating the waste. However, it said, "The burial locations for each container will be accurately surveyed and recorded so that precise location of the wastes will be known. Retrieval through the use of remotely controlled automatic mining equipment would then be possible. Concepts for retrieving the stored wastes will be examined . . ."

The AEC didn't hide the fact that the steel containers would corrode in six months; it just was not candid about it. And it wasn't very candid about the hydraulic salt mine just a few miles away on the other side of Lyons, either.

Digging deeper, the concerned public

discovered that the commercial mine, which planned to continue its operations for 30 to 40 more years, had a tunnel that came within 1,500 feet of a tunnel extending from the AEC mine. How long would it take water to dissolve through the 1,500 feet of salt, thus making it possible for uncontrolled migration of the radioactive waste?

A few months ago it was reported publicly that 175,000 gallons of water once pumped down into the hydraulic mine during a salt-recovery operation had disappeared instead of coming to the surface as brine. Neither the AEC experts nor the mining company could explain where the water had gone. Still not known publicly as this is written is that the water-vanishing incident happened six years ago, in 1966, and the AEC has known about it since that time.

After all this and much more digging by non-AEC environmentalists, the AEC finally announced in October that it was having second thoughts about the Lyons, Kansas, disposal site. Work was stopped and the AEC sent a letter to the Joint Congressional Committee on Atomic Energy explaining its action. The letter noted the possibility of flush-out of the radioactive waste by the adjoining salt company's operations and the fact that the solution-mining would eat away at the underground salt pillars. The AEC letter said there is a potential of "sudden and dramatic collapse of a fairly large area not far from the repository site, with the formation of a surface lake which could be several hundred feet deep."

These, of course, are not all of the environmental impacts the AEC might have been more concerned about. What about all the heat from the decaying waste - where does it go? The AEC says it'll produce a maximum temperature rise of 1 degree F at the surface of the site approximately 800 years after burial and a maximum rise of 32 degrees F in an underground stream 285 ft. below the site, also 800 years after burial. But the State Geological Survey says a thermal explosion is possible and that faults in the overlying rocks could result.

The AEC's environmental impact statement, however, gives assurance that the radioactive wastes will remain safely locked away from the reaches of man for the 500,000 to one million years it will take them to decay. It begins with the following introduction:

No significant impact on the environment resulting from either the construction or operation of the proposed repository is anticipated. Minor environmental effects anticipated on or below the 1,000 acre proposed site as well as those beyond the site boundaries are described below.

Today virtually every newspaper in the State of Kansas is opposed to burial of nuclear wastes in their salt beds or are opposed to it until further studies can be conducted. The Governor is opposed also and has asked that the project be stopped. In the state legislature, 48 members of the House and nine Senators have sponsored bills calling for the Governor, President Nixon and Congress to reject the project.

(Continued on page 5)

Part 2: The Radioactive Salt Mine

Congressman Joe Skubitz of Pittsburgh, Kansas, said, "How ironic it is for a member of Congress to find it necessary to sit here today and plead that an agency of government not pollute the environment while at the same time Congress will be asked to consider the expenditure of billions of dollars to clean up pollution that already exists. How ironic it is to be required to make a case against a new kind of pollution so hazardous and so lethal that all existing pollution seems almost inconsequential."

But Congressman Craig Hosmer of the Joint Atomic Energy Committee, who last June told us it would be suicidal to delay the fast breeder reactor, has steadfastly supported the AEC throughout the dialogue on the repository issue. "I get the impression that we should never have invented the wheel if we had thought about it before hand," he said.

If becoming aware of the facts is disturbing, that is as it should be. We Americans are on the verge of making decisions about the future of man, either for better or worse.

If becoming aware of these facts causes us to turn against the AEC and nuclear power, if it makes us want to rush out and say stop, that would be an unwarranted reaction. We don't yet



know the whole story. To do so would be to confirm what the AEC has feared all along: "Nuclear power is too complex for the public to understand and we can better serve the nation by deciding for them what is best rather than scaring them with the awesome possibilities."

It appears now that the AEC made some poor decisions in regard to the abandoned salt mine near Lyons. But this in itself is no reason to condemn the AEC nor is it any reason to abandon the concept of using salt beds for high-level radioactive waste disposal. Most of the problems uncovered and made public by environmentalists are unique to the Lyons site.

Some solution, however, must be found for the radioactive waste. Like it or not, and whether or not we keep it, nuclear power is here. Total generating capacity is already over 7,000,000 kilowatts and in the next year or so, capacity will surpass that of hydroelectric power.

There are, of course, other ways to dispose of the radioactive waste. We could dump it into deep ocean trenches where it may eventually disperse, increasing background levels of radiation somewhat. We could send it to the sun by rocket or to some safe orbit in space. We could, through other types of nuclear reactions, convert it to safe non-radioactive materials.

These are not wild ideas but sound, technical concepts that have been studied and evaluated. Taking into consideration all the desirable criteria, none appear today as practical as burial in stable Earth locations.

Overlooked in most of the controversy, however, is whether or not we should even try to dispose of the waste now. Unlike other methods of producing power, the AEC has so far done an outstanding job of controlling the harmful effects of nuclear power. We know we have the technology to continue containing and storing the waste safely for 30 or 100 more years. Who's to say we will never find a beneficial use for the waste? We Americans, when we want to or are forced to, have a knack for finding ways to make money out of things we once thought were useless. And possibly in a few years we might even find a better solution for permanent disposal than the salt mines.

One thing we should do, if we decide to wait, is to put some of the profits aside, possibly the equivalent cost of burial in the salt beds. When the ultimate solution is agreed to, we would then not be faced with the problem of finding new sources of money as we are today in our desire to clean up air and water pollution.

The problem bothering environmentalists most about the salt-mine disposal method, is the irreversible nature of the decision. There is no way to guarantee that the poisonous waste will never return to man's living environment. If we decide in 50 to 100 years that we made a mistake in burying the waste, as we have decided it was a mistake to bring slaves to America, or to annihilate the Indians, or to fight a war in Southeast Asia, we could, at some staggering cost, recover the waste. But what if we don't find out it was a mistake for a thousand years or ten thousand years?

The social and environmental impacts of the commitment we are now making to nuclear power are staggering. There is no reason to turn

away from the commitment but we must examine the alternatives and make our decisions with all aspects in mind. We should not let a few technologists enthusiastic about their own proposals, or a few power companies enthusiastic about their profits, make such far-reaching decisions for all of us.

Most of all, we must find a path, taking into

Shooting Atomic Age Garbage

By William Hines
Chicago Sun-Times

WASHINGTON- The novel idea of disposing of nuclear power-plant waste by shooting it into orbit around the sun, as suggested to NASA and the Atomic Energy Commission, points up an emerging problem akin to the one that arose when Pandora opened up the box.

The problem confronting an energy hungry world in the final years of this century is a dilemma in the classical sense: a situation requiring a choice between equally undesirable alternatives.

One of these is the inevitable accumulation of highly dangerous "garbage" if atomic energy becomes, as expected, an increasingly important component of the power mix. The other is a predictable power famine in another 20 years or so if the atom is shelved and total reliance is placed in fossil fuels.

There are some basic facts of life in the atomic age that cannot be blinked or argued away, and one of these is that when the atom is used as fuel some extremely dirty "ashes" are left behind.

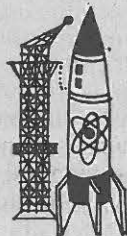
Conservative assumptions about growth of atomic power suggest that some 3.6 million pounds of waste will be created in the next 25 years.

It is beginning to look as if there is no place on earth to store this waste - and even if there were, it would take an unjustifiable amount of faith in the durability of human institutions to expect that the custodial function would be faithfully

consideration the present mess we have made of our planet, which will give man the greatest chance of surviving during the next few hundred years and of preserving some quality of life that is desirable. We are not doing that now and the lack of concern on the part of many of us is very disturbing.

Next: Thermal pollution or water diversion?

discharged for centuries on end without letup or slipup.



So that leaves outer space - or does it?

It is possible today to rocket quite substantial packages out of this world. If money is no object, if accuracy is no criterion, if simple escape from the earth is the only objective, it probably can be done relatively cheaply.

But any project aimed at permanent deep-space disposal of atomic garbage would have to contain built-in safeguards against mishap. One authoritative study of the problem supposes that 365 payloads, would have to be launched between 1980 and 2000 to rid the world of the waste that will be accumulated in that period.

Murphy's well-known law ("if anything can possibly go wrong, it will") suggests that something less than 100 per cent reliability will be achieved, yet nothing less than 100 per cent is acceptable. Even a 99.7 per cent safety record would mean one failure, with possible consequences altogether too horrible to contemplate.

Clean Up and Save Money

The National Wildlife Federation has done a study, the results of which can be seen in the Feb.-March, 1972 issue of National Wildlife, which shows that Americans can have a cleaner environment and still save \$12 billion per year in the process. Indeed, the study breaks it down even further and shows how the typical American family can save \$113 per year with a national cleanup campaign which will reduce air pollution damage by 66 percent and save \$87 annually while slashing water pollution damage by 90 percent.

The NWF investigative team used available data from the Council of Environmental Quality and the Environmental Protection Agency. Though they freely admit that the research data is skimpy, they contend, as do many of the government ecologists they talked to, that the figures used are on the conservative side. For instance, they do not include such things as a shortened life due to illness or loss of scenic values.

The results of the study are shown here in the boxes.

How you will save money from cleanup of air pollution

		Total for United States	Your Share As Head of Family
POLLUTION DAMAGES IN 1972	Air pollution now does this much damage each year . . .	\$16.1 billion	\$268
GROSS SAVINGS FROM CLEANUP	A cleanup program can reduce this damage 66% by 1976. Then annual gross savings will be . . .	\$10.7 billion	\$178
minus COST OF CLEANUP	Deduct from future gross savings the annual cost of cleanup . . .	\$3.9 billion	\$65
equals NET ANNUAL SAVINGS	So in 1976 the air cleanup will result in net annual savings of . . .	\$6.8 billion	\$113
YOUR FAMILY can save \$113 a year with a cleanup campaign that will reduce pollution damages 66 percent. These figures were developed by an investigative team of the National Wildlife Federation.			

The cost figure shown for polluted air includes such CEQ estimates as: human health, \$6 billion; materials and vegetation, \$4.9 billion; and lowering of property values, \$5.2 billion. Water pollution cost estimates were more difficult to pin down due to an overwhelming lack of

How you will save money from cleanup of water pollution

		Total for United States	Your Share As Head of Family
POLLUTION DAMAGES IN 1972	Water pollution now does this much damage each year . . .	\$12.8 billion	\$213
GROSS SAVINGS FROM CLEANUP	A cleanup program can reduce this damage 90% by 1980. Then annual gross savings will be . . .	\$11.5 billion	\$192
minus COST OF CLEANUP	Deduct from future gross savings the annual cost of cleanup . . .	\$6.3 billion	\$105
equals NET ANNUAL SAVINGS	So in 1980 water cleanup will result in net annual savings of . . .	\$5.2 billion	\$87
YOUR FAMILY can save \$87 a year with a cleanup campaign that will reduce water pollution damages by 90 percent. These figures were developed by an investigative team of the National Wildlife Federation.			

data. The study team did talk with economists, however, who have researched the problem for years. They conservatively estimated that water pollution costs the U. S. \$12.8 billion annually. At the same time though, they believe that pollution damages can be reduced 90 percent by 1980.

The estimates that the team used were based on current pollution standards and time-tables. They do not assume any additional government action. According to John Strohm, head of the investigative team and National Wildlife editor, "our air pollution figures are valid - assuming these ifs: if current strict standards are not lessened . . . if time tables set forth are met . . . if regulations are enforced."

Whether Americans will make this necessary investment to clean up the environment remains to be seen. But it is now clear that there are economic benefits. The NWF has commissioned an independent poll to determine information on the public's attitude and the results should be forthcoming soon. If any additional information regarding the study is desired, please contact Dennis Hanson, National Wildlife Federation, 1412 Sixteenth Street, N. W., Washington, D. C. 20036.

Reprinted from CONSERVATION NEWS, National Wildlife Federation, Feb. 15, 1972

Tribute to a Conservationist

Photos by Dale Burke, The Missoulian

Guy M. Brandborg of Hamilton, Montana, is a forester of the old school. He is one of that breed which had as its contemporaries such giants as Aldo Leopold and Bob Marshall. Indeed, when historians can look back with some perspective, he may be one with them.

He retired from the Forest Service some years ago after finishing his hitch as supervisor of the Bitterroot National Forest. Those who came after him were not blessed with the same dedication to the land and its life systems. The Bitterroot was to become the center of a great storm of controversy over the practice of clearcutting.

"Brandy" looked with dismay on the work of his successors. And not content to rest on his own achievements, he has led the fight to restore the Forest Service to a place of pride and accomplishment in recognizing the public forests as something more than the pawns of special interest. He is still fighting.

Recently, he was accorded a special tribute at the annual convention of the Montana Wilderness Association, meeting in Billings, January 29, 1972. The tribute was given by his good friend, Dale A. Burk, state editor and outdoor writer for The Missoulian at Missoula.

The following is the text of his tribute.

by Dale A. Burk

Tonight we honor a man who is a friend—a man truly that in the fullest sense of the word. A man—a thinking, rational, compassionate, moral being. A man who feels and knows and says what it is to be a man—alert, involved, interested, committed, optimistic, questioning, and, above all, loving.

It is no small task to love -- to love life in its fullest meaning, to share in the joyful experience of life and in so doing to open your heart and mind to the dignity of sharing that life. To give love by doing, naturally and freely, loving other living creatures, not just men, but all things as well.

That is, after all, the message we deliver tonight. In a small and insignificant way, we do tribute to a man who has given us and the world about him more inspiration than most of us could hope to summon up in a lifetime.

We give our respect to G. M. "Brandy" Brandborg.

But in so doing can only humbly and almost reverently admit that in giving we are overwhelmed in comparison with the magnitude of what he has given us. I will not toll tonight the list of his tangible accomplishments for we all know of these, and yet that is the least of what he has given us.

It is a small gesture we make tonight, but one long overdue and one we give with deep heartfelt appreciation and admiration. It is an honor to give thanks to Brandy for all he has been to those



Guy M. "Brandy" Brandborg as he appeared before a Senate subcommittee hearing in Washington, D. C., on clearcutting of the national forests.

of us in the conservation movement, for all that we might give him would come as nothing if he did not have our love and respect and deepest admiration. And he knows without saying that he has that, not as a possession but as a trust between members of the life community, and as Men who insist that all men pursue the nobleness found in the "out-giving" of concern that personifies G. M. Brandborg.

In December of 1968, shortly after I began writing an outdoor column in Missoula, Clifton Merritt of The Wilderness Society, an old friend, wrote to suggest that I seek out and meet Guy M. Brandborg. It was wasted advice, for G. M. Brandborg sought me out before I could go to him, and in time we became professional acquaintances and ultimately deep, personal friends.

Let me quote Clif Merritt's words: "I should like to point out that most conservationists who hail from Montana got their start directly or indirectly from the foresight and outstanding efforts of one man, Guy M. Brandborg of Hamilton. Brandy, a retired forester and educator, guided and inspired us all through the years when conservation was not a popular concept and the going often rough. It was in partial recognition of his many accomplishments that a few years ago the American Motors Company bestowed on Brandy a national award as one of the top ten professional conservationists in the United

States, yet neither the prize nor these few comments pay adequate tribute to Guy M. Brandborg for all that he has done for Montana and its people."

Ladies and gentlemen, if men like Clif Merritt and tributes such as the American Motors Company Award cannot pay adequate tribute to G. M. Brandborg, I doubt seriously that we tonight could even hope to come close. But we do try, and we humbly say thanks to a man who, in teaching us all to stand above other men has himself stood higher than any of us.

If I could cite Brandy's one outstanding characteristic, it is his unquenchable faith in other people -- and his ability, by example and persuasion to inspire us to give a hundred and fifty per cent of our time and energy to a cause greater than any of us, Brandy included.

Yes, Brandy has inspired us all to be bigger men than we otherwise might be, but even so it would be less than honest for any of us to not admit that no matter how tall Brandy has inspired us to stand, we still must look up to him. In doing so, we can truly say that there indeed, is a man and friend who stands for what Men should stand. He stands tall in our lives, and it is a distinct tribute to him that he does not stand alone.

Minimums Considered

The Idaho Legislature is considering legislation to require minimum flows in natural streams to protect fish, recreation, water quality, and aesthetics. In spite of protection for existing water rights, irrigation interests are fighting the proposal.

An attorney for several irrigation companies told a Senate committee, "The enactment of SB 1322 in its present form, if held constitutional, could possibly spell the demise of future development which is contingent upon the consumptive use of water."

The assistant director of the Idaho Fish and Game Department, Bob Salter, said, "The quality life we enjoy in Idaho would be enhanced and protected by the enactment . . ." of the bill.

The Mayor of Boise said the measure was needed in the interests of water quality.

Impact Requested

A number of Wyoming conservation organizations and service groups, under the umbrella of the Wyoming Outdoor Coordinating Council, have requested a full and complete impact study on projected power developments in Montana and Wyoming.

The request to initiate the study was made by Sierra Club Regional Representative Miss Laney Hicks of Dubois, acting in behalf of the Council. Her letter to EPA Administrator William D. Ruckelshaus said the federal agency was in the best position to make an impartial study.

She said the building of a large power center of from 50,000 megawatts to 200,000 megawatts as projected by the North Central Power Study could make northeast Wyoming and southeast Montana "another disaster area."

Thirteen Wyoming groups and organizations, including High Country News, joined in the request for the study.

Co-ops Promoted

Stuart Crawshaw, manager of the Wyoming State Rural Electric Association, will address a meeting of the Natrona County Sportsman's Association in Casper on March 21. Title of his talk is "Responsibilities of the Power Industry in Protecting the Environment."

Wyoming rural electric cooperatives have proposed cooperatively-owned power generation complexes as alternatives to privately-owned generating facilities. Legislation was defeated in the last Wyoming Legislature which would have accomplished that fact. It is anticipated that similar legislation will be introduced in the next session.

Crawshaw's talk should be of interest to anyone concerned with the energy-power problem. The meeting will be at the Guaranty Federal Bldg. in Casper at 7:30 PM, March 21.

Bounty Killed

The Idaho Senate killed a bill on a 16-19 vote which would have placed a \$7.50 bounty on coyotes. The House passed the bill 44-22. The bill took almost two hours of floor debate.



Vehicles Bring Concern

Forest Service officials in the Intermountain Region are deeply concerned about growing problems associated with use of motorized vehicles on National Forest lands.

"Motorized vehicles, when not properly controlled, can be damaging, disruptive, and in places dangerous," stated Regional Forester Vern Hamre. On steep, narrow trails, motorized vehicles may be hazardous, not only to horses, riders, and hikers, but also to their own users. The noise they create impairs some recreation experiences and often disturbs wildlife. They frequently damage vegetation and cause erosion if used improperly on or off trails.

"The Forest Service has an obligation to protect natural resources from damage and to provide a healthy and safe environment for all visitors. Many areas already have been closed because of environmental damage due to indiscriminate use of off-road recreation vehicles," Hamre said. "More controls appear to be necessary in the near future."

The Forest Service is authorized by the Secretary of Agriculture's Regulations to restrict, by appropriate notices, the use of National Forest lands when necessary.

In planning the management of motorized vehicles, the Forest Service will solicit information and ideas from the public on the problems involved. Public meetings will be held as necessary to involve the people who are interested in the various resource uses and values. Other Federal and State agencies, as well as private landowners, will be encouraged to take part with the public in the planning process.

Judgments about which areas, roads and trails should be open to motor vehicular travel will take into consideration possible damage to vegetation and soil, danger to wildlife, fire

hazards, human safety factors, and compatibility with other uses. If properly controlled and operated, off-road recreation machines can be accommodated in many places with little or no physical damage to the resources. Restrictions on motor vehicle travel will be posted on the ground as necessary to advise people of controls imposed.

Use of motor vehicles is not permitted in wilderness or primitive areas. On a case-by-case basis, restrictions also have been adopted where damage to soils, vegetation, and other resources could be substantial, and for public safety.

In spite of many obvious problems, off-road use of motorized vehicles is recognized as a legitimate use of National Forest lands when such use is not detrimental to resource values or public safety. Jeeps, motor scooters, trail bikes, snowmobiles, all-terrain vehicles, dune buggies, and other types of vehicles are used in the National Forests. They provide a means for an exhilarating form of outdoor recreation -- on roads and trails and in open country. Such vehicles can also provide safe and convenient transportation.

Snowmobiles present a unique situation because they are used when the ground is snow-covered. Their potential to cause erosion is minimal, but in avalanche country, on frozen waterways, and under adverse weather conditions they present special public safety problems. In addition, wildlife may be harassed and vegetation not covered by snow may be damaged.

Users of motor vehicles are encouraged to cooperate with the Forest Service in carrying out a program of sound land management practices for protection of the basic land and water resources, including esthetics.

Land Rush Getting Underway

High Country News—7
Friday, Mar. 17, 1972

The head of a Colorado real estate agency recently said, "The mid-70's will see a demand in our area for land that will surpass the turn-of-the-century land rushes - even the wild one in Oklahoma."

Paul Dawkins of the Van Schaak Land Co. of Denver said a new land boom centering on the remaining resort and leisure-time is already happening. But he said, "... after the 1972 elections it will really take off."

points out some major pitfalls. These are inadequate water supply; inadequate soil to support a septic (sewage) system; lack of a survey certified by a licensed engineer or surveyor; lack of an estimate for installing electricity; inadequate fire, theft and liability insurance; overambitious plans for building on or improving property, and an unwillingness to "do it the country way."

Legitimate real estate dealers and developers

... protection lacking ...

Governor Cecil Andrus of Idaho, in a recent evaluation of his first year in office, said one of his chief concerns is the quality of life and living in Idaho. He said, "One of the greatest threats facing Idaho's quality of life is immigration from California and other populous states."

California radio stations already tout the advantages of recreational living on acreages along the Salmon River. A recent information sheet out of the office of Senator Bob Packwood (Oregon) said it was imperative for the U. S. Forest Service to acquire private lands along the Snake River in Hells Canyon. The lands may soon be sold to Texas speculators who have already made a bid.

Big Sky Montana may have moved too far too fast in the giant development which encompasses an area comparable in size to a city of 125,000. There, the development is to be a year-round, Aspen-type operation on about 8,000 acres.

As a Chicago Tribune article said, "The Big Sky master plan calls for \$15 million to be spent on condominiums, golf courses, swimming pools, shops, restaurants, lodges, ski lifts, a convention hall, and assorted extras. All of it is being built on privately owned wilderness."

Dawkins says one of the factors pushing up land sales and land prices are environmental groups "... taking thousands of acres of land in the Rockies off the market and turning them into wilderness areas and game refuges. As they do this, they are increasing the value of farm and ranch properties adjoining. The more land they take out of use, the more the remaining land increases in value."

What all of this means has been summed up by Utah planning consultant, George H. Smeath. He says, "Hundreds and perhaps thousands of citizens of this state (or other states) will build projects or use land or sell land for varied uses only on the basis of the maximum monetary return to them - and with absolutely no consideration of public welfare, except as these citizens are limited or governed by the planning, zoning, and subdivision ordinances or regulations of their local governments or by such limited control as state agencies may have."

Dawkins says, "... The real problem is that others - not people in our league - will sell to anyone with money, and we are going to need some state control - strict guidelines that can be enforced to keep the unscrupulous, unqualified, get-rich-quick out of Colorado and the rest of the Rockies."

Dawkins says such controls will not harm the legitimate land dealers, "but they'll help save the Rockies for posterity and they won't slow the land boom already with us in the high country and getting bigger all the time."

Idaho has just opened a State Planning and Community Affairs Agency Office. Planning Director Herb Derrick says his office plans to compile a survey of all land in Idaho - complete with soil samples, data on water availability and other factors. The survey is to determine the best potential use.

Utah has drafted "emergency legislation" in an attempt to avert a land use crisis. The proposed legislation would provide for state enabling acts on planning, zoning and subdividing.

Most of the Rocky Mountain States are trailing far behind the developers and subdividers. But some county and local governments are moving to protect their land and interests.

Sublette County, Wyoming, has county-wide zoning and a county planner. A few other counties in Wyoming have county planners and are moving toward county-wide zoning.

Short of state, county or local planning what can a land buyer do to protect himself. Sylvia Porter, in a recent column, gave some valuable advice. She said deal only with a licensed real estate broker in the locality, hire a "county lawyer" to represent you in dealings for the land, and go to a local banker for a realistic appraisal of land values and a frank discussion of land purchase matters.

She said a new book, "Buying Country Property" by Irving Price (Harper & Row),

often have provided for most or all of the points listed. In addition, environmentally concerned developers take many other considerations into account.

A good example is T. B. C. Land and Recreation Development Corporation of Boulder, Wyoming. The company is incorporated and licensed in Wyoming. Its properties are in Sublette County which has county-wide zoning.

In addition, the company has strict protective covenants on all the acreages which it is subdividing and selling. Amongst the covenants is a provision "to preserve, as far as practicable, the natural beauty of said property."

High Meadow Ranch, as the development is called, has zoned its 7,632 acres. Most of it is to remain a working ranch. No housing is to be allowed along 18 miles of superlative trout fishing on the New Fork River, and very little development. Acreages being sold will have views of the famous Wind River Mountains nearby.

Until such time as federal or state controls are imposed on land developments, the public must either depend upon legitimate companies or beware.

The companies such as T. B. C. and Van Schaack are in the best position to protect both the buyer and the public interest.

Dawkins says, "We feel that we must exercise environmental control and we're in a good position to do it."

States' Rights Battle Looms

Sportsmen in Wyoming and at least nine other western states are currently facing a battle between states' rights and public access that could greatly affect the states' economies and wildlife management programs.

Various individuals and lobbies are pushing for a national hunting license that would make both resident and nonresident license fees equal for hunting on federal land.

Since approximately 57 percent of the land in Wyoming is public, the state could lose as much as \$3.6 million in nonresident hunting license income alone. This represents about 85 percent of the total taken in by the State Game and Fish Department for hunting licenses—or about 68 percent of the total 1970 income for the department.

But the effects of such a national license are more than economic. While there is considerable public land in Wyoming, it is the state that has to manage the wildlife. In addition to this, wildlife generally winter on much of the 105,365 acres of Game and Fish Department land or graze on private land and cross into federally-owned forest only in the summer months. Although a harvest may occur on federal land, the base herds are generally dependent on state and private lands during the crucial winter season.

This brings into question exactly who "owns" wildlife in the state. During the summer and fall, including hunting seasons, when large herds of deer and elk are found in various national forests throughout the state, sportsmen might consider the animals "public" property.

But long after the hunters are gone during the winter months, it isn't the public represented by federal government that manages wildlife—it's the state.

This is why the state's right to manage its own wildlife comes into conflict with the right to hunt on public land and with the federal government's right to control game on federal land.

The United States Supreme Court is currently considering a New Mexico case involving states' rights in which federal officials killed game out of season and without permission of the state.

The case could have far-reaching ramifications, since it puts into question the state's right to govern its own wildlife. Talk of a national hunting license has equally far-reaching possibilities, since it could give the federal government control over hunting of animals that spend three-fourths of their time on state or



High Meadow Ranch near Boulder, Wyoming, combines the desire of people to own a bit of the West and careful planning to protect the environment.



private land.

The push for a national hunting license was apparently spurred by discontent among sportsmen over the differences between resident and nonresident license fees.

A recent study by the federal Public Land Law Review Commission revealed that nonresident hunters, for example, pay on the average nearly 10 times as much for an elk license as residents do and pay more than six times as much for a deer license.

To determine which fees are reasonable, the Western Association of State Game and Fish Commissioners had an independent study made by the Wildlife Management Institute, Washington, D.C.

After completing the study, the Institute recommended a one-to-five ratio of resident to nonresident hunting license fees and a one-to-three ratio for fishing license fees.

While the Wyoming Legislature has to make the final decision on the license fee ratios, it is hoped a ratio can be established that will let residents share in the rising costs of game management, yet will be equitable for the nonresident who is hunting on both his "own" land and the state's.

As Game and Fish Director James B. White summed it up, "... money alone will not produce the opportunities available to sportsmen visiting Wyoming."

"Although I firmly believe that the resident should be entitled to marked benefits in the allocation of all permits, and in the license fee pricing structure, we cannot ignore the issue through 'ostrich thinking' with our heads in the sand."

MM TTTT - - -

Poisoning Documented

In a copyrighted article of the March-April, 1972, issue of COLORADO Magazine, the poisoning of western wildlife is more fully documented than ever before. Using excerpts from the Division of Wildlife Service's Policy Handbook for 1971, the hard-hitting article relates the story of the men, the methods and the means behind predator and varmint "control."

For those interested, copies may be obtained from the publishing address at 7190 W. 14th Ave., Denver, Colorado 80215. Individual copies are 90¢.

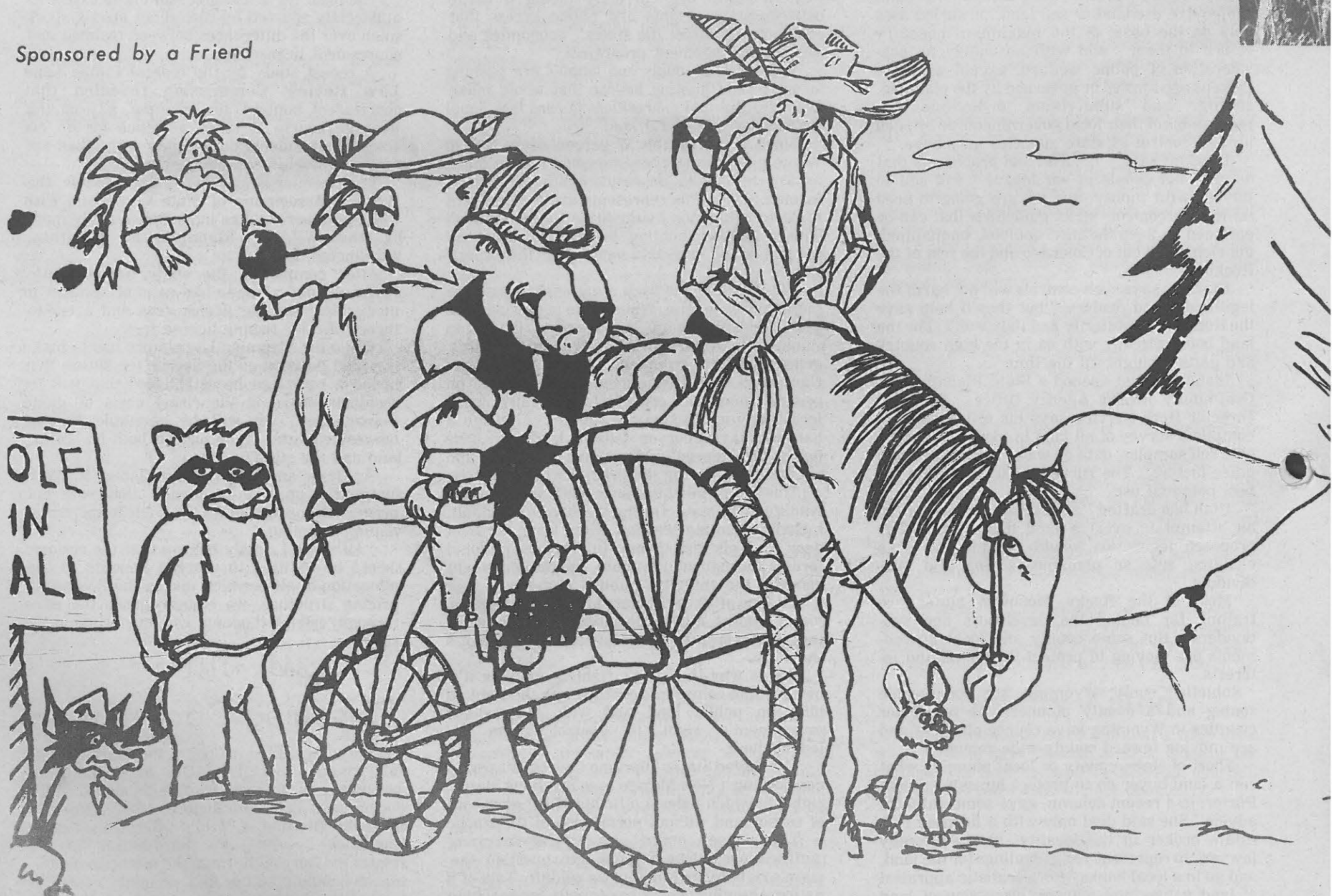
THE ENDANG



Photo by Luther Goldman, U. S. Bur. Sport Fisheries & Wildlife

Ecology is the study of the relationships between living things, one with another. The actions of Man have altered the natural world and brought about the extinction of many creatures and brought about the extinction of many things. Wildlife Week is a time to draw attention to the idea that we must take action to maintain lions and grizzly bears and may in some way be lost.

Sponsored by a Friend



Me 'n Kid and the rest of the "Wild Bunch" are headin' for Oblivion . . . I mean Bolivia!

ED ONES

High Country News—9
Friday, Mar. 17, 1972

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Wyoming Game & Fish Dept.



Photo by Idaho Fish and Game Dept.



Photo by National Park Service

Wayside Wonder

by Thomas M. Baugh

Interstate Highway 191 passes through Blackfoot, Idaho, on its northward wanderings. As the traveler drives north from Blackfoot, he encounters high sagebrush plains, the majority of which lie on the Fort Hall Indian Reservation. During most seasons of the year, flights of ducks wheel in the clear skies and settle to feed in the grain fields which border the road. Pheasants scratch gravel alongside the road and colorful magpies flit from lane to lane. Further along the highway, about 10 miles north of Blackfoot, the country slopes upward and a black line dotted with junipers appears in the near distance. The black line is lava, stretching from west to east across the horizon.

This jagged almost alien landscape has a peculiar beauty all its own. At first glance, the harshness is relieved only by the twisted forms of the multitude of junipers. In a way, it seems strange that anything can grow amongst the jumbled rock and seemingly sterile ash and pebbles. Life, however, is tenacious and given half a chance will exist in even the most hostile environments.

In reality, these lava beds are not entirely hostile. The winds of southeastern Idaho have made it possible for varied lifeforms and complex eco-systems to invade the area. These winds carry loose topsoil and drop it in the nooks and crannies among the jagged boulders. With the passage of time, this soil has deepened into fertile pockets. The same wind which brought the soil also brought tiny seeds, some of which settled in the soil pockets. The moisture from rain and snow and the ever present sun did the rest. Wherever there was soil, plants took hold.

It is fascinating to note that the surrounding fertile plains were also at one time in the past, covered with lava. The process of time and the forces of a dynamic nature have converted them into arable land.

Today, many plants and animals inhabit these fields of lava. The hardy juniper and the equally hardy sage are predominant. Various grasses exist throughout the cinder blocks.



Photo by Tom Baugh

Sage and juniper are the predominant plants amongst the lava fields of southeast Idaho.

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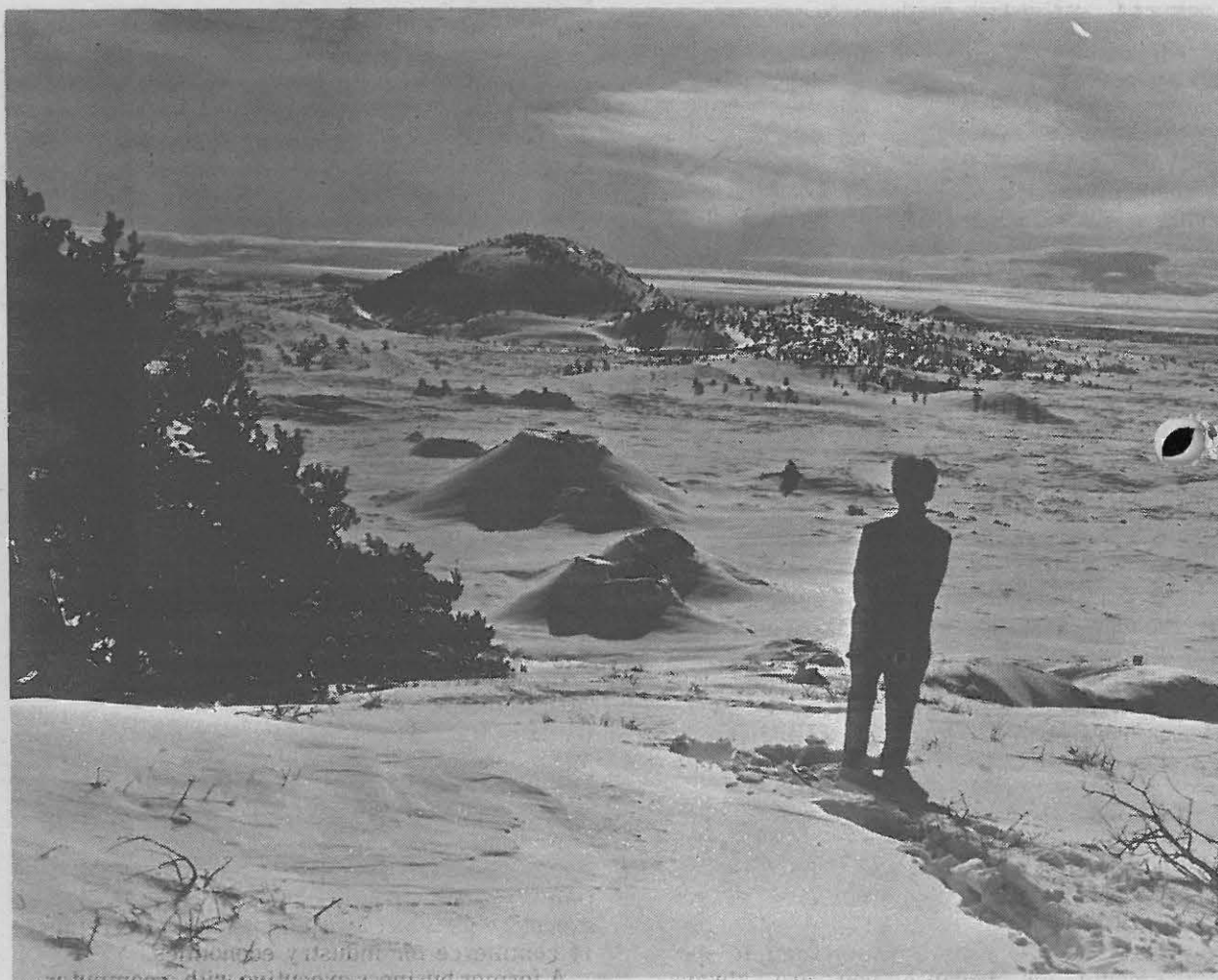


Photo by National Park Service

The stark beauty of Craters of the Moon National Monument can best be appreciated on a clear winter day.

Thousands of ducks and, within season, geese fly over this belt of black boulders. Birds, rodents and small mammals make their homes here, protected by the labyrinthine passages in the rocks.

The lava formations of this area are considered to be relatively new. Geologists have determined that several thousand years ago, molten rock was forced upward from deep within the earth. This rock, passing through fissures or cracks in the earth's structure eventually flowed out upon the surface creating the fractured formations apparent today. Volcanic activity was occurring at other places within this same general area. It was during this period that the cinder cones at Craters of the Moon National Monument were formed.

The State of Idaho has recognized the uniqueness of the lava beds and has established a visitor rest stop on both the north and south bound lanes. These rest stops have restroom facilities as well as shaded picnic tables. From either side of the road, the visitor can make the difficult cross country hike into the lava. There are no trails among the boulders and any hike beyond the perimeter of the visitor areas is difficult.

The camera-using naturalist can have a field day in this jumbled landscape. The rock formations themselves are photogenic and a challenge to both the imagination and skill of the photographer. The variety of forms which

juniper often assumes are apparent here and also provide excellent photographic material.

As you are stumbling about, trying to save your shins from the painful scrapes of the lava, take a closer look at those blocks of stone. The intricate whorls and patterns on the surface of much of the lava are a fascinating but difficult photographic subject. Lichens are abundant in the area and provide a field day for the microphotographer. However, you don't need to be a photographer or possess expensive equipment to enjoy this area. An interest in the world around you and the wonders it offers the observant will serve almost as well.

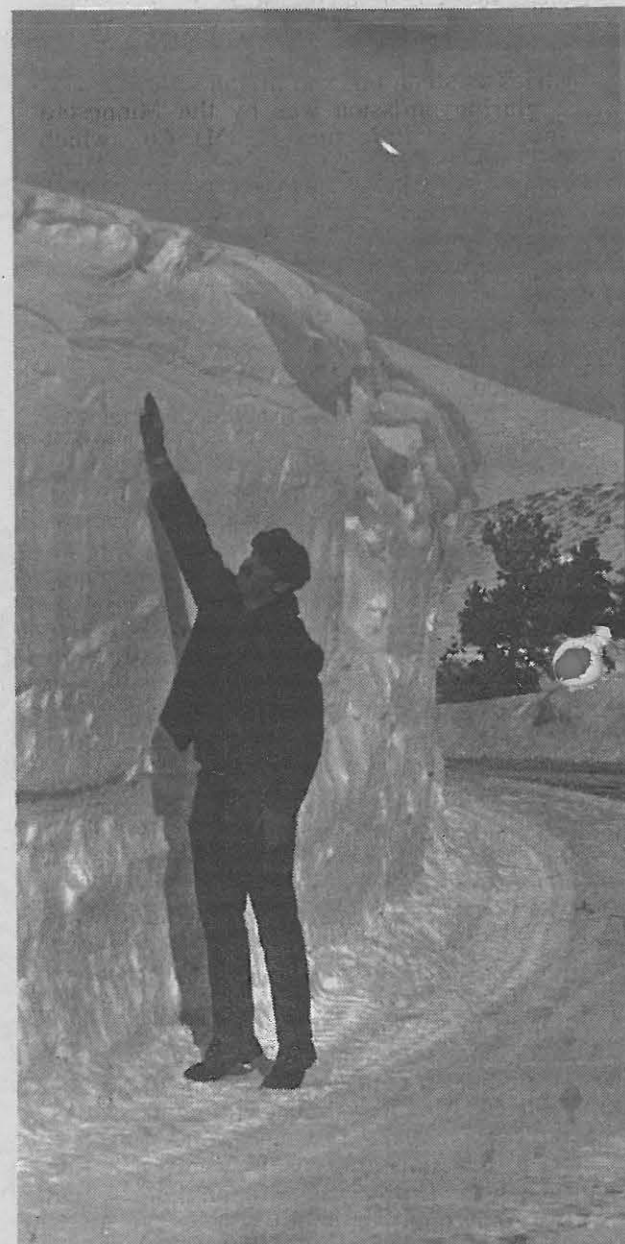


Photo by National Park Service

Summer visitors to Craters of the Moon National Monument would never guess that deep snowdrifts blocked some roads.

Snow Pack Heavy

Park Rangers report that Yellowstone National Park has been experiencing one of the most severe winters in many years. Temperatures dropped to 56 degrees below zero in early February—only 10 degrees above the record low set in 1933. All reporting stations in the park report above normal snow depth and water content ranging from 9 percent above normal at East Entrance to 52 percent above normal at Lewis Divide and Aster Creek. The greatest snow depth in the park is at Lewis Divide with 114 inches.

Though the snow depth is of vital importance to the wildlife of the park because it affects their movement, it is the water content that most interests man. The amount of water contained in the snow determines the spring runoff and how much water will be available for reservoirs and lakes.

Under normal conditions, it takes approximately 10 inches of snow to make one inch of water. However, in the park this winter, the water content is averaging about one inch of water for every four inches of snow. This high water content should produce a considerable runoff next spring. The northern portion of the park is averaging 40 percent above normal in water content while the southern portion is averaging 37 percent above normal.

Advice from Polluters

High Country News—11
Friday, Mar. 17, 1972

by Peter J. Bernstein

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The chief executives of America's major industrial polluters are playing an extensive - and highly questionable - role in shaping President Nixon's environmental policies.

Working through the little-known National Industrial Pollution Control Council (NIPCC), board chairmen and presidents of blue chip companies with a multi-billion-dollar stake in how strongly or weakly the government enforces antipollution laws have obtained important changes in the administration's cleanup strategy.

Created by executive order 19 months ago and supported by taxpayer's money, the blue-ribbon council of 221 corporate chieftains was intended to advise President Nixon on industrial pollution problems and to set an industry-wide example in cleaning up the environment.

But key members of Congress and national conservation groups, who are barred from NIPCC's private meetings, say the intended spur has become a brake, and that the clean-up is being slowed.

Commerce Secretary Maurice H. Stans, who passes NIPCC's views directly to the White House, recently confided to council members that they are playing an "increasingly important role" in "government policy-making."

Stans told the industry executives "virtually no major move is made in environmental policy without drawing on your advice and criticism. The rough spots in administration of environmental laws, standards and implementation actions have been easier to spot and smooth out because you are always available to give us help."

The far-reaching activities of NIPCC (nicknamed "Nipse" by its members) are emerging as a prime political target.

Sen. Edmund S. Muskie D-Maine, frontrunner for the Democratic presidential nomination, plans to focus on NIPCC's role in coming oversight hearings of his Senate subcommittee on air and water pollution.

"The concern here is that the council seems to have access to the decisional process without public responsibility to anybody," says Leon Billings, subcommittee counsel.

Interviews with key members of Congress and national environmental organizations, business leaders and government officials show the following about NIPCC's activities:

--Despite its mandate to set an example for others in fighting pollution, NIPCC failed to get all-important clean-up commitments last month from more than half of its own member companies. None were forthcoming from such basic industries as steel, oil, and manufacturing. The most glaring omission was by the Minnesota Mining and Manufacturing (3M) Co., which failed to comply with NIPCC recommendations by setting no time table for future clean-up steps. The firm's board chairman is Bert S. Cross, who also heads NIPCC.

--Compliance with federal antipollution laws by NIPCC companies this year was extremely spotty. The Justice Department filed civil and criminal suits against 24 major firms represented on the council, including General Motors, Du Pont, Union Carbide, American Cyanamid, Standard Oil of New Jersey, Goodyear Tire, and U. S. Steel.

--The Justice Department and the environmental protection agency were told in October by White House troubleshooter Peter M. Glanigan to set aside their waste disposal suit against Armco Steel Corp. and to negotiate the matter out of court, after Armco President C. V. Verity fired off a long letter to President Nixon asking him to "look into the circumstances of the court action."

Rep. Henry S. Reuss D-Wis., chairman of the House subcommittee on natural resources, sharply criticized White House interference in the case and questioned the propriety of Verity, who is NIPCC member, seeking what Reuss termed preferential treatment.

--NIPCC, acting through Commerce Secretary Stans and its executive director, Walter Hamilton, obtained significant changes in air pollution rules proposed by EPA for controlling hazardous substances and drafting state implementation plans. The result may well be watered-down enforcement of the landmark 1970 Clean Air Act, environmental critics charge. NIPCC also held a special meeting last month to denounce the Muskie water pollution bill, which the Senate passed unanimously, and to urge enactment of a bill with a far more lenient attitude toward industrial polluters.

--Requests from 15 conservation groups to attend NIPCC meetings either as participants or observers have been rejected. NIPCC also has

turned down requests from congressmen for transcripts of the meetings.

In both cases, NIPCC has maintained that industry executives would not speak with the same candor if the meetings or transcripts of them were opened to the public.

With an annual operating budget of \$310,000, NIPCC supports a professional staff of eight and turns out many reports, including the so-called commitments report of voluntary actions that various industries are making to clean up pollution.

Since its inception in April 1970, NIPCC has had seven full meetings and numerous working sessions of subcommittees at which the impact of pollution control regulations are discussed in great detail. When ever NIPCC members meet, however, a government lawyer is present to make certain that in discussing mutual problems none of the company executives runs afoul of the anti-trust laws.

Close inspection of NIPCC's record reveals that it maintains a close working relationship with such key environmental policy makers as White House assistant John Whitaker and Russell Train, who heads the White House Council on Environmental Quality. Train has attended every NIPCC meeting.

Moreover, NIPCC's viewpoints are heard by those administration officials who sometimes count the most - in the Office of Management and Budget (OMB). Among the officials who regularly attend OMB's secret meetings on environmental policy is the same Walter Hamilton, who, in addition to being NIPCC's executive director, is deputy assistant secretary of commerce for industry economics.

A former business executive with a computer-like mind sharpened at Harvard University, Hamilton is highly regarded by NIPCC members as an effective advocate of their views.

By his own admission, he played a key role in urging OMB to change the all-important federal guidelines for state air pollution plans.

"The information I get as director of the council I certainly use in OMB without attributing it to the council," Hamilton said in an interview. "Because of my council role, I'm acutely aware of the large array of problems - the practicalities of compliance. I can give OMB a faster and more practical response than some other government officials."

It's this "instant communication," as Hamilton calls it, that has aroused so much indignation among national environmental groups. With such access by the captains of industry to the government chambers where decisions are made, it's no wonder, conservationists say, that pollution is gradually contaminating the nation's air, land, water, and food.



"The council is less concerned with controlling pollution than in sanctifying it," says Rep. John D. Dingell D-Mich., who heads the House subcommittee on fisheries and wildlife conservation.

"It's about as useful as sidepockets on a cow."

Dingell, who considers NIPCC a waste of taxpayer's money, tried unsuccessfully several months ago to delete its 1972 budget from the Commerce Department appropriations bill.

In a related move another NIPCC critic, Sen. Lee Metcalf D-Mont. has introduced a bill that would require government advisory committees like NIPCC (there are some 1,500 such committees) to have non-industry representatives and to conduct open meetings.

"We don't believe it's fair for industrial groups to have access to high-level people in the administration, including the President, from a tax-supported program in a manner environmental groups don't have," says Lou Clapper, conservation director of the National Wildlife Federation. He supports the Metcalf bill.

Hamilton scoffs at such complaints. "The environmentalists," he declares, "have more immediate, in-depth access to environmental policy-makers than any other segment of society. People like David Brower (head of Friends of the Earth) and Ralph Nader have immediate and continuing access to Train, Whitaker, and (EPA Administrator William D.) Ruckelshaus."

He said conservationists also have an opportunity to participate on the Citizens' Advisory Committee on Environmental Quality, which is headed by Laurance Rockefeller.

Hamilton, in reviewing NIPCC's role, said the Nixon administration is trying to obtain a true picture of the impact of pollution control regulations on industry, and has funded a series of 11 so-called micro-economic studies to determine whether companies can absorb antipollution costs without shutting down.

As an interagency effort, involving EPA, the President's Council of Economic Advisers and the White House Office of Science and Technology, the results of the studies are likely to play a significant role in setting future antipollution standards.

Hamilton said he was displeased with the first two studies completed. They dealt, he said, with the pollution problems of iron foundries and the leather tanning industry. Both reports have "considerable deficiencies," he explained, because they fail to take into account the full economic "burden" on the affected industries. Both studies will be sent back to the authors with instructions to do more research, he said.

"We simply don't know enough to understand the impact of pollution controls in these industries," Hamilton said. "We are trying now to predict the effect on the people and their communities so that we can ease the impact of the transitional process. NIPCC must get in deeper and find out more clearly and faster what it is that is really happening."

"There is no need for the public to suffer unnecessary disruptions in the process of getting to new objectives (a cleaner environment) if we plan properly."

Hamilton tries to take an objective view of the job industry is doing. He said the results are "certainly uneven," and that some NIPCC companies have been derelict.

But he insisted that despite their poor response to NIPCC's own request for updated commitments on controlling pollution, the vast majority of the firms recognize they must tackle the problem. "All many of them need are manageable time frames," he said.

"..Noted & Quoted.."

"Environmental quality is more than pollution control. We must stop thinking in terms of meeting the immediate demands of the next 5 to 10 years and look at a 50 to 100-year base. We must not measure everything from today's GNP objective, population growth rate, or life style, but recognize that these are variables. Sacrifices may have to be made when survival on the planet is at stake.

"We must learn to use planetary resources in the most efficient manner for the benefit of all mankind; to use, not to waste; to simplify, not to proliferate; and to differentiate between 'better' and merely 'more'. We must look for the real sources of environmental problems, not just the obvious."

Albert H. Stevenson
Malcolm Pirnie, Inc.
Consulting Engineers

"Just as our air and water are vital to our well being, so is the land of this commonwealth, which we all share and love. In this area, I will submit for your consideration a land-use policy act. It would establish the procedure for the implementation of a land-use policy for the commonwealth through the localities and the planning districts. It would assign to the division of State Planning and Community Affairs the responsibility for developing the necessary criteria to ensure that the policy is, in fact, followed. I recognize the validity of the arguments about local control over land use, and about the restrictions on an individual's use of his own land. Nonetheless, I think all will recognize as well the need to avoid the tragic fate which has enveloped so much of the north-eastern United States as a result of haphazard and inadequately planned land development."

Governor Linwood Holton
Address to the Virginia General Assembly

Western..... Roundup

McGee Charges Butz on Clearcutting

Sen. Gale McGee has charged that Agriculture Secretary Earl Butz was primarily responsible for the decision to kill a proposed Executive Order regulating clearcutting on Federal forest lands.

McGee questioned the Secretary closely on March 6 about the Executive Order when Butz appeared before the Senate Appropriations Subcommittee on Agriculture, Environmental and Consumer Protection. McGee is chairman of that subcommittee.

"The questioning of Secretary Butz has established that he, and not pressure from Congress or elsewhere, was primarily responsible for the decision to kill the recently proposed Executive Order on clearcutting," McGee said.

The Senator pointed out that the Secretary's testimony clearly established six "unarguable" points:

--The secretary did make the primary decision to kill the Executive Order, although he consulted with Interior Secretary Rogers Morton and Russell Train, Chairman of the Council on Environmental Quality.

--That Butz did not summon other interested groups, including professional societies, conservation organizations, or other groups, for similar consultation.

--That the Secretary did not feel the Executive Order would have significantly altered present practices of the U. S. Forest Service.

--That the Secretary did feel it would have cramped the style of government land managers by giving them an added "burden" of demonstrating clearly the environmental soundness of proposed clearcuts.

--And, that considerable pressure was generated on Capitol Hill and elsewhere in opposition to the proposed Executive Order. Regarding the claims of Butz that the Executive Order was killed because of pressure

from Capitol Hill and elsewhere, McGee stated: "The Secretary can take the responsibility for this."

"He invited the pressures," the Senator said. "He invited the pressures by revealing the existence and the substance of the Executive order to the timber industry and to no one else, thus insuring a one-sided view of the issue."

McGee said industry newsletters and correspondence in the subcommittee's files "clearly show that the timber lobby was informed and held two meetings with Cabinet officers and others prior to January 11."

The Senator noted that it was on January 11 when the newspapers reported timber industry criticism of the proposed Executive Order, "thus revealing its existence to others for the first time. Two days later it was announced the order had been killed."

Highways Studied

The National Park Service and the Bureau of Land Management recently held joint meetings in Utah on placement of roads and highways in Canyonlands National Park. Planners are in agreement that there will be few highways within the Park, with most built around the periphery. Overlooks will be built to give views of the scenic canyons.

Planning Undirected

Land use planning in the western states may be wobbling and undirected because of "poor executive leadership" according to an official of the Federation of Rocky Mountain States.

George Nez, director of land use planning for the Federation, said the states have deferred state-wide planning because of local issues, and because of the "phony" economic issue.

Nez spoke at a land use planning workshop recently held in Denver. It was sponsored by the Federation.

Officials of Colorado, Utah, Idaho, Montana, North Dakota, South Dakota, New Mexico, Nevada and Wyoming all agreed they do not have enough authority to get land use planning done. They said there was not enough adequate legislation to implement effective land use planning and monitoring of programs.

The secretary of the Colorado Environmental Commission, Robert Bronstein, told the officials that the states should each enact environmental policy acts that would make the state the "trustee of its environment." And he called for each state to separate planning and regulatory functions, establish a department of transportation, set up population advisory agencies, and establish a conservation trust fund that, "like highway trust funds, would buy up land and regulate its use."



"Color Me Yellow"

"Color Me Yellow," the headline fairly leaps from a dazzling yellow background in the current issue of COLORADO Magazine. And once again, publisher Merrill Hastings, Jr., has fingered Wyoming's Governor Stanley K. Hathaway as a man who talks big about "Quality" environment but doesn't display a iota of conviction.

The Highway 26 Association is a group dedicated to promotion of that federal highway - and of course all the towns along its route from Nebraska to Yellowstone National Park.

As Colorado Magazine tells it: It was decided that the best way to publicize the 390-mile scenic drive would be to splash natural rocks with bright yellow paint clear across the state. It sounded like a clever scheme: follow the yellow stones to Yellowstone.

Hathaway was invited to Casper to paint the inaugural boulder. "I'm doing this on the condition that they be 10 miles apart," he emphasized as he enthusiastically defaced the first large stone. A shiny plaque of gubernatorial graffiti was affixed to the glistening rock. It reads: "Dedicated to Highway 26 by Governor Stan Hathaway, April 24, 1971."

Shale Oil Wangled

Wyoming Governor Stanley K. Hathaway used his influence to wangle two more site nominations for oil shale development. He went directly to Secretary of the Interior Rogers C. B. Morton, well after the January 31 deadline for submission of bids.

The Department of the Interior had previously announced that 15 companies had submitted nominations on 23 tracts, only one of which was in Wyoming.

Hathaway submitted two additional site nominations in a letter dated February 18. They were in behalf of the Wyoming Oil Shale Environmental Planning Committee.

Wilderness Opposed

The Idaho House of Representatives recently voted to oppose any more wilderness for that state. Proponents said the action was necessary to enter into testimony before a congressional committee.

One representative said Idaho now has three million acres in the wilderness system, "... the greatest contribution of any state. Another said, "Ecology is a great thing but I think you can go to extremes with some things." He added that a number of Idaho sawmills have already been closed because of environmental considerations and the market for lumber.

Jerry Jayne of Idaho Falls, president of the Idaho Environmental Council, said passage of the House memorial was "an insult to the people of Idaho." He said the memorial was printed one day and passed the next, without benefit of public hearings or public participation.

New Area Proposed

Utah Rep. Sherman P. Lloyd has proposed an alternative to the Senate-passed bill on the Glen Canyon national recreation area in Utah and Arizona. Lloyd's bill varies dramatically from the Senate version in providing for a much smaller designated recreation area.

The Senate provided for a 1.3 million acre recreation area, with an amendment to add about 118,000 acres in the Escalante Basin as a possible wilderness. The Lloyd version provides for a 391,000-acre recreation area administered by the Park Service. In addition, his version provides for a 2.2 million acre national conservation area administered by the Bureau of Land Management.

Under his version, another 2.1 million acres would be studied for two years with the possibility of including the area later in the national conservation area.

Lloyd's bill would also allow the construction of a highway from Glen Canyon City northward to Bullfrog Basin. Such a highway proposal has been vigorously protested by conservationists in the past.

Changes Pushed

Air and Water News reports that pressures are mounting in many states against commissions and boards charged with policing air, water and other pollution. The publication says critics are pushing to have such boards eliminated, or get legislation requiring board members to be free of any possible conflicts of interest.

Alaska, Arizona and Washington have no such boards. The boards in Montana and New Mexico are prohibited by law to have any members with possible interest conflicts.

The NEWS says environmental groups in Colorado and Idaho are pushing for changes that will either create full-time control agencies or make the existing control boards more responsive to the public interest.

PROPOSED GLEN CANYON NATIONAL RECREATION AREA (391,000 ACRES)
PROPOSED CANYON COUNTRY NATIONAL CONSERVATION AREA (2.2 MILLION ACRES)
PROPOSED CANYON COUNTRY NATIONAL CONSERVATION AREA ADDITION (2.2 MILLION AC.)
PROPOSED ROAD

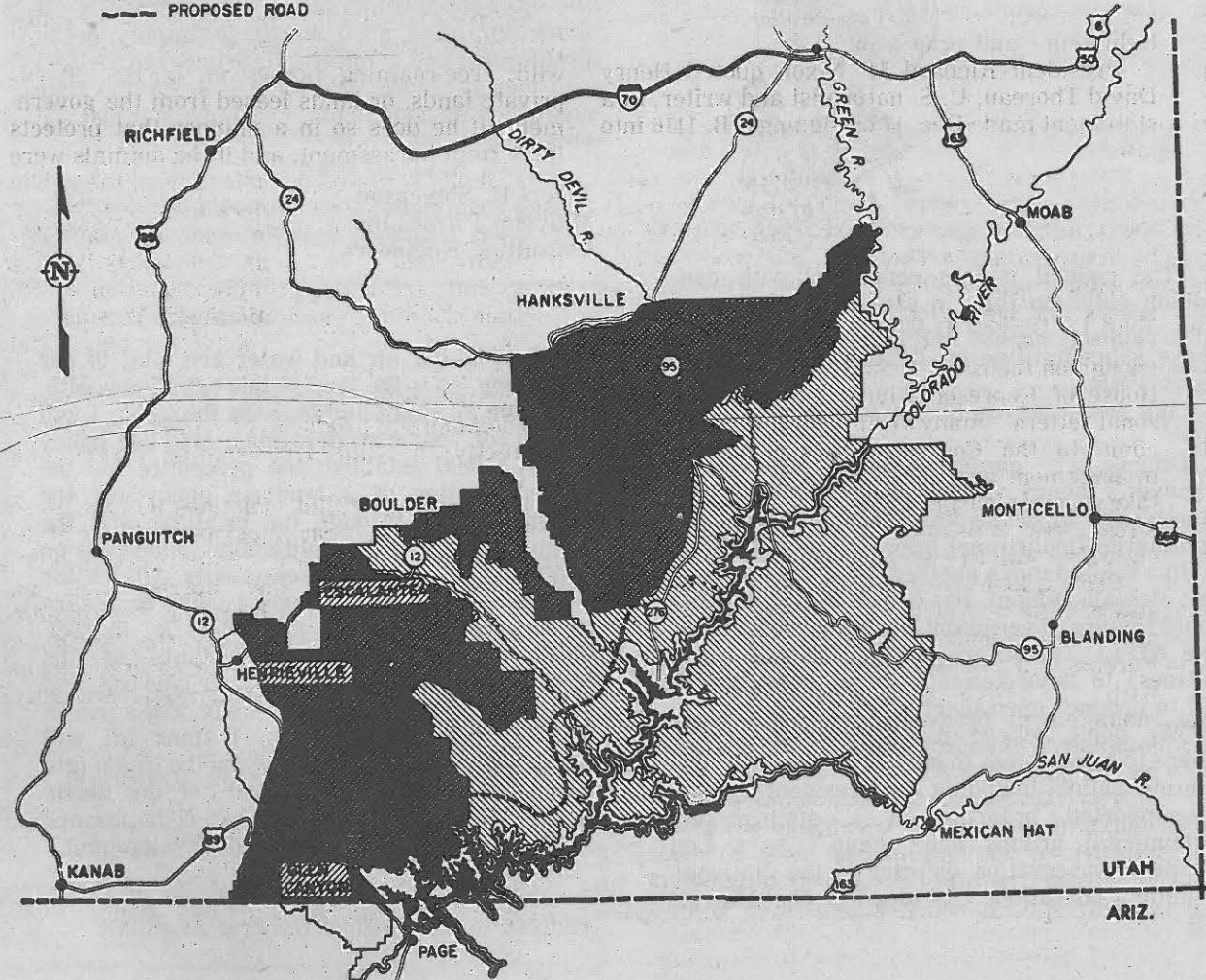
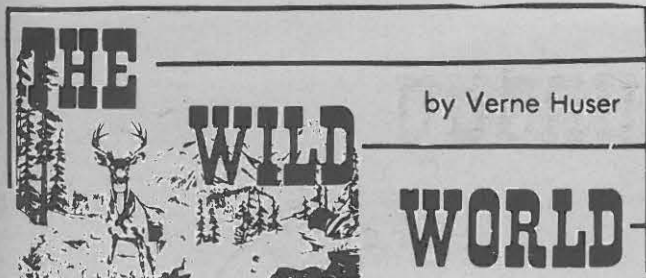


Photo by Verne Huser



Have you ever been in the deep woods during the heavy snows of winter? I don't mean by snowmobile; I don't mean tramping through a foot or two of snow during a late elk hunt. I mean snowshoeing or ski touring into the wilds for a day's outing in the basic elements—or better, an overnight camping trip in the snow.

Poets often refer to winter as a dead time. And while it is true that many trees and bushes lose their leaves, that many birds have left the cold country for the south, that many of the animals have gone into hibernation for the winter, still there is much life in the wild world that the snow-biler never sees for the noise his machine makes.

A tour along the meandering channels of the Snake River in Jackson Hole gives me as pleasant an outing as any I've taken. Skimming across the frozen flats toward Blacktail Ponds, I see tracks of coyotes and the wing-marks of raven and magpies that have been feeding on a carcass left by the canines. Or there is a rabbit perhaps, or a shot-crippled goose. (One gosling the summer of 1970 injured a wing badly enough to lose its use, and as I floated the Snake River late in the season, I imagined this unfortunate bird becoming a coyote's meal).

Trumpeter swans—28 of them on one occasion—rest on the ice of the beaver-built pond, and dozens of ducks—mostly mallards and golden-eyes—feed in the open water where warm springs or running water or decaying vegetation keeps the ice from forming. Turning north along the streams that feed Blacktail Ponds, actually only side channels of the Snake itself, I see my first moose feeding in the tall willows. And then a small band of elk moves into the fringe of conifers along the main Snake.

Two hundred yards upstream, I see a family of Canada geese waddling away from their resting spot in the snow-filled hollow of a now-dry streambed. I press them too closely, and they take flight, honking raucously. Their cacophonous cries warn another band of elk of my approach, and I only see their buffy rumps move gracefully out of sight around the next bend.

A fat porcupine is next to appear, jostling his rattley tail from side to side as he gouges a two-inch trench through the snow. He carefully crosses a small channel over a snowbridge that holds him, then seeks shelter from the intruder in a bushy spruce from which he blinks in sleepy wonder at the creature on long thin slats.

I see the wooshing of wings and observe a silent raven overhead. And even while I'm looking up, the bald eagle sweeps into view from somewhere downstream, heading north toward his nest and mate. How's fishing? I wonder.

What's that clattering? The rutting season should be over by now. But there they are: two bull moose doing battle—no, not really! The rut is over, and they are just playfully sparring. They'll lose those heavy antlers any day now—nature didn't mean for them to carry such a heavy load through the winter; they don't really need them now that the rut has ended.

Teeth-scarred aspens suggest the growing scarcity of food. And here is beaver sign: trees a foot-and-a-half in diameter have been girdled four feet above the ground where the beaver has started his cut from the top of the snow pack. Another raven flies up and and magpies scatter. Another carcass, this time a beaver's. Must have been caught by a coyote, tracks all around—too many beaver in this area, too much pressure on the trees, beaver have to go too far from safety to fell a tree, and the coyote serves his purpose: to keep the balance. All this, nature plainly reveals to anyone who takes the trouble to look.

There's a curiosity: a tree the beaver have cut has fallen wrong, perhaps in a windstorm because it points northeast, away from the frequent southwest winds; lodged against a giant spruce tree, the cottonwood is useless to the hard-working beaver that cut the tree. But the beaver hasn't give up. He's climbed up the snowdrift supported by the spruce boughs and made another cut eight feet above the ground in an attempt to salvage the tree. It hasn't worked this time—all that work for nothing.

A herd of elk—or is it the same one just keeping ahead of my noise, silent as I am on cross-country skis? Their smoky breath gives them away. I turn downriver where I meet the main Snake. I am looking for the beaver, and near an active lodge I know from summer float trips, I find three—two adults and a yearling kit living in a bank den.

Tracks of weasel and snowshoe hare, of pine squirrel and grouse mark the snow, but I see none of these lesser creatures. Lesser? To whom? To man, the hunter, perhaps, but not to nature. All are important, for they provide food for other creatures, or they help to cultivate the soil (gopher, mole) or plant seeds (squirrel, various birds) or irrigate the willow marsh (the beaver with his dams that raise the water level). All have their place.



A pair of bull moose playfully squaring off. Such antics may be partly to break the antlers loose so that they drop free.

Living Symbols of History

by Jim Humbird
Idaho Fish and Game Dept.

Probably no animal is better suited to excite the human imagination than the wild horse; and none can arouse sympathy faster than the inoffensive little burro. Both animals are descendants of faithful work animals brought to Western ranges by old-time gold and silver prospectors.

Most newcomers in the West—and urbanites everywhere—express indignation when they learn that many cattle and sheep men consider the wild burro only an exotic nuisance. The wild horse rates the same disfavor with most stockmen; in fact, more so, because it is more numerous on Idaho rangeland.

Stockmen complain that wild burros and horses multiply, eat up the sparse vegetation, and pollute water holes until stock, deer and bighorn sheep cannot get a drink. These animals have virtually destroyed natural range vegetation in some places, their opponents charge.

In other states where goodly numbers of wild jackasses abound, outdoor guides sometimes have had riders thrown from mules and trail parties broken up when a violent hee-haw shattered the canyon quiet. The acoustics of such places make the burro sound only yards away. Mules in such situations have been drawn off the trail. They seem to go crazy when they hear the call of a wild burro. All riders can do is hold a tight rein—and pray a lot.

President Richard M. Nixon quoted Henry David Thoreau, U. S. naturalist and writer, in a statement made Dec. 17 on signing S.B. 1116 into law.

"We need the tonic of wildness," he read. "During the past several months, many thousands of Americans, particularly children, have concurred in Thoreau's plea with an outpouring of concern for the preservation of wild horses and burros on Western ranges. The 11-year-old son of one congressman felt deeply enough on the issue to himself testify before the House of Representatives; and countless personal letters—many from young people—have come to the Congress, to the federal land management agencies, and in my own mail. I take special pleasure today, therefore, in signing strong new legislation to protect these noble animals," the President said.

Central Idaho's estimated 150-175 wild horses and handful of free-roaming burros, under the new law, are under the jurisdiction of the U. S. Bureau of Land Management. In cooperation with the Fish and Game Department, management programs must be designed to maintain a thriving natural ecological balance on the public lands.

The law says, "All management activities shall be at the minimal feasible level and shall be carried out in consultation with the wildlife agency of the state ecological balance of all wildlife species which inhabit such lands, par-

ticularly endangered wildlife species. Any adjustments in forage allocations on any such lands shall take into consideration the needs of other wildlife species which inhabit such lands."

Hugh Harper of the Bureau of Land Management, Boise, says most of Idaho's wild horses and burros are in the vicinity of one Pine Peak in the drainage of the East Fork of the Salmon River, near Challis. There are reports occasionally of these species roaming remote and empty parts of Owyhee County, but these horses turn out to be branded and owned by someone. Cowboys sometimes chase—and even capture—wild horses. The animals have sturdy legs, are sure-footed, and make good mountain pack horses.

Harper disclosed that BLM does not propose to designate and maintain specific ranges on public lands in Idaho as sanctuaries for the protection and preservation of wild horses and burros, but the size of existing herds or bands will be controlled.



Harper stressed that nothing in the new law prohibits a private landowner from maintaining wild, free-roaming horses or burros on his private lands, or lands leased from the government, if he does so in a manner that protects them from harassment, and if the animals were not willfully removed or enticed from the public lands. Any individuals who maintain wild horses or burros on their private lands and/or lands leased from the government must notify BLM in Boise with a reasonable approximation of the number of animals so maintained, he said.

Finally, the new law prohibits removing wild horses and burros from the public domain, killing such animals, processing of their remains into commercial products, or selling (directly or indirectly) of wild, free-roaming horses and burros.

Penalties for willful violations include up to \$2,000 fine or one year imprisonment, or both. Thus, it now is the policy of Congress that wild, free-roaming horses and burros shall be protected from capture, branding, harassment or death; and to accomplish this they are to be considered an integral part of the natural system of the public lands in the areas where presently found.

These animal species, the free-roaming horses and burros, are living symbols of the historic and pioneer spirit of the West; they contribute to the diversity of life forms within the nation and enrich the lives of the American people; and these horses and burros are fast disappearing from the American scene.

Thoughts

from the

Distaff Corner

By Marge Higley

While browsing through a box of stored-away books, I chanced across an old illustrated volume of Mother Goose Nursery Rhymes. Today's children are hardly familiar with some of those old favorites. It's understandable, since most of them were written about a hundred years ago, so they sound pretty quaint by now. In a way, it's too bad — they do have a certain charm, but of course they are utter nonsense. Most of them don't try to teach a lesson or point out any moral. But times have changed, and the verses and stories written for children today all seem to subtly imply a bit of moralizing.

"The Little Engine That Could," for instance, teaches a child to persevere. Others go on to point out kindness to animals, obedience toward parents and teachers, etc.

Perhaps all Mother Goose needs, to again hit the best-seller lists, is a bit of revision here and there, to bring her up to date on situations in the world today. Something like:

Jack and Jill went up the hill
To fetch a pail of water.
Asked Jack, "Had we better boil it?"
Said Jill, "Yes, I think we oughter."

Lots of the old rhymes deal with animals. These could be changed just enough to give them modern meaning. For instance:

Hickity-Pickity, my black hen
She lays eggs for gentlemen.
If they'd clean up the smoke from the factory,
She might look white again.

Or:

Hey, diddle diddle, the cat and the fiddle
The cow jumped up to the moon.
Little dog looked up there, as he breathed earth's foul air,
And said "Not a moment too soon."

Today's small fry might clap their hands to:

Pease porridge hot, pease porridge cold.
It's nearly all additives, now we are told.

The realm of subject matter seems almost unlimited. Fertilizers and pesticides could be brought into the picture by:

Mistress Mary, quite contrary,
How does your garden grow?
With the help of dangerous chemicals,
On the grocery shelf, row on row.

Or:

Little Miss Muffet sat on a tuffet
Eating her cakes and tea.
Along came a spider, and sat down beside her.
She sprayed all, with strong DDT.

Even good old Humpty Dumpty could get into the act:

Humpty Dumpty sat on a wall
Humpty Dumpty had a great fall.
Since he was made of plastic,
Nothing could degrade him at all.

Here's one that could go on for verse after verse if one really put one's mind to it:

Old King COAL is a merry old soul
And merry, he well should be!
We call for more power by the kilowatt hour
We'll all pay for those fiddlers three.

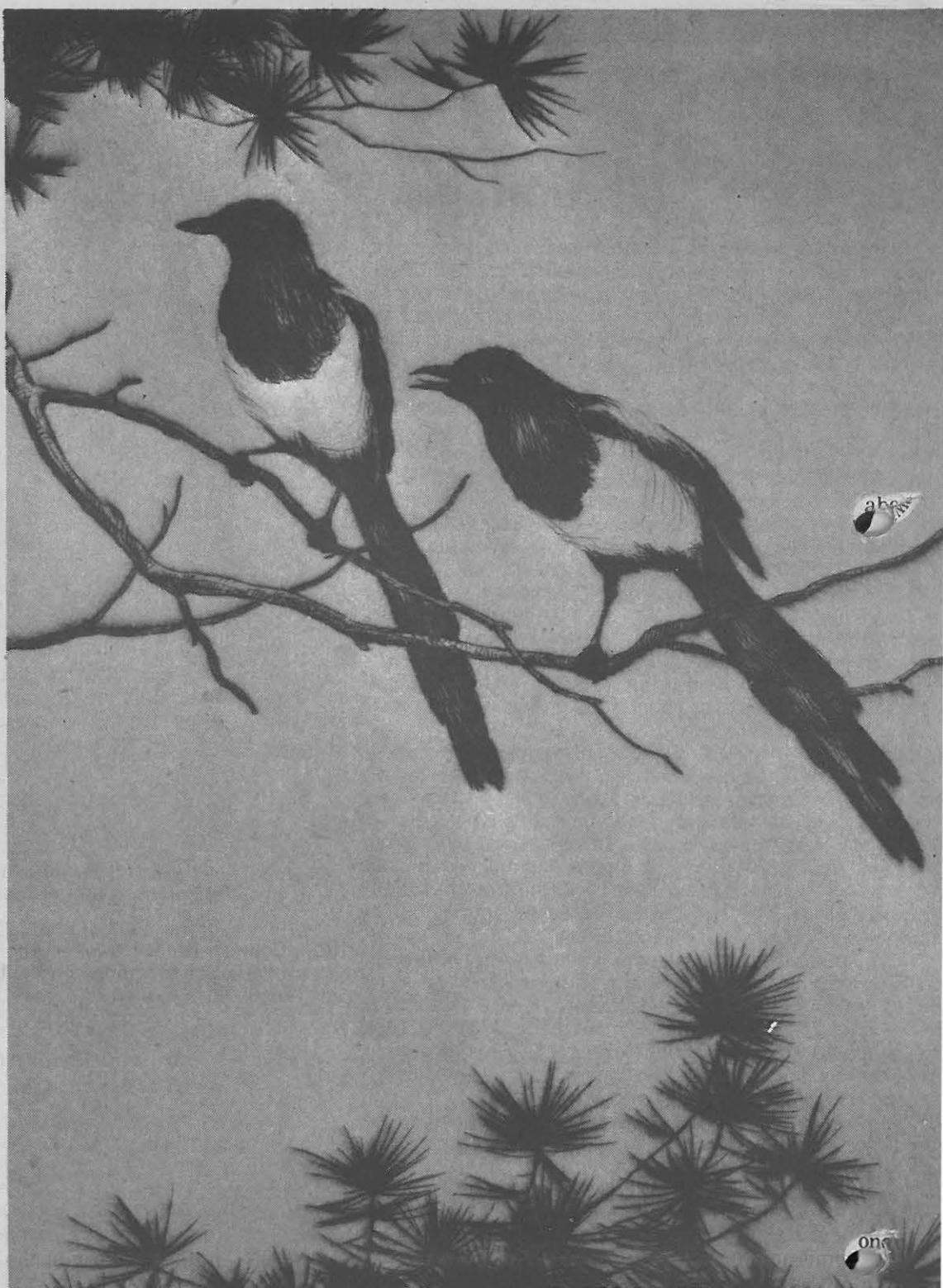
That one leads straight into one little old Mother Goose rhyme that about a hundred years from now won't need much revision, if we continue to use up our natural resources. How about:

Jack be nimble, Jack be quick
Better get out the candlestick.

Teaching Guide Available

William D. Ruckelshaus, Administrator of the Environmental Protection Agency has announced publication of a 520 page classroom guide to instruct teenagers in the knowledge and skills of environmental protection. Ruckelshaus says it is "by far the most complete and accurate of the few environmental curricula in use."

The two-volume guide, developed by the Institute for Environmental Education, is for use in secondary schools. It may be obtained from the Institute at 8911 Euclid Ave., Cleveland, Ohio 44106, for \$15 per set.



Pen and ink by Hans Kleiber

The Magpie

Consider, if you will, with me
The Magpie in the Aspen tree
Who greets the cold December day
In such an optimistic way.
He lives at our house, more or less,
And teaches us, I must confess,
A lot about the way that we
Could live our lives more worry-free.

In summertime, our mother cat
Benign as any diplomat,
Strolls by him like she doesn't see
A thing to interest her, and he
Will not degrade himself to hate
This stalking, furry reprobate.

Pretty soon, the children will
Throw buttered toast into the still
And frozen morn--a breakfast treat
That Mr. Magpie loves to eat.

No hang-ups has this lovely bird,
And though he's never even heard
'Everything's Beautiful,' (like the song)
I sense he knew that all along.

So many things this creature knows:
That some are friends, and some are foes;
That into the white and frigid world
A gift of buttered toast is hurled.

Presently the sun will rise
Exposing bright and friendly skies
And if you asked (and he could tell)
What makes him think that all is well?
He'd likely say he heard somewhere,
The Master Planner, "way up there,"
Who made the Earth and scaled it true,
Notes the fall of the Sparrow... too.

by Marcia Wogensen Hoffman

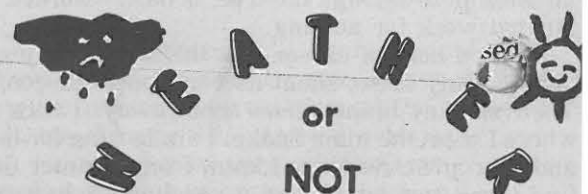
Seminar Slated

A three-day seminar on Chemical Pollution and Human Ecology will be held on the University of Wyoming Campus at Laramie, March 22, 23 and 24. The course is being sponsored by the Wyoming Human Resources Confederation and the Department of Civil and Architectural Engineering.

The course is designed to aid those in the health professions to improve consumer protection, to set standards, to give a basic understanding of the fundamentals of chemical pollution, and to assist health workers in examining alternatives for action. A tuition is required. However, tuition scholarships are available.

Some of the topics to be covered include the ecology of chemical pollution, air-water chemical pollutants, carcinogens in food, and problems of pesticide use.

Information on the seminar may be obtained from Mrs. Carol Nelson, Box 3295, Univ. Station, Laramie, Wyoming, or by calling Mrs. E. Lucile Tihen, Laramie.



	High	Low	
Sun.	57	30	Bright with high clouds
Mon.	64	35	Beautiful
Tues.	51	35	Mixed sun, rain and snow

Well, last week we had record high wind, devastating gusts of more than 100 miles per hour. This week, that 64 degrees on Monday set a record high for that date. Even the green grass growing at the edge of the patio looks to be record high. Right now, we're keeping our fingers crossed -- we're hoping that we don't next week have record high snowdrifts!



Environmental Eavesdropper

LOONEY LIMERICKS

by Zane E. Cology

Said the black-footed ferret, "I swear,
For my kindred, I've searched everywhere!
I'm beginning to think
We're becoming extinct.
I sure hate to get all that rare!"

* * *

A joint federal study on pollution control said it would have a significant impact, nationwide. The study said curbing pollution may put hundreds of small factories out of business, bringing unemployment and local recessions to the communities that depend on them. The study did not define compensating financial benefits to be derived.

* * *

Eight hundred strip mine employees gathered at the statehouse in Columbus, Ohio, to protest a proposed strip mining act. The miners reacted after the president of Hanna Coal Co. urged employees to oppose certain provisions which would ruin the coal company. Hanna (a subsidiary of Consolidated Coal Co. which is a subsidiary of Continental Oil Co.) said it would have to close its mines in Ohio if the legislation were passed.

* * *

The director of the Michigan Department of Natural Resources, Dr. Ralph MacMullen, said the two leading contenders on his list of "ten most wanted" environmental goals were population control and land use planning.

* * *

A public opinion poll sponsored by the U. S. Commission on Population Growth and the American Future showed that 6 out of 10 American adults favor abortions for reasons other than saving a mother's life, and half favor removal of all legal restrictions on abortion. A whopping 87 percent believe the government should make birth control information universally available.

* * *

Lawmakers in West Germany have proposed a new law which calls for imprisonment up to five years for crimes against the environment. The proposal is based on the assumption that poisoning the environment is as much a crime as the physical harm done to the body or life of another person.

* * *

William R. Gianelli, California Director of Water Resources, has proposed that the legislature set aside one day each month when no power or water could be delivered throughout the state. He said the purpose would be to "teach us how to function when the time comes that our water and power supplies would be unable to meet the needs of all our people."

* * *

Dreyfus Foundation will not give any more money in support of research on new pollution abatement technology. The directors say enough technology already exists and that it is time to put pressure on the politicians to make use of available technology through better legislation and stricter enforcement.

Wilderness . . .

dismay of that powerful organization in the rush to dispose of the roadless area inventory.

All groups concerned are asking the Forest Service for an extension of time. The Sierra Club asks for a minimum of 30 months. Wildlife-2000 said decisions should be deferred until at least 1978.

Only an outpouring of concern for the manner and means of the inventory can bring a reassessment of the program by the Forest Service. Concerned citizens should write their congressional delegation requesting an extension of time for review and classification of all roadless areas.

Letters to the editor . . .

on citizens of Wyoming in giving them information about what is really being done here. Best wishes on continued success in your work.

Sincerely,
Mrs. A. H. Voss
Greybull, Wyoming

Editor:

Dick Barker referred your name to me last fall when I spoke to him concerning the availability of wild river impact studies. I've worked for American River Touring Association for 3 years on the Middle Fork of the Salmon and Rogue Rivers, and may possibly work for the USFS next summer helping develop a management plan. Therefore, in addition to my earlier interests in working an individual study project for the University of California, I'm interested in studies having to do with ecological and sociological carrying capacity of river environments and acceptable levels of biological pollution.

There seems to be a scarcity of information, I guess owing to the newness of the field, but I'd sure like to get a model to work from, or some related data that might be applicable. If you know of any such studies, have any suggestions on structuring of the study, or can recommend any references, I'd very much appreciate it.

Sincerely,
Matt Conover
711 Oak Ave.
Davis, Ca. 95616

Editor's note: Sorry, I don't have the kind of information you need. However, the paper goes to a number of river guides and outfitters who might be able to help you. I hope so. The studies you are doing are important and will become even more so in the years ahead. I wish you success.

Growth Approaches Limits

by Anthony Lewis

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LONDON - In the memory of the race, man has always struggled to overcome the limits imposed by nature. His success has been spectacular, especially in this last century of accelerating technology. Today he sees that he has the means to fight pestilence and disease, to unlock even the binding energy of the material world.

When he is told now that the growth of population and production threatens his existence - that growth is approaching its earthly limits - his inevitable reaction is to regard that warning as one more challenge to be overcome. Surely the technology that has enabled human society to grow so rapidly will find a way to break through the limits.

That is one instinct underlying our refusal to believe the scientists who in growing numbers see ecological disaster ahead. Even when they avoid doomsday rhetoric, when they are most calm and reasonable, their message of inescapable limits is difficult to accept. Skeptical listeners, if they articulate their disbelief, argue that man can find or make substitutes for resources that run out. He can multiply the yield of crops, carrying the green revolution further. He can eliminate pollution.

But the skeptics overlook the fact that every piece of technology has a cost. Manufacturing some new plastic instead of using a scarce natural material causes pollution. Suppressing pollution requires capital investment in machinery that in turn has side-effects. Our life on Earth cannot be separated into convenient compartments. Everything we do affects everything else, and in the end technology cannot escape a finite planet.

Food production is a good example. We know that remarkable gains have been made in agricultural yields. But there are costs, too.

World food production increased by a third between 1951 and 1966. That required increases over those 15 years of 63 percent in the money spent annually on tractors, 146 per cent in the spending for nitrate fertilizers, 300 per cent on pesticides. It will be significantly more costly to achieve the next one-third growth in food production. And of course the investment, in addition to putting a burden on resources, causes pollution and exhaustion of crop land.

Scientists who have been studying growth and ecology for the Club of Rome, an eminent international group, have demonstrated how the problems are inextricably interconnected. The findings are fascinating - and chilling.

The researchers projected the continuation of

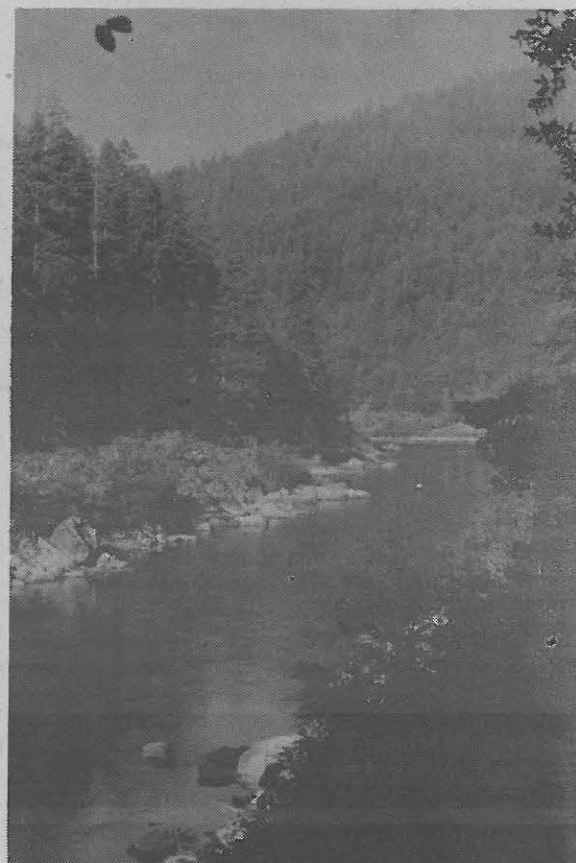


Photo courtesy Oregon Outdoors

A placid stretch of the Rogue River in Oregon. The great rivers, whether in wilderness or not, are becoming so popular with so many that restrictions on use are drawing tighter. The use of wilderness areas, parks, and free-flowing rivers is already drawing attention to a steadily growing human population.



present growth trends. They discounted major wars or other serious dislocations. They made the optimistic assumption of a 250-year supply of all resources at the current rates of use. (But the point is that the rates will not be steady. They will increase exponentially with population and consumption.)

Their projections showed the world pattern of growth collapsing within 100 years because of natural resource shortages. It would become increasingly difficult to get at raw materials, requiring more capital. Food supplies would fail as fertilizer requirements could not be met.

Then the scientists assumed that the supply of resources was doubled. On that model, rapidly increasing pollution caused collapse.

The next projection made the further assumption, quite unrealistic, that by 1975 pollution all over the world will be reduced by three-quarters. That would allow industrial growth to carry on longer. But the expansion of cities and industry would use up agricultural land, erosion and land exhaustion would occur, and food would run short.

Finally, on top of their optimistic assumptions about resources and pollution, the scientists assumed a worldwide doubling of agricultural yields. That allowed a huge industrial expansion - and then collapse because of pollution, despite strict antipollution measures.

Even population control of unimaginable perfection would not avert the collapse. The scientists assumed that world population was absolutely stabilized by 1975, with births equaling deaths. For a while, per capita income and food supplies would grow rapidly. But once again natural resources would run out.

The conclusion of the scientists was that there is only one way to avoid the pattern of boom crashing into the earthly limits. That is to moderate all the interconnected factors: Population, pollution, industrial production. The essential is to stop economic growth.

We shall have to await publication of the Club of Rome report - in March - to judge how convincing its scientific arguments and mathematical analyses are. But there is already conviction in the sober method used, and in the fact that this group comes out with the same answer as other reputable studies and books increasingly have - the answer of the stable state.

If man wants an extended future, in short, if he wants to avoid the pattern of boom and collapse, he will have to give up the philosophy of growth. Is that socially conceivable? The more one thinks about what is asked, the more staggering are the implications.



Ice and snow are going fast as Spring comes on with a rush. And where The Sinks, near Lander, appeared this way only a month ago, now the Middle Fork of the Popo Agie River is a rushing torrent. This photo from inside the limestone cavern looks at the streambed in the foreground,

and beyond to the canyon walls. At this natural phenomenon only a few miles out of Lander, the stream disappears into the mountain wall. It reappears as a great rise approximately 1/2 mile down canyon, and from the opposite side. The area and the canyon is now a state park.

Only People Can Save Endangered Ones

by Gregory Paul Capito

It was just a century ago that clouds of passenger pigeons in flight blotted out the sun's rays, while schools of grayling migrated up fresh-water streams, and the powerful grizzly stalked bison on the prairie.

The passenger pigeon, the Michigan grayling and the plains grizzly are now just memories. They have gone the way of twenty-two other wildlife species in this country—down the road to extinction. In fact, of all the continents of the world, North America has witnessed the most rapid decline in both the number and variety of its wildlife species. Nature's long-term effort to establish a complex, stable, ecosystem has been reversed.

Before the advent of industrial man, animal populations fluctuated, while certain species completely disappeared. The saber-toothed tiger, mastodon and archaeopteryx could not adapt to the gradual climatic changes of the geologic past. Slowly, they vanished from the face of the earth. They were, however, victims of natural controls which spanned millions of years. By contrast, the rapid change in this country from pristine forest to urban ghetto has hastened the premature doom of entire biotic communities.

No single factor has played a more significant role in the extermination of wildlife in this country than the adverse modification of suitable habitat. Thousands of miles of superhighways and the erratic growth of housing developments have annually gobbled up millions of acres of natural environment, thus contributing to the demise of sensitive wildlife populations. Add to this the more subtle forms of habitat degradation, air and water pollution, and the disappearance of nesting cover for one more bird or the elimination of a spawning bed for yet another race of fish.

Because of fluctuations in the condition of existing habitat and its dependent wildlife populations, federal wildlife experts have developed a means of determining the relative status of a species considered to be in peril. The classifications of such species are as follows:

An "endangered species" is one whose immediate prospects for survival are in serious doubt. Factors which may cause its elimination range from disease and predation to loss of habitat, or perhaps a combination of all three.

Immediate help is needed or the species will perish. In this classification, are approximately ninety birds, reptiles, mammals and amphibians.

A "rare" classification contains those species whose numbers are by nature, few and quite limited over an extensive range. If environmental conditions remain relatively stable, the animal may survive in limited numbers. If habitat conditions are drastically altered, the species may quickly be placed on the endangered list. In this classification are nearly forty-five birds, mammals, fish, reptiles and amphibians.

Another classification is that of a "peripheral species," whose natural occurrence is concentrated outside the United States. The animal may not be indigenous, but its survival depends upon the maintenance of critical habitat along our nation's boundaries. In this class are eighty individual wildlife species.

The final classification is "status undetermined". In this group are approximately one hundred animals on which more research is needed to determine their relative status. As more information is gathered, their classification will be determined.

A mere classification of wildlife is not enough to ensure the survival of an imperiled species. Habitat acquisition and improvement is needed to maintain suitable populations and insure propagation for the future. Currently, the federal government has under its jurisdiction over 765 million acres of public land. These vast areas are, for the most part, managed on a multiple-use basis and at times are in direct conflict with the endangered species program. A re-classification of existing public lands is needed to ensure the preservation of critical wildlife habitat. In addition, artificial propagation, coupled with a re-introduction of endangered species is of vital importance. In the past, propagation efforts by federal researchers at the Patuxent Wildlife Research Center in Laurel, Maryland, has augmented populations of the whooping crane, the Aleutian Island goose and the masked bobwhite quail. Clearly, their efforts have returned these animals from the brink of extinction.

Of course, the key to resolving any environmental problem is an aroused, informed citizenry. Strong public support for a rare or

endangered species program, coupled with a clear understanding of basic ecological principles, is of utmost importance in maintaining a healthy environment and our wildlife heritage. Informed citizens realize that the passing of any animal, no matter how small or insignificant is an indicator or symptom of our rapidly deteriorating environment. Maybe the passenger pigeon, the schools of grayling and the regal plains grizzly of a century ago were trying to tell us something.



Snow Is Deep!

Ninety-three inches of snow has fallen at West Glacier, Montana, the headquarters of Glacier National Park. The maximum snow depth was 58 inches on January 24 and 25. The present snow depth is 54 inches.

The deep snow has driven the deer and elk down to lower elevations along the park roads, creating a paradise for photographers and people who want to see wildlife.

William J. Briggie, Superintendent of the park says, "We encourage winter use of the park by visitors; however, we urge them to exercise caution near the wildlife."

"The deep crusted snow makes it difficult for the animals to evade people, has weakened the animals, and made them sensitive and tense."

"Visitors will encounter many of the animals in the roads. Rather than attempting to climb the high berms, they stay on the roadways."

Last weekend a visitor encountered an elk on the road near Sprague Creek. The elk climbed the berm and ran out onto the lake. As the cameraman tried to get closer, the elk retreated further out onto the ice and broke through. Park rangers were unable to recover the animal alive."

"Ecological stresses on elk, deer, and moose are greatest during severe winters," Briggie added. "Although the action of predators serves to relieve these stresses, the activities of man can tend to intensify stress for individual animals. This is the case when harassment or viewing from close distances forces animals into deep snow or onto lake ice."