

Haystack Mt.- A Case Study

by Marice Doll

Haystack Mountain swings on a balance scale. On one side tips a herd of 300 elk and on the other, economic income from 15,000 skiers.

Haystack Mountain abuts the northern boundary of the Maroon Bells-Snowmass Wilderness near Aspen, Colorado. The Forest Service did not include Haystack in the original wilderness boundary in the 1950's because its scenic grandeur was not as striking as that of the surrounding mountain peaks. (Haystack elevation is only 12,206 compared to surrounding peaks in the 14,000s.) Five years ago the Sierra Club petitioned the Forest Service for Haystack's inclusion, but the Service preferred its use as public land for grazing.

Now the Maroon Bells-Snowmass area is rapidly becoming a "wilderness ghetto" as evidence shows its heavy use by hikers, fishermen, backpackers, photographers, naturalists, cross-country skiers and snowshoe trekkers. For this reason, conservationists want the approximately 4,000 acres of Haystack included in the Maroon Bells-Snowmass Wilderness.

In the wake of this request comes giant Aspen Ski Corporation with D.R.C. Brown, president, who finds the Haystack slopes ready-made for another ski area. With a holding capacity for 15,000 skiers, this means 14,000 acres would be affected with the land boom that usually coincides. The Corporation sent its recommendations to the White River National Forest, wherein the area is located, and was soon thundered upon by Colorado conservationists.

Robert Child, landowner in Old Snowmass, led the immediate opposition, and sent to the Forest Service a signed statement from property owners in the Pitkin County area opposing any commercial ski development on Haystack Mountain. Landowners of all but 361 acres of the 25 square miles signed. Of the 361 acres, 281 are already controlled by the Ski Corporation.

"If made a wilderness area, its uses would be available to more people, instead of the wealthy few who can afford downhill equipment," Child explains for the opposition. "If it becomes a ski area, it has only one use."

Near the base of the mountain rests the St. Benedict Monastery for Trappist monks who chose the area for its solitude and silence. With the possible advent of a ski area located next door, the monks would have to move.

"And so would the elk," Child hastens to add.

In 1930, elk were transplanted to Aspen after they had been killed off in the early, 1900's by hunters. A ski slope is not considered ideal range for elk, which now number about 300. Also affected are the smaller animal and bird species and deer, bear, grouse, squirrels and hares which find refuge and cover in the mountain fastness.

The Aspen area is now so over-crowded with ski slopes and other attractions that stretches of the only highway to serve Aspen in the wintertime have a death rate twice that of the statewide average for similar rural roads. In addition, the water table has been dropping at a rapid rate so that people living below the great concentration of population have to drill water wells to greater depths. And, yes, Aspen does have a smog and pollution problem.

When Aspen Ski Corporation requested an initial study permit for the area from the Forest Service, they were refused because public opinion was already mounting strongly. (Such a permit allows cutting of roads and land clearing and is usually considered tantamount to final approval.)

The Forest Service did grant a Special Use Permit for the establishment of a temporary

(Continued on page 10)



Photo by Bill Sniffin

WILD HORSES IN A NATIONAL FOREST! Unbelievable but true, these wild mustangs were photographed in Wyoming's Shoshone Forest. For more on this interesting story see page 15.

Justice is prostituted!

Is Werner To Go Free?

by Tom Bell

It has now been seven months since helicopter pilot James O. Vogan went before a Senate subcommittee and revealed the illegal deaths of hundreds of eagles in Wyoming. They were shot from the skies over the Bolton Ranch owned by Herman Werner of Casper.

It has been over a year since the deeds alleged to Herman Werner were committed.

What has happened to justice?

A kid picked up with marijuana in possession is clapped into jail and almost immediately given a sentence.

A powerful and politically influential rancher commits a gross federal offense and flagrantly and boastfully flaunts his power. He has not yet been charged.

If Werner is innocent as he steadfastly maintains, why has he not demanded a speedy hearing to clear his fair name?

If Governor Stanley K. Hathway is so concerned with the image of Wyoming ranchers, why has he not personally interceded on the highest levels as he has done on other matters? It was he who used the office of Governor to request eagle killing permits for the self-same Wyoming ranchers whom he is now trying to defend.

Following the revelation by Vogan on August 2, 1971, it was announced that a grand jury would be called to investigate the whole eagle killing matter. The date set was November. Then it was announced it would be December. Then no more announcements of a grand jury - only that there would be prosecutions.

Charges against four of the gunners was finally brought in late December, and on January 14, two were sentenced. Sentencing of two others followed on January 20. All said they would be witnesses for the government.

Two more gunners were fined a total of \$300 and each placed on six months probation February 18. Norman Devilbiss and Delbert Jenkins, named by Vogan as two of his gunners, were mechanics for Buffalo Flying Service. During sentencing, both said they would cooperate with the government in further prosecutions.

Devilbiss was charged with killing 25 golden eagles and two Canadian geese from the aircraft. His attorney told the court he had been sent from Buffalo, Wyoming, to the Bolton Ranch near Rawlins "to do some predator control work on the ranch and was informed he was supposed to kill eagles."

Devilbiss claimed he did so for three weeks until he found out it was wrong. He then refused to do any more.

At the time of the hearing, U. S. Attorney Richard V. Thomas said both men would be subpoenaed "if we have any trials." But at the same time, he also said he had set March 1 as a "target date for a major prosecution." But he qualified that by saying this could be delayed.

Now, a time has been set for "about March 15." Thomas told High Country News that three more gunners will be charged. Information on them was obtained last week.

Asked if he felt he had had work pushed off on

(Continued on page 16.)

Friday, Mar. 3, 1972

HIGH COUNTRY

By Joan Bell

"A Better Tomorrow Through Technology." I'm going to have to ponder that one for a bit. I know it was the theme for National Engineer's Week. But somehow it's like flipping a lead dollar on the bar. Especially when the official proclamation says, "whereas, as an era of unmatched progress generates new problems for society, man's demand for an environment tailored to his needs grows ever more intense."

I'm a little skeptical of this tailoring approach. The way things have been going, I am not certain whether the tailoring will be for a new Easter suit for wear in a bright new world, or a coffin suitable for wear in a world too well tailored by the hands of Man. I wouldn't be quite so apprehensive if I hadn't seen some of the tailoring which had already been performed on the world I have to live in.

And yet, like most trusting humans, I am going to have to depend on the engineers and technicians who got us into this jackpot to get us back out. I would have to subscribe to what one engineer has remarked on the subject, "Tell me what kind of world you do want and I think I can make it for you. The choice is yours."

If we have allowed our world to become tailored to the internal combustion-driven automobile, the fossil-fuel burning, steam-generating electric plant, and the phony facade of a Las Vegas night club, we have nobody to blame but ourselves. Having seen the error of our ways, it now becomes our choice as to how we undo the error and proceed to make things right.

It is not that existing technology cannot set things right. The engineers have the means. The question is, do we the people have the will.

Too many people still believe the stink emanating from a sugarbeet factory, or the smoke billowing from a smokestack smells like MONEY. And too many engineers are still not willing to display the courage of their convictions - when a steady paycheck is involved.

Ralph Nader's remarks about government bureaucrats not being responsive to the people "because government is pretty much indentured to the special interest groups, the campaign-fund supporters" could be extended to many of our engineers and scientists. There are exceptions.

While GM and Ford engineers bitterly wait at the adversities put in their way by the Clean Air Act of 1970, a fellow engineer named Bill Lear has done the impossible. He had developed a virtually non-polluting steam turbine, using \$12 million of his own money. He says he can make the engine for cars in 3 to 4 years. The bus-sized model will be available sooner. The engine will run on kerosene.

But can you see the wave of dismay which will take hold of the petroleum industry. From stockholders, company presidents and boards of directors right on down to gasoline service station operators, the mighty howls will shake our economic foundations. So, too, howled the buggy-whip makers around the turn of the century.

A news release is just out extolling the virtues of the fuel cell as a satisfactory, non-polluting alternative to steam-generating electric plants. Can you picture any one of the hundred or so, solidly-entrenched giants in the utility industry wildly cheering the success of a home-appliance, fuel cell generator. Especially one that could conceivably operate from the methane gas coming from decomposing human or animal wastes. How dare the engineers negate all the investment in plants, transmission lines, and other inventory. Beside what would they then do with all of the coal in the Powder River Basin of Montana and Wyoming? Think of the waste if it were allowed to lay there until some future generation might find a need for valuable chemicals.

The Army Corps of Engineers and the beaver-minded engineers of the Bureau of Reclamation have done more to tailor the environment than any other comparable group. They are still at it.

Recently, a Nader Task Force did a study entitled "Damming the West," centered on the activities of the Bureau of Reclamation. It found (p. 108), "that the Bureau ignored technological progress in its electric power and M&I benefit evaluations. BuRec assumes annual power benefits are equal to the annual alternative cost of power over the life of the project, generally 50 to 100 years. However, the alternative cost 30 to 40 years from now may be much less than the alternative cost of current sources of power. Cheaper methods of generating electricity are constantly being developed. The Federal Power Commission recently concluded that the following advanced methods of producing electricity will be technically feasible by 1980: thermoelectric generation, thermionic generation, fuel cells, and magnetohydrodynamic (MHD) generation."

Thus, the hydropeaking power units proposed by BuRec in Wyoming in conjunction with the coal development in the Powder River Basin may already be outmoded. They want to build pumped-storage units above Buffalo Bill Reservoir near Cody and above Tongue River Canyon near Sheridan. And so more of our environment would be tailored - prostituted on the altar of progress by well-meaning engineers who can't think beyond tomorrow.

A man who should know, S. David Freeman, director of the energy policy staff of the President's Office of Science and Technology, says the United States and other nations are playing "Russian roulette with life on this planet by inefficient use of energy resources. . . Future generations may well curse us for being so wasteful."



Photo by Laney Hicks

A landscape tailored by man near Kemmerer, Wyoming. These man-made ridges and valleys are part of the coal-stripping operation of Kemmerer Coal Co. for Utah Power & Light.

Letters To The Editor



Peace Corps

8c
United States

Editor:

Thanks for keeping us reliably informed about your area. I use summaries and notes from your paper in our Audubon newsletter - Leaves.

Thanks much for your good work.

Mrs. Eva J. Price
South Bend, Indiana

Editor:

Enclosed please find \$10 for my 1972 subscription to your fine paper. I find your no-holds-barred articles both informative and very enlightening. I hope God continues to give you the strength necessary to keep up the good work.

My special interest lies in the Sawtooth Mt. area. After three years of extended backpacking in those beautiful mountains (including a solo hike of 10 days from Atlanta, Idaho, to Stanley, Idaho), I find that I have a very definite stand to take in regard to their future. I very much favor

High Country . . .

If we are playing deadly games, it is because our technology is still being misdirected. Far more of our energy could be coming from environmentally safe, non-polluting natural forces - the sun, the wind, and the escaping gases from wastes which now pollute our atmosphere. Should these be our choices, they would be economically as well as environmentally feasible. The time is now for some hard decisions.



HIGH COUNTRY NEWS

Published bi-weekly at 140 North Seventh Street, Lander, Wyoming 82520. Tele. 1-307-332-4877. Copyright 1971 by HIGH COUNTRY NEWS, Inc. 2nd class postage paid at Lander, Wyoming 82520.

Material published in HIGH COUNTRY NEWS may be reprinted without permission. Proper credit will be appreciated. Contributions (manuscripts, photos, artwork) will be welcomed with the understanding that the editor cannot be held responsible for loss or damage. Articles will be published at the discretion of the editor.

EDITOR	Thomas A. Bell
OFFICE MANAGER	Mary Margaret Davis
CIRCULATION MANAGER	Marjorie Higley
Subscription rate	\$10.00
Single copy rate	35¢
Box K,	Lander, Wyoming 82520

having them declared a WILDERNESS AREA along with the White Cloud Peaks as defined in the Wilderness Act of Sept. 3, 1964. I strongly oppose making a National Park of this area. The reason is simple. I do not want to backpack in an area where the animals are so totally protected that they have lost their fear of man to the extent that bears will raid your camp right in daylight and in full sight of a group of people. I believe in hunting in any area enough to keep the animal population under control and wary of man.

Another stand I would like to take is against the huge proposed strip mining operations in the so called desert areas of Wyoming. Also, I am dead set against the clear cutting timber harvest concept.

Thanking you again for your courageous stand against the desecration of our wilderness heritage.

Sincerely,
Jack E. Norton
Grand Rapids, Michigan

Editor:

In my opinion your paper has been considerably improved since its "change of policy" a year ago when you decided to drop advertisements and become completely independent. And I don't think anyone grieved much over the increased subscription rate.

Before the change, I had the feeling at times that there were features included that were somehow out of keeping with the overall spirit of the paper. One case in point: snowmobiling. I suspect that the majority of the paper's readers feel, as I do, that a fraternal treatment of mushmooing, machine-age sport is best avoided in an environmental paper that stresses the value of preserving quietness and solitude in the back-country. I am glad that you have quietly dropped the sport from your coverage, and I hope the policy continues.

Del Owens
Brown University
Providence, R.I.

Editor:

I am interested in knowing more about your publication. High Country News I read an advertisement about it in the "Michigan Out-Of-Doors" magazine.

I teach a high school class in environmental problems, called "Michigan Conservation." I also publish a monthly bibliography for teachers called ECOSOURCES. I try to keep the material

(Please turn to page 15.)

Guest Editorials



Printed from the OIL & GAS JOURNAL, Feb. 21, 1972.

The Dawning Age of Sulfur

by G. L. Farrar

There's a current song which is popular in the U. S., and apparently around the world - The Age of Aquarius. Like so many popular songs, the words consist about 95% of one simple refrain - "This is the dawning of the age of Aquarius, the age of Aquarius, the age of Aquarius," etc.

These lyrics began running through my mind in The Hague, Holland, recently. Some Dutch oilmen had been discussing energy requirements in Japan, where sulfur restrictions on fuels and slack gas rank with the world's most stringent.

"Ah, yes," said one of the men, "soon we must all follow the Japanese lead, and on an international basis at that. Already, many of the lakes in Sweden have a pH of 4, and there have been rain showers where the pH measured 2."

(pH is a measure of acidity. A pH of 7 means exact neutrality. Smaller numbers mean greater and greater acidity.)

I whistled softly. "That's dilute sulfuric acid, except that the showers were not so dilute. I didn't know Sweden had that much industry," I mused.

"It doesn't," he said. "That's just the point. The prevailing winds from northern Europe blow across the North and Baltic seas. SO₂ laden air arrives in Sweden, and the SO₂ is dissolved in moisture which later precipitates.

"Sweden has asked North European governments to immediately cut total SO₂ emission to one-half, and eventually to one-tenth. Then the absolute value of this 10 percent should never rise, according to the Swedish request."

That's when the Aquarius lyrics crossed my mind. Only I substituted "sulfur" for Aquarius.

The age ahead will be the sulfur age. This will be the most prevalent industrial commodity. According to a spokesman from the Sulphur Research Institute of Alberta, supply will exceed demand by millions of tons per year, at the present "depressed" price of about \$11/ton.

"It's only when sulfur can be had for, say, \$5.5/ton that we can envision world demand

equaling supply," says the SRIA spokesman. "Then we can use it more extensively in fertilizers, and it can begin to compete as a road-building and building-construction material."

This occurs at a time when the oil and energy-producing industries must make huge outlays to reduce air pollution. They cannot begin to recover the cost of these facilities by selling sulfur at \$5 to \$6/ton.

So we have yet another reason why "cheap" energy will soon be a thing of the past. This and all other costs of doing business must ultimately be passed to the consumer.

International control of sulfur oxide production level. Sizable increases in the already huge world stockpile of sulfur. Research into new methods for sulfur utilization. Passing the incremental cost of sulfur removal to the ultimate energy user.

This is the dawning of the age of sulfur, the age of sulfur, the age of sulfur...

Reprinted from the DESERET NEWS,

Feb. 21, 1972.

Make Them Pay

One of the fastest and most effective ways to abate pollution is to make the polluter pay for his own pollution.

Certainly those who generate pollution should not get a free ride, with the taxpayers forced to pay for cleanup later. Of course, manufacturers can be expected to pass abatement costs along to the people who buy their products. But then pollution control costs should be regarded as much a cost of doing business as are labor and transportation costs.

Indeed, once pollution costs are passed along to consumers, the market system ought to signal producers to concentrate on those products and processes which take little toll on the environment.

That's why many conservationists were hopeful last year when the Nixon administration announced it planned to tax industry for the sulphur dioxide it emits into the atmosphere.

But those high hopes turned into sharp disappointment after the administration finally unveiled the specifics of its proposed tax last week.

At first glance it might seem only common sense to charge a higher tax for sulfur dioxide emissions in dirty areas than in those parts of the country where the air is still comparatively clean. That's the idea behind the provision that the proposed tax would not be applied in those parts of the country where the general atmosphere is already cleaner than existing federal standards require.

But as The Wall Street Journal notes, "the virtual exemption from the tax in clean-air states could have the effect of attracting high-polluting industries into those areas" - located mostly in the West.

That's not all that's wrong with the tax outlined by the administration. For one thing, the tax is not high enough, even in the dirtiest areas. The Coalition to Tax Pollution reports that much abatement costs more than the proposed levels of 15 cents per pound of sulphur in the dirtiest areas and 10 cents in areas where the air is cleaner.

For another thing, there would be no tax until 1976 when, by law, higher standards for clean air are supposed to be met anyway.

That's why the coalition - an organization of major environmental groups such as the Federation of Western Outdoor Clubs, the Sierra Club, and the Wilderness Society - are pushing for an alternate tax bill that has been introduced by Sen. William Proxmire.

Under the Proxmire bill, the tax would be raised by five-cent increments over the next four years to a level of 20 cents - enough to pay for the costs of abatement.

Moreover, the tax would be applied uniformly across the entire nation. That makes sense not only because it would deter dirty industries from moving to clean-air areas but also because air pollution travels great distances. For example, meteorologists have traced air pollution in Oklahoma to smoke stacks in Wisconsin, Illinois, Indiana, Ohio, and West Virginia.

Let's not allow a good principle to get lost because of the administration's inadequate pollution tax proposal.



Reprinted from THE IDAHO STATESMAN,

Boise, Feb. 1972.

Bounties Are Bad

An Idaho House-passed bill which establishes a \$7.50 bounty on coyotes apparently has struck a responsive chord among thinking Idaho sportsmen and livestockmen. The chord: They don't like it.

The Boise River Cattle Association last weekend passed a resolution opposing HB 378. Most other cattlemen throughout the state have similar sentiments. Their reasoning is correct. If coyotes are to be controlled, the job should be left to professional hunters.

Sportsman's groups in Eastern Idaho also are concerned. They feel the coyote bounty bill would dilute Fish and Game Department funds that could be better spent in more constructive programs.

Idaho laws presently require the Fish and Game Department to pay \$12,000 annually to a Predator Control Fund for destruction of predator animals. But the department says it actually has been paying \$25,000 annually in recent years.

The state monies, along with contributions from the Sheep Commission, are provided as part of a fund for U. S. Bureau of Sports Fisheries and Wildlife administration of predator control. Last fiscal year, the U. S. agency employed 24 professional predator hunters. According to the bureau's annual report, 3,911 coyotes were killed in Idaho the last fiscal year. In addition, 256 bobcat and 30 bear were killed.

The hunters are assigned by district, concentrating on those areas where predator problems are most prevalent. They work on a "trouble call" basis.

Idaho sportsmen should be quick to recognize the tenuous position HB 378 might place on landholder-sportsman relations. Most private landholders are willing to let sportsmen hunt if they ask permission and demonstrate respect for private property. But 12 months of hunting coyotes by amateurs spurred by a \$7.50 coyote bounty is too much a risk for any land owner to take. The amateur would be likely to hunt where the animals are most prevalent and not where the livestock-predator problems exist.

Even if one were to ignore the biological studies of coyote control which demonstrate the futility of bounty hunting, HB 378 still is a bad bill.

It is bad for the cattleman, the farmer, the outdoorsman, the hunter who values trespass privileges and the average guy who enjoys the outdoors knowing that high caliber rifle bullets will be flying only during the regular hunting seasons.

Coyotes can be hunted year around now, but there is no bounty and therefore little incentive by the general hunting public to shoot them. The bounty bill would open a can of worms that would benefit a select few at the expense of the majority. It should not be passed.

Reprinted from Casper STAR-TRIBUNE,

Wyoming, Feb. 22, 1972.

Keep It Clean

Wyoming has no copper smelters emitting sulfur, but the recent administration proposal to tax sulfur pollution at the rate of 15 cents a pound may be cause for concern.

The tax won't apply to clean air states like Wyoming, where the ambient air - the general atmosphere - is already cleaner than existing federal standards.

All but two of the 15 copper smelters in the country are in the West, spewing four million tons a year of sulfur dioxide pollution, notes the Wall Street Journal. This compares with 25 million tons of sulfur emissions from 800 power plants.

Yet, overall air contamination in these uncrowded states is still far below the maximum pollution levels set by the federal standards.

This would seem to offer an incentive to polluting industries to locate in states like Wyoming. The air in Wyoming, it is estimated, could get 10 times dirtier before it exceeds federal standards. Thanks, but we like it the way it is.

While we don't expect any copper smelters, we can look forward to a dozen big coal power plants springing up in the next decade. These, too, can emit sulfur.

The Coalition to Tax Pollution, representing a number of environmental groups, has called the administration proposal distressing, and is seeking a tax of at least 20 cents a pound on sulfur emissions. This would provide a greater incentive to scrubbing out the sulfur from stacks. It would be graduated in 5 cent increments to 1975, giving industries time to comply.

But the point is, there should be little or no degradation of the atmosphere anywhere. Sulfur pollution can remain in the atmosphere for a week or longer and drift across several states. Sweden, for example, reported severe damage from sulfur in rain far from the source of the pollution in England. An air pollution episode in Oklahoma was traced by meteorologists to emissions in Wisconsin, Illinois, Indiana, Ohio and West Virginia.

Wyoming is a clean air state. Let's keep it that way.

Box R. K. 10520

The Environmental Effects of Nuclear Power

Part 1: A Growing Controversy, Radiation Effects

In the twenty years since a string of light-bulbs was lit by power flowing from a nuclear reactor, atomic power has assumed new importance. The insatiable demand for electric energy has put increasing emphasis upon the atom to provide more power. But such emphasis has brought serious questions. Will proliferating nuclear power plants raise radiation to dangerously high levels? How do you safely dispose of great amounts of deadly radioactive by-products? Will thermal pollution from great numbers of plants seriously degrade the environment?

The full answers are not yet forthcoming. But there is also a serious lack of good general in-

formation about atomic power. It is in this context that HIGH COUNTRY NEWS begins a series on The Atom and The Environment. The series was originally written for The Intermountain Observer, and is reprinted here through the courtesy of the OBSERVER and the author.

The series was written by Pete Henault, an atomic scientist at the National Reactor Testing Station at Arco, Idaho, near Idaho Falls where he makes his home. He also happens to be one of Idaho's most dedicated and outspoken conservationists. The views he expresses here are his own and should not be presumed to reflect the views of his employer, Argonne National Laboratory.

The editor.

by Pete Henault

He Wears Two Hats

by Sam Day

Two years ago, when it appeared that Idaho's Middle Snake River was on the verge of being written off as a free-flowing stream in the interests of hydroelectric power production, an Intermountain Observer reader wrote a long letter which asked, "why block the nation's deepest gorge when nuclear power is just around the corner?"

The argument, a detailed analysis of the environmental and economic case against further dam construction in Hells Canyon, was considered a novel one in those days. But in recent times it has become part of the arsenal with which environmentalists are stopping dam builders in Idaho and elsewhere.

The letter-writer, Pete Henault of Idaho Falls, went on to become one of the prime movers in the environmental movement in Idaho, both as a writer and an activist. He is president of the Hells Canyon Preservation Council, a director of the Idaho Environmental Council, an active member of the Sierra Club, an occasional witness at congressional hearings on environmental bills and an unflagging cajoler of senators, congressmen and secretaries of the interior.

As a writer and photographer, Henault has pressed his case for environmental sanity through a variety of publications. He has written major articles for this newspaper presenting arguments against the proposed Lynn Crandall Dam on the Upper Snake River and in favor of a bill by Sen. Robert Packwood of Oregon to set aside the Middle Snake and its approaches as a national river.

Henault's best remembered journalistic contribution to The Intermountain Observer was an illustrated account, last January, of an eastern Idaho rabbit drive. It demonstrated both the futility and the barbarity of such events, and it was reproduced in newspapers and magazines around the world.

Henault's record as a critic of environmental abuses is one of the qualifications he brings to the four-part story in The Intermountain Observer: the impact of nuclear power production on the world in which we live. Growing national concern over the disposal of radioactive waste and the safety of nuclear reactors has deepened the urgency of the subject. It is a controversy which finds the environmental and nuclear power communities increasingly at loggerheads.

Henault's other major qualification for the task is that he has feet firmly planted in both communities. He is a nuclear scientist whose specialty is the experimental breeder reactor - the electric power producer which lies at the very heart of the controversy.

Born at Hyannisport, Mass., Henault graduated from the University of Idaho in physics in 1961. He went to work at the National Reactor Testing Station in eastern Idaho in 1964 for Bettis Atomic Power Co. (a division of Westinghouse) as a test engineer on the Navy's prototype of the U.S.S. Enterprise reactor. Since 1967 he has been conducting safety-oriented experiments on EBR-II, the nation's only operational fast breeder power reactor, for Argonne National Laboratory.

In this series, undertaken at the request of The Intermountain Observer and timed to coincide with the 20th anniversary of the first production of electricity from the atom, Henault sifts through the welter of conflicting opinion from the Atomic Energy Commission and environmental groups to arrive at an appraisal of the hazards involved in continued nuclear power production. He was assisted in the research and preparation by his wife, De Anna.

Searching through the archives of America's first experimental breeder reactor, an Atomic Energy Commission facility known in the nuclear profession as EBR-I, an entry in the log-book for December 20th, 1951, can be found which reads:

At 1:23 p.m. Load dissipators from the Generator were connected - Electricity flows from atomic energy.

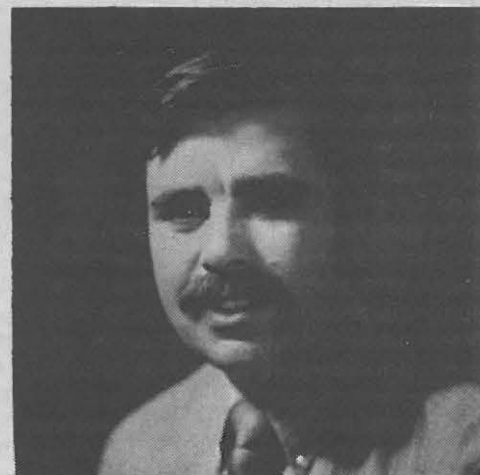
With these simple words, peaceful nuclear power was born on an unlikely sagebrush desert 18 miles southeast of Arco, Idaho. "The atom had been harnessed."

The electricity on that historic day, 20 years ago, was used to light four 200-watt lightbulbs. On the following day, the supply of outside power to EBR-I was cut off and the reactor produced in excess of 100 kilowatts, enough power to supply all of the facility's electrical requirements.

EBR-I was shut down several years ago and

was designated a National Historic Landmark when President Johnson visited the site in 1966. The facility is soon to be turned over to the National Park Service.

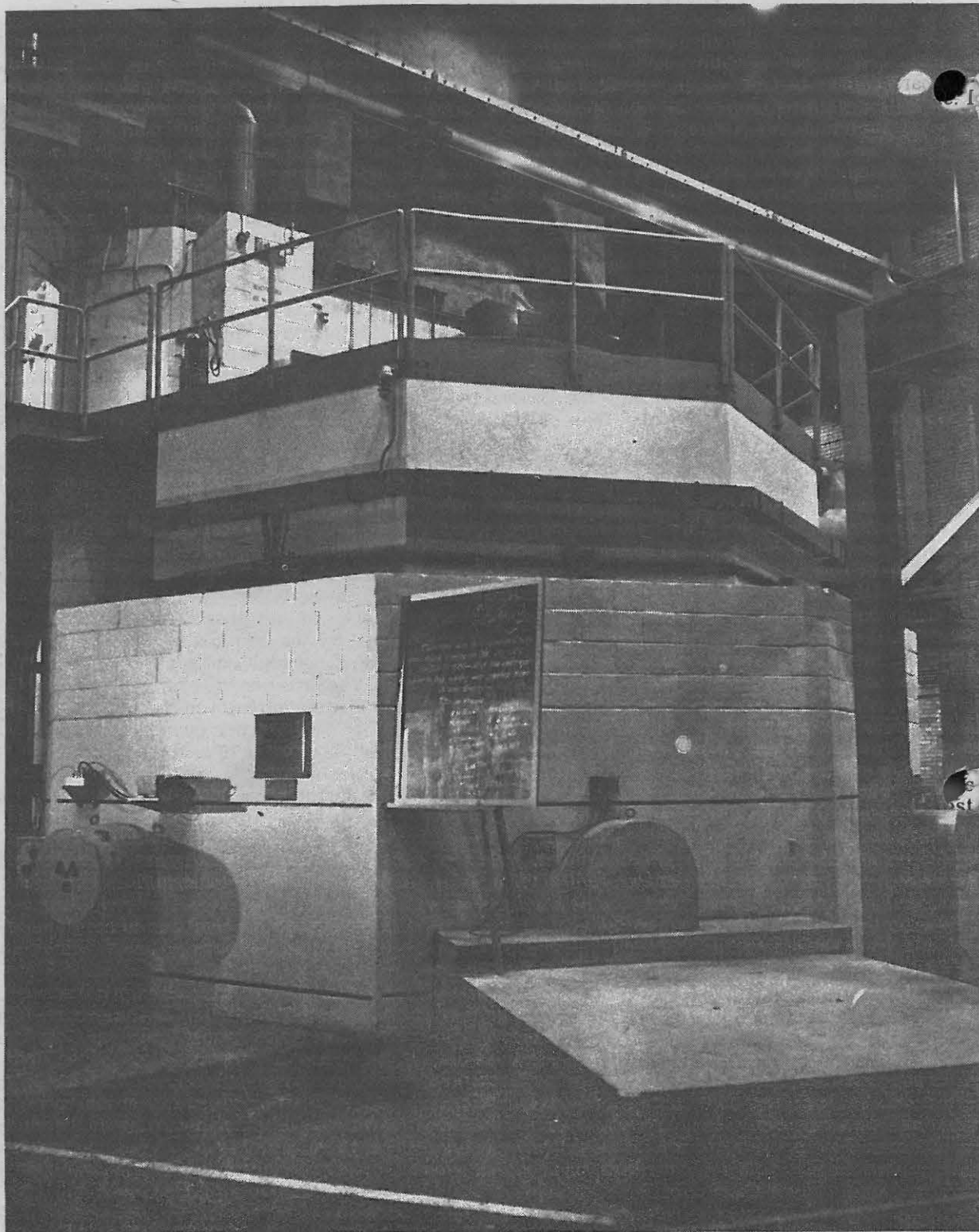
Today there are 120 nuclear power plants in operation or under contract throughout the United States and many more throughout the world. Nuclear plants are being built today which are capable of producing more than



1,000,000 kilowatts, an electrical generation capacity more than 2-1/2 times that of Hells Canyon Dam and 50 times that proposed for the controversial Teton Dam not very far from EBR-I.

Two of these plants are capable of producing more power than is now generated by all the dams on all the rivers in Idaho. They don't drown wild rivers and scenic canyons. They don't pollute the atmosphere with tons of ugly fly ash and acid-producing SO₂ for you and me to breathe. They don't need to strip mine the sacred lands of

(Continued on page 5)



Experimental Breeder Reactor-1 located at Arco, Idaho. Here, the first electricity flowed from the controlled reaction of the atom. EBR-I was designated a national historic site by President Lyndon Johnson in 1966.

Radiation... A Growing Controversy

High Country News—5
Friday, Mar. 3, 1972

the Navajo and the Hopi. They can be located almost anywhere, far away from Hells Canyon and Canyonlands and Black Mesa.

One would expect environmentalists to be grateful for that historic day in eastern Idaho 20 years ago. But they are not.

Last June, in a message to the Congress on national energy needs, President Nixon said, "Our best hope today for meeting the nation's growing demand for economical clean energy is with the fast breeder reactor." He asked Congress to make "a commitment to complete the successful demonstration of the liquid-metal fast-breeder reactor (LMFBR) by 1980" and requested an additional \$50 million to achieve the goal.

The National Wildlife Federation called the President's program a "wholesale commitment to federal promotion of the breeder reactor program, long a favorite Frankenstein of the Atomic Energy Commission" and termed the program "extremely costly and dangerous."

Shortly before the House was to vote on the appropriation, Friends of the Earth (FOE), a highly-respected national conservation organization, sent a letter to every member of Congress urging them to vote against the appropriation bill. The letter claimed that "little is known about the social and environmental hazards" and that FOE was "firmly opposed to the development of such a new and hazardous technology without the full participation of the Congress and the public in the decision-making process." Development of the LMFBR now, FOE said, was "premature."

Rep. Craig Hosmer, minority leader of the Joint Committee on Atomic Energy, responded with his own letter to each member - a very terse, indignant letter. He said, "It is an uncontroverted fact that our country is running out of power." He referred to FOE as "An organization naming itself 'Friends of the Earth'" and to their letter as a "demand." He termed their request "ridiculous."

FOE's letter, very polite actually, had said, "We urge you to vote against passage of the bill in its present form" (emphasis added)

Hosmer's letter concluded with three paragraphs:

"It is both possible and provident to develop a safe breeder reactor.

"It would be suicidal for any modern industrial nation to refuse to do so.

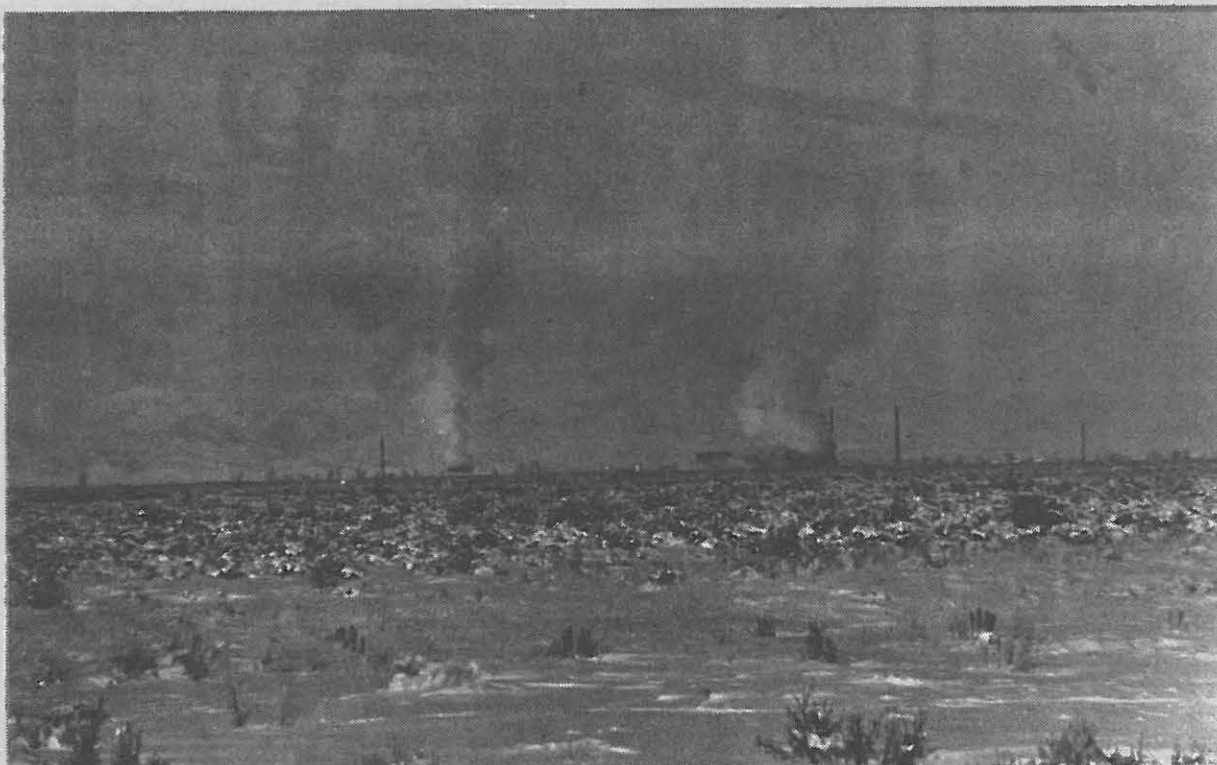
"Your enlightened support of the necessary funding is solicited."

The House, apparently not wanting to be considered unenlightened and certainly not wanting the nation to commit suicide, approved the appropriation. The AEC and the President got what they asked for and FOE was ignored. But the debate over the merits of nuclear power, and especially the fast breeder, continues.

And it is growing. The Scientists Institute for Public Information (SIPI) has recently sued the AEC for not examining the environmental impact of the LMFBR. Bills have been introduced in the Pennsylvania and Delaware legislatures calling for a moratorium on all nuclear plant construction in those states. Senator Mike Gravel of Alaska, an increasingly vocal critic of the AEC and nuclear power, has proposed a nation-wide moratorium.

Calvert Cliffs

Last July 23rd environmentalists won a major victory when the U. S. Court of Appeals in Washington, D. C. ruled in their favor on a suit involving the Calvert Cliffs reactor in Maryland. The Court severely criticized the AEC, charging that it had made "a mockery" of the National Environmental Protection Act (NEPA). The AEC was not only ordered to implement the full intent of NEPA, making the Commission responsible for evaluating the total environmental impact, including the non-nuclear aspects of all nuclear power plants, but it was also ordered to consider the environmental



Clouds of steam rise from the experimental reactors at the National Reactor Testing Station (NRTS) near Arco, Idaho. It is in the escaping gases that dangerous radiation may be allowed to contaminate air and the surrounding countryside, unless they are carefully controlled.

issues in connection with all nuclear-power licensing actions that took place after January 1st, 1970, the effective date of NEPA.

This landmark victory by a few environmentalists is changing the whole course and structure of the Atomic Energy Commission. It will affect the licensing of scores of nuclear reactors, several of which are already in operation. Plants are expected to be delayed on an average of one year and cost estimates for the delays range up to \$5-6 billion. Senator Gravel indicated a possibility that "the long-term implication of the court decision may be a permanent halt to the nuclear electricity program."

Still the debate goes on. Last month a coalition of environmental groups, led by the Southern Vermont Conservation Society, filed a class action suit challenging the very constitutionality of the 1954 Atomic Energy Act.

Maybe it's about time we began to wonder what the environmentalists are concerned about.

What are the real facts behind all the uproar?

Is the LMFBR a hazard and is its development premature as FOE claims? Is it an undeniable fact that the U. S. is running out of power as Congressman Hosmer claims and would it be "suicidal" for the nation not to develop the fast breeder? Is the breeder really our "best hope" for "economic clean energy" as the President has claimed?

Unfortunately, the answers are not simple. And, also unfortunately, too many critics and too many proponents have been attempting to give the public simple answers.

But, for the environmentalists at least, getting the truth isn't easy. Where can they go with their questions?

Obviously the AEC is the most qualified to

provide the public with straight-forward, understandable answers. They're the experts and it's our tax dollars that pay for their operations.

The American Nuclear Society should be answering the public's questions, too, and, while the majority of members often seem mainly interested in talking to themselves and commending each other's achievements, the society does address the issues through a number of periodicals and several symposia each year.

The nuclear industry and the power utilities stand to gain the most from nuclear power and, since their gain may be at the expense of public health and safety and a decrease in the quality of the public's environment, they should be helping, possibly more than any other group, to provide the public with candid answers. But their main concern is profit and corporate growth, not safety of the environment, and in our capitalistic society, it is naive to expect the profiteers to be candid.

The responsibility for informing the public must, of course, reside with the AEC. But the AEC, born in an aura of bomb-making secrecy, has found it difficult to talk to the public about what the peaceful arm is doing. Too often it has hidden behind a questionable screen of classification or retreated with a barrage of atomish language that no layman could decipher. Too often it has simply been silent, apparently hoping the uproar would go away. When it has been forced to speak, the tone of its dialogue has been, "Don't worry about a thing, we have everything under control."

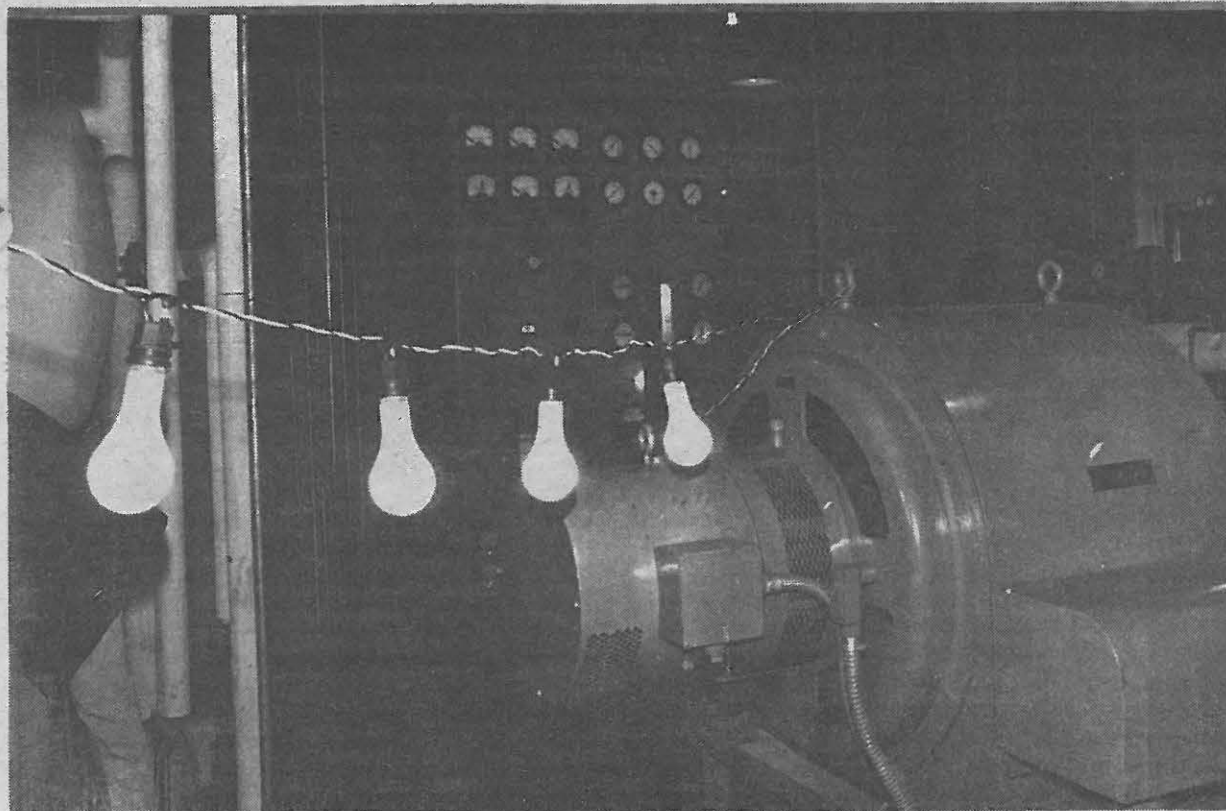
The Mysterious Atom

To evaluate the questions and answers surrounding the nuclear power controversy, and to see them in their proper perspective, it is necessary to have some knowledge of the basic facts about nuclear reactors.

A nuclear reactor derives its power from the direct conversion of mass into energy according to Einstein's famous equation, $E=mc^2$, or energy equals mass times the square of the velocity of light. Most types of energy or heat-producing reactions are chemical: reactions where the atoms that make up matter move around and change their "preferences" for each other. In a nuclear reaction, the atom itself changes its composition.

Two special types of nuclear reactions are "fission" and "fusion." The term "fission" comes from the splitting of heavy atoms such as

(Continued on page 7.)



When these four lightbulbs flashed on, it signaled the beginning of the era of peaceful atomic energy. The date was December 20, 1951. In a little more than 20 years, atomic energy is now looked-to to provide much of the burgeoning demand for energy.

Grand Teton National Park

Master Plan and Wilderness Proposal

by Verne Huser

If I devote less time to Grand Teton National Park, it is not that I feel it is in any way less important than Yellowstone because it is smaller or younger. I know Grand Teton much better than I know Yellowstone, but much of the material in the Grand Teton National Park Master Plan and Wilderness Study duplicates the Yellowstone material.

I would begin again by saying that in my opinion the Advisory Team did a thorough and comprehensive job. In the preface, the team refers to Grand Teton National Park as "a place in which the public can learn to reach a genuinely harmonious relationship with the physical environment." It goes on to say in the introduction that the purpose of the park is "to protect the scenic and geologic values of the Teton Range and Jackson Hole, and to perpetuate the park's indigenous plant and animal life." Nothing very startling or profound here.

But unlike Yellowstone, Grand Teton National Park was carved to a large extent out of previously developed lands; consequently Grand Teton is stuck with a number of prior uses that under law it must recognize: grazing permits, elk hunting in the park, an airport in the park, Bureau of Reclamation control of the waters in Jackson Lake and consequently, to a large extent in the Snake River, and a biological research station operated by the University of Wyoming, which may be the excuse for Wyoming Senator Hansen's similar but more elaborate proposal for Yellowstone. There are also private lands within the park as well as school lands that -- being in the public domain-- have in the past been open to mineral entry under the 1872 mining laws.

All these problems need to be considered in a comprehensive master plan, and the Park Service must learn to work around them. The Advisory Team calls for "An overall plan for preserving the region's prime scenic attributes" that includes "an integrated solid waste disposal plan" and "all-weather intra-regional road circulation." It proposes "to make rational responses to the public's needs."

Public needs? There is another can of worms that often includes swimming pools and golf courses, a convention center and all manner of convenience for the casual tourist, not the true park visitor. A re-tuning of park priorities is suggested by the Advisory Team, a recognition "that not all visitors seek the same experience or degree of involvement with the resources within the park." Sounds to me as though they are saying the convention center has a place in the park. I disagree if this is their meaning.

However, an important concept recognized by the Advisory Team is that "upper limits of use do exist." In that regard, the primary factor governing the use of park lands "is the mandate to perpetuate the park's ecosystems in their most natural state." This I go along with wholeheartedly. I also accept the second point, "the assurance of a quality visitor experience in each of the park's principal use zones," but disagree that it is an "equally important matter." To consider it equally important, I would have to accept swimming pools and convention centers, fancy bars and laundromats as part of the park experience, and I don't.

Another vital concept--mentioned also in the Yellowstone Master Plan--that must be the basis for curbing future development in the park: "there is a limit to the ability of the park to withstand open-ended overnight accommodation of the public. Parks are not for people if it means that public use will be permitted to the point that park values are seriously impaired or destroyed. The public must recognize that unlimited development means eventual destruction." Development ceilings have been established in the park and must be adhered to.

As in Yellowstone, regional planning suggests that, "Gateway towns would serve as primary visitor service hubs, and adjacent national forest would have an increasingly important role in the recreational picture, thus relieving Grand Teton of the necessity of maintaining and developing facilities and services inappropriate to a national park." Well-planned and controlled private enterprise outside the park rather than stopgap expansion within the park--I buy that.

While the Grand Teton Master Plan seems to lack some of the philosophical soundness of the Yellowstone Master Plan, many of its specific proposals appear to me to be sound: seeking through cooperation with the Bureau of Reclamation to return Jackson Lake to a lake instead of a reservoir, and "to ensure flows on the Snake River to provide adequate aquatic environment for the native fishes," developing an alternate means of transportation to the motor vehicle, eliminating the necessity for a

public elk reduction program in the park, to limit the airport extension to the committed 300-foot northward extension (though I personally disagree with this proposal, I recognize the Wirth Commitment--most of these proposals have to do with correcting old mistakes).

The Master Plan outlines the six classes of land use in the park presented in both the Yellowstone and Grand Teton Wilderness Studies: high-density recreation, general outdoor recreation, natural environment, outstanding natural, primitive, and historical. But in the Master Plan the Advisory Team has broken Grand Teton National Park down into three zones representing levels of visitor use: 1) through zone, a corridor embracing the highways and bisecting the valley; 2) valley zone, the valley floor of Jackson Hole; and 3) mountain zone, all the Teton Range within the park.

The mountain zone has further been divided into three sub-units: A) a trailless area between Leigh and Webb canyons with little use by man, B) the northern backcountry of primitive trails



and slightly more use (and no more trails to be built), and C) the most accessible and heavily used southern portion of the range in the park south of Leigh Canyon (the area of well-developed, well-used trails and the more popular mountaineering routes). An important philosophical statement is made at the close of the section explaining the zone concept: "Although parts of this sub-unit (C) may already have exceeded saturation levels of use, diversion of this pressure to either of the other sub-units by improving access or facilities should not be attempted." Well and good, but what do we do with the increase in sub-unit C? No ceiling seems to have been set for use in this area, though there is a suggestion that research needs to be done in this area.

I happen to believe in the sacrifice of certain lands to protect others, the national recreation area concept in which areas of high density use are sacrificed to the public for the sake of protecting areas of greater value, but I stand firm on wanting no further development of any kind to appease the tourists' lust for comfort and convenience.

I suggested in a recent column that a monorail system be developed in Yellowstone to facilitate tourist mobility. More development? Yes, but only for the sake of eliminating roads that bring in non-camping campers and cause expensive road-clearing operations every spring, a development designed to get rid of numerous present ills including the snowmobile use of the park. Is that inconsistent? I think not.

As one writer on the subject suggested, "Let's eliminate the modern day conveniences, but let's not eliminate the people for whom the park was created." I agree, but I see a monorail system not as a modern day convenience but rather as a means of eliminating greater ills.

So in Grand Teton: we may sacrifice already developed areas like Colter Bay to public use--and for some people that is the park experience--but we should not sacrifice any more of the undeveloped land, not even the 1/8-mile buffer strip recommended by the Park Service.

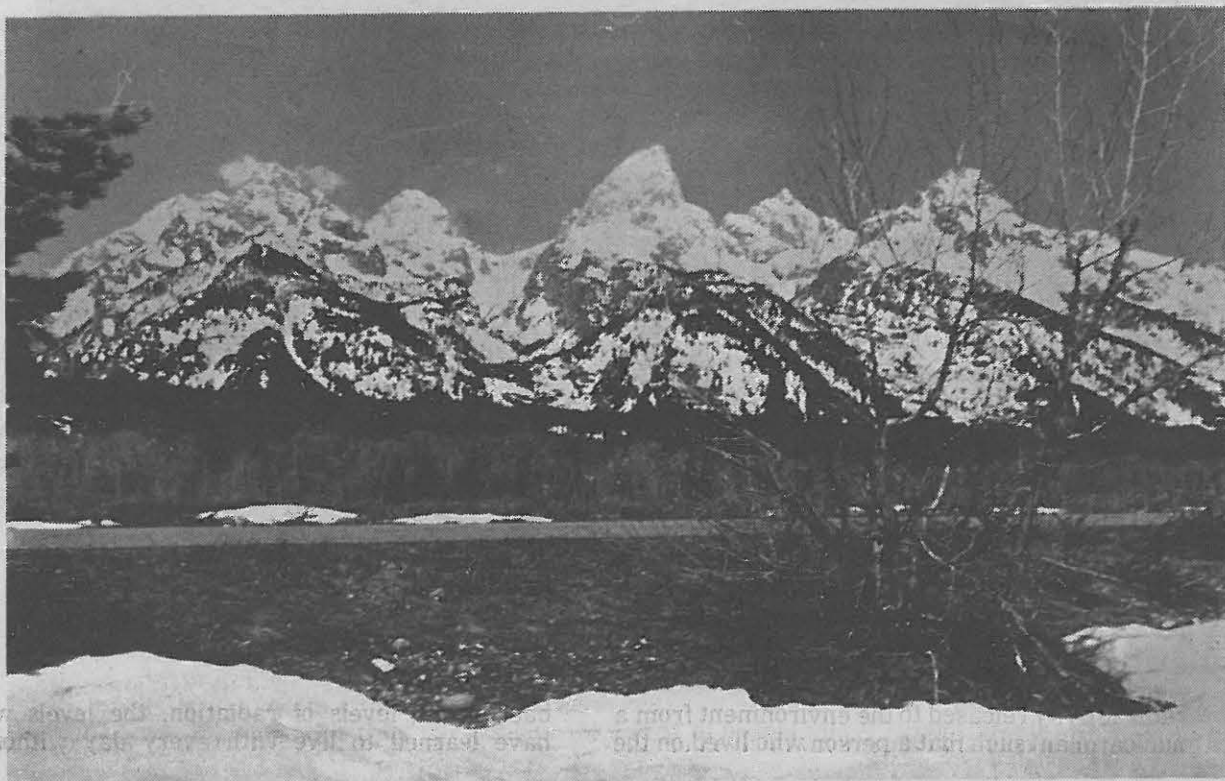
Only one roadless area of seven in the park--the Teton Range itself--has been recommended for wilderness protection although one of the areas exceeds 20,000 acres. (An area must have at least 5000 contiguous acres of roadless land to qualify for wilderness designation; all seven of the areas A-G in the Grand Teton wilderness study qualify by that criterion). Particularly Area C along the Snake River and three areas where grazing is permitted (E,F,G) belong in the wilderness (Areas F and G are adjacent to the Teton Wilderness in Teton National Forest).

Area C may deserve special attention. Much of it is open to grazing at present, but perhaps the primary reason it has been left out of the wilderness proposal is that the Snake River is heavily used by both scenic and fishing float trips. (More than 60,000 people floated the Snake in the park last summer). But the float trip is a wilderness experience, for a great many people, despite the fact that you can see and hear highway traffic from the river (you can from the top of the Grand Teton, too), and commercial airline traffic as you float down the river. (Frontier's turbo-jets shatter the quiet as they roar down the river to land at the airport in the park that is about to be extended even further into the park right now).

Perhaps Area C doesn't belong in the wilderness, but I'm afraid that without wilderness protection, it will be further and further developed to appease the tourists (developed bathrooms taking the place of existing outhouses, which took the place of bushes--but with the tremendous increase of use, certainly sanitation had to be considered). I believe it is important to set ceiling on float trip use in the park as the Park Service has in Grand Canyon. The move to a limit of 15 float trips operating in the park under a concession regulation is no doubt a move in the right direction. But whatever the case, Area C needs greater protection from development and use--or is Area C to be sacrificed too?

I must argue also with the enclave concept: 14 2-acre areas omitted from the wilderness as a concession to Rep. Wayne Aspinall's purist concept because existing structures damage wilderness values. Who has not seen a trapper's cabin or a ranger station as part of the wilderness scene? Several of the enclave areas are destined for "campground management development" which apparently "requires the use of helicopters for the removal of human waste." I recognize the problem of heavy backcountry use by man--indeed, cases of hepatitis have been traced to waters in Cascade Creek--but must we have helicopters? Have all alternatives been considered? How about the chemical toilets like those being used on Grand Canyon float trips, also under Park Service jurisdiction?

Perhaps we have to learn to live with the
(Continued on page 7)



Master Plan . . .

enclaves, but in principal I oppose the concept. Perhaps we have to learn to live with the grazing in the park—at least for the time being—but I oppose the perpetuation of that practice. Perhaps we must accept the airport in the park, but I must oppose that concept too: it doesn't belong, prior commitments notwithstanding. Maybe we even have to live with the elk hunting in the park; hopefully that abomination can soon be eliminated.

That's a lot to live with, and my objections to the wilderness proposal and to the master plan, minor though they be, pale into insignificance in the light of these more serious problems that "we've got to learn to live with."

What do you think? If the Park Service does indeed plan "to make rational responses to the public's needs," then it is incumbent upon us to participate in the hearing scheduled for March 10 (2 P.M.) at the Pink Garter Theater in Jackson, Wyoming, either by being there in person or by writing a letter to be included in the hearing record to the Superintendent, Grand Teton National Park, Moose, Wyoming 83012.

Radiation . . .

plutonium and uranium. The term "fusion" comes from the combining or fusing together of light atoms such as hydrogen. In each case the mass of the subatomic particles, after the reaction, is less than before and the difference is converted to energy according to Einstein's equation. The energy is seen in the form of heat, actually caused by friction of the atomic particles moving within the fuel structure at high velocities. The heat, of course, can be used to produce electricity. Of the several ways to convert the heat to electricity, by far the most efficient is through the use of boiling water and a steam turbine.

Nuclear power reactors, as we know them today, are really fission reactors. The atomic bomb, or A-bomb, is also a fission-power reaction but is not a controlled reaction.

An example of a fusion reaction is the hydrogen bomb, or H-bomb. Man has not yet been able to achieve a controlled, power-producing, fusion reaction although a great deal of effort has been expended in this country, the United Kingdom, and the USSR in the attempt to do so. Controlled fusion power holds a lot of promise because its fuel might come from the almost infinite supply of hydrogen in ocean water. But fusion power as a means of supplying the nation's energy needs is probably 30 years away, at least.

The heavy uranium and plutonium atoms are split, or fission, when bombarded by neutrons, one of the subatomic particles that make up all atoms. From the fission reaction, two new atoms are created and usually two or three neutrons are released. The new atoms are called "fission products" and the released neutrons are used to bombard new heavy atoms and keep the fission process going.

It is these fission products that are the cause of most of the environmentalists' concern today. They are the waste product of the nuclear reaction.

Fission products are often created in an unstable and highly-excited state. They immediately begin to decay or stabilize, giving off high-energy radiation in the process. Hence the terms "radioactive" and "radioactivity."

The radiation from this nuclear waste is much the same as X-ray but greater in intensity. If exposed to the human body in excessive amounts, changes in the molecules of the body cells can result. An altered behavior or death of the cells is likely to follow.

Too much radiation over a prolonged period can cause leukemia, anemia, leukopenia, cancer, cataracts, or genetic mutations. Exposure to extremely high levels of radiation can cause instant death but this is well controlled and is not a serious problem. It is the prolonged exposure to the low-level radiation, much like the long-term exposure to cigarette smoke or smog, that environmentalists are concerned about.

Radiation

Nobody knows how much radiation is too much. We all eat, drink, breathe, and absorb some radiation every day. Most of it is "natural or background" radiation, coming from naturally-occurring unstable atoms and from cosmic rays. Medical and dental X-rays, and even television watching, add to the natural radiation we have learned to accept without concern.

The AEC has established a limit for the radioactivity released to the environment from a nuclear plant such that a person who lived on the

boundary, drank the water in the effluent canal, and breathed the downwind air 24 hours a day every day of his life, would receive an exposure from the plant of no more than 500 millirem per year to his whole body. (A millirem is simply a unit of exposed radiation dose.) If there is a community near the nuclear plant, then the exposure can be no more than 170 millirem per year.

Recently, as a result of pressure from environmentalists, the AEC stated that the radioactivity released to the environment must always be as "low as practicable" in addition to never exceeding the above limits. Honest attempts are now being made to lower the routine release to "zero."

Drs. John Gofman and Arthur Tamplin, the two researchers of the Lawrence Radiation Laboratory that have caused much of the present uproar, refer to the AEC's limit as a permit for mass murder. They say the AEC limit should be reduced to one-tenth its present level, that exposure at the present level would produce 32,000 additional cancer deaths every year.

Dr. Linus Pauling, professor of chemistry at Stanford University and winner of the Nobel Prize in Chemistry in 1954 and the Nobel Peace Prize in 1963, supports Gofman and Tamplin:

"The arguments that have been presented by Gofman and Tamplin and that are supported by (my) calculations seem to me to require that a decrease be made immediately in the Federal Radiation Council guidelines for radiation exposure of the American people."

The AEC insists, "There is no accepted evidence of any sort of genetic or tissue damage to any human being exposed to these maximum levels." It disputes the calculations of Gofman and Tamplin, pointing out a number of factual errors and misinterpretations on which the calculations are based. One such "error," made in arriving at the 32,000 deaths figure, was the assumption that all 200 million people in the United States would be exposed to the AEC limit. This is, of course, impossible since any activity leaving the site boundary dissipates just as smoke does from a conventional power plant.

And so the debate goes on, growing larger, with experts on both sides making claims and counter-claims. The environmentalists, concerned about the quality of life but often not trained in the area of radiation biology or medical physics, are caught in the middle. Who should they believe?

Exposure

One thing the environmentalists could do is ask how the AEC limit compared with the background levels of radiation, the levels we have learned to live with every day without

question.

Cosmic rays and natural radioactivity expose every American to an average of 130 millirem per year. So the AEC limit, in effect, allows for doubling or tripling the dose that an average American might receive.

But the background level can vary greatly depending on altitude (more cosmic rays penetrate the thinner atmosphere at higher altitudes), local mineral deposits, etc. While the nation's average is 130 millirem per year, the lowest state average is 100 (Texas) and the highest is 250 (Colorado). The average in Idaho is 170.

A person living in a brick home can receive 25-30 millirem per year more than his neighbor in a wood home. A person traveling across the country by plane can get an additional dose of 2-3 millirem just from the higher level of cosmic radiation at an altitude of 30,000 feet. An ordinary chest X-ray may involve exposure to 200 additional millirem. Seen in this light, the AEC limit seems low.

But missed in much of the controversy are a few bigger questions, questions which a few responsible environmentalists are asking and which the AEC can give no satisfactory answer. What are the long-term and cumulative effects? Isn't it possible that even with this low level of fission products, exposure may lead to an eventual, harmful buildup in certain species due to concentrations in various organs, or parts of the body, or in certain species of the food chain? We know it happens with mercury, DDT, and other contaminants. Why not fission products?

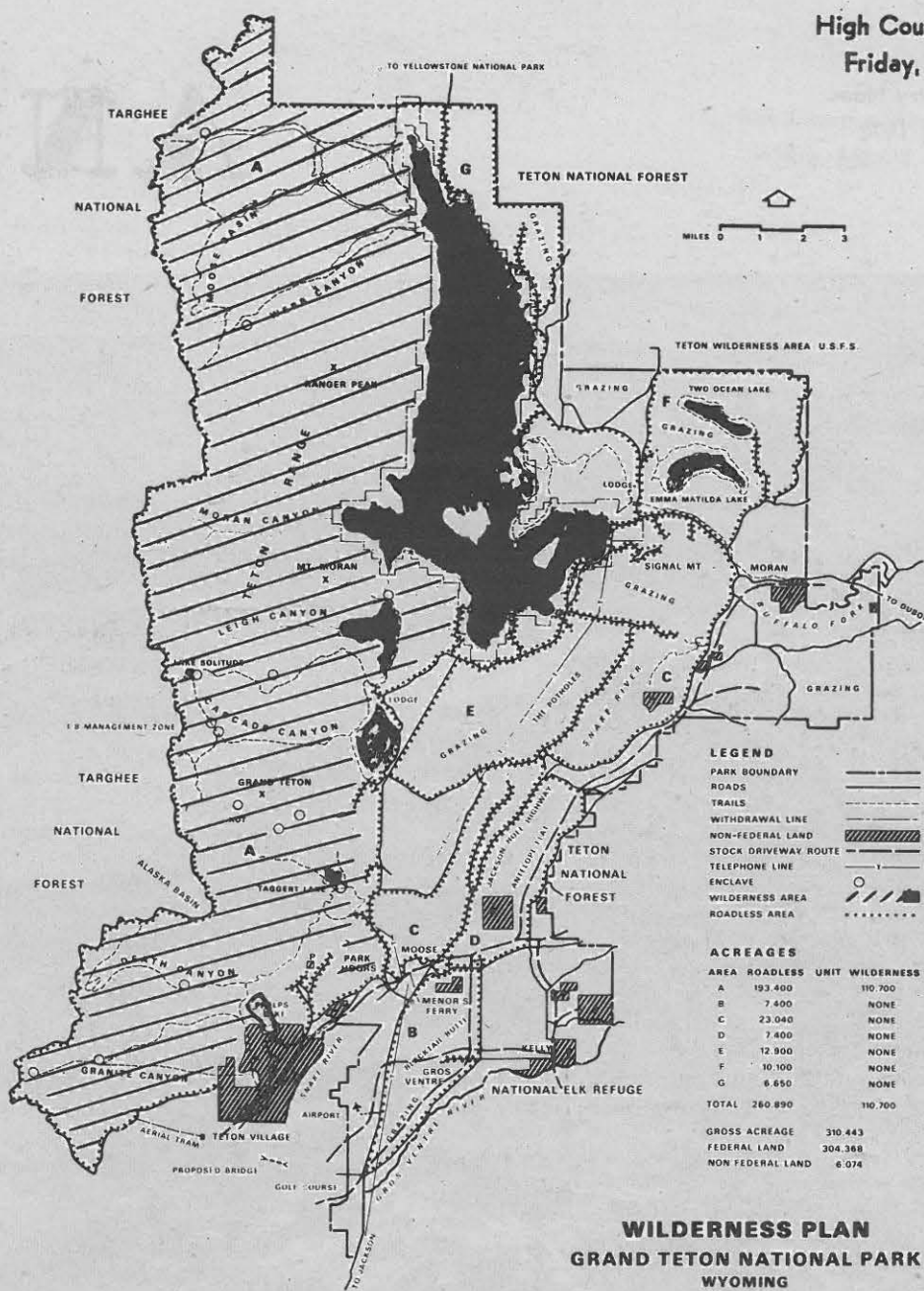
The AEC has sponsored extensive research in this area and knows that some species do concentrate, such as radioactive iodine collecting in the thyroid, and several species do not concentrate. But there are still some species for which there is not enough evidence, not enough data.

In 1871, when there weren't many factories, air pollution wasn't a national problem; will radioactive pollution be a problem when there are 1,000 nuclear plants across the country? No one knows the answers to these questions.

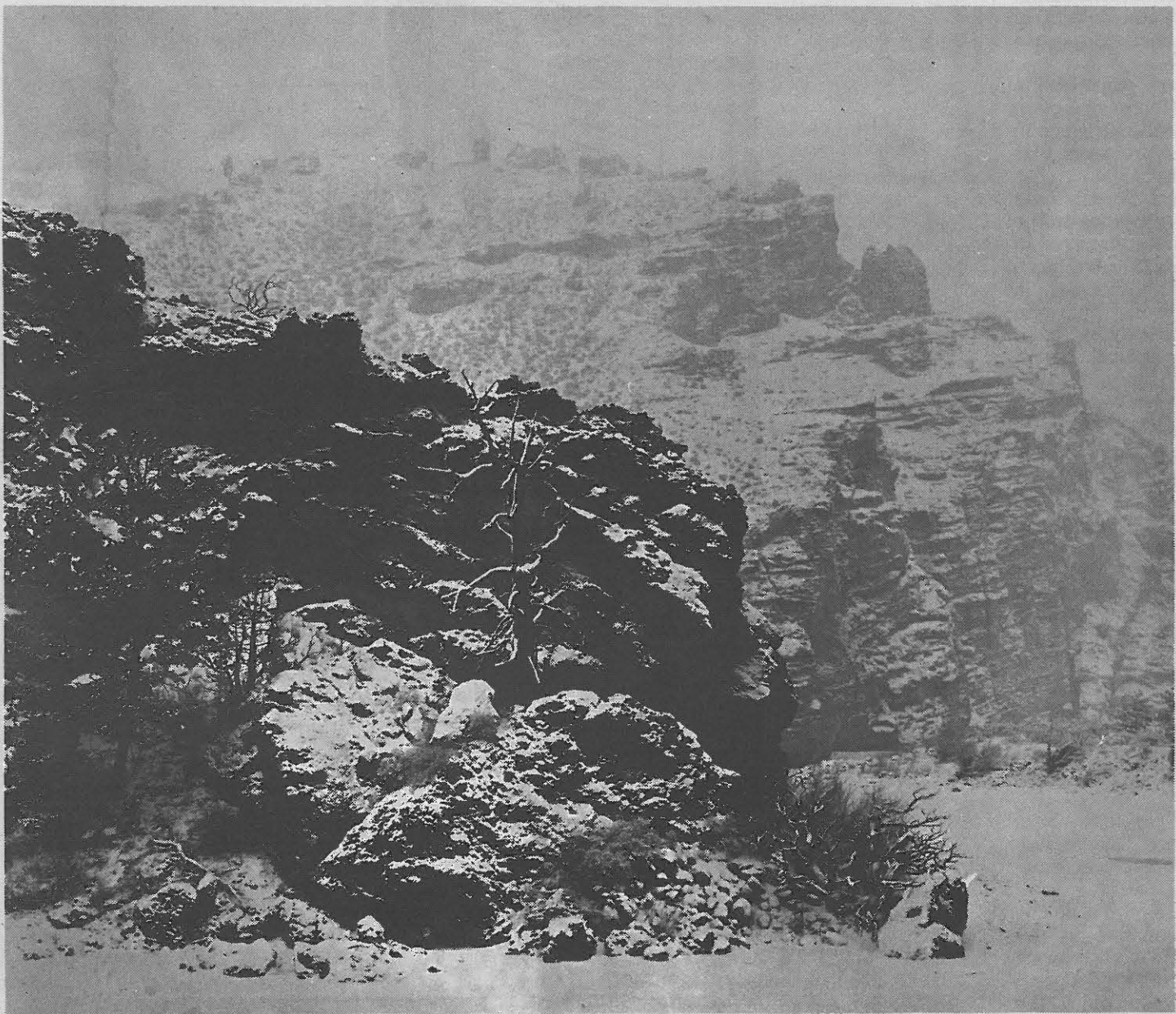
The mercury we've put in our lakes and rivers will always be there; we can't clean it up. Lake Erie is dead and the sludge that killed it is too deep to remove. We've made too many mistakes from which we cannot turn back the clock.

And we know that those who are urging caution, the experts like Linus Pauling and the environmentalists like Mike McCloskey of the Sierra Club, have little to gain if the limit is lowered. But many among those who say the limit is sufficiently low, who reassure us there is nothing to worry about, have a lot to gain by leaving the limit at the higher level. An extra two

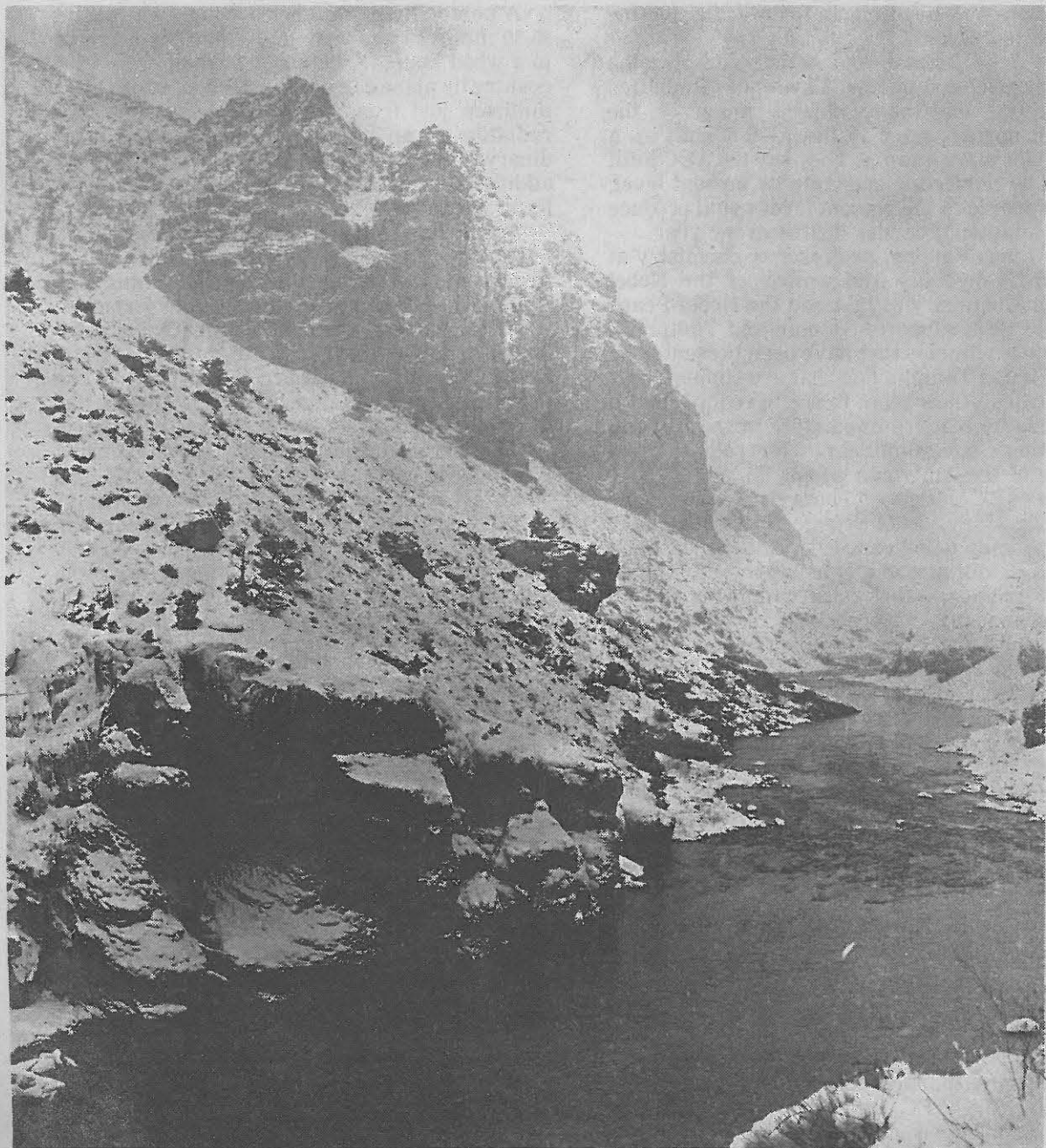
(Continued on page 15.)



ANOTHER FA



The first early-d
by bus and automobile
over Sylvan Pass. The
Wyoming, westward
North Fork of the Sho
Water by John Colter,
Yellowstone.) Since th
traversed the canyon,
here, however, is the
winter setting.

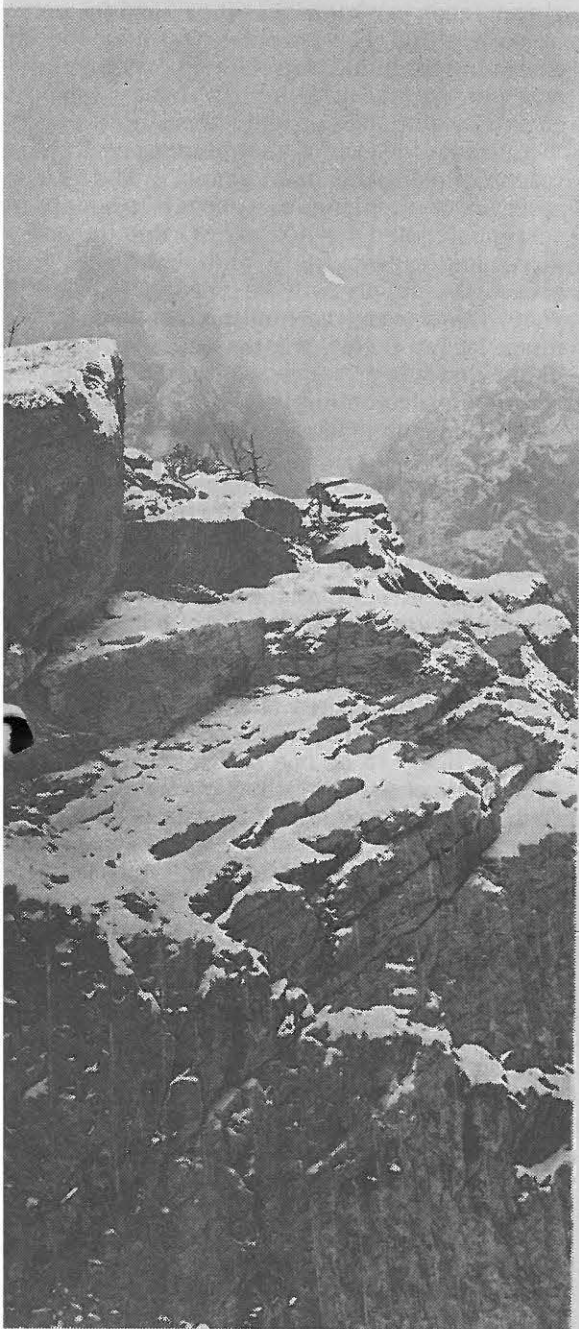


E

to Yellowstone
the east gateway
was from Cody,
canyon of the
(Called Stinking
man to set foot in
of visitors have
ummer. Shown
e canyon in its



Photos by Lynne Bama



Haystack Mt...

weather station on Haystack Mountain by the ski corporation. How much of an edge this gives the corporation for eventual control is anybody's guess, and everybody's question.

Finally, in late 1971, John Burns, the White River National Forest Ranger in Aspen, announced that the Forest Service people would conduct a review of all roadless areas to determine to what use they can best be put. The Forest Service must make recommendations to the Congress next year as to the classification of the land, including the area around Haystack Mountain on Capitol Creek in the Roaring Fork Valley. Burns has said that approximately 85-90 per cent of the public lands in the area could be used for commercial skiing under present Forest Service standards.

"Every slope in Aspen will be a ski run," opines Don Tesitor, president of Wildlife 2000, interested in saving Haystack.

In the meantime, Aspen Ski Corporation, already holding the largest lift capacity in North America - 27,460 - points to the over-crowded conditions on the slopes and stresses the need for more areas to lessen the congestion.

"The population of this country continues to grow. There is an ever-increasing interest in all type of outdoor recreation. Skiing is an important factor in the recreational needs of millions of Americans, and it makes a significant contribution to the economy of the Roaring Fork Valley," says President D.R.C. Brown.

"I don't think the Forest Service realizes some provision must be made for wildlife and wilderness, if for no other reason than to preserve a quality of life for human population," says Don Tesitor.

Tesitor with his Wildlife-2000, a non-profit scientific research corporation, will launch an independent study of the proposed ski area and its total effects on the ecology and economy of the Roaring Fork Valley. They have already enlisted the support of the Colorado Game, Fish and Parks Commission and now propose to request a five-year moratorium on any permit for skiing or any development until the study is completed.

"Scientific data is urgently needed so that the public may be aware of the impact of such developments," Tesitor states. "In that way, the decision can be the responsibility of the average citizen, as well as legislative and congressional representatives, instead of secretive decisions based on bureaucratic manipulations. In many cases, such decisions and the real impact are purposely withheld from the public until the bulldozer starts up."

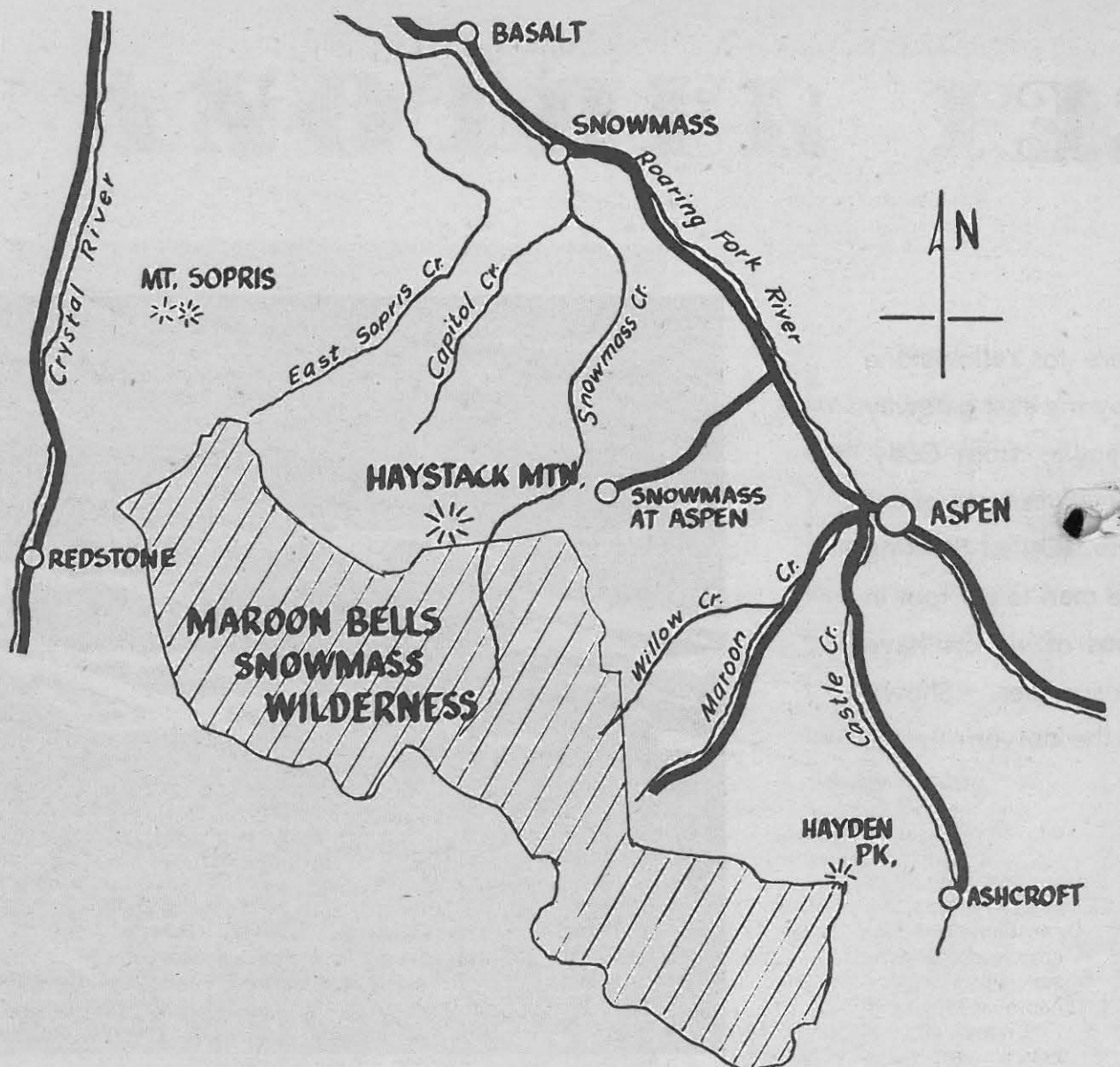
The study will target three main areas of concern:

1 - Carrying capacity for humans and their developments, based upon raw sewage pollution of the Roaring Fork River, traffic congestion and deaths, and lack of comprehensive land use plans.

2 - Enlargement of the wilderness area as relief for part of the increased recreation load while still maintaining recreational use and aesthetic values.

3 - Protection of wildlife and the herd of 300 elk. (Main runs and lifts would be placed in the normal elk migratory routes, spelling almost certain destruction for the herd and other wildlife.)

As the first public hearings begin March 6 in Aspen's Paepke Auditorium at 8 p.m., Haystack Mountain awaits its proper definition as "price" or "value."



A Blueprint For Survival

by Anthony Lewis

Copyright 1972, New York Times

LONDON - Our diverse worlds - developed, underdeveloped, east, west - have at least one article of faith in common: Economic growth.

For individuals, for economic enterprises and for nations, growth is happiness, the specific for ills and the foundation of hope. Next year our family will be richer, our company bigger, our country more productive.

Now the ecologists have begun to tell us that growth is self-defeating, that the planet cannot long sustain it, that it will lead inevitably to social and biological collapse. That was the central thesis of the recent "Blueprint for Survival" published in Britain, and it is a theme increasingly found in analytical studies of the earthly future.

The proposition is so shocking that the natural reaction is to wish it away. Some economists, the apostles of growth, do just that. There was an especially acute example of wishfulness in a Newsweek column by Henry C. Wallich, Yale professor and former United States economic adviser, condemning the opposition to growth as dangerous heresy.

"It is an alarming commentary on the intellectual instability of our times," Wallich said, "that today mileage can be made with the proposal to stop America dead in her tracks. Don't we know which way is forward?"

As long as there is growth, he said, "everybody will be happier." By "allowing everybody to have more" and refusing to "limit resources available for consumption," we shall also have "more resources" to clean up the environment.

If Wallich's opinion is representative of the American intellectual community, it is an alarming comment on our awareness of the most important facts of life today. For he is evidently in a state of ecological illiteracy.

There are no such things as endless growth and unlimited resources for everyone and everything. We live in a finite world, and we are approaching the limits. Discussion of growth as an environmental factor has to begin with some understanding of such considerations.

The crucial fact is that growth tends to be exponential. That is, it multiplies. Instead of adding a given amount every so often, say 1,000 tons or dollars a year, the factors double at fixed intervals. That tends to be true of population, of industrial production, of pollution and of demand on natural resources - some of the main strains of planetary life.

The rate of increase determines the doubling time. If something grows 7 per cent a year, it will double in 10 years. Right now world population is growing 2.1 per cent a year; at that rate it doubles in 33 years. And with each doubling the base is of course larger for the next increase. The

world had about three and a half billion people in it in 1970. At the present rate of increase, it will have seven billion in 2003.

Exponential growth is a tricky affair. It gives us the illusion for a long time that things are going slowly; then suddenly it speeds up. Suppose the demand for some raw material is two tons this year and doubles every year. Over the next 15 years it will rise to only 32,768 tons. But just 5 years later it will be 1,048,576 tons. That phenomenon is what makes it so hard for people to understand how rapidly we may be approaching the limits of growth. For as population and per capita consumption both grow, the curves of demand suddenly zoom upward.

Consider the case of aluminum as a sample of resource demand and supply. The known reserves of aluminum are enough to supply the current demand for 100 years. But the use is increasing exponentially, and at the rate of increase the supply will be enough for only 31 years. Moreover, the multiplying demand is a much larger factor, mathematically, than any likely discovery of new sources of supply. If reserves were multiplied by five, the same growth of demand would still exhaust them in 55 years.

The example of aluminum is not especially chosen to disturb, for there are others that even more dramatically indicate the way exponential growth can run up to projected limits. One is simply arable land. At the present rate of world population growth, the supply of land necessary for food production will run out by the year 2000. If agricultural productivity were doubled, the limit would be pushed back 30 years.

Those estimates are taken from draft documents of our age. It is a report made for the Club of Rome, an eminent international group of industrialists, economists, scientists and others. Entitled "The Limits of Growth," it was done by scientists using world system models developed in the Massachusetts Institute of Technology. It will be published in March by Potomac Associates of Washington.

The report's authors would never insist on any particular figure. They know that they are dealing with variables, and they have indeed leaned way over backward to make optimistic assumptions in their projections.

But every model they build assuming continuation of the present world philosophy of growth ends in collapse. To ignore the tendency, to pretend that growth can go on forever, is like arguing that the earth is flat. Only the consequences are more serious.

**STOP HEIR
POLLUTION**



Enclosed is \$10.00. Please send

High Country News

to:

Name _____

Street _____

City _____ State _____ Zip _____

If a gift, please indicate how to sign the gift card:

High Country News

Box K Lander, Wyo. 82520

Composting Does Wonders

by Peter Tonge, staff writer

At first glance it looks something like a concrete mixer. In fact, it's an oversized "kitchen blender" which in recent years has become something of a showpiece in this part of the world.

It draws people - horticulturists, agriculturists, and plain home gardeners - eager to see if it does what they've heard tell of it. Invariably it does.

On any given day Stan Bulpitt, known in this and neighboring states for his prowess as a landscape gardener, will use the 150-gallon-capacity machine to liquefy kitchen scraps and such things as discarded flowers and other soft vegetation; reduce a pile of old newspapers to pulp; or maybe grind discarded bottles into smooth sand crystals.

Little wonder nurseryman Bulpitt talks of the blender with a mixture of admiration and affection in his voice. "What that machine does for me..." is a typical phrase.

Among other things it has helped establish Mr. Bulpitt as something of a compost king around here. It has given him the background and authority to oversee the now-famous "Scarsdale experiment" in the neighboring town of Scarsdale, Connecticut - the start of what could become a nationwide municipal composting trend.

That's what he wants to see. A compost-conscious America solving its waste problems, enriching its soils, and - most important - conserving what has become a very precious commodity: water.

Under Mr. Bulpitt's direction Scarsdale began composting in 1966. Now each year it disposes of some 200,000 cubic yards of leaves and tree cuttings this way - at savings up to \$44,000 annually. In effect the town has turned a garbage glut into a sought-after product.

As a result, more than a score of municipalities from Florida to Massachusetts already have followed the Scarsdale example. Perhaps an equal number are setting up facilities so that they, too, may gather in fall's colorful harvest.

Water storing emphasized

The economics of the program and a mounting sea of leaves are spurring the trend. But it is the composts' water-storing properties that Mr. Bulpitt sees as most vital to the nation.

Rainfall, he points out, remains constant, while population figures continue to leap upward. Thus with rivers polluted, ground water is being tapped increasingly to meet the growing needs. As a result, the water table has dropped alarmingly in many areas.

Take Mr. Bulpitt's own experience. In the 1930's a shallow well could meet the needs of the nursery. Then as the water table fell he dug deeper. Finally he drilled more than 1,000 feet into bedrock to make sure of his supply. But now even this is flashing a warning signal.

When not being pumped, the water level in the borehole stood at around 80 feet below ground level - until this year. Now the gauge never reads higher than 110 feet, a drop of 30 feet in the past year. Moreover, the well used to supply up to 30 gallons a minute; "now it never gives better than 15," says Mr. Bulpitt. "People don't - and often won't - believe it, but a monumental thirst awaits us just around the corner."

Soil improvement through widespread composting isn't a panacea, though. It won't provide the whole solution to this thirst, says Mr. Bulpitt. "But it will go a long way toward alleviating it."

"You see?" Mr. Bulpitt explains, "compost is a soil conditioner with vital water-storing properties. We must have widespread composting for this reason alone."

As he explains it, good top soil will absorb water and hold it from one rain to the next, cutting down the need for irrigation. "In fact it's the best water-storage tank we can have."

But poor conservation and agricultural practices he says, have taken the spongelike qualities from the soil over vast areas of the United States. Most rainwater now simply flows to the sea - just so many billions of useless, muddy gallons.

Leaves prompted action

Another sign of the times is bint, or poverty grass, so named because it grows in poor soil. "You barely saw it 30 years ago," says Mr. Bulpitt. Today it abounds.

Water problems and soil infertility apart, much of the nation has a massive leaf problem to tackle now that incineration is banned. With land-fill areas running out, the only alternative

appears to be composting.

That's what sparked the Scarsdale move - that and the observations of Fred Crothers, a clothing manufacturer and resident of the town.

Attracted by the fame - or notoriety, as some saw it - of the Bulpitt composting operations he had frequently visited Brookside Nurseries in neighboring Darien, Conn.

What he saw, he liked. And when Scarsdale threatened to founder in a mounting sea of leaves, his comment to town officials was a terse: "Get Bulpitt. Let's see how he does it."

What Stan Bulpitt suggested wasn't easily accepted. Sanitation engineers knew from their own land-fill experience that decaying leaves could produce a gas so powerful that it would punch a hole through 30 feet of fill, and so obnoxious that working close to one of these leaks was a nauseous experience. Yet here was a gardener suggesting the leaves be left to decay in windrows - right on top of the ground!

No problem, Mr. Bulpitt insisted. Buried leaves are denied oxygen. They putrify. Leaves above ground have oxygen. They decompose with no offensive odor, indeed no odor to speak of at all. If not, who would ever tread a woodland path?

Even so the skepticism persisted. The risk was too great. So in the end Scarsdale's sanitary engineers compromised. They would compost the leaves, but no more than could be conveniently moved in a day. That way any odor problems could be quickly overcome.

But there was no need of the precaution. The compost, like all properly managed decomposition, attracted no flies, no rodents, and did not smell.

But it did, and does, attract people. Like flies to a honeypot, they are drawn particularly in the spring, to Scarsdale's so-called dump. "At less than a penny a pound (\$4 a cubic yard - 3/4 of a ton - to be exact), who wouldn't come," say the gardeners.

Each fall, Scarsdale's vacuum trucks suck up the leaves from the streets and deposit them at the town's Mamaroneck Road Bush and Leaf Disposal Area, whose parklike entrance seems more in keeping with a country club than a town dump.

There bulldozers push the leaves into windrows seven feet wide at the base (no wider or there is a risk of anaerobic decay) perhaps 15 feet high, and up to 100 yards long.

When the writer visited Scarsdale he dug about six to eight inches into a pile of leaves with his fingers. At that point, the heat from the decomposition was so intense that he could not bear to keep his hand there for more than a few seconds at a time.

All this composting effort cost the town of Scarsdale \$15,000 last year. This compares with the more than \$58,000 annual cost of a land-fill area.

"Like all things good, composting is simple," says Mr. Bulpitt, whose plant at nearby Norwalk gives the Scarsdale compost a final grinding before it is made available to the public. At this stage the original volume has been reduced to around 7,000 cubic yards.

"People keep looking for snags. There aren't any," he says. But, like anything, he warns, composting can be mismanaged.

In his own operations Mr. Bulpitt composts anything and everything that is biodegradable. That's where his blender comes in. The creamy liquefied wastes, added to the compost piles, act as a form of culture hastening aerobic action and enriching the end product with valuable minerals. The glass sand can be used on paths, he says, and the pulped paper, poured between plants makes a weed-resistant mulch.

Any edible food wastes treated this way do not attract vermin or flies, Mr. Bulpitt avers. His own operations at Brookside attest to this.

Exonerated in court

But exemplary as his composting operations were, Mr. Bulpitt became the target of considerable criticism a few years back. His nursery was a health hazard, it was charged, and he was taken to court. But the charge could not be substantiated. Official investigations showed there was no unpleasant odor, no vermin, and no more insects in his nursery than in any average garden.

Rumors abounded. "He grinds up cats and dogs in his machines," was one of them. An anticomposter, he suspects, one night shot three stones through his living room window with what police deduced must have been a slingshot. One stone traveled into the kitchen and struck the faucet with such force that the handle became embedded in the wall.

To all this provocation, Mr. Bulpitt responded: "Come and see for yourself how we operate."

The appeal had its effect. Many people did visit the nursery and the opposition largely died away. "When people know the facts about composting, their opposition disappears," Mr. Bulpitt contends.

Westfield, N. J., recently began composting operations similar to Scarsdale's. Neighboring Scotch Plains immediately challenged the move in court, claiming it an unsanitary health hazard. It was largely Mr. Bulpitt's testimony and the Scarsdale example that won for Westfield the right to continue composting.

Thus, with court backing for properly run facilities, Mr. Bulpitt sees the way open for widespread town and city composting.

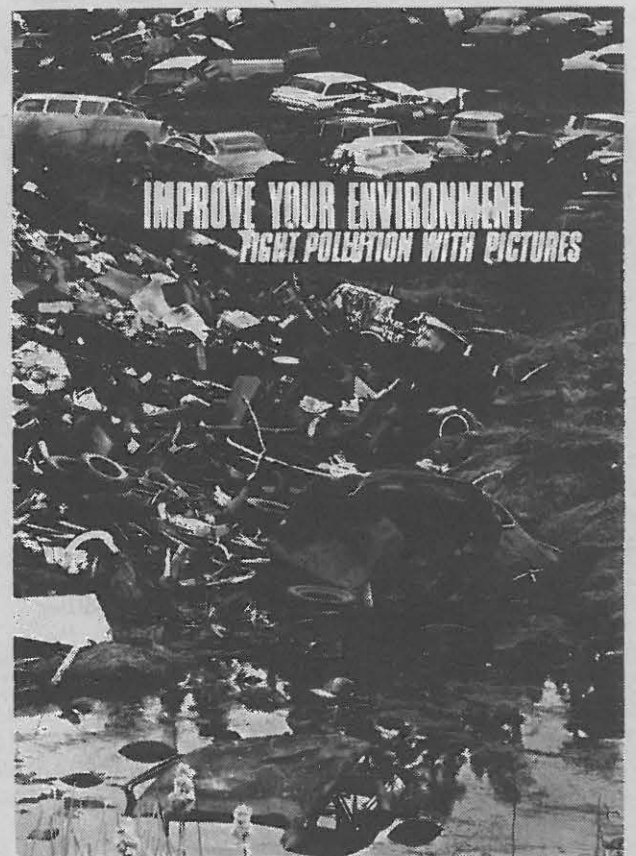
But, he hopes ultimately to see all biodegradable wastes treated this way - even sewage. Referring to Milorganite - perhaps the best known of treated nightsoil fertilizers - he says: "Why should we import sewage all the way from Milwaukee when we've got it right here?"

If the depleted soils are to be adequately restored and water shortages obviated, "nothing compostable must be wasted," he says. Another prerequisite: these fertilizers must be inexpensive.

Bag the stuff and rail it around the country, says Mr. Bulpitt, and it's like any other fertilizer in a garden store - expensive. But universal composting would mean bulk, inexpensive supplies were available everywhere - for public gardens, highway median strips, private gardens, and farms.

Scarsdale's price of \$4 a cubic yard if you fetch it, \$6 if it's delivered, could apply all over the United States, he says.

(Editor's note: Could this also be an answer to sawdust and lumber mill wastes?)



Photos Are Tools

Eastman Kodak Company has a new publication designed to help individuals and interested groups harness the power of photography as a tool in environmental-action projects.

"Improve Your Environment . . . Fight Pollution with Pictures," Customer Service Pamphlet No. AC-26, shows actual projects successfully completed by the use of pictures. The 56-page, 8-1/2 by 11-inch pamphlet, which has a list price of \$1, is available from photographic dealers or directly from Kodak.

To obtain the book, check first at stores where photographic supplies are sold. The publication may also be ordered directly from Kodak. Single copies may be ordered by sending a payment of \$1 plus state and local taxes, where applicable, to Eastman Kodak Company, Department 454, 343 State Street, Rochester, New York 14650. Interested groups may order quantities of the publication from Kodak at the following prices: Two to nine copies - 75 cents each; 10 or more copies - 50 cents each.

Projects detailed by the new publication fall generally into the categories of pollution abatement, conservation of wildlife and natural areas, and beautification.

Western..... Roundup

Atom Blast Questioned

The Wyoming Wildlife Federation is asking for additional environmental studies on the proposed underground nuclear blast near Pinedale. The blast of five 100-kiloton nuclear shots are to be fired sequentially between 7500 and 10,000 feet in depth. The test is slated for 1973.

"Project Wagon Wheel" is being done by El Paso Natural Gas in another test of natural gas "stimulation." Earlier tests, the Rulison in Colorado and Gasbuggy in New Mexico, were done with one device. The proposed Rio Blanco test in northwestern Colorado will use three 30-kiloton devices fired simultaneously.

The draft environmental statement points out that if the test is successful, El Paso will be prepared to fully develop the potential gas field. Such development would call for as many as 100 wells, all using nuclear stimulation. The maximum number of wells to be stimulated in any one year would be five to seven.

Site of the test for Wagon Wheel is 20 miles south of Pinedale and about 10 miles from Boulder. The draft statement says ground motion may be perceptible up to seven miles away. However, the statement also says persons within 25 miles will be requested to follow appropriate safety procedures. Those within seven miles will be asked to leave the area.

Jim Noble, a rancher near Cora and president of the Wyoming Wildlife Federation, claims the blast will have "tremendous environmental effects on Sublette County" and be detrimental to underground water supplies and recreational resources.

Grizzlies Decreasing

The Montana Wilderness Association has asked the Fish and Game Commission to end unlimited public hunting of grizzly bear. Cecil Garland, Lincoln, president of the Association and Mrs. Kathryn Law of the Grizzly Bear Committee, Missoula, appeared before the Commission.

Dr. John Craighead, wildlife researcher from the University of Montana, also told the Commission that grizzly bear deaths were now exceeding bear cubs being born. Research done in Yellowstone National Park and surrounding areas shows there has been a downward trend since 1968. Craighead said the ratio of older bears to cubs was increasing. He expressed concern with the dynamics of such a population.

Montana hunters have recently had license fees raised from \$1.00 to \$5.00. It is estimated that between 28 and 48 grizzlies have been killed annually for the past five years. Hunters account for about one-half to two-thirds of the kill.

Craighead says numbers are declining because of increased control and an increased hunter kill in Idaho. Other wildlife experts point to shrinking habitat because of roads and other intrusions.

Wildlife Displayed

LINCOLN, Nebr. -- A wildlife spectacle unique to Nebraska will soon begin along the central Platte Valley, as the vanguard of the annual spring migration of sandhill cranes approaches the state.

Every year, some 150,000 to a quarter of a million cranes use the Platte Valley as a staging area during their annual push to nesting grounds far to the north. While in Nebraska, the majestic cranes perform their courtship rituals, a strange display of bobbing, hopping, and much flapping of wings.

Nebraska's concentration is by far the largest gathering of sandhill cranes anywhere in the world. They are majestic birds, often standing 4 feet tall and sporting wingspreads of 6 feet. They gather in such numbers along the Platte that, in the early morning light, they seem like a gray stubble covering sandbars on the river.

As early as one-half hour before sunrise the cranes will begin leaving roosting places on the river and fly to fields, usually from one-half to two miles south of the river. Bird watchers with binoculars and photographers with telephoto lenses will have good success from their cars, and as long as they stay inside the vehicles, the birds will not be frightened.

Largest concentrations of cranes occur near Doniphan, Elm Creek, Overton, and Hershey. Peak populations of around 200,000 will occur in late March. Cranes begin departing the state around the first week of April, and virtually all will be gone by May.



Catches Big Fish

Donald M. Grover of Helena, Montana, hooked onto something big and heavy in the Missouri River last Sunday, February 20. After an hour's struggle, and assist from fishing partner Carl Blankenship, a 27 pound 15 ounce brown trout was landed. The near-record fish measured 34.8 inches long and 26 inches around the girth.

The trout was caught in the Missouri River just below Canyon Ferry Dam. The fishermen weren't talking much about the tackle, but did say it was an artificial lure.

The largest brown trout known to be caught in Montana weighed 29 pounds. This lunker was taken from Wade Lake in 1966 by E. H. Bacon of Three Forks. The world's record is probably a 39.8 pound brown trout from Loch Awe, Scotland.

Population Examined

The Nevada Governor's Environmental Council has adopted a report urging a study of how many people the state can support, and ways to keep population within desired limits. The Council, which is composed of state agency heads, says in the report, "We should carefully examine our resources and determine the number of people the state of Nevada can accommodate and still maintain a healthy environment."

It says that as long as population growth continues unrestricted, "It is inherent that our environment will continue on a downward trend."

Nevada ranks 48th among the states in number of people, ahead of Alaska and Wyoming.

Lobbying Defended

John M. Place, president of Anaconda Co., has defended his action in going directly to the President to seek intervention in establishing air pollution control standards. Place and other Copper industry executives met with White House assistants to object to state actions which go beyond federal policy.

Place said he objected to testimony from an EPA representative for state air pollution standards in Montana.

Testimony before a congressional subcommittee revealed that following Place's visit, a hand-carried letter to Montana from an EPA official resulted in deletion of parts of earlier testimony from the air hearing record.



Moose such as these have been driven by deep-snow conditions into ranchers' hay stacks in southwestern Wyoming. At Pinedale, much hard feeling has been generated between ranchers and those who want to protect the moose.

Impacts Required

Environmental impact statements may be required on grazing and other special uses of western public lands. That was the word directed to the Colorado BLM advisory board.

Burton Sillock, director of the U. S. Bureau of Land Management, told the group via a telephone hookup from Washington, "As we see it in the future, and not the distant future, environmental impact statements are going to be required on grazing, on timber, on coal, and on off-road vehicles."

Stockmen may also be jolted by another report, that of the Advisory Committee on Predator Control. That committee, from which President Nixon's executive order on poisons was drawn, said, "Ranchers assume that grazing on public land is a right, which the task force says may be an unwarranted presumption."

Bighorns Prosper

Oregon's bighorn sheep continue to prosper, including the latest transplants into the Strawberry Mountains near John Day and the Wallows in Wallawa County.

Just recently 13 bighorns were observed by Ron Bartels, district game biologist at Enterprise, in the Lostine River drainage, 12 within one mile of the site where 20 bighorns were released last summer. The animals were obtained at Jasper Park in Alberta, Canada, and are of the Rocky Mountain species. A previous release of Rocky Mountain bighorns was made by the Game Commission in Hells Canyon of the Snake with stocks also obtained from Alberta.

In the Strawberry Mountains, three bighorns were recently observed about two miles from Canyon City. These sheep are the desert or California bighorns transplanted to the Strawberry Mountains in August of 1971. The band of 21 sheep, including several rams, was trapped at Hart Mountain.

Also observed recently were 23 bighorns in the Steens Mountain area. The report indicated the animals appeared alert and healthy.

Moose Hand-delivered

Last week, Chet Mariner, editor and publisher of the Pinedale Roundup, got an anonymous 4 AM call to come down to his office. It was snowing, and awfully dark, in the little mountain town at the foot of the Wind Rivers.

When he finally reached his office, he was barred from entering. Lying in front of the door was a young cow moose, all four feet tied with rope and wire, and obviously placed there.

District game biologist Jim Straley untied the moose. After about 15 minutes, it was able to get to its feet and take off.

Mariner headlined on his paper the following day, "Thanks, Fellows! But you really don't have to go to all that work again." And reiterated in the accompanying article, "So, as I said in the heading, don't go to all of this effort to bring me any more moose - the printed sign accompanying the animal seemed to hint that I could have more - as I really have no place to keep them, and anyway they seem to do quite well running loose and wild."

The sign to which he referred said, "If you want more, Advertize."

The incident seems to have been precipitated by the small weekly paper's earlier plea to protect the moose in and around town. Heavy snows in the mountains have put more moose than usual in the lower valleys. As a result, Pinedale has a small herd of the big game animals wintering within the town and at its outskirts.

Nervous residents have been peppering the animals with shotgun pellets, and in some cases, shooting the animals with .22's. As a result, a number of moose have had to be destroyed because of the gunshot wounds.

Some ranchers are irate because of the numbers of moose and other game animals they have had to feed during the hard winter. Most ranchers, however, are sympathetic to the problems of the game animals and many are feeding them hay without compensation.

Pinedale residents generally concede the moose to be a part of their winter environment. As a result of the shootings which have occurred, several people have offered rewards for information concerning any more shooting.



A public hearing on the Master Plan and on the Wilderness Proposal for Grand Teton National Park will be held March 10, 1972 at the Pink Garter Theater, Jackson, Wyoming at 2 p.m. A series of public hearings on the Master Plan and on the Wilderness Proposal for Yellowstone National Park will be held in Jackson, Wyoming (March 11), Idaho Falls, Idaho (March 13) and Livingston, Montana (March 15).

Packets containing a draft master plan and preliminary wilderness study report for each park may be obtained from either park or from the regional office (1709 Jackson Street, Omaha, Nebraska 68102). Anyone who wishes to make a statement at the hearings is asked to notify the Hearing Office (Supt., Grand Teton National Park, P. O. Box 67, Moose, WY. 83012 or Supt., Yellowstone National Park, WY. 82190). Written statements may be submitted to the Hearing Office for 30 days following the conclusion of the hearings.

Having read both the Master Plan draft and the Wilderness Proposal for both parks, I believe the National Park Service has done a creditable job: the long delay has been worth the wait. That is not to say that I agree with everything that is proposed in either the Master Plan draft or the Wilderness Proposal. But in both parks we are stuck with some unpleasant precedents that in some cases we have to learn to live with, at least temporarily: grazing in the parks, snowmobile use of the parks, even visitor accommodations and tourist traps, and the problematic Jackson Hole Airport.

But the general intent of the National Park Service seems to have taken a turn for the better. The Yellowstone Master Plan introduction seems to resolve the conflict between protection and use by suggesting that "to have both is to have neither," and the stated purpose is "To perpetuate the natural ecosystems within the park in as near pristine conditions as possible for their inspirational, educational, cultural, and scientific values for this and future generations."

The Grand Teton Master Plan says that the park was established "to protect the scenic and geologic values of the Teton Range and Jackson Hole, and to perpetuate the park's indigenous plant and animal life." Both parks are designated as natural areas, and the intent of the Park Service seems to be to keep them as natural as possible in the face of some dangerous precedents.

As an example, fishing has traditionally been a consumptive use of Yellowstone. This use is questioned "in light of the importance of sustaining the integrity of the natural ecosystem," says the Yellowstone Master Plan (already stocking of fish has been discontinued in Glacier National Park, and the Middle Fork of the Salmon River in Idaho has been put on a catch-and-release policy for this year to insure its wild character).

In Grand Teton National Park, a catch-and-release policy has been suggested in the quest for quality instead of quantity, and the Master plan calls for management of "the native cutthroat trout so as to assure the perpetuation of a native wild population." Another goal in Grand Teton is to develop an elk management program "aimed at ultimately eliminating the necessity for a public elk reduction program" in the park.

The Park Service proposes to develop use ceilings, recognizing that "upper limits of use do exist." With three million visitors in Grand Teton during each of the past three years, the Park Service anticipated 4 million by 1975 and 5 million by 1979. The two-fold management plan calls for the protection of the park's ecosystems in their most natural state and the assurance of a quality visitor experience.

Frankly the Park Service hopes to phase out many existing facilities and uses, and the recognition of the need to develop ceilings is an important step: "there is a limit to the ability of the park to withstand open-ended overnight accommodations of the public. Parks are not for people if it means that public use will be permitted to the point that park values are seriously impaired or destroyed (italics mine). The public must recognize that unlimited development means eventual destruction."

The Master Plan, looking to the future, anticipates that "gateway towns would serve as primary visitor service hubs, and adjacent national forest would have an increasingly important role in the recreation picture, thus relieving Grand Teton of the necessity of maintaining and developing facilities and services inappropriate to a national park."

In other words, the Park Service seems to be recognizing some of its past mistakes, and it is taking positive steps to correct them. I believe that the Master Plans are both comprehensive and philosophically sound-though the implementation may have some rough sledding. Thus, it is important that conservationists throughout the nation not only familiarize themselves with the details of both the Master Plans and the Wilderness proposals but also participate in the hearings, either in person or by letter to be included in the Hearing Record.



The Latter Day Outlaws

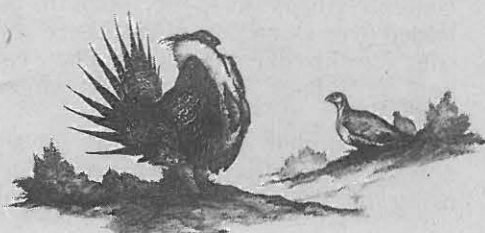
by Ed Langworthy

On the Montana ranch where I was raised we had a bookcase. It was a huge thing, towering well above the heads of my parents, and long enough so that it, together with a brick chimney, formed an entire partition between kitchen and bedroom. It was full of books, and I had read my way through about half of them by the time I was 15. There were Dickens and Thackeray and Longfellow and Lowell, and Owen Wister and Harold Bell Wright, and even, I must admit, some Zane Grey. There were five volumes of the diseases of horses, published by the Department of Agriculture in 1896 (I never quite finished those!)

But the book I remember best - the one which commanded my rapt attention all one summer - was Nathaniel P. Langford's "Vigilante Days and Ways." The prose was somewhat flowery and the detail redundant, but I read every word of this huge tome with a horrified fascination. The exploits of the Plummer Gang, the organized and calculated plots, the cold-blooded murders and stagecoach robberies, the arrogance and deceit and duplicity of George Ives, Boone Helm, Clubfoot George Lane and Henry Plummer, fired me with an emotion which could only be described as righteous indignation. The password of the outlaws was: "I am Innocent." Innocent indeed!

The book was made more vivid for me because the action had taken place in the very country we called home. The galloping bandits had rounded the same hills, the lurching stagecoaches careened down the same steep grades, the stolen gold was cached along the same creeks I was familiar with. It was my country which had been outraged. I yearned for justice. I fervently hoped for law and order. I galloped along through this book until my uncle suggested pointedly that I gallop out along the east fence and staple up the bottom wire which the sheepmen had ripped off so their flocks could share our pastures.

I sneaked the book out on the fence line and read it among sagebrush and bunchgrass, which gave it a realistic flavor. I began to ride with the Vigilantes. They organized quietly and efficiently, almost anonymously. With the exception of X.Biedler, their leader, nobody even knew their names. They had had enough. They were determined to correct the evil because it was their country, too. The peace and tranquility of the land must not be destroyed by the greed and corruption of a small minority of hoodlums. They rode them down, one by one, with relentless



Wild World...

To that end I will outline in some detail elsewhere in this issue both the Master Plan and the Wilderness Proposal for both parks. I have dwelt here primarily upon the Master Plans. The Wilderness Proposals I believe are legislatively sound though I do not agree with the concept of "wilderness threshold" or with the use of helicopters for the removal of human waste from the back country enclaves (I'm not even sure I like the idea of the enclaves, but here again we are stuck with existing structures and uses) or a few other minor points of the proposal.

Accepting present uses such as livestock grazing and Bureau of Reclamation controls, I suppose we have to go along with most of the Class IV designations, but I'd personally like to see many of the present uses abandoned-as perhaps they will be through a slow process over the years, but it seems impractical at the present to become embroiled in yet another battle with powers that be.

Don't mis-read me. I'm an old fan of Cyrano de Bergerac who believes, "Man does not fight merely to win. No! Better to know one fights in vain." But faced with the facts of life-the dam on Jackson Lake exists-we must sometimes wait, and since, "It is a fundamental tenet of national park policy . . . that where other uses have impaired wilderness values, the national parks and monuments are managed to restore the wilderness character of those areas by the removal of adverse uses."

Perhaps that is a sop to the conservationists, but I'm willing to go along with that tenet in the hope that abusive uses that erode park values, wilderness or otherwise, will ultimately be removed through continuing public concern.

persistence. They followed them day and night, winter and summer, until they had hanged nearly two dozen of them. They banished others and scared the hangers-on out of the country. Law and order prevailed. The landscape smiled again. I finished the book with a great feeling of satisfaction. I even finished the fence.

Reflecting on the book later I concluded that the Vigilantes had done the Territory a great favor. Despite the questionable legality of their methods, I felt I owed them a debt of gratitude, because my family never even had to lock their door in the thirty years they lived on the ranch. They had deep-rooted feelings of security because law and order was a deeply-established principle of that society. What the Vigilantes had initiated had been refined and civilized and incorporated into the statutes of a modern state.

Now, 46 years later, it seems to me human nature has not changed much. Outlaw types are still around. To be sure they don't mask themselves in bandana handkerchiefs. They wear expensive business suits, are polite and smiling and soft-spoken. They affiliate themselves with Good Works, and their portraits may occasionally be seen on the Distinguished Citizen page. (Plummer was sheriff, remember!) They wrap themselves in the Flag instead of old bedquilts, and explain that it is their patriotic duty to waste the natural resources in order to maintain the "American Way of Life." Do they break the laws? Of course not. They don't have to. They have become so wealthy and powerful by looting the public domain that they can buy legislatures and write their own laws. Their password is: "I am Innocent!"

But they are outlaws nonetheless. They are motivated by the same rapacity which inspired their gold-camp predecessors. They violate the irrevocable laws of Nature. They murder the very eco-systems which sustain them and us too. You know them well. They are the men who devastate watersheds and then watch that basic wealth of Idaho - water - waste away in bigger and bigger floods every spring. They destroy renewable resources in their exploitation of nonrenewable ones. They put forty head of livestock on an area which can only support ten, then wonder why the nutritious perennial grasses give way to noxious annual weeds which are highly inflammable. They bury us in waste paper, waste metal, waste glass, pollute our streams and befoul our air. They rob the future generations.

Are they innocent? You decide!

But now history is repeating itself. I seem to see a few Vigilantes gathering. Why are they gathering? For the same reasons they organized in 1863; because there are no effective laws to protect the natural treasures. If there were we wouldn't be watching the forests and the grass and the water disappear, and one species after another of our wildlife becoming extinct. These new Vigilantes are emotional. The emotion is righteous indignation. They intend to correct an evil. They love their land and they don't intend to let it be spoiled by a minority of environmental hoodlums.

Who are the Vigilantes? Not prominent people, certainly. Not rich and powerful men. They are mostly anonymous as they were in the 1860's. Small private citizens who love their land, volunteering their services to organize conservation and environmental groups, laboriously digging out data, arming themselves with facts, educating themselves and others, writing to Congressmen, joining such organizations as The Wilderness Society, The Isaac Walton League, Trout Unlimited, Friends of The Earth, The Sierra Club, Greater Sawtooth Preservation Council and many others. There are women Vigilantes too: The League of Women Voters, The American Association of University Women, The Citizen's Alliance. Don't underestimate them. They are educated, informed, articulate and persistent! Add to them the dedicated and conscientious professional conservationists in the Forest Service, Bureau of Land Management, and the State Fish and Game Departments, and you have a sizable group. They are not very well organized. Yet. But they are becoming more so. They mean business. They know that ecology is not just a passing fad or a "kick," but a fundamental principle of life which demands the allegiance of man as well as the other species.

I predict that they will win. They will win for the very reason the Vigilantes won in the 1860s - because winning is a matter of survival. And then perhaps future generations can afford to leave the doors to the natural resources "unlocked," secure in the knowledge that vigilantes are no longer necessary because effective laws have been passed to protect our homelands. Nature's law, which must inevitably become man's law, will prevail.



When the hounds of spring are on winter's traces,
The mother of months in meadow or plain
Fills the shadows and windy places
With lisp of leaves and ripple of rain.

Swinburne: ATALANTA IN CALYDON

Reprinted from THE BILLINGS GAZETTE

Wastes Make Good Soil

by Alice O. Hamilton

Composting kitchen waste to make good potting soil is a direct and satisfying recycling process. You know that at least this waste will not add pollution to the nearest river into which your city sewage is being dumped.

Start with a leaky garbage can and a plastic lawn bag for a liner. Punch a few holes in the bottom of the plastic sack so excess water may drain away.

Place a shovelful of dirt on the bottom of the sack. Perhaps a few potted plants have given up the ghost, and soil from the pots can be used for this bottom layer if no soil was put under cover last fall. Moisten the soil if it is very dry.

Start adding all the kitchen scraps such as fruit and vegetable peelings, outside leaves of cabbage and lettuce, tops of carrots, potato sprouts and plate scrapings. Paper napkins, sweepings from house and shop, dust from the

electric broom, hair, cloth, will all decompose. Dampen very dry material before adding. Avoid including fats of any kind.

Additional layers of soil should be added weekly. If large amounts of sawdust are used, a sprinkling of lawn fertilizer will replace the nitrogen required to decompose wood.

Roll the can about occasionally to mix the contents. Always keep the top of the plastic sack folded over when not filling. There should be no odor to this decomposition. The can may be kept in a back entrance all winter with no problem.

For complete decomposition for soil, plan on at least six months from starting to fill the can to using the finished product. It may take longer.



Signs of Spring

LINCOLN, Nebr. -- Someone looking for signs of spring in February would probably be branded as an unbridled optimist by most Nebraskans, but the optimist would not be too far out of line, according to wildlife biologists of the Game and Parks Commission.

Migrating waterfowl are already arriving in Nebraska on their northward trek. Meanwhile, on the local scene, many species of wildlife have already completed their mating activities, and others are making preparations for courting rituals. Some great-horned owls across Nebraska are already the proud parents of broods of brand new owlets.

Horned owls get a head start on other species with January and early February courtships. The mother owls incubate eggs in February, and are often covered by mid-winter snows while faithfully sitting on the nest.

But the early hatch is nature's way of giving young owls a better chance for survival. When the owlets begin to fend for themselves, the young of other species will just begin appearing and will make easy prey for these inexperienced hunters.

Late February also sees the arrival of northbound geese, as well as a few flights of ducks. These travelers will join other waterfowl that wintered here, before heading to nesting grounds far to the north.

Ring-necked pheasants also provide an early sign of spring. Roosters are already staking claims to the territories that will be their headquarters when they start crowing to attract hens in late March.

Thoughts

from the

Distaff Corner

By Marge Higley

I feel sort of like I'm sitting on a fence, trying to look in both directions. That fence is the predator control controversy going on between conservationists and stockmen -- more specifically, sheepmen.

I belong on both sides of the fence. All my life I have lived in or near the wide open spaces where it has been my privilege to observe and enjoy the wonders of nature. (To this day, I find that a fresh-caught trout cooked over a campfire and eaten from a tin plate is much more soul-satisfying than a filet mignon served in a fancy restaurant, although I do enjoy that, too!)

The sights, sounds and smells of the great outdoors are some of the things I have enjoyed sharing with my children. The sight of a bright spring blossom reflected in a clear mountain pool; or the sight of an eagle soaring high over the cliffs against the blue desert sky. The sound of a squirrel scolding at us from a tall pine tree; the smack of a beaver's tail as he dives when we intrude. The smell of rain-washed sagebrush, or the spicy aroma of evergreens. I hope that I may be able to share these things with my grandchildren, too. That's why I belong on the conservationist side of the fence.

The reason that I have been lucky enough to spend so much of my life in the mountains and on the desert, is because I grew up in the sheep business. So I belong on that side of the fence, too.

Just before the turn of the century, my Dad answered the call of the west and came to Wyoming from the state of Maine. He took a job herding sheep, and found both the country and the simple life to his liking. At that time the range was wide open, and before long Dad was able to start his own sheep operation which thrived for many years. When he felt that the business was well established he made a trip to Canada and returned with a bride.

The sheep provided a good living -- and a very good life. Every summer the growing family moved up to the mountains where the sheep were summered. When they were trailed to the desert for the winter, we reluctantly moved into town for school. I didn't get to learn about the desert until years later, when my husband managed the company. It wasn't always an easy life. But for me, a few hardships were unimportant compared with the advantage of spending summers in the mountains and winters on the desert.

By then, the sheep industry was not thriving as it had in its beginnings, but it was still a good livelihood. The range was becoming crowded and sheep operations were, to a great extent, regulated by the government -- the Forest Service and the Bureau of Land Management. There were, as there had always been, some winters that were severe, and some that were too dry. Some years the markets were poor; occasionally a heavy snowstorm in May killed hundreds of new-born lambs.

There were predators, but they, too, had always been with the sheep industry. Coyotes on the desert, and bears in the mountains. (I have never seen one scrap of evidence that the eagle is a predator of sheep or lambs.) When a band of coyotes bothered the sheep, they were diligently eliminated by trapping or denning. If a bear molested the herds, a trap was set, or the herder spent the night watching for the marauder over the sights of his 30-30. It was fair enough -- the predators who got into the herds were liquidated, and those who did not were left alone.

I have been away from the sheep business for the past 13 or 14 years, but am aware that the problems of the sheepman are ever-increasing. Imports and synthetics are strong competitors in the wool market. Sheep now must be trucked instead of trailed. Possibly greatest of all, is lack of adequate help. Herders no longer initiate their sons or grandsons into the art of herding sheep. Young men who several years ago might have become sheepherders are today driving tractors or erecting buildings, or attending college.

With all the problems that the sheepman faces today, why is it that the relatively minor dilemma of predator control is the one that's making all the headlines?

This is the question I have been pondering as I sit here on my hypothetical fence. Perhaps the sheepman feels defenseless against those difficulties which have been brought upon him by the changing pace of today's world. So he lashes out at the predators because he reasons that there is one woe he can do something about. After all -- predators are pretty much the same as they have always been, even in the days when the sheep industry was a thriving one.

WHAT BONE ARE YOU?

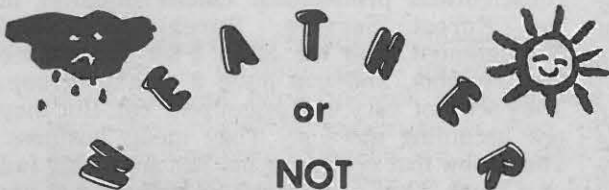
There are the WISHBONES who stand around waiting, wishing that someone else would do the work.

There are the JAWBONES who do all the talking but aren't willing to exert more than their tongues.

There are the KNUCKLEBONES who knock everything that everyone else attempts to do.

And finally there are the BACKBONES, without whom the organizations cannot exist. They pull the load and get the job done.

Audubon Newsletter



High Low

Sun.	58	32	Bright but windy
Mon.	60	42	Hang onto your hat
Tues.	54	24	Is it spring?

The snow is melting from the hillsides and pouring down washes and gullies into the river. Monday's high of 60 was a record for that date. Could Spring really happen by the end of February? It's possible -- after all, winter showed up here at the end of October!

Environmental Eavesdropper

LOONEY LIMERICKS

by Zane E. Cology

There was all this yelling and squalling
About eagle deaths. "So appalling!"
I wonder why it
Has grown so quiet.
Could it be that someone is stalling?

Rainwater samples from seven of the northeastern United States were reported by scientists to have acid levels 10 to 100 times greater than anticipated. A similar condition has been found in Sweden which receives rain contaminated by polluted air from British and West German industries. Records kept since 1915 show that rain falling in central New York was normally alkaline.

A University of Alaska engineer has proposed a simple plan to use the relatively warmer waters of the Arctic Ocean as a source of power to generate electricity. The waters would be pumped up into the colder air temperatures, and, by means of heat exchange, used to vaporize a working fluid to run a turbine.

Michigan Senator Robert P. Griffin, Assistant Senate Republican Leader, says it is vital to begin action this year on a plan to clean up the Great Lakes. He said the administration has not yet funded an anti-pollution program drawn up by EPA, and cited published reports that the administration does not intend to do so. He has asked the Office of Management and Budget to release more of the impounded \$20 million for Great Lakes anti-pollution efforts.

Washington State's Department of Ecology recently reported an oil spill of an estimated 16,000 gallons into the Spokane River. The spill came from a leak in a pipeline used by Continental Oil Co.

Secretary of the Interior Rogers C. B. Morton has proposed the addition of eight species of wild cats to the endangered foreign wildlife list. Such a proposal would ban the import of skins from the cats. The list includes the cheetah, leopard, tiger, snow leopard, jaguar, ocelot, margay, and tiger cat.

A Census Bureau survey shows American wives now expect smaller families than their counterparts just five years ago did. The survey revealed that 64 percent of those 18 to 24 expect no more than two children, a figure 20 percent higher than those reporting in the earlier survey. Wives in the age range of 18 to 39 expect to have an average of 2.8 children, down from 3.1 reported in 1967. A family size of 2.1 is considered that which will achieve a stable population.

An Ohio state senator, Oakley Collins, was indicted by a federal grand jury for illegally strip mining 32.6 acres of the Wayne National Forest. Collins said the stripping was accidental but records show he had applied for a mining permit on the area and was turned down. The Republican legislator serves on a committee considering a tough new strip mine law which he opposes.

Dams Blocked

Governor Cecil Andrus of Idaho told fellow governors at the National Conference that there would never be another dam on the Middle Snake River. He publicly thanked his fellow governors, Tom McCall of Oregon and Dan Evans of Washington, for their support in opposing any more dams.

Meanwhile, in eastern Idaho, the U. S. Justice Department has initiated condemnation proceedings against landowners in preparation for construction of Lower Teton Dam.

Letters to the editor...

up-to date and of a general nature so teachers in any area of the country can use the information. Since I have no funds for this venture, I am asking that people who want the material free-of-charge should send a self-addressed, stamped envelope to me (Janet Woerner, Freeland High School, 710 Powley Drive, Freeland, Michigan 48623). If you know of interested people in your area, I hope that you will pass this information along to them.

Thank you.

Sincerely,
Janet Woerner
Science Dept. Chairman
Freeland High School

Editor's note: We certainly will pass the information along. Thank you for performing such a great service. Mrs. Woerner has enclosed No's 1 & 2 of Vol. I, ECOSOURCES, and I can tell our readers who are teachers that it would be well worth their envelope. ECOSOURCES consists of film reviews, references for teachers and students, available pamphlets, and current environmental literature. Very good.

Mrs. Woerner also says, "ECOSOURCES should function as an idea exchange. For this, we need your assistance. If you have materials, teaching aids, sources of information which you have found helpful, bibliographies, simulations, games, puzzles, teacher's guides, etc., please send information about them, and a copy - if one is available. Material will be cited in ECOSOURCES, so that we may share each others ideas. A list of contributors will be kept, so that people requesting this list may find out who has what available. Persons wishing a copy of this "swap" list should send a stamped, self-addressed envelope to ECOSOURCES, Mrs. Janet Woerner, Freeland High School Science Department, 710 Poweley Drive, Freeland, Michigan 48623. Please limit these ideas to those that are useful in teaching environmental science. Ideas in earth science should be sent to the Rock and Mineral Exchange, Mr. Charles A. Wall, Department of Science Education, University of Georgia, Athens, Georgia 30601. Be sure to include a self-addressed, stamped envelope if you wish to receive his list of earth science materials."

Editor:

I have heard your name for years but never had the pleasure of meeting you.

I arrived in Casper in 1897, April 25. I was 16 years old. I and a brother-in-law was looking for work. Cleveland was just leaving the White House and McKinley was taking over. Shepherders was getting 30 dollars a month and wool was selling from five and one-half to seven cents a lb. I wish some of these sheepmen could have been here then.

I went to work for old Ed Adams better known as Buddy Adams. He was awful bald-headed. I worked for him four years then went in the sheep business with old John Tom a old Scotchman. After three years I was in the sheep business by myself for ten years.

The sheep men is hollering about hardtimes from the time I came. Until 1903 or 1904, every sheep in Wyoming was scaby (from scabies, a kind of mange. ed.). I used to get up at four o'clock, melt snow in a tub over a bonfire after breakfast. Me or the herder (would) walk among the sheep, catch scaby ones, tie them down, the other would hand dip the scaby spots where the sheep had kicked the wool off with the feet or chewed the wool off with their teeth, then turn them loose.

I dipped four years, sometimes twice a year. Then came hoof and mouth disease. The lambs late in the fall would get sore lips till they couldn't bite grass off and slowly starve. But we was lucky and caught it in time so there was very small loss.

Again, we would get up early, eat breakfast, go out to the corral where we had corraled the sheep that nite, cut the lambs out in a small catch pen and rub their noses with sperm oil with rubber gloves on, one with scaby noses the other to keep them from getting it.

The sheep men of today would die the death of a rag baby if they had to work like (that).

Now as to eagles, there is no reason to believe there wasn't just as many eagles or more then as there is now. And (in) all the fifteen (years) with the sheep, I never saw a eagle touch a lamb. I did see twice a eagle pick up a third or one half jackrabbit and fly off with (it).

And as to coyotes, in the first five years of 1900, I bet there (were) three coyotes to where (there) are one now--if not more. Yet they yell hardtimes with the Government giving to them

all the time. I wish they could see some real hardtimes as I have.

I am 92 years old and going strong but I start writing (and) I cannot spell worth a darn so please excuse miss spealt words--remember I am not as young as I was 92 years ago. Enough said if not to much.

There was not quite 500 (people) in Casper when I landed here in 1897.

I am Old Art Gaylord better known by what few old friends still are here as Horse Thief Gaylord.

Keep giving the sheep men the devil about eagles and coyotes.

(Editor's note: It isn't often I get a laboriously turned-out, handwritten letter by a 92-year-old Wyoming pioneer. But I much appreciate the letter by Mr. Gaylord. I don't know how he happened by his nickname but his account of early-day sheepraising strikes me as a pretty honest and forthright telling of how it really was.

Thanks, Old Timer. I will make it a point to look you up the first time I get a chance when in Casper.)

Wild Ones Thrive

Southwest of Lander, Wyoming, at the southern extremity of the Shoshone National Forest, the rugged Wind River Mountains taper off into the Red Desert. As might be expected, the forest terminates in long, open ridges. Elk use these ridges as fall and spring range, and as migration ways from desert to mountain range.

And so do wild horses use these open ridges and upland ranges. That was documented recently when the U. S. Forest Service took Bill Sniffin, editor of the local Wyoming State Journal, on a search and document mission. His photo of the horses appears on page 1.

The men took snowmobiles from Highway 28 (between Lander and Farson), and went north to the area where the horses are wintering. They found seven horses, two of which appear to be stallions, and no colts.

The account of Editor Sniffin follows:

Reason for the trip was the "Wild Horse Act" which was signed by President Nixon Dec. 15, 1971. The Act called for the Secretary of Agriculture (and Secretary of Interior) to "protect and manage all wild, free-roaming horses as components of the public lands."

District Forest Ranger Doc Smith said these seven horses are believed to be the only wild horses in the Shoshone National Forest, which runs from South Pass to Montana. He speculated that they had come from the larger herd (estimated 1,500) that roams the Red Desert. The seven-horse herd had been seen in the area many times.

"The horses appeared in good health and were in excellent shape," Smith said.

Radiation...

or three million dollars on the cost of a nuclear plant may only slightly be seen in the homeowner's electrical bill but it may easily cut into corporate profits or affect the decision on whether or not a power plant can obtain the financial backing for its proposed plant.

To environmentalists, the defenders of the present AEC limit have a superficial view: "The solution to pollution is dilution," they seem to be saying. "If the radioactivity is too high, mix it with more water before dumping it into our rivers. Any amount of radioactivity mixed with twice as much water will cut the activity per gallon in half.

"If the gaseous activity in the exhaust air is too high, build the boundary fence a little farther away - then the activity will be diluted more when it passes the nuclear plant boundary."

But a Scotch and Soda, while it doesn't taste as strong, contains just as much scotch as a Scotch on the Rocks!

Technically, it would be simple for nuclear plants to operate with a lower limit, lower even than Gofman's proposed level. Many plants in fact routinely release only one per cent of the AEC limit. Economics might suffer slightly but cost would be passed on to the consumer. The additional cost of a homeowner's electricity would be negligible.

On the other hand, is it right to hamper the utilities with restrictions that are not necessary? No, it is not right but the key here is that we do not know that it is not necessary. In the past, we have always decided in favor of the polluter and today we are incapable of cleaning up the mess we have made and continue to make at an increasing rate every day.

Maybe it is time we gave our environment the benefit of the doubt.

Next: The Radioactive Salt Mine

Eagles Still Threatened

A recent survey by the Wyoming Game and Fish Department has revealed that the estimated golden eagle population of Wyoming is about 11,000. Now, concern is being expressed



Bald Eagle

over the 413 estimated bald eagles in the population.

Unlike the golden eagle, which is found throughout the world, the bald eagle is found only in North America. This species is in real danger of extinction according to John Turner of Moose, Wyoming.

Turner, who has written a book on eagles and who has studied eagles for more than 10 years, said in the September issue of WYOMING WILDLIFE, "Wyoming is one of only 10 states

still privileged to have more than a dozen pairs of bald eagles."

Turner estimated that only 500 pairs of bald eagles live in the continental United States (excluding Alaska).

Warren Higby, bird biologist for the Game and Fish Department in Lander, said the entire eagle population of Wyoming, including golden eagles, represents a large part of the entire continental eagle population. He said Wyoming is one of only three states having significant eagle populations.

Higby pointed out that of the 50 states, only about 10 or 11 have any eagle populations at all and that "civilization" is driving eagles even out of Montana.

Turner stated population figures don't tell the entire story, since the percentage of young birds will determine whether the eagle population will increase or decrease.

"There is a tremendous mortality rate in the first year among young eagles," according to Higby. He estimated an average eagle population to have between 15 percent and 20 percent immature birds. Results of the survey recently completed by the Game and Fish Department reveal, however, that Wyoming has a "lot lower percentage of juvenile birds," according to Higby.

Concern over dwindling eagle populations and especially the killing of bald eagles, which were declared our national bird in 1782, has prompted the National Wildlife Federation to offer a \$500 reward to persons "providing information that was of substantial assistance in obtaining a conviction for shooting a bald eagle."

The National Wildlife Federation made the reward announcement simultaneously with its announcement of National Wildlife Week, whose theme this year is "Ecology: A Wild Idea."

"Maybe it's just a wild idea that we can still have a world where people can watch wild eagles. Pesticides, pollution and destruction of habitat are pushing the eagle and other animals closer and closer to disaster," the federation stated.

In the wake of mass eagle killings in Wyoming, President Nixon, in December, signed into law a bill prohibiting anyone from shooting

or harassing "any bird, fish or other animal, or to knowingly participate in the using of any aircraft for such purpose." Maximum penalty under the new law is one year in jail and a \$5,000 fine.

In addition to this, Congress is currently considering a revision of the Bald Eagle Protection Act that at present provides a maximum \$500 fine and six months in jail for shooting bald eagles.

The current bill introduced by Rep. John Dingell (D-Mich.) and 23 colleagues, calls for a maximum fine of \$5,000 and one year in jail for the first offense. Subsequent offenses under the bill would be punishable by a maximum fine of \$10,000 and two years in jail.

The House version of the bill (H. R. 1000) is currently being considered by the Senate. While bald eagles have been protected



Golden Eagle

the golden eagle, still listed in state laws as a predator, has been relatively unprotected for years. The golden remained undefended by law until 1962 when a federal statute was passed giving the bird limited protection.

"The 'exemption clause' to the 1962 law, however, states that 'on the request of the Governor of any state, the Secretary of the Interior shall authorize the taking of golden eagles for the purpose of seasonally protecting domestic flocks and herds in any such state.'"

According to Turner, Wyoming was repeatedly granted exemptions to the law.

Early in 1970, however, Walter Hickel, then Secretary of Interior, went to a permit system for killing golden eagles.

While President Nixon's recent executive order banning poisoning of predators on federal land might protect both golden and bald eagle populations, a Game and Fish bird biologist concluded that "our eagle population is not really healthy and in the long run ... is probably on the decline."



Dam Site Proposals

A dam on the lower Green River in Wyoming would not jeopardize mining for trona according to a report issued recently. A Denver engineering firm made the report for a feasibility study committee authorized by the 1971 Legislature.

The damsite would be a few miles upriver from the town of Green River. The resulting reservoir would be above the mineralized beds. Trona is now being mined at depths from 800 to 1,500 feet beneath the surface.

Stauffer Chemical Co. says a reservoir might weaken the foundations at its chemical processing plant near the high-water level of the proposed reservoir. Stauffer and other companies process the trona into baking soda and similar products.

The dam and reservoir are being proposed as alternates to sites upriver which caused a storm of controversy. Conservationists opposed the upstream dams and proposed that use be made of existing reservoirs to store additional water.

Werner To Go Free ...

him to stall action on the Werner case, he said he did not feel that had been the case. He said he had first thought it would be a simple open-and-shut case but that had proved to be incorrect.

As a side development, the National Wildlife Federation asked that grazing leases on public lands held by Werner on his Bolton Ranch not be renewed. The Federation even filed an intervention and protest petition with the Bureau of Land Management in objection to renewal of the leases.

First, the Rawlins District Advisory Board, composed of nine fellow ranchers and one wildlife representative, voted to renew the Bolton leases. Claude Martin, district manager of the BLM, took the objection under advisement but after a week rendered his decision. The leases were renewed. He said no charges had been proved against Werner, therefore, he had no recourse but to renew them. However, he said later findings could result in a review of the case.

Other developments have served to draw attention from the Werner case.

The most significant was President Nixon's banning of toxic poisons in predator control on public lands. However, the use of poisons will continue. Such agencies as the Johnson County, Wyoming, Predator Animal Control Board is known to have large quantities of toxic poisons. Contraband sales have continued in both Colorado and Wyoming.

On January 26, a deputy U. S. Marshal confiscated 25 pounds of the highly toxic thallium sulfate from one of Wyoming's leading ranchers.

Paul Etchepare of the prestigious Warren Livestock Company at Cheyenne maintained that he was merely storing the thallium for area stockmen. He said the stockmen have stopped using it since federal registration was suspended in the summer of 1971, and its use prohibited by private individuals.

The question might properly be asked as to why, if it was not being used, the toxic material had not been voluntarily relinquished to authorities at the time its use became illegal.

Wyoming's Governor Stanley K. Hathaway, among others, had voiced the opinion that President Nixon might well rescind his executive order on poisons. The premise is evidently based on the wishful thought that Wyoming sheep ranchers are as politically potent as the nation's lumber men.

However, that does not appear to be in the cards. The word came from special assistant to Nathaniel Reed, Jim Ruch. Reed is Assistant Secretary of the Interior for Fish, Wildlife and Parks. Ruch said there would be no backing away from the ban.

In fact, Ruch told the American Association of Conservation Information meeting in Casper on March 1 that there could be other ramifications. He said the efficient execution of predator control programs by the states may determine the rights of those states to handle all wildlife.

Ruch referred to the Cain Report and said the "key evidence was so clear that we had no hesitation in recommending to the President the ban on poisons on public lands." He said all concerned should carefully study that report.

Ruch said the announcement of the ban had at first been met by "stunned silence." But that was followed by a loud howl from the western woolgrowers, and such comments as "even now there are packs of slaving coyotes gathering in the hills."

Even cattle growers joined in the chorus. Ralph Yoder, president of the Colorado Cattlemen's Association, said, "It seems the move is purely political. It's a matter of numbers. There are more people hopping on the ecology bandwagon than there are ranchers. The rancher has always been a conservationist, but you've got to be realistic."

Back in Wyoming, the editor of the Wyoming State Tribune, Jim Flinchum, was honored by the Wyoming Wool Growers. He was touted for a number of editorials in the Republican-oriented, Cheyenne daily which defended the sheepmen from the "attacks of environmentalists." He also editorially played Sen. Gale McGee, a Democrat, for his handling of the predator issue before his Senate sub-committee.

It will remain to be seen if Werner is indeed charged in the eagle killing - and when. It may be that action will remain stalled until public indignation forces the issue.

U. S. Attorney Richard Thomas' office could long since have been given the manpower to deal quickly and fairly with the Werner case. But for obvious political reasons, it has been allowed to quietly retreat into the background.

The public needs to be heard.