

High Country News

The Outdoor and Environmental Bi-Weekly

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Lander, Wyoming

Friday, December 22, 1972

Merry Christmas

A Look Back

by Tom Bell

The 1970's have been hailed as the Age of the Environment. If so, 1972 could be marked, for the most part, as one of the great steps forward.

Across the country, a wave of concern for all aspects of the environment has swept all ages and all segments of society. And the concern is expressed in more than lip service.

Nowhere was the concern more apparent than in the affairs of the pocketbook. Various polls have shown the American people are ready to sacrifice some of their affluent living to a better environment. They have indicated they are willing to pay more taxes and pay a higher cost of living. How high has not yet been fully tested. But with an energy crisis moving ever closer and the cost of providing truly clean energy an unknown quantity, the time may not be far off when cost does become a critical issue.

In the meantime, voters cast their ballots for bond issues on environmental matters in unprecedented numbers. Residents of New York State approved a monumental \$1.15 billion bond issue by an amazing 2-1 margin. They voted \$175 million to buy recreational land, \$650 million to clean up rivers and bays by building better sewage plants, \$150 million to clean up the air, and \$175 million to deal with solid waste problems.

Florida voters passed a \$240 million environmental bond issue, aimed particularly at rescuing their disappearing beaches and shorelines. Voters of Washington State went for a \$265 million bond issue, and although a tough shoreline protection initiative was beaten, a similar but weaker version was passed.

The environment won big in California. There a Coastal Protection Initiative was easily passed in spite of the fact that developers, oil companies and power companies spent an estimated 15 times more money than conservation interests, trying to defeat the measure. In other victories, the forces of no-growth showed surprising strength. County bond issues, put on the ballot by popular initiative, were approved in four California counties to provide funds for more parks, open spaces, and recreation areas.

But there was more than taxes and big bond issues involved. The League of Conservation Voters backed 57 congressional and gubernatorial candidates, and put up some \$65,000. They won 43 and lost 14. Among

(Please turn to page 10)



The quiet, peaceful beauty of the West is here exemplified in Montana. But the serenity of such scenes is illusive for human pressures are relentless. Subdivisions in the mountains and strip mining in the hills and plains are bringing drastic change.

And A Happy New Year

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Friday, Dec. 22, 1972

HIGH COUNTRY

By Tom Bell

We are beset with difficulties. We are not really sure the paper will come out from month to month. We suffer the excruciatingly slow growth of circulation, which will ultimately lead to success. But we have dear friends who not only buy our newspaper, they read it. And help us get more readers.

The staff is alive and well, thank you! And God willing, we will be here next year at this time.

It has been a sometimes-painful, always-eventful, frenetic kind of year. In the tradition of all newspapers, a deadline always looms ahead. One paper has not even been put to bed before the planning has begun on the next.

The moments of satisfaction and our ultimate rewards come when we receive the warmly written letters and appreciative phone calls from our readers and well-wishers. We can know then that our efforts are not fruitless.

Mary Margaret (Mrs. Robert) Davis, our pert and pretty secretary, type-setter, errand girl and odd-chore hand, has stuck with the paper through thick and thin. She was there when the door first opened, before the first paper took shape in words and photos. She's a full-time wife, mother and housekeeper on the side.

Marge Higley, our humorist and gal-of-good-spirit, sends all those bills and renewals. And she takes the time to send thank you notes to those who send gifts. If you haven't read her column, you have often missed the best part of the paper. We are thinking of her now as she joins the rest of her family at the bedside of her critically ill, 90 year-old mother.

During the year, Anne Turner joined our redoubtable little band. She puts in a full day here, with no pay or compensation, and then works a shift at a local restaurant to keep herself alive. How much more dedication can you ask than that?

These gals are all real troopers. But so is my wife who has had to dedicate herself to my life — and now also to this paper. Sometimes it is an onerous burden. Nevertheless, she is with me, mostly uncomplainingly and unquestioningly.

We have much for which to be thankful. Our oldest son, Alan, is home from a hitch in the Army in Japan. With him he brought a lovely young daughter-in-law, Cinde, daughter of his sergeant-major, and son, Andy.

Our Christmas will be joyful. For the first time in three years, all three of our big boys will be home. Second son, David and his lovely wife, Sharon will join us. With them will be grandson, Benjamin, and granddaughter, Sandy.

Third son, Jim, marries his little doll, Linda, on January 6. Alan and Jim will both be at the University of Wyoming second semester.

No one who gets deeply involved in the environmental cause can escape unmarked and unchanged. The state of our world environment has progressed to a stage of most serious import. I am convinced that we who are passengers on this delicately balanced globe must find solutions soon.

And so this past year, I find my attitudes and life style changing rapidly. I now fear for the future of my children and grandchildren. I wish I could promise them a rose garden. But all is not going to be roses in the future.

Given a real awakening to our dangers, their world may not be catastrophic. But I am certain it is not going to be on a level of today's affluence.

As a farm boy during the 1930's, I learned the term "milking the cow dry." That is what we are doing to our world now. The only difference being that a cow will regenerate her productive capacity. Our finite resources cannot regenerate, and we are using them at a progressively prodigious rate. It cannot go on for many more generations.

In a way, this is a message to my sons and daughters, as well as to our readers. I am not without hope. If their generation can learn to live more simply and less wastefully, if they will control their numbers, they may still live happily ever after.

Across the miles, all of us wish all of you a most Merry Christmas. We look forward to a happy and successful New Year and wish all of you the very same.



The ermine robes of winter lie majestically across the land and all thereon.

Letters To The Editor



Editor:

After a one year trial period, I have decided to continue my subscription with your paper. Becoming aware of new issues or possible problems is all important. One can not always read or hear these things in the daily news. This does not mean I agree with all you say, which I don't.

I do like the way you are presenting the Oil Shale development in Colorado, Wyoming and Utah. You seem to make an effort in getting the facts. However, your stand on clearcutting is bad. I am sure you are aware that some species of trees need the exposed soil and no shade to regenerate. If man does not do it then nature will in the form of insect, disease and fire. The latter being more easily suppressed than the others causes the outbreaks in insects and disease. Before man, fire controlled these two by burning an old decadent stand of timber which is more susceptible to insects and disease. Lodgepole pine is such a species of tree which needs to be clearcut if harvested. A large percentage of Wyoming's timber resource is lodgepole pine. That is why clearcutting is so evident there. I do agree that the manner of setting boundaries is important for aesthetic reasons. The old square or straight line boundary must depart. The irregular boundaries must be the new rule.

Enough of that. Thank you for your fine paper even though I do get curled hair because of some statements or stands. Life would be boring if there wasn't something to disagree with.

Sincerely yours,
Phillip J. Hoefer
Ft. Collins, Colo.

Editor's note: Thanks for your renewal and your comments, Mr. Hoefer. We appreciate both.

I am sorry if I have conveyed the impression I am totally against clearcutting. I am not, realizing it is an accepted silvicultural practice. But I am totally against most of the clearcutting which has gone on in Wyoming and over much of the West. Hopefully, that is now

being corrected, or most of it will be now that the Forest Service will be required to do environmental impact statements. I will accept clearcutting when it is confined to those areas in which an impact statement shows it will not seriously damage other values, in which it conforms to the sustained yield capacity of the forest in which it is located, and in which the true economics of road construction, slash disposal, and replanting show it to be in the public interest.

I was very interested in the recent comments of Forest Service Chief John McGuire. In addressing the Kalispell, Montana, Chamber of Commerce, he said, among other things, that the demand for timber products would have to be met by better utilization of forest products. He said that only half the timber cut is removed, and only half of that removed is utilized. He said that which is left is a "tremendous available resource."



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Guest Editorials



Reprinted from the DESERET NEWS, Dec. 7, 1972.

Oil Shale: A Contradiction

For some years, knowledgeable Utahans have been pointing out the state's tremendous oil shale reserves and calling for their development.

That assessment has now been put into perspective and affirmed by a recent comprehensive Interior Department study on energy sources. The study declares that "The development of a one million-barrel-a-day shale oil industry by 1985 would come closer than any other domestic alternative to provide for America's long-term energy needs without unduly degrading the environment." Extensive oil shale deposits are found in Utah's Uintah Basin, in western Colorado, and in southern Wyoming.

The Interior Department's report is even more impressive considering the depth and extent of its inquiry into alternative energy sources — including development of oil and gas from the Alaskan and Canadian Arctic, and such sources as the tides, wind, and sun.

Commented the report: "The environmental problems and other constraints facing the alternatives are as great or greater for other domestic sources as they are for oil shale."

Like any other energy source, however, there are problems. Two issues must be squarely faced if there is to be a future for the oil shale industry:

First, sufficient water must be found. The heating process by which the oil is recovered from shale demands great amounts of water. Although the water is currently physically available in sufficient amounts in the affected areas, its availability to the shale industry is

uncertain. That is one of the priorities that must be threshed out in the context of future water needs for the state, and one which the Interior Department study group admits it has not fully explored.

Second, a more comprehensive national oil shale policy needs to be developed. While the federal government is embarking in tentative directions by choosing six parcels of land for lease — two in each of the three states — the boundaries of that policy are still ill-defined. How far, for instance, should the government go in administering development on the 54% of the oil shale lands that are federally owned? What incentives, if any, should be offered to promote shale development? Precisely what environmental safeguards need to be observed?

Formulation of policy has been slow partially because technical solutions to oil shale development have been slow. The industry now claims those problems have largely been solved, and that shale oil can be brought to market at a competitive price of \$2.40 a barrel. The Interior Department plans to accept bids next month from private industry for test development of its six government pilot tracts.

With the U.S. facing a growing energy shortage, shale oil can make an auspicious contribution. Here is an industry that could produce an estimated 600 billion barrels — enough to fuel the nation at present levels for 150 years.

Now that doubts about its impact on the environment are being resolved in shale oil's favor, let's get on with the job of development.

Reprinted from the DESERET NEWS, Salt Lake City, July 29, 1972.

Colorado River Is Salty

Seven weeks ago President Nixon announced he was prepared to take "certain actions immediately" to improve the quality of Colorado River water going into Mexico.

But the only way to achieve a prompt and substantial reduction in the amount of salt in the water is through a drastic curtailment in use of the river by the already parched Upper and Lower Colorado River Basin states.

That's why westerners are anxious to find out exactly what the President has in mind and are suspicious of dramatic moves.

This week, for example, Governor Rampton joined governors of five other Colorado River states in cautioning against permanent guarantees to Mexico on the quality of water it gets from that river.

It's rather late for warning against permanent guarantees, since the U.S. already is party to a 1944 treaty assuring Mexico "usable" water from the Colorado. Since 1960, however, that water has become so salty that Mexican crops have been badly damaged.

Even so, Governor Rampton is right to be concerned since Utah can be vitally affected by whatever is done to ease this increasingly irritating source of friction between the U.S. and its long-time friend to the South.

Utah's La Verkin Springs and Crystal Geyser contribute more than 1 million tons of salt a year to the Colorado River. There has been talk about simply preventing such highly concentrated saline flows from entering the Colorado.

In addition to such natural sources, salt

also gets into the river through the leaching of fertilizers from irrigated agricultural lands. As farming becomes more efficient and productive, it may be possible to take some of these lands out of production.

If the Southwestern U.S. could import water from Alaska, Canada, or even the Pacific Northwest, it could afford significant reductions in the use made of the Colorado. But such water imports aren't in sight.

That being the case, officials of the U.S. Bureau of Reclamation feel it will take several hundred million dollars to solve the problem through such means as better management of the river.

Don't jump to the conclusion, however, that Americans feel little sense of urgency about coming to grips with the salinity problem. On the contrary, Mexico's problem is to an increasing extent our problem, too, since the water the U.S. takes from the Colorado also is becoming saltier and saltier. As Governor Rampton pointed out, all seven Colorado Basin states plus the Department of Interior and the Environmental Protection Agency support the speed-up of a major salinity control program.

All things considered, this problem looks more like a matter for engineers than for politicians.



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Friday, Dec. 22, 1972



Reprinted from THE LOVELL CHRONICLE,
Wyoming, Dec. 7, 1972.

Wild Horse Rep Questioned

Comments by Wyoming's lone representative to the Wild Horse and Burro Advisory Committee we feel are premature.

Dean Prosser Jr. of Cheyenne, recently appointed to the board, called for an inventory of free-roaming horses and burros and asked for control or limitation of the inventory in the future.

At the same time, Prosser took a jab at the mustangs in his comment that he "suspects" the great majority of the wild horses are nothing more than ranch horses that were "turned loose and propagated on public lands."

We have long advocated that an inventory of the wild horses is needed, but we suspect, for different reasons than Mr. Prosser's. His comments indicate he would use the inventory as a basis for limiting the number of mustangs at its current level or less.

Although we do agree with the idea that the number of wild horses and burros should be kept in proper balance with the available range, we feel that more study is needed before any decision is reached as to the size of the herds.

We suggest that before Mr. Prosser announces more preconceived ideas on how best to manage wild horses he spend more time finding out about the animals.

As to the origin of the horses, what difference does it make? Andalusian ancestry or former cow ponies, they both should be protected as part of the heritage of the West.

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Wild Horse Annie:

High Country News is pleased to present the following interview with Mrs. Velma B. Johnston, better known as Wild Horse Annie. Mrs. Johnston granted the interview to author Jennings exclusively for use in High Country News.

Like others interested in and concerned with the wild horse, we have come to regard Mrs. Johnston with the utmost respect and a certain amount of awe. It is incredible that such a diminutive little lady could have accomplished so much by sheer dogged persistence. But accomplish it she has, and we are proud to present her thoughts and feelings here.

We had hardly received the manuscript when Interior Secretary Rogers Morton and Agriculture Secretary Earl L. Butz announced that Mrs. Johnston had been appointed to the newly created Wild Horse and Burro Advisory Board. Those of us acquainted by the situation would have been confounded if she had not been appointed. And so her good work can continue. We wish her every success, and we pledge her our whole hearted support.

The editor.

by Josh Jennings

"So the people shouted when the priests blew with the trumpets: and it came to pass, when the people heard the sound of the trumpet, and the people shouted with a great shout, that the wall fell down. . ."

JOSHUA 6.20

In 1950, in the desert of western Nevada, a young woman followed a truckful of maimed and dying horses. As the truck jolted along the road, she noticed a colt lying on its side, trampled beneath the hooves of the cargo of living death. This young woman loved all living things, particularly the wild creatures of the desert lands and especially the horses. The horses in the truck, once wild and free-roaming, were bound for a slaughter house. They would be destroyed, almost an act of kindness considering their pitiful condition. The rendered by-products of their bodies

Photo by Hope Ryden



A Medicine Hat mare and her foal before a summer hailstorm. On the treeless Great Plains, wild horses cannot shelter from the elements. This photo is from *Mustangs, A Return to the Wild*, a beautiful and thoughtful book by Hope Ryden (Viking Press, \$9.95).

would be canned and utilized for pet food.

Something clicked deep within the spirit of that young woman. Something told her that what she was seeing was wrong, vicious and tragically inhumane.

As the days passed, she studied the situation of the wild horses. What she discovered concerning the condition of the once great herds shocked her so deeply that the entire course of her life and the lives of many others would be radically changed for all time.

Soon the trumpet call would burst forth from the desert lands. The people would gather and shout; and slowly, ever so slowly, the walls would come tumbling down.

This slim, somewhat shy young woman, with the given name of Velma Bronn would soon become known to the world by another name. Millions would call her Annie, "Wild Horse Annie."

The story of Wild Horse Annie has been told many times, in many places and in a multitude of different languages. There is, however, something in the retelling which stirs the spirit, recalling a nation once young and vital. Perhaps what is more important, in this age of violent dissent, is the fact that Annie is a living testimony to the success of the American political dream. For what she has accomplished, in her long struggle, has been achieved through the valid and recognized institutions of government.

Annie is a person whose early childhood, some would say, marked her for defeat. Struck down with polio as a child she would have to bear the physical and the more severe psychological scars throughout her life.

Transcending these problems Annie married and settled into the routine of a working housewife. Her desire in life was to be a good wife and mother and for a few short years she would realize part of this goal, living in love and close companionship with her husband Charlie Johnston. Even in love and marriage tragedy followed Annie. No children were

born to her and in 1964, after a lingering illness, Charlie died.

But Charlie was still living on that day when Annie followed the truck to the slaughter plant. Together they began the long struggle to save an important part of our great American heritage, the few remaining wild horses.

On August 30, 1972, Annie and I met at her home overlooking the lights of the city of Reno. The sky was cloudy that night and lightning flashed against the majestic eastern slopes of the Sierra Nevadas. We were meeting to explore the possibility of an interview. We found that we could talk to each other and Annie graciously consented to the interview which follows.

Jennings: Annie, how did you begin your struggle to save the wild horses?

Annie: Actual confrontation with the opposition began on a very local level. . . in the courthouse at historic Virginia City in my own State of Nevada. The meat dealers had never met with a cold, hard, unemotional offensive. Previous opposition to their vicious treatment of wild horses had taken the form of a defensive position which they were adequately prepared to deal with. Their lack of preparedness, in the face of a strong offensive maneuver, indicated that weakness had actually existed all along, even though they had been very successful in gaining official permission and encouragement for their roundups. The result of this confrontation and the display of weakness in the arguments of those seeking approval for the roundup of wild horses caused the County Commissioners to take a close second look at the issue. This 'second look' resulted in the adoption of a resolution prohibiting the use of airborne and mechanized vehicles in the roundup of wild horses and burros within Storey County.

The struggle in Virginia City was only a beginning. I used every available bit of time and effort to gather as much information as possible such as pictures and eye-witness statements. It was also my belief that if the public was aware of the continued atrocities elsewhere in Nevada and other western states it would respond with positive support for protective action. The question which constantly faced me was how to get the message across to the public. The media was, at that time, reluctant to enter into what was becoming a highly controversial issue. At times the deck appeared to be stacked in favor of the exploiters. On occasion I was able to get a 'Letter to the Editor' published over my signature, however that was obviously not enough. There followed a do-it-myself letter writing campaign that seemed to be never-ending. Miles of typewriter ribbon was worn to shreds. I wrote to every organization and individual in Nevada whom I thought would be interested, and slowly, the effort began to pay-off.

Next came the struggle to enact legislation on a State level. I was helped in this effort by a sympathetic State Senator who was a neighbor and was, by this time, thoroughly familiar with the situation due to my frequent visits. The letters of friends to lawmakers, based on documentary information I was able to furnish, along with the appearance of many of these friends at public hearings, swung the balance of votes in favor of the pending legislation. However, action by the committee to which the legislation was assigned, added an amendment prohibiting the application of this law to Federal Public Lands. This watering down action pointed-out the vital need for Federal legislation.

Jennings: You were successful in your attempt to obtain Federal legislation. In 1959 (Continued on page 5)

A Western Legend

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President Eisenhower signed into effect Public Law 86-234, better known as the "Wild Horse Annie Law." What specific protection did the passage of this law provide for the wild horses?

Annie: The "Wild Horse Annie Law" actually provided no specific protection for the wild horses. It simply outlawed one form of inhumane action against them. It made the use of airborne and mechanized vehicles illegal in the capture of wild horses on Federal Public Lands. We felt that by eliminating this expedient method of capture the roundup of wild horses would become commercially non-profitable. It's much more expensive to trap or round up wild horses through the use of mounted riders. By cutting profits we hoped to discourage the widespread exploitation of these beautiful wild creatures. I think it's very important to point out that when I testified before the Congressional Committee on behalf of the "Wild Horse Annie Law" I recommended that a management, protection and control program be adopted immediately. Unfortunately, my recommendation was not acted upon.

Jennings: Public Law 86-234 was a step forward but obviously more legislation was necessary. What loop-holes existed in P.L. 86-234 which made it imperative that you continue to work for further Federal legislation?

Annie: Enforcement of the "Wild Horse Annie Law" was placed at the local level. You must realize that the habitat of the wild horses is the same as that of domestic livestock and huntable animals. The domestic livestock operators, grazing their cattle on public lands, contended that the wild horses were consuming forage necessary for their own cattle. The hunting interests wanted the forage for target animals. State Fish and Game coffers are, of course, enriched by license fees and tax on the sale of ammunition. Because of this, hunters and Fish and Game Commissions took the position that wild horses, being neither edible nor of trophy value, should be removed in order to allow more target animals on public lands. Local officials, elected by their constituencies, would do little or nothing that would cause them to lose the support of these strong private interest groups, specifically the domestic livestock grazers and the hunters. These groups carry heavy support at election time. We found that illegal air roundups continued. In one specific instance, a Sheriff of a western Nevada county actually moonlighted by rounding up wild horses through the use of aircraft. At other times, and on many occasions, officials 'looked the other way.' Often, when an appeal was made directly to them to intercede in the course of a roundup, they claimed that they were "too busy" or they arrived too late.

Jennings: Just recently President Nixon signed Public Law 92-195 which apparently provides additional protection for the wild horses and burros which wander our public lands. What additional protection does P.L. 92-195 provide?

Annie: Public Law 92-195, though not the utopia we sought for the wild ones, does provide more protection than they have ever had. Analyzing P.L. 92-195 indicates that it provides for the following:

By Congressional mandate these wild ones are removed from the limbo in which they have existed since the first mustang sought and found freedom on the lush grasslands of the New World. They are now legally recognized as an integral part of the natural systems of public lands.

Jurisdiction has been removed from the hands of local officials and placed in the hands of Federal agencies who represent all of the people of America. As I stated before, the fate of the animals was previously in the hands of those who represented only those people in specific areas whose financial interests were best served by the removal of the wild horses.

When it becomes necessary to reduce the numbers of wild horses in an over-populated area, presupposing such need arises, decisions will be reached only after thorough study by an Advisory Board representing all the users of public lands. This includes true public representation rather than arbitrary decisions arrived at and carried out by commercial users. In addition, the animals removed cannot be sold for any monetary consideration, direct or indirect. This regulation eliminates any element of commercial exploitation which could lead to over-zealous population controls.

Violators of P.L. 92-195 face the possibility of a \$2000 fine. Violations are set forth as the:

1. Willful removal or attempts at removal from the public lands without the authority of the proper Federal agency.
2. Conversion to private use without authority.
3. Death or harassment.
4. Processing into commercial products the remains of these animals.

Finally, provision is made for the designation of Federal agency personnel to arrest, without warrant, any person committing any violation of Public Law 92-195.

Jennings: It's my understanding that P.L. 92-195 was a compromise bill and that even further legislation will be necessary before wild horses and burros achieve a truly protected status. What compromises exist in the law and what further legislation is necessary?

Annie: It's true that provisions were added to the original bills that would indicate a weakening of a fully protected status. Already in evidence, as a possible source of controversy, is the provision which allows a person claiming ownership of a horse or burro, on public lands, to recover that animal if recovery is permissible under the branding and estray laws of the State in which the animal is found. There is a decided lack of strict requirements of valid proof of ownership in most of the states where these animals are located. This situation allows a claimant to state that X number of horses in a certain area are his because, a few years back, he turned out some of his own branded horses and the resultant progeny are thus his.

Unfortunately, that simple statement is usually all that a livestock inspector requires in order to issue a certificate of ownership. This certificate is then accepted by consignees, such as slaughter houses, as proof of ownership. And an "owner" has a right to do anything he wants with his own horses. Livestock inspectors are often cattle owners themselves and thus benefit from the use of public lands. It is often in the best financial interests of the inspector to see to it that it is made as easy as possible for a claimant to gather as many of his "owned" horses as he wants. This helps to provide more grazing potential for the inspector's own cattle. It can't be repeated often enough that a decided strengthening of the

proof of ownership must take place. This strengthening must come about through State legislation or if necessary by Federal legislation.

Another weakness in P.L. 92-195 is the authorization which allows Federal agencies to enter into cooperative agreements with land owners and other State and local governments and to consult with the wildlife agency of the State. The previous record of these State and local bodies indicates that this provision could lead into agreements decidedly unfavorable to the wild horses and burros if the local governmental bodies were to exert sufficient pressure. It would be a specific function of the Advisory Board to be a watch dog for this type of activity and maneuvering.

There is a ray of hope that these weaknesses may be minimized due to a recent ruling by the Attorney General of the State of Nevada. The gist of his ruling is that, and I'll quote him in essence here, "State statutes which permit the killing, capturing or selling of horses or burros are in conflict with — and are superseded by — Federal law," he continues "the intent of Congress to make this bill superseding is readily apparent." We can only hope and work to see that his counterparts in other states take this same position.

* * *

In the concluding installment of this personal interview with Mrs. Johnston, she gives her views on the Taylor Grazing Act, wild horse reserves, and population controls on the wild horse herds.



Board Named

Eight westerners and an easterner have been named to the Wild Horse and Burro Advisory Board. The advisory board is a requirement of the Wild, Free-Roaming Horses and Burros Act passed by Congress in December, 1971. The appointments of the nine members were announced in late November, 1972, by Secretary of Agriculture Earl Butz and Secretary of the Interior Rogers C.B. Morton. Members will serve an initial appointment of one year beginning January, 1, 1973.

The advisory board will advise the Secretaries on matters pertaining to the protection, management and control of wild, free-roaming horses and burros on public lands administered by the Bureau of Land Management and the Forest Service. The first meeting is scheduled for January.

Announcements from the two Secretaries said the advisory board members were selected for their specialized knowledge about the protection of horses and burros, management of wildlife, animal husbandry and natural resource management.

Of special interest to all wild horse lovers were the appointments of Mrs. Velma B. Johnston of Reno, Nevada, and Mrs. Pearl Twyne of Great Falls, Virginia. Mrs. Johnston is currently the president of the International Society for Protection of Mustangs and Burros, and president of Wild Horse Organized Assistance, Inc. (WHOA). Mrs. Twyne is president, American Horse Protection Association, past president of Defenders of Wildlife, and executive director of the Virginia Federation of Humane Societies.

The other members appointed to the board are: Dr. C. Wayne Cook, head of the Range Science Department, Colorado State University.

(Continued on page 15)

6-High Country News
Friday, Dec. 22, 1972

Reprinted from THE INTERMOUNTAIN OBSERVER, Boise, Dec., 1972.

Developing A Land Ethic

by Diane Simmons

As winter and the snows come, skiing, snowmobiling, condominium dwelling and other activities that make northern resorts tick are going strong in Ketchum and Sun Valley. But there is at least one group in the resort community which has a different — some say radically different — vision of the possible future of resort life, and indeed the future of all life.

Headquartered in a house on a backstreet in Ketchum — which it shares with a small newspaper and a typesetting business and a half dozen dogs belonging to various staff-members — is Environment West. Environment West is made up of a group of scientists dedicated to the proposition of environmental planning and thus the preservation of an earth they see being rapidly and perhaps totally depleted.

While environmental considerations are not novel these days, Dick Meyer, head of Environment West, maintains that what most people still have in mind is discovering how best to do what they want to do with the land — rather than finding out what they should do, or refrain from doing, to be in harmony with the land. Planning is not particularly new, Meyer says, but what you usually see is either no planning or planning with only economics in mind. We must learn to think primarily in terms of the earth — its past as well as its future.

Meyer bases his concern on studies like one being made on the Snake River Plain which shows that we are losing our soils at the rate of 1 percent per year — which means productive land could be non-existent in 100 years — and we may, in Meyer's words, "join the other civilizations who refused to be careful."

Environment West feels the depletion of the environment is a problem of the direst importance. But others are more philosophical. "Some people are concerned," says Meyer. "But we still hear comments like 'Ecology is fine, but we have to get on with business.' With people still thinking like that, we're all in trouble."

What the biologists, archeologists, landscape architects, sociologists, limnologists, and all the other members of Environment West's far flung 30 member staff do to get people to act as good husbands, rather than rapists of the earth, is to present a plan based on an ecological inventory of their property. The inventory includes the superficial geology of the area, the hydrology of the ground water, the plant community, wild life, soils, slope analysis, sociological inputs, weather, energy flow — and a wealth of other material which give the planners an intimate knowledge of the personality of the land.

If the ecological inventory indicates that a condominium or even a ranch house is not in harmony with the environment, Environment West will recommend that the project be abandoned, or will, perhaps, survey another area for acceptability.

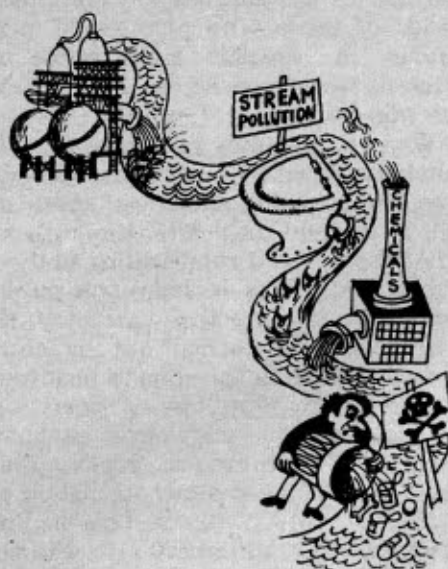
While some planning groups, according to Meyer, act only as justifiers for the developers who hire them — putting a nice environmental face on any project the developer wishes to undertake — Environment West views such practices as professional prostitution. "We would never go on record for a project that was not in harmony with the environment," says Meyer. "And many projects aren't."

What sort of activities are in blatant disregard of the future of the environment? Any development which disregards the environmental inventory. Subdividing comes to mind immediately as one of the most irresponsible of actions. Not only is the land divided into areas too small to be productive, but the developments spawn roads, and other intrusions on nature and often end up in trailer and shack towns. Subdividers are often uncon-

cerned with where they build — frequently they subdivide hillsides and other areas which are highly unsuitable.

A second environmental disaster in the eyes of Environment West is the push to put more land under cultivation. "We don't need that land now," says Meyer. "We should keep it in reserve. We might need it very badly later." And off the road vehicles can cause erosion. People who go up into the hills and meadows and use their machines carelessly pollute the air and the silence as well as ripping up the land.

Meyer attributes these continued disasters not only to ignorance on the part of the general public, but to ego trips on the part of



many businessmen. Although the corporate man is beginning to give lip service to the needs of the environment, his main concern is to make the deal and get ahead in the business world. But there are some hopeful signs. The U.S. Forest Service has become a lot more aware of the need for environmental harmony in the past few years. In Meyer's opinion this is largely due to flak from the public.

Who should have an environmental inventory taken? Almost anybody, although Meyer cautions that every case should be judged on its merits. If you were building in

the middle of the desert, he says, he would hesitate to undertake a planning project. But often people building nothing more than a home could profit by some planning. Weather factors could suggest a design of house which would make for lower heating costs. Perhaps the inventory would reveal an interesting plant community that should be saved. The cost of such planning is relative to each project. As an example, however, Meyer mentions a 400-acre ranch project which Environment West undertook. The owner wanted to find the best site for his home. The job cost him \$2000.

Environment West's position on environmental protection is respected — if seen as somewhat radical — by Neil Sampson of the Idaho State Planning agency. Sampson says that Environment West's criticism of some other planners is not unjustified. "There's lots of prostitution," he says. "It happened to us. We had a planner who testified before the planning commission that the five-acre farms a developer wanted to sell in Blaine County would be self sufficient. It was absurd. We knew that the place would feed one cow for 26 days and that would be it."

Sampson says that Environment West's basic assumption is unquestionable; "You can't continue uncontrolled growth in a finite space." He compares Environment West to a man with a lily pad in his pool. The lily doubles every day and the man tries to decide when he must cut it out. He decides to wait until the pad covers half the pond. But by then he has only one day left. Environment West, Sampson says, doesn't want to wait that long.

But although Sampson thinks environmental radicals are necessary and sometimes push people farther toward environmental concern than they would otherwise go, he is glad all environmentalists aren't "the end is closer than you think" types. There is always a danger of a backlash, he says. If your proposals seem completely out to lunch — even if they aren't — people will ignore you or work against you. If you are closer to them philosophically you have a better chance of changing their minds.

Impacts Become Business

by Anne Turner

Surprisingly enough to those in the field, ecology can be a business. Traditionally underpaid and over-worked environmentalists are learning a few things themselves from the business world they both criticize and counsel. Some of them are discovering that dedication to a worthwhile cause does not necessarily preclude profit-making. Or perhaps they feel they can better serve the environmental cause by working with the "opposition" rather than against it. Hard-core conservationists may call this selling out. But ecological consulting services are a growing trend and serve a vital function as bridges between the conservation and business oriented worlds.

A case in point is EcoDynamics, a new, independent ecological research and environmental consulting service. Its 23-member staff of University of Utah trained scientists states its organizational purpose in these terms: to provide "government, industrial clients, and other public and private groups an experienced, functional, interdisciplinary team to aid in defining and appraising the effects of man's use on the existing environment. We are concerned not only with alternative solutions to today's problems, but also with the more difficult identification of future problem areas."

Primary among EcoDynamics' diverse services are environmental impact studies. By the

National Environmental Policy Act of 1969, all federal agencies and federally endorsed groups must prepare an environmental impact statement prior to project commencement. Frequently, such federal agencies are understaffed and under-funded to the point of being unable to provide adequate impact statements. EcoDynamics promises to provide the necessary expertise plus the impartiality these groups lack.

Many public and private organizations not affected by the federal statute desire professional advice on sound ecological practices for a variety of reasons. Chief of these are the economic benefits of fore-planning to prevent ecological errors. Attempts to rectify past mistakes can be extremely costly to both the business and the environment. Ecological consultation may also aid public relations by averting adverse criticism or legal action against a business.

Other services offered by EcoDynamics include environmental monitoring to determine the effects of a proposed change on various aspects of the environment — vegetation, animals, water, soil and air. It provides counsel on natural resource development and management for an extensive range of industrial, business, recreational, environmental and professional interests, both public and private.

Biomedical services are also included in the
(Continued on page 7)

Dunkle Takes A New Role

High Country News-7
Friday, Dec. 22, 1972

by Anne Turner

Following an unsuccessful bid for governorship last June, Frank Dunkle, former director of the Montana Fish and Game Department, has recently moved into an area where his environmentally-directed talents will not be buried under a waste pile of intra-departmental political dissension, or restricted by a chronic case of legislative lumbago.

Dunkle, with co-associate, writer-cinematographer Robert E. Carroll, has founded the Helena-based Ecological Consulting Service. It is an attempt to achieve through private business and good conscience what he could not accomplish as executive head of Montana's Fish and Game Department — a state of mutual understanding and peaceful coexistence between environmental and industrial concerns.

In what was hardly a surprise move to local Fish and Game commissioners, Dunkle resigned his executive post in January of this year to seek the Republican gubernatorial nomination. Dunkle's anticipated resignation followed repeated conflicts with policy-making commissioners appointed under Democratic Governor Forrest Anderson's administration. And it was prompted by the passing of recent legislation aimed at reorganizing the Fish and Game's executive branch. It was aimed at ousting Dunkle from office at the end of 1972.

Dunkle had further incurred commissioner censorship by his history of pro-environmental stands against Montana's big industry. Several years ago, he faced dismissal for opposing the Highway Department's proposed degradation of the Madison River's banks. This unpopular stance resulted in Montana's Stream Preservation Act and the passing of further legislation against air and water pollution.

Forty-seven year old Dunkle, having begun a 16 year career with the Montana Fish and Game Department in 1947, had held the executive office for 8½ years, replacing Walter J. Everin as director on October 1, 1963. As director, Dunkle had drafted and served as overseer to numerous environmental laws passed by the state legislature, and his environmental interests had extended into membership in various conservation organizations.

During his directorship, Dunkle consistently stressed the necessity for long-range planning in Montana's resource policy and the feasibility of industrial cooperation. He optimistically

Photo by Mike Sawyers



Environmental impact statements will hopefully prevent much of the destruction to our streams, forests, and lands. Independent consulting groups will find ever greater need for their expertise in developing such statements.

pointed out that the same heavy equipment being used by Highway Department contractors and Colstrip coal miners, for instance, could be employed for reclamation and reforestation purposes. "The skills that build highways," he claimed, "are the same kind that can reclaim Colstrip."

One of Dunkle's major platforms during his brief political debut had been the need for compatibility of industrial and environmental interests. Regarding his sudden switch from politics to business, Dunkle said, "I campaigned heavily on the belief that there could be economic growth and still have ecological protection. I'm still out to show that it can be done; and this is a way to do it." Dunkle further commented that "all of Montana's gain won't be through government action. Neither will all proper management resources. Our main thought is to see that Montana's resources are properly served."

The Ecological Consulting Service aims at fostering a responsible industrial attitude toward ecology. In letters to various federal and state agencies and private industries, Dunkle and Carroll stated their purpose in these terms: "to give environmental advice, prepare and present environmental impact statements for state and federal agencies and industrial groups."

It would seem that the Environmental Consulting Service is a novel as well as necessary venture by environmentalists in the business world. According to Dunkle, "no one in the area of business offered this kind of service. A number of firms write environmental statements: most are architectural or engineering. We're trying to approach it from an ecological standpoint."

Industrial and business response to the Service has been "very good" to date. Initial contracts include state and federal agencies as well as many of Montana's larger industries and businesses. Out-of-state contracts are also anticipated.

In compiling an impact statement, the first step is to define the problem i.e., what the development or change is to be; where and when it will take place. "Then," says Dunkle, "you determine the goals, what you are trying to solve and what kinds of solutions are available. Taking this into consideration . . . we would offer alternatives of how to do it without destroying the area."

The second stage, Dunkle explains, involves a "two-step process — a preliminary review

and a detailed study" of the ecological impact of the proposed alteration. "This is where we sit down and work with the person in terms of what he can or cannot do, as to what would be ecologically sound and not destructive to Montana."

According to Dunkle, "an impact statement that leads to a good detailed study and a sound reclamation program can put land back into production in a continuing fashion. It's valuable to the company, and valuable to the state of Montana." Applying this philosophy to the issue of strip-mining in Montana Dunkle says, it "can go on, and with proper reclamation the land can be returned to productive use."

Studies of the areas in question will be made by "qualified ecologist-biologists competent in water, soil, vegetation and animal life." Dunkle and Carroll's Service will provide writers, photographers and supervisors for drafting and reporting these studies for public release. The Service's goal in this respect is to promote public understanding through the preparation of informative and readable impact statements. As Dunkle states, "the public will in time pass judgement; and they will pass a better judgement if they have better information."

In his new-found role as peace-maker, Dunkle claims "a lack of understanding on both sides has created emotional issues where they didn't have to be. We're in a position to help industry understand conservation, and I would hope that the conservationists still recognize my integrity. We think we can do some real good for Montana."



Impacts . . .

organization's services. EcoDynamics will advise or conduct field or laboratory research on both wild or domestic animal diseases and human diseases carried by these animals.

EcoDynamics is representative of a growing number of independent businesses concerned with environmental problems in such widely diverse areas as forestry, mining, housing, transportation, pest control, public health and waste disposal. Such organizations are the outgrowth of an increased public awareness of and concern about environmental issues.

More citizens are beginning to realize the urgent necessity for the wise use and management of our rapidly diminishing natural resources by individuals, governments, businesses and industries. The devastating and costly effects of man's indiscriminate tampering with the environment are sorely evident and no longer being ignored. Businesses and industries are learning that sound ecological practices also benefit their economy. The taxpayer is learning that ecological blunders by businesses and industries not only depreciate his environment and his health, but his pocketbook as well. To our shame, this latter loss still speaks most strongly to the majority of Americans.

Equally important, ecological consulting services illustrate the possibility of constructive cooperation between two concerns often mistakenly earmarked as antagonists. The best interests of the businessman may frequently coincide with those of the environmentalist. What is profitable for one may well prove profitable for the other — however the word is defined.

8-High Country News
Friday, Dec. 22, 1972

RETURN



The Frost perfo
Unhelped by an

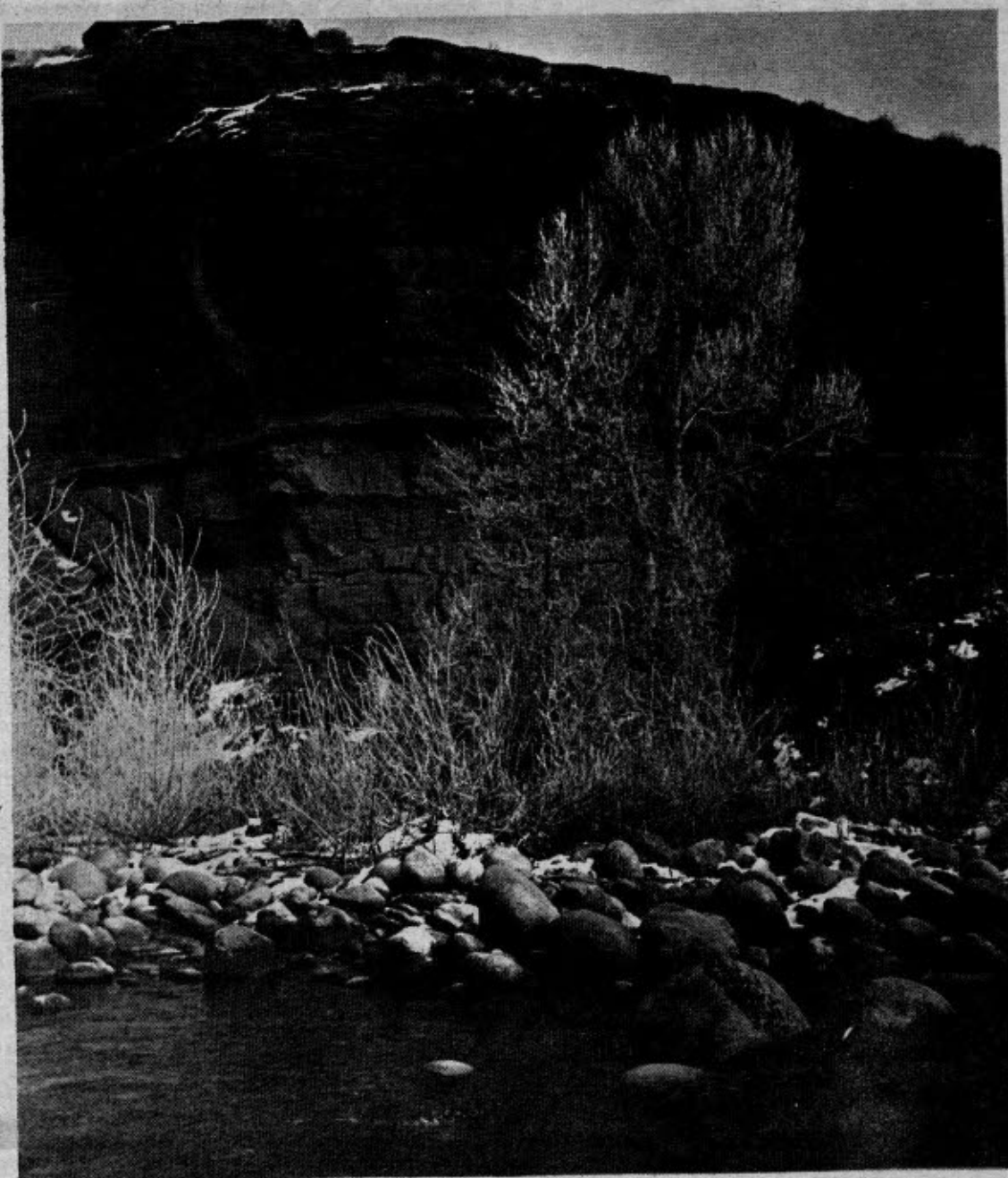


PH

N F R O S T

The Frost performs its secret ministry,
Unhelped by any wind.

Coleridge.



Photos by Marge Higley

10-High Country News
Friday, Dec. 22, 1972

A Look Back...

their victories were some significant ones in the West. The all-powerful Rep. Wayne Aspinall was decisively beaten. A relatively unknown Wayne Owens beat the incumbent Rep. Sherman Lloyd in Utah. Senator Lee Metcalf won handily over his challenger in Montana.

Senior Colorado Senator Gordon Allott, ranking minority member on the Senate Interior Committee, was a backer of the Colorado Olympics. Both went down to defeat. But it wasn't only the Olympics which helped defeat Allott. His insensitivity to environmental matters and his ties to big business were duly noted by the voters. His successful opponent, Floyd Haskell, said he thought the environment was the number one issue in Colorado. Haskell squeaked past Allott in the voting but he was outspent almost 2-1 in campaign financing.

Montana Congressman John Melcher, not previously noted for environmental concerns, responded to his constituent's concern for strip mining. His campaign ads showed him viewing coal stripping operations. He won handily.

So did Congressman Teno Roncalio in neighboring Wyoming, although Roncalio had first introduced industry amendments to a strip mining bill and then turned around and introduced a tough environmental amendment. Over all, he has a good environmental record.

Conservative Idaho Rep. James McClure easily beat his challenger, William E. Davis, for a senate seat being vacated by Len B. Jordan. It was a setback for Idaho environmentalists. So was a nearly clean sweep of legislative seats.

The defeat of the Colorado Winter Olympics financing proposal was a bellwether for the changing attitudes of westerners. But the people of Montana are not to be outdone. The recently published First Annual Report of the (Montana) Environmental Quality Council is a testimonial to how far that state has moved.

Chairman of Montana's EQC, Rep. George Darrow, prefaced the Report with some understatement when he said, "One of the major actions of the 1971 Legislature, with long-term significance for the future of the state, was enactment of the Montana Environmental Policy Act." Darrow, who is now a state senator-elect, was the sponsor of the Act.

An arm of the Legislature rather than the executive branch, Montana's EQC has courageously and forthrightly taken the lead in pointing out the environmental problem areas and recommending what should be done about them. As only one example, the EQC Report recommends to the Legislature that four policy studies be initiated. They are: a Coal Task Force, a State Land Use Policy, a State Energy Policy, and a State Public Transportation Policy.

Concern for what may happen to eastern Montana as a result of national energy problems has fanned interest in tough environmental legislation to a new high. Ranchers and landowners who do not want their lands and way of life destroyed have joined with environmentalists in fighting industry and development interests.

As a result, landowners, businessmen, and environmentalists have formed the Northern Plains Resource Council. Originally put together by such groups as the Bull Mountains Landowners Association and ranchers from Sarpy Creek and Colstrip, the organization has grown and matured. Now its influence even reaches down into northeastern Wyoming.

The Council is headed up by a young lawyer, Ellen Pfister Withers, whose family ranch in the Bull Mts. is directly threatened. Her vice chairman is Dick Colberg whose family ranch is also threatened. Colberg was recently elected to the Montana House of Representatives. (For more on NPRC, see page 11.)

As part of a concerted effort to restrain and guide the projected development of vast coal deposits in Montana and Wyoming, national environmental groups have become increasingly involved. One of the first to delve into the monumental problems of energy development was Miss Laney Hicks, Northern Plains Representative of the Sierra Club, from Dubois, Wyoming. She remains one of the driving forces behind state and national action to deal with the problems of strip mining, air pollution, water uses, social conflicts, and related issues.

She has been joined by such other activists as Ed Dobson of Friends of the Earth, and Bill Bryan, an independent Northern Rocky Mountain Environmental Advocate. Dobson concentrates on the effects and impact of strip mining. Having visited strip mining operations in Europe, he is one of the most knowledgeable spokesmen in the area.

Bryan, born and raised on a small farm in Maine, has a doctorate in Environmental Advocacy from the University of Michigan. His efforts are directed at uniting the efforts of all the various groups in Montana and Wyoming, and providing communication between them.

Energy — and the demands for more — is the key to many of the environmental problems looming in 1973 and the years ahead. Because of the impending energy crisis in the United States, attention is being focused on new sources. Those new sources are coal, oil shale, uranium, and deeper, tighter deposits of oil and natural gas. As a result, such diverse and varied organizations as the Montana Wilderness Association, National Audubon, and Trout Unlimited, have joined with other, seemingly more general groups, to fight unrestrained development. In addition, new, specifically-oriented groups such as Wagon Wheel Information Committee in Sublette County, Wyoming, have sprung up.

Project Wagon Wheel is a brainchild of El Paso Natural Gas Co. to tap natural gas deposits dispersed through tight geological formations. The company has proposed a test of five 100-kiloton nuclear devices detonated deep underground. If successful, the project



could lead to hundreds and possibly thousands of similar detonations. Residents are not opposed to development of the gas deposits but are adamantly opposed to the detonations. They fear their whole way of life may be completely disrupted for a long period of time. Their fears appear to be well grounded, and so Wagon Wheel Information Committee is one of those spontaneous citizen groups formed to protect their own environment. It is indicative of the concern people are beginning to feel toward threats to their way of life by altering the environment.

Similar reactions are coming from Colorado where large-scale development for oil shale will have drastic effect on a whole region. The Colorado Open Space Coordinating Council has been in the forefront of opposition. Made

up of a coalition of many smaller groups, COSCC exemplifies the kind of organization now in operation in many states. A coalition represents many more people and can bring much more pressure to bear on the state level. This is especially important in getting favorable legislation.

Wyoming may not be exactly representative of other western states, and yet what happened here in 1972 could be a microcosm of environmental problems and issues.

Governor Stanley K. Hathaway told the Wyoming Association of Soil and Water Conservation Districts that, "Among environmentalists I am considered the man in the black hat!" He said it was because he feels the state should offer economic opportunity as well as environmental quality.

He also told them that preserving the environment will be "the greatest challenge of the decade. I think we're equal to it." His own performance would not meet the criteria.

At the same conference of soil and water conservationists, Wyoming's Director of Air Quality, Robert Sundin, said Wyoming is spending about the same amount for air quality as for billboard removal. Because of lack of financing and personnel, as well as deficiencies in Wyoming's law, the Environmental Protection Agency has stepped in and taken over some functions of air quality control.

It can be noted that in Wyoming's Republican dominated 1971 Legislature, Republican Governor Stanley K. Hathaway made no strong pitch for adequate funds for air pollution control.

Governor Hathaway concentrated on a bill to give sweeping powers to the state to build water storage reservoirs on the Green River in the 1971 Legislature. He was soundly defeated — at the expense of much energy which could have gone into desirable environmental legislation. Conservationists pointed out at the time that two existing Bureau of Reclamation reservoirs could easily hold Wyoming's allocated Green River water.

Thwarted by those who wanted to protect the scenic Upper Green River, the Governor and other state officials turned to the alternative. They entered into negotiations to buy Fontenelle Reservoir from the Department of the Interior. Those negotiations, like the Vietnam peace talks, proved illusive. When it seemed that all was to be signed, sealed and delivered, it was announced that the Department of the Interior had lost the contract. It still hasn't been found.

Wyoming, one of the leading producers of raw uranium for nuclear fuel, does not have control over radiation sources. Wyoming's air quality control section has been calling for legislation for at least four years. Neither the Governor nor the Legislature has taken heed. With five uranium processing mills and the prospect of a \$2.5 billion uranium enrichment plant, Wyoming officials now feel it is imperative to get legislation.

Wyoming's Air Quality Act, highly touted by Governor Hathaway, fell flat on its missing sections. The Environmental Protection Agency had to come in and assume charge of certain areas of air quality control. In addition, Wyoming's law contains one of the biggest loopholes ever devised by a polluting industry. It says Wyoming standards cannot be higher or more strict than Federal standards. This means Wyoming's clean air may be degraded down to the Federal level before the law's provisions take effect. The clause has won a dubious national distinction of being termed the "Wyoming Clause."

Wyoming politics are almost overwhelmingly dominated by the Republican party. The Republicans have complete control of the State Legislature. It is here that serious environmental legislation must originate if the

(Please turn to page 12.)

The Northern Plains... What of their Future?

Men have passed through this land, and some have stayed, but all have used its productiveness with little thought, assuming that it would always be productive and beautiful. However, those who stayed learned from the land one lesson, that the scars of rough treatment on this land healed very slowly. The plow, the buffalo and the cow have left no deep, everlasting marks upon the land, for the land has been stronger and more enduring than any of them or the men who accompanied them.

Now a new group of men have come with plans to lay bare 1200 square miles of this land for the coal beneath its surface, an area equivalent to a strip 20 miles wide East and West stretching from the Yellowstone River in Montana to the Platte River in Wyoming. These men would dig up the land down to depths of 150 feet in the beginning, and some of them say that they can economically remove 10 feet of overburden (land) to get at one foot of coal. These men have big plans for this land. They come thinking about coal and profits for tomorrow, but not about land for the future. The strip mining of coal for which these men are preparing will disturb and disrupt this land as never before. These men know how to remove coal, but not how to return the land to its original balance and productivity.

THE SCOPE OF POSSIBLE DEVELOPMENT

Regardless of the lack of knowledge, real and scientific, on the part of the developers, plans are afoot to proceed with development, whether in a coordinated form as set out in the now probably defunct North Central Power Study or in a piece-meal fashion, a generator at a time, as in the proposed Montana Power Company plant at Colstrip, which will grow from a 700 megawatt to a 2100 megawatt plant. This plant together with the proposed gasification plants on the Cheyenne Reservation is probably the opening wedge of development.

The following lands have been leased for coal development:

Acres	Lessor	Area
61,123.93	BIA	Crow Reservation
36,232.27	BLM	Montana (federal and private surface)
203,614.73	BLM	Wyoming (federal and private surface)
56,902.00	State of Montana	Montana
16,435.75	BLM	North Dakota
374,308.68		Total Area

Additional lands are subject to exploration permits for coal which lead to the issuance of preference right options and leases, and are as follows:

Acres	Permitter	Area
231,555.93	BIA	Crow Reservation
227,773.31	BIA	Cheyenne Reservation
152,633.44	BLM	Wyoming
611,962.42		Total Area

The foregoing leases are a conservative estimate of 374,308.68 acres known to be leased for coal in the Northern Plains area, which do not include the unknown amount leased by the Burlington Northern and other private owners. It is evident that strip mining of an area of this size will have a massive effect in the Northern Plains on land, water, and air quality.

THE FUTURE OF WATER

In this semi-arid land, water is essential and prized. Irrigation, stock watering, small cities, and recreation have been the traditional uses for water. The rivers have remained essentially free-flowing. This may all change, for it takes water for coal development, and lots of it.

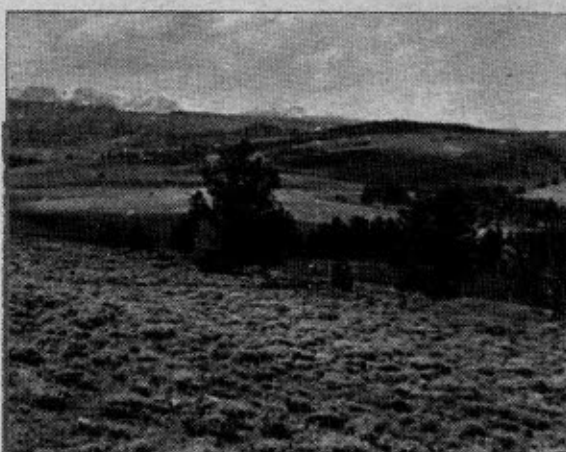
April 1972 the Bureau of Reclamation published an Aqueduct Appraisal Report, proposing a system of aqueducts and holding dams to obtain 2.8 million acre-feet of water annually (about 1/3 the average annual flow of the Yellowstone River) from the Wind-Bighorn system, Fort Peck-Garrison Reservoir, Powder, Tongue, Little Bighorn, Little Missouri, and Yellowstone Rivers, and even the Green River, for industrial development of coal in the Gillette-Colstrip area. The water siphoned out of the rivers for coal development would not be returned to the rivers or recycled to any productive purpose in this region, but would pass into the air as steam and fog. It is conceivable that such a diversion of waters from the free flowing rivers could result in a severe curtailment of future urban, recreational and agricultural water use in this area.

An additional effect of coal development on water is the destruction of the underground water table as a result of strip mining. Many areas depend entirely on ground water, having no live streams in the area. At this point there is little reliable scientific information as to the nature of the underground water in the coal-bearing areas of Eastern Montana, other than the Tongue River Member of the Fort Union formation is the superior water bearing strata of the area. Even more speculative is the nature of the underground water in a spoil bank. There are enough existing spoil banks in Montana, Wyoming, and North Dakota to begin research in this area, and the Northern Plains Resource Council does not see any justification in proceeding with the systematic destruction of the Tongue River Member of the Fort Union Formation before research is completed on the nature of our underground water resources.

THE FUTURE OF THE BIG SKY

Clean air with high visibility is a distinctive feature of the Northern Plains, and in Montana, the Air Quality Bureau safeguards its existing high quality. A three-judge Federal Court has ruled that it is illegal for plants like the proposed Montana Power Plant at Colstrip to significantly degrade the quality of existing air. This means that if the air is "clean", the people who live in the area have a positive right to retain that clean air and not have it filled with chemical debris until it is as soiled as the air constituting the national standards. The people in many populated areas, who consume the energy, refuse to allow permits to construct generating plants, because the consumers fear the plant pollution. They have had enough.

Montana Power obtained rate increases, which will help to support the construction of the Colstrip plant, which will ship most of its power to the West Coast on transmission lines running West from Colstrip through the Magruder Corridor of the Bitterroot Valley and West. Bonneville Power Administration is already beginning studies on additional power generation complex-



This land, "... is a golden land, a land of buff-colored sandstone cliffs, ochre-tinted ponderosa pine bark, and expanses of yellow grass. The landscape seems to glow under the hot summer sun. It is intimate—with a feeling of closeness between man and earth."

Environmental Quality Council
First Annual Report, October 1972, p. 83

es for the West Coast in the Colstrip area and is pursuing further transmission line studies. The Draft Environmental Impact Statement on the initial Montana Power Colstrip plant notes that its operation and surrounding activities may well degrade the quality of the existing air at Colstrip to the national secondary air quality standard. If one relatively small plant can do this, we would do well to ponder the effects of more and bigger power generating plants on the Big Sky.

THE FUTURE FOR OUR PEOPLE

The coal men are coming promising that for every man they employ, an additional 2.5 jobs will be created to service their employees' desires, and if the estimates are true, a population increase for Eastern Montana of 200,000 to 400,000 people, taking a conservative estimate. Plant construction will bring in large numbers of transients. Trailer parks will bloom like prairie wild flowers. The companies planning the construction have not made any plans for the accommodation of their construction people; they are making plans only for their permanent employees. The proposed Montana Power Plant at Colstrip, while under construction will employ 700, and an estimate has been made that the construction of the Reynolds plant at Buffalo, Wyoming, will bring 75,000 temporary residents into the Buffalo area. The proposed gasification plants on the Cheyenne reservation will bring in from 20,000 to 30,000 people to the reservation area.

A number of questions arise. Who will take care of the temporary construction workers for the companies? Will an increased industrial tax base support the schools, water, and sewerage treatment systems, more heavy duty paved roads at the city and county level, increased police force requirements and law enforcement facilities? With the increase of population will come demands for secondary tax supported projects like parks, swimming pools, zoos, baseball fields, art museums, enlarged city halls and county court houses, more sophisticated tax assessment systems, enlarged court systems, and social workers. An enlarged industrial tax base has not in other areas successfully supported all the things taxed upon it.

We feel that the following statement from the Montana Economic Study Research Report, Part I: The Montana Economy, October 1970, Chapter 1.59 is correct and should be carefully considered in relation to the proposed development:

Numerous studies have shown that the two factors that influence spending by state and local government services must be expanded more or less proportionately with population, it is to be expected that increased total expenditure and taxes will accompany population growth. And since expenditure per capita tends to be closely tied to per capita income, any policy that raises per capita income is likely to raise, not lower, per capita taxes by some fraction of the increase in per capita income.

A slow steady growth is easily planned for, but growth like a mushroom cloud can be devastating. Thirty years is the estimated life of the proposed plants. The question arises, will we have at the end of that time a series of dying and ghostly company towns spread across the prairies, an Indian



community submerged in a white mining culture, and a marginally productive agricultural community. We think that serious consideration should be given to these matters before we take on the social and economic problems attendant with a mining culture.

We do not think that coal development offers the kind of long term, stable economic and social development that the residents of the Northern Plains would like to see in this area. Let us learn from the problems of the East, and make haste slowly.

THE NORTHERN PLAINS AND THE ENERGY CRISIS:

The rate of growth of energy consumption in the industrial nations of the world has been so phenomenal that our Great Plains region is faced with the ominous threat of being literally consumed to satisfy our nation's desire for metallic and fossil mineral resources.

Energy consumption is bringing these new men West, because in 50 years the United States has consumed nearly all of its known oil and gas reserves, and because the populous areas demand energy, but do not desire to absorb the pollution of energy production where they live. The new men come West, too, because there is a profit to be made from them from the development of cheap Western coal (coal as low as \$2.00 per ton at the mine). Their profitable plans for coal development could exhaust our strippable Western coal reserves in 30 years, and leave us an exhausted land.

We, the people, are told that we have an "energy crisis", but we are not exhorted to conserve our energy use. We are told to burn more gas, air condition more buildings, burn yard lights at night; all this without a thought that the energy we use (fossil fuels) pollutes our air, consumes our land, and fouls our water. More people, more consumption, more energy, and more pollution—that has been the cycle of "growth"; but we are discovering that "growth" has its limit imposed by the ability of the earth to absorb the burden of our waste.

Our land of space and sky is now faced with the possibility of being burned on the altar of cheap energy for millions; it may be devoured by the nation's desire for energy from fossil fuel resources, but should we permit the consumption of our land in a short 30 years without serious thought and study in two areas; firstly, whether over the long term our mined land can be restored to its former self-sustaining productive balance, and secondly, what new source of energy will be available in 30 years when the strippable coal is gone.

We are told now that we have an energy crisis, but in 30 years we may have crises in land... and energy. We cannot wait 30 years to solve the energy crisis. We must seriously direct our national goals towards its solution in the same manner that Americans placed a man on the moon in 10 years.

In 1971 the Federal Government spent the following amounts for energy research:

\$ 3 million	Geothermal energy	clean, possibly infinite
4 million	Solar energy	clean, infinite
65 million	Fusion	clean, infinite
136 million	Fossil Fuels	dirty, polluting
336 million	Nuclear Fission	radioactive, polluting

The foregoing figures indicate that there is no serious commitment at a national level to finding the solution for an infinitely renewable and pollution free source of energy, but such sources are on the horizon. We must seek a national commitment to make them a reality. We have faith in American technology that it is possible to do this and in a manner which will permit us to preserve our land, our air, and our water. To invest in coal is to avoid the problem.

PLAN OF ACTION:

The Northern Plains Resource Council feels that certain steps should be taken in order to give people time to consider the effects of coal development and to take steps to protect ourselves and our land from the worst effects of coal development.

The science of reclamation is in its infancy in the Northern Plains region, and we think that mining should be slowed until more hard facts are known concerning the restoration of the land to its original self-sustaining balance, how long it will take, and what will happen to our ground water and to the water taken out of the rivers.

The state reclamation laws of this area are comparable to the original naive attempts made by the Eastern states 30 years ago. We must get through our state legislatures and through Congress tough, sophisticated reclamation laws, defining standards of reclamation, as well as processes of mining and reclamation, laws which will ensure the protection of the people and the land after the coal men are gone. We must seek legal protection of the surface owners in the area ensuring that they are equipped with equal tools for bargaining with mineral interests. We must seek enforcement of the State and Federal laws on water and air quality already available for our protection.

To obtain these goals we must all become informed and be vigilant, or planning will proceed without our input, knowledge, or consent. We will be the faceless figure of population density of 1.2 persons per square mile. The people of the Northern Plains are more than a population density figure. We have faces and we have voices. Let us make them seen and heard.

JOIN US

The Northern Plains Resource Council is a non-profit Montana corporation comprising a federation of regional landowners groups and concerned citizens, who have banded together for the purpose of protecting and preserving their land and to give the people who live in the Northern Plains an organized voice to influence the decisions affecting their lives. We are active in communications, research, organization and advocacy.

If you are willing to entrust your future to the discretion of the power industry, the agencies, and the mining companies, then there is no need for you to feel concerned about the future of Wyoming, Montana, and the Dakotas. If, on the other hand, you agree with us that the long-term adverse effects of the development of the Fort Union and Powder River Basin coal fields may well outweigh the short term gains, then join us. We need your support, your ideas, and your contributions. Come by and visit us at 421 Stapleton Building, Billings, Montana, or call 259-6114.

Northern Plains Resource Council
421 Stapleton Building
Billings, Montana 59101
(406) 259-6114

Enclosed is my donation for \$ _____

Enclosed is my \$5 membership fee ☐

Please send further information. ☐

Name _____

Address _____

City _____

State _____

Zip _____

Northern Plains Resource Council
421 Stapleton Building
Billings, Montana 59101
(406) 259-6114

I would like to attend a public meeting sponsored by NPRC.

Name _____

Address _____

City _____

State _____

Zip _____

TO: Air Quality Bureau
State Dept. of Health and Environmental Sciences
Cagwell Building
Helena, Montana 59601

I support NPRC petition requesting the denial of the permit to construct the Montana Power Colstrip generating plant.

Name _____

Address _____

City _____

State _____

Zip _____

12-High Country News
Friday, Dec. 22, 1972

A Look Back...

state is to maintain its quality environment. And yet at a Natrona County Republican platform meeting in March, the party rejected such proposed planks as: Be it resolved we will support measures directed at preventing degradation of Wyoming's air quality; Be it resolved we will support an Environmental Bill of Rights which holds it is every citizen's right to enjoy a clean, healthy and attractive environment; Be it resolved we will support measures to protect the state's land resources from unnecessary degradation by strip mining and construction projects. It can be noted that Natrona County contains about one-fifth of the people of Wyoming.

But all was not bad. Like others around the country, Wyoming people are restively stirring. Newcomers join swelling ranks of natives in questioning such time-honored precepts as progress, development, and growth.

What started out as a local issue ballooned to national attention over expansion of Jackson's airport. Located on national park lands, opponents had a ready handle to bring the problem to public attention. What has finally emerged as the central issue is the question of growth itself. If you extend the runways to accommodate small jets, how long before you have to decide to lengthen them again for ever bigger jets, handling ever more people?

As more people press for more solitude and escape from the scurrying, noisy, plastic society of the technological world, the people of Wyoming are asking how much wilderness is enough? To those who have had virtual wilderness at their backdoor, and always expect it to be there, it is a difficult question to answer. But the answers are coming in the form of more people to crowd them on their



Wyoming's Governor Stanley K. Hathaway has often accused environmentalists of caring more about prairie dogs than people. He has been quoted as saying, "Certainly to ravage the earth would destroy us all but on the other hand to say that we will have no more industry in Wyoming would leave the state to the prairie dogs."

favorite wilderness lakes, and in their campgrounds.

Once a term which drew cold stares, wild and scenic rivers are now openly discussed. The concept is actively being pushed by the League of Women Voters. Two wilderness workshops were held in Wyoming, at Lander and Laramie. Another regional wilderness meeting was held in Denver.

Wyoming group of the Sierra Club is active and thriving. Many residents have found the members are not all sideshow freaks, nor do they all originate in southern California.

Audubon chapters are swelling their ranks in unprecedented numbers. A new Chapter at Green River was added to those at Casper and Sheridan.

The Wyoming Federation of Women's Clubs and the Wyoming State Library sponsored a series of seminars on the environment around the state. Surprisingly, they found serious and growing concern with solid waste to be a primary issue.

Highways came in for scrutiny and criticism. As a result of concerted effort and public exposure of factual material, the Clarks Fork Canyon may be safe for the time being.

Two outstanding public land areas were drawn to public attention and given some protection under Bureau of Land Management regulations. The vast Red Desert, home of thousands of antelope and herds of wild horses, now has the beginnings of a plan of management. Historic Outlaw Canyon in the Big Horn Mountains was recommended for greater protection.

A Glenrock rancher, Jake Kittle, saw the need for a movie on what was happening to Wyoming's environment. He thereupon produced *Wanted: Wyoming, Dead or Alive!*

Now, as the New Year approaches, the battles begin all over. When legislatures go into session, some of the most crucial efforts are involved. The Third House, in the form of special interest groups, is already in evidence in most capitols. Those who care for undefiled skies, clean and free-flowing streams, productive lands, and an environment they would wish to pass on to future generations must also be present.

If you wish to support lobbying efforts in Wyoming, send contributions to the Wyoming Outdoor Coordinating Council, Box K, Lander 82520. Colorado contributions should go to the Colorado Open Space Council, 1742 Pearl St., Denver 80203. Montana contributions to Northern Plains Resource Council (see page 11), to the Montana Wilderness Association, Box 548, Bozeman 59715, or to the Montana Wildlife Federation, 410 Woodworth, Missoula 59801.

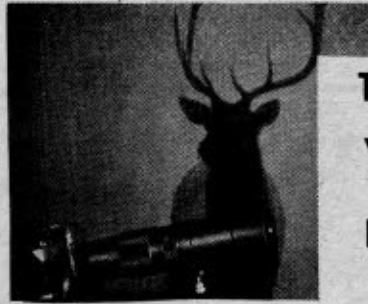
Utah contributions can be sent to the Utah Environment Center, 1107 South 1900 East, Salt Lake City 84108. Idaho's can be sent to the Idaho Environmental Council, Box 3371, University Station, Moscow 83843.



"..Noted & Quoted.."

"The time is already gone when a man can say 'This is my land and I can do as I please.' The way private landowners use their land must eventually fit in with the uses of society. . . The land has a certain 'carrying capacity' when it comes to humans just as it does for cattle and all other creatures. The capacity is lower if every private landowner does just what he pleases."

Dr. Thadis W. Box
Dean, College of Natural
Resources
Utah State University



The Wildlife Photographer

by Ed Will

With this, I kick off a new monthly column. Since it is new, I'll use the first column to tell what it's going to be all about. Judging by the sales of telephoto equipment for wildlife photo enthusiasts from my own camera shop, wildlife photography is a very rapidly growing form of outdoor recreation. It will be my pleasure to try to give information and hints to make it more enjoyable and productive.

I am not out to make professional wildlife photographers out of anyone. But I would like to help amateurs get wildlife pictures that will give personal satisfaction and pleasure, using relatively simple equipment that is not too expensive.

Wildlife photography can give all the thrills of the hunt with many advantages. It has no closed season but offers year around hunting for anyone. Besides, after you shoot you won't have the rather unpleasant task of dressing out the carcass and packing it out to the road. (I must admit that a picture of a buck lacks some of the culinary flavor of venison in the freezer. So you'll have to depend on feeding the spirit rather than the flesh. However, I suspect that in our modern way of living, there is enough hunger of the spirit to go around.)

Reader hints and unusual experiences will be welcome but space will limit the number used in the column. An occasional unusual photo might be used but since this is a non-profit publication (in every sense of the word) no payment may be made for reader contributions. Questions pertaining to WILDLIFE photography will be answered either by letter or in the column, but not ones on general photography. A stamped and self-addressed envelope must accompany all questions, photos and hints.

I will try not to get too technical — no essays on the relative co-efficient of refraction of lens A against that of lens B, etc. Equipment will be described in ordinary language. I am a great advocate of simple language in writing and have found it the best expression even in major publications.

No particular brands of equipment will be plugged. High Country News accepts no advertising so there are no advertisers to keep happy as in other publications, and the impartiality this permits in writing about equipment makes such writing far more of a pleasure.

So much for statement of policy. Next month's column will start out with some information on just what equipment is needed for practical wildlife photography. My experience selling such equipment has shown me that people make grave mistakes in their original purchase of a camera for such photography.



Compost An Asset

A compost system of garbage disposal is being introduced to New York City and Lubbock, Texas. Ecology, Inc. is presently converting part of New York City's trash into organic fertilizers by means of a patented bioconversion process. The currently operating 150-tpd plant in Brooklyn will serve as a model for the construction of larger plants in a cooperative project between Ecology, Inc. and General Electric Co. Replacing the present method of sanitary landfill in Lubbock, Texas, Naturizer, Inc. will combine solid and liquid garbage with feedlot manure to produce compost for use on fields, gardens and lawns.

In addition to being more environmentally sound, the new method of waste conversion into fertilizer will be less costly than standard methods. Ecology, Inc. will receive \$4.50/ton from New York City, and Naturizer, Inc. \$110,300 from Lubbock for its first year of operation. Lubbock city officials predict they will save at least this much in landfill operation cutbacks and less daily mileage traveled by garbage trucks.

Western..... Roundup

High Country News-13
Friday, Dec. 22, 1972

Briefly Noted...

In the aftermath of the oil spill into Lake Powell, sources in Utah say that a more accurate estimate of the volume of the spill is 250,000 gallons. The earlier, public estimate was 38,000 gallons.

There is also the curious fact that the ruptured section of pipe was rushed to Texas by the pipeline company — before it could be examined by the Environmental Protection Agency.

The question is also being raised as to why the whole oily mess was buried at the 3,600-ft level of Lake Powell. The lake level is supposed to rise above that level next year and from then on. No assurances have been given that the oil will stay buried.

* * *

Nevada's State Economic Development Department has announced a new policy in regard to economic development. A spokesman for the Department says it feels that no new industry or business should be solicited unless that industry is willing to utilize the most technically efficient and economically feasible pollution control methods. The industry should also meet the needs and requirements of the community.

* * *

The Bureau of Land Management is taking a second look at a fencing proposal in southwestern Wyoming. District Land Manager Neil Morck says the BLM might not allow any fences in the Pilot Butte Study Area because of adverse public opinion.

In an area in which there were heavy winter losses of antelope one year ago, it was not difficult for fencing opponents to get a petition bearing almost 2,500 signatures. The BLM said it had also received letters from several state groups in opposition to the fences.

* * *

Grizzly bears in Yellowstone National Park may be extinct by 1993 according to a wildlife biologist who has spent years studying the animal. Dr. Frank Craighead, Jr. of Moose, Wyoming, says if current management policies in Yellowstone Park are not changed, the bears are on the way out. Craighead says there are only about 250 grizzlies believed living inside the park.

* * *

Arizona Governor Jack Williams has been faced with a recall petition. Backers of the recall base their charges on indifference to environmental issues and his signature on a controversial agricultural labor law.

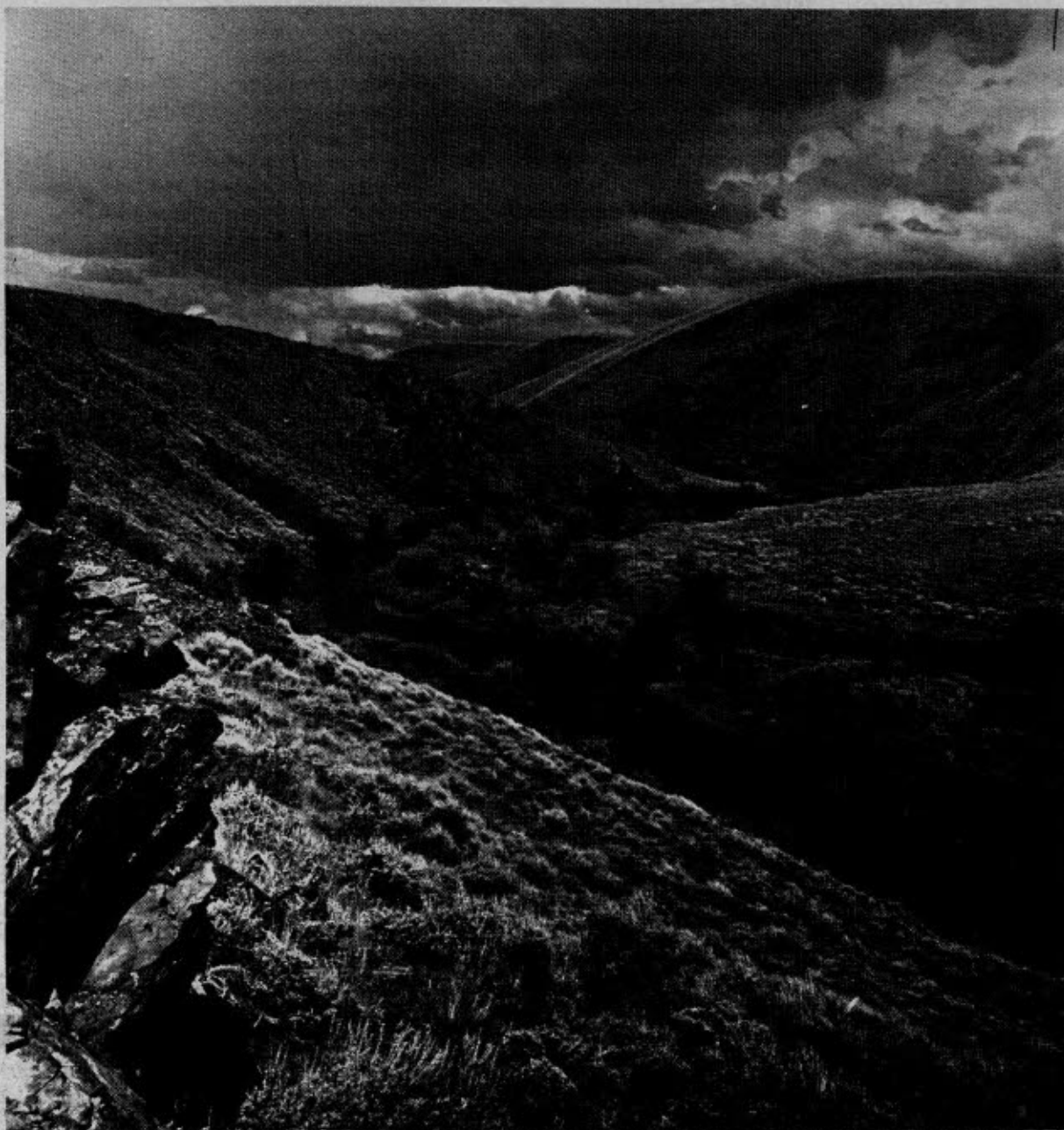
* * *

Derrel P. Thompson has been named as Midcontinent Regional Director of the Bureau of Outdoor Recreation in Denver. The 49 year-old Thompson was a vice president in charge of government operations for Environogenics Co., a division of Aerojet-General Corp.

* * *

Ronald H. Walker, a 35 year-old special assistant to President Nixon, has been named to head the National Park Service. The appointment drew immediate criticism from Wyoming Senator Gale McGee.

McGee said he "had hoped the new director would be an individual of recognized professional competence whose background included a great store of environmental knowledge." McGee also said the appointment of Walker raised "the spectre of politicization" of the Park Service.



Wyoming's Sweetwater River through the historic Sweetwater Canyon along the Oregon Trail has been proposed by the Bureau of Land Management for Wild and Scenic Rivers designation. Wyoming's League of Women Voters has proposed legislation which would authorize a stream preservation feasibility study. It would provide a survey, plan a state system of rivers and streams, prepare a report on such a system, and make recommendations for further legislation. Such a study, although far short of actual protection, would be a far-reaching step in Wyoming.

Wild Horses - "Useless Mustangs"

Utah's state brand inspector says the federal law protecting wild horses and burros is unrealistic and dangerous. John A. Chugg of Ogden, supervisor of state brand inspectors says he must defend stockmen in their opposition to preservation of wild horses.

Chugg said the law which was pushed through Congress "by busybody women's clubs and elementary school children is ridiculous, unrealistic and dangerous to our environment and economy."

The spokesman for livestock interests asks, "Which is more important, to allow herds of wild, useless mustangs to deplete the mountain plains and rangeland with its resulting erosion and replacement by cactus and sagebrush, or to intelligently manage the grasslands so that food — beef and mutton — can be produced for the survival of mankind?"

Chugg's counterpart in Wyoming, Dean Prosser, says he thinks the Utahans' remarks were "a little overdone." But he said there will be problems with the herds.

Prosser, who was named to the Wild Horse Advisory Board, says, "Horses are notoriously hard on vegetation. Horses tear up the range and they run in bunches."

Prosser sees control of the herds as one of the biggest problems.

"How is the public going to accept reduction of the herds when the time comes?"

The law provides that surplus animals can be removed if they are seriously ill, injured, or there are too many for the habitat. Removal must be done in the most humane way possible.

Prosser says he "suspects" that a great majority of the wild horses in Wyoming are nothing more than ranch horses that were "turned loose and propagated on public lands." He said he spoke for stockmen when he said the general attitude is that they don't want to see "a population explosion" of the wild horses.

No accurate inventory has yet been made of the horses but rough estimates place the number in Wyoming at about 4,000. Most of these are in the Red Desert where most of the land is publicly owned.



After a visit to the Michigan House of Representatives, an eleven-year-old boy reported in a letter to the local paper, "There were quite a few empty desks. One legislator was eating peanuts. Another was reading the funnies. When the speaker called the session to order, nobody paid any attention. We wouldn't be able to do that in school. Grownups should behave better."

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Friday, Dec. 22, 1972

Thoughts from the Distaff Corner

By Marge Higley

This Christmas story comes to you, somewhat indirectly, through the courtesy of Aesop, the fable-teller.

One year Town Mouse invited his cousin, Country Mouse, to spend Christmas in the big city. (Because this column is 2 inches shorter than it used to be, these parties shall hereinafter be designated as "TM" and "CM".)

Now CM had always enjoyed the peace and quiet of his rural life, and he wasn't sure he wanted to go to the big city, but TM finally convinced him.

"I'll meet you at the edge of town," said TM, "and we can follow Santa Claus Lane straight to my house."

CM agreed, and the day before Christmas, they met as planned. Santa Claus Lane it was, indeed! There were Santa Clauses (in assorted shapes and sizes) on every street corner. There were even mechanical Santa Clauses bobbing and swaying in department-store windows!

"Somehow," thought CM, "it seems much more personal when there's only one Santa Claus each year."

Loudspeakers were blaring out Christmas music. They heard Jingle Bells, Jolly Old St. Nicholas, I Saw Mommy Kissing Santa Claus, and many more. CM kept listening for his favorite — O Holy Night — but he didn't hear it.

"There's a Christmas tree lot just around this corner," said TM. "Let's go pick out a tree."

CM was flabbergasted at the sight of the Christmas trees. There were tall trees and short trees; thin ones and fat ones. There were pink trees, and blue ones and white ones — even silver and gold trees!

"I had a pink tree last year," said TM. "What color would you like?"

"Well," hesitated CM, "I sort of like green trees, myself, but I don't see any here."

"Green trees are quaint and old-fashioned," laughed TM. "We'll take this white one, and decorate it in blue and silver."

It was evening by the time they left the Christmas tree place, and the streets were dazzling with a brilliant display of lights and neon signs and oscillating, animated Christmas decorations. CM blinked at the lights, and looked skyward.

"I can't see the stars," he complained.

TM laughed at him. "Look, silly, there's a star on top of every Christmas tree for blocks and blocks — clear on down the street!"

"Well," thought CM, "even the three Wise Men would have trouble following The Star, with all this competition!"

Suddenly, he said, "Thanks for the glimpse of your city, Cousin TM. I guess I'll be going now."

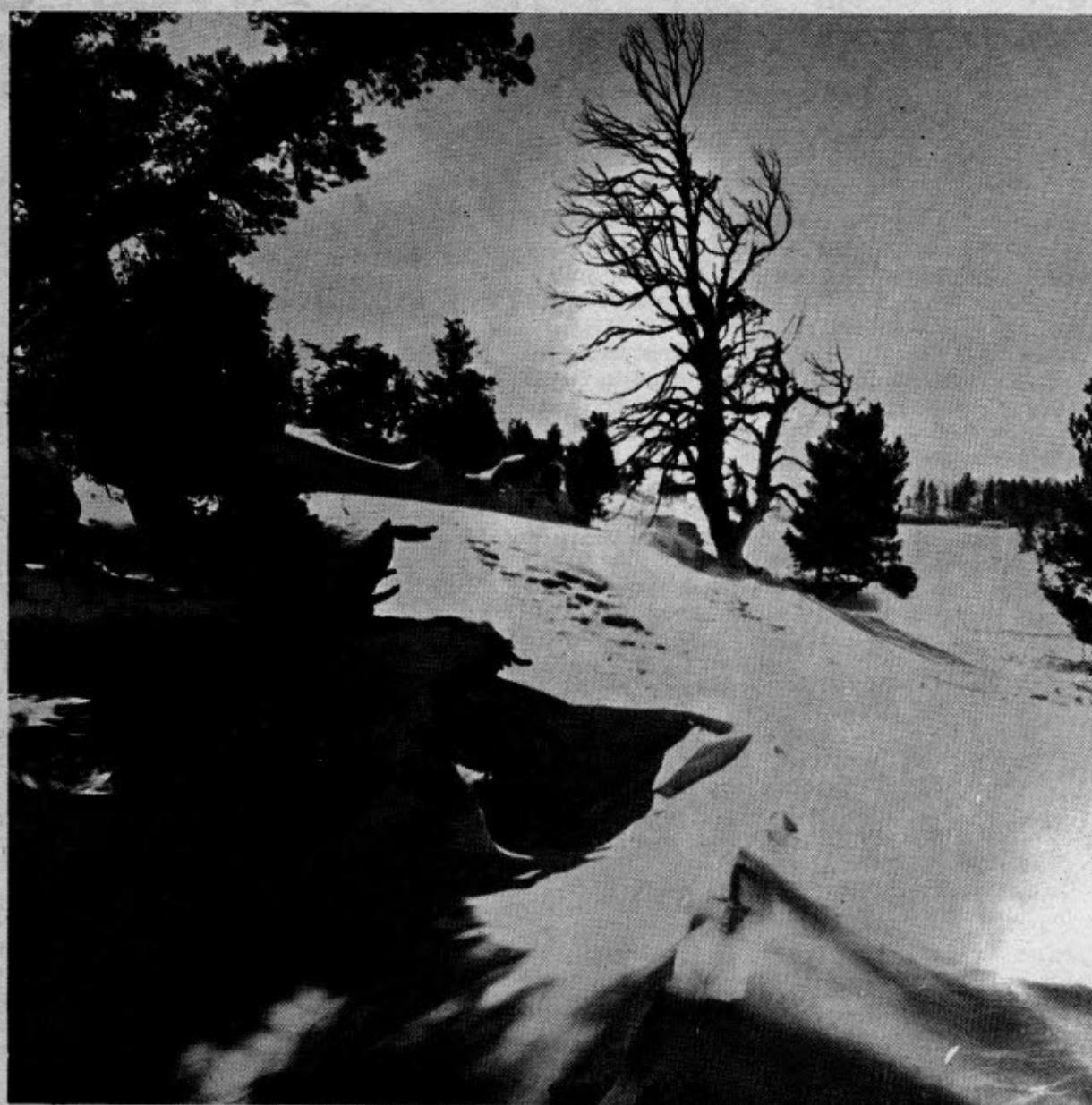
"But you can't leave now," cried TM. "It's Christmas Eve, and you haven't seen ANYthing yet!"

"Yes, I know," murmured CM, as he hastened to retrace his steps back through Santa Claus Lane.

With a sigh of relief he passed the city limits and at last came to his familiar rural haunts. The spruce and pine trees, dusted with a thin coating of fresh snow, had never seemed more beautiful. The quiet woods seemed to sing of Silent Night and Peace on Earth.

"Somehow," thought CM, "when I'm out here close to nature, it's easier to remember what Christmas is really all about!"

He looked skyward. The stars were glittering pale gold against the black sky. He blinked, and looked again. One star, up there, seemed to be... extraordinarily bright. . . .



The snow lay on the ground,
The stars shone bright
When Christ our Lord was born
On Christmas night.

VENITE ADORAMUS

Use Water Sparingly

by George W. Kelly

As a landscape architect and nurseryman in Colorado for some forty years, I have planned and planted many thousands of gardens. I have talked and advocated the preservation and the addition of beauty in flowers and trees for a long time.

Now, we are facing a crisis in that the population has increased to the point that a shortage of water is right around the corner. We need to be revising our practices in ornamental gardening so that we may still have good gardens with the use of much less water.

In Colorado, much water has been diverted from the more thinly populated western slope to the densely populated eastern slope with the excuse that "domestic" water has a prior right over agricultural or recreational use. Actually around half of this "domestic" water is used to water bluegrass lawns.

The western slope is not going to consent to anymore diversion of water without a strenuous protest, for they now need all they have for their own uses. More and more people are moving from the congested areas to these comparatively "open spaces."

We need blue grass lawns, but we do NOT need to plant every square foot of ground surface around our homes to blue grass. There are other dry land grasses which will give a green cover, hold down the dust and mud and still require less water. There are other ground covers both living and inanimate that can be substituted. I do not like the looks of many

of the areas recently covered with red aggregate, but a good landscape designer can suggest many things that can be used and be attractive.

We now need to develop a landscape architecture for the Rocky Mountain area which uses the appropriate things from the English, Spanish, Japanese and other areas and combines them into a design which recognizes this area's differences and plans to fit them.

We have many nice native plants that have adapted themselves to this climate over the thousands of years. They may be just as attractive as the exotic things we have been using but they will live and be happy with a fraction of the water. There are many other plants from other similar parts of the world which we may learn to use.

Finally, we need to learn how to use the water that we have more efficiently. Most of the sprinklers now in common use waste too great a proportion of the water, and the average lawn is badly overwatered. We must learn that the secret of successfully growing plants in this area is to encourage them to have deep roots. To do this we must prepare the soil deeply and water much less frequently and much more thoroughly.

We can also cut down considerably on the amount of water needed by learning how to properly mulch, cultivate and weed.

By relearning NOW, these three things — better design, better plants and better maintenance, we can look forward to having good gardens in this area for many years to come.

Environmental Eavesdropper

LOONEY LIMERICKS

by Zane E. Cology

"Get your boots!" cried Mrs. St. Nick
"It'll be time to leave, pretty quick —
When you get down below
Take it easy and slow —
That SMOG can get dangerously thick!"

* * *

Florida's Apalachicola River is slated for development and heavy barge use if an upstream county gets its way. The county wants to dredge a large inland port for barges. The river, which originates along the Georgia border and flows to the Gulf of Mexico, is famous for its fisheries and its natural beauty. The famous Apalachicola oysters come from the mouth of the river.

* * *

The AEC is not going to store highly radio-active wastes in the bedrock beneath the Savannah River plant in South Carolina. Faced with concerted opposition from environmentalists and the outspoken criticism of prominent scientists, the AEC changed its stand. The opposition was joined by powerful South Carolina Senator Ernest F. Hollings. Some of the extremely dangerous wastes will remain deadly for hundreds of thousands of years.

* * *

Shell Oil Co. has agreed to stop its use of two major pesticides, dieldrin and aldrin. This action is the result of over two years of pressure by the Environmental Protection Agency and various conservation groups to halt Shell's exclusive manufacture of these long-lasting pesticides. Aerial spraying on cornfields is the largest of five categories of the chemicals' use now being discontinued.

* * *

A survey of 125 federal and state park superintendents and public land managers finds the use of off-road vehicles destructive to the environment and to wildlife. Fifty-four percent report willingness to ban such vehicles unless funds are provided by federal and state governments to protect the environment. Only 15% were in favor of the continued use of off-road vehicles. Public land managers were most disturbed by the use of trail bikes, mini-bikes, all-terrain vehicles, snowmobiles and dune buggies in that order.

* * *

The Interior Department's Fish and Wildlife Service recently closed three snowmobile trails in wildlife refuges in the northern Midwest. Their studies show that snowmobiles "do disturb wildlife and harm wildlife habitat." The snowmobile bans includes the Tamarac National Wildlife Refuge in northern Minnesota and the Des Lacs National Wildlife Refuge in North Dakota.

* * *

Wyoming's Veterans of Foreign Wars Commander Charles Mollett has issued a list of ten facts about world and national environmental problems. Included are facts relating to ocean pollution, air and water pollution, junked automobiles, and endangered species. Mollett says, "Any possible skeptics, who believe America is merely on an 'Ecology Kick' should consider these ten facts."



Areas of Action

High Country News-15
Friday, Dec. 22, 1972

The National Water Commission has issued an 1122-page draft report, climaxing four years of studies of the nation's water problems and needs. The Commission has now scheduled public hearings on the report before submitting a final report to the President. Four hearings will be held at Spokane, Washington, January 8 and 9; Phoenix, Arizona, January 11 and 12; New Orleans, Louisiana, February 5 and 6, and Washington, D.C., February 8 and 9.

However, for those who cannot attend the hearings, written comments will be accepted until January 15. Comments can be mailed to National Water Commission, Rm 405, 800 No. Quincy St., Arlington, Va. 22203.

Here is a chance for the public to express its desires on water programs and developments. In the past, many water developments were of the pork barrel variety — economically unsound and environmentally destructive. There is now a chance to correct some of the policies leading to such development.

Obviously, the general public will have no opportunity to see or study the voluminous report. But for those concerned enough to want to know more before commenting, the Environmental Policy Center has issued **Comments on the Draft Report of the National Water Commission** by Brent Blackwelder. It may be obtained by writing to EPC at 324 C St., S.E., Washington, D.C. 20003.

For those who wish to make specific comments without referring to the above, the following are some of the key comments:

1) The cost-sharing reforms proposed in Chapters 5 and 14 for navigation, flood control, irrigation, and drainage (channelization) are outstanding and are the recommendations most likely to come under heavy attack during public hearings and thus are the ones needing the most support and defense. Developers and the barge lobby will be out in force to criticize these cost-sharing reforms. (In essence, the Commission has recommended that each of these special uses should be required to cover all costs for developments from which they directly benefit. At the present time much of the developments are subsidized by the taxpayer.)

2) The Commission asserts there is no need for more irrigation and drainage projects designed to increase agricultural productivity. (Such environmentally destructive projects as the Lower Teton Dam in Idaho and the Central Utah Project, among others, could not be economically justified in terms of crop production under the Commission recommendations.)

3) The Commission commendably reinforces the many fine recommendations of the 1966 Task Force on Federal Flood Control Policy. The strong recommendations made in Chapter 5 could help move the country away from the big dam approach to flood control.

4) The Commission should be severely criticized for trying to undercut the 1972 Water Pollution Control Act Amendments just passed last October.

5 and 8) The proposals for strengthening the hand of the Water Resources Council and for creating an independent board of review to examine water development projects seem desirable. The Commission endorses the Principles and Standards of the Water Resources Council, which all things considered is probably good even though there are many defects in them, but goes on to recommend a 5½% discount rate. We ought to raise objections to the use of this low discount rate. (The WRC has recommended a 7% discount rate while many economists say it should be 10%. High Country News recommends the 10% discount rate.)

The Commission report also calls for deauthorization of all water development projects authorized for more than 10 years and on which no construction has begun.

In summary, High Country News strongly advises its readers to comment on the Report of the National Water Commission. We recommend that you ask for a higher discount rate (10%) on all water development projects, that all special users of water from water development projects be required to repay with interest all construction costs, plus full operation and maintenance costs, and that projects should be deauthorized if they were authorized later than five years ago and on which there has been no appreciable construction.

* * *

The Starkweather Watershed Project in two counties of North Dakota is an environmental catastrophe. It involves some 36,000 acres of prime wetlands, two large lakes, and two large marshes. The draining of the wetlands and the burning of the marshes will destroy breeding and resting grounds for literally millions of waterfowl, shore birds, songbirds, and migratory species of all kinds. The environmental impact statement done by the Soil Conservation Service has been severely criticized by a number of national organizations, including the National Audubon Society, the National Wildlife Federation, the Izaak Walton League of America, and The Wildlife Society.

Write to Mr. Kenneth E. Grant, Administrator, Soil Conservation Service, Washington, D.C. 20250, and protest the Starkweather Project.



Spills Detected

General Electric has researched a novel device for detecting tankers guilty of oil spills. The technique involves seeding marine oil shipments with invisible magnetic particles known as ferrites. The metal dust would be dumped into the oil during the loading process and removed either by a magnetic filter during unloading or later by refining. In case of a spill, identification of the vessel would simply entail decoding the particular ferrite compounds in the petroleum, each having slightly different magnetic properties.

The G.E. process is expected to be an effective alternative to proposed "coding" or "tagging" systems which interfere with petroleum processing. "We don't believe it would cause any problems in refining," said one G.E. research official. About one ton of the metal dust would be required to tag the oil cargo of a 100,000-ton tanker at a cost of \$2,500.

Board...

sity, Fort Collins, and past president, Society for Range Management; Dr. Floyd W. Frank, D.W.M., head of the Veterinary Science Department, University of Idaho, Moscow.

Dr. Robert Hungerford, professor of Biological Science, specializing in desert wildlife species, University of Arizona, Tucson; Ben Glading, retired Chief of Game Management, California Department of Fish and Game and past president of the Wildlife Society, Sacramento.

Ed Pierson of La Porte, Colorado, retired State Director, Bureau of Land Management, Wyoming, and member, Board of Directors Laramie County Horseman's Association; Dean Prosser, Jr., Wyoming legislator and executive secretary, Wyoming Stockgrowers Association, Cheyenne; and Ray Young of Elko, Nevada, rancher, past president of the Nevada Cattleman's Association, and a member of the Nevada Legislature.

16-High Country News
Friday, Dec. 22, 1972

by Anne Turner

A Need For Indian Culture

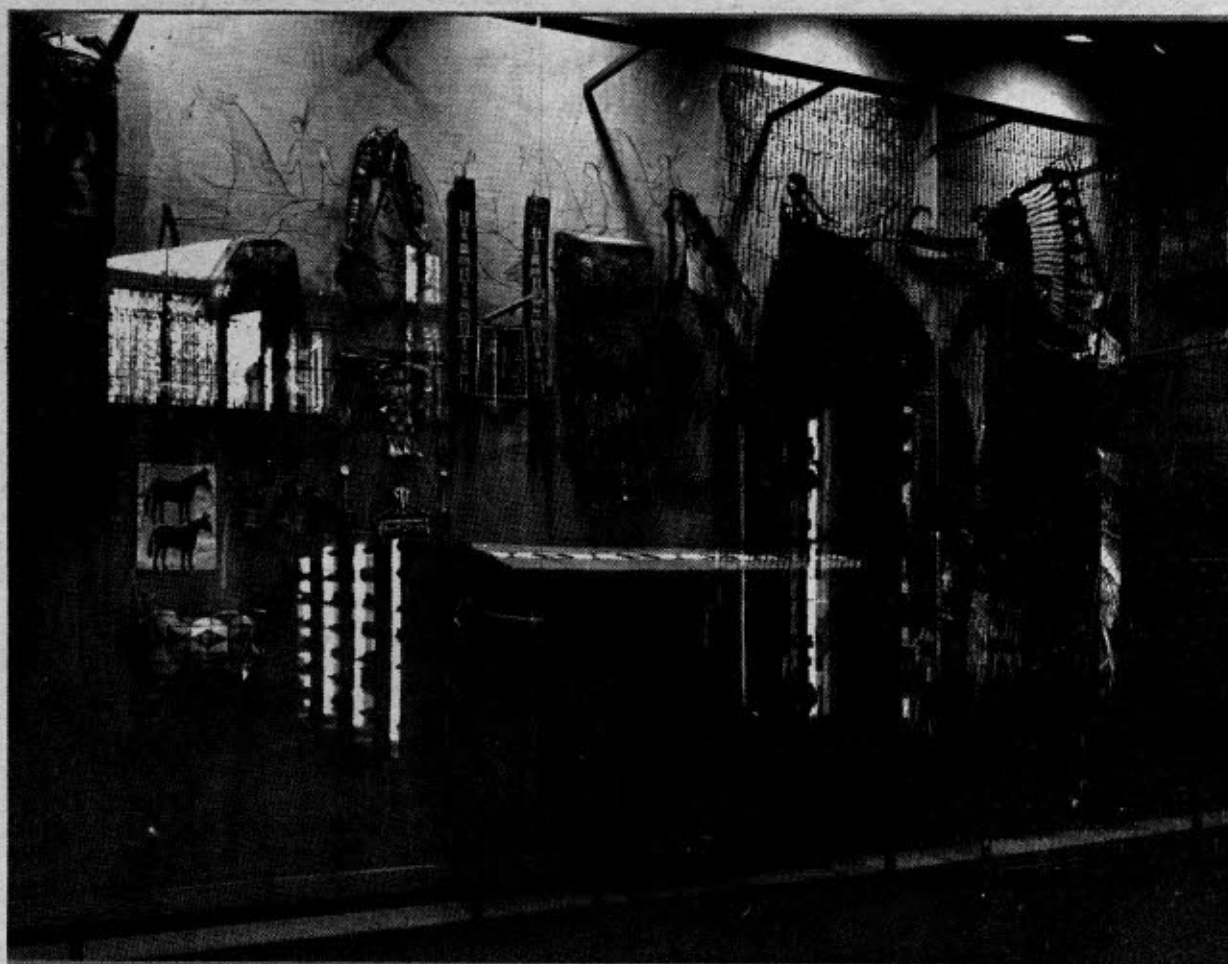
Late in the 20th century all Americans are beginning to rediscover, in a new and more valid sense, their priceless Indian heritage. This is not an appreciation born essentially either of nostalgia or of guilt and useless reprisal on the part of the white man. Nor is it primarily a residual manifestation of the middle 20th century mania for authentic "primitive" cultures as such. It is more the result of a growing ethno-ecological sense that man's various cultures and peoples are not separate and antagonistic entities, but parts of a unified whole. Even more basic is the joint realization that this is true of man in Nature.

Both truths are very appropriately expressed by the Indian Arts Museum in Grand Teton National Park which opened in May of this year. The museum, which is the focal point of the recently remodeled Colter Bay Visitor Center, displays the David T. Vernon collection of Indian artifacts. The collection is on loan to the National Park Service from Laurance Rockefeller. Its accomplishment and organization is in large measure due to the managerial efforts of Chief Park Naturalist Charles McCurdy.

The collection includes Indian artifacts from various tribes and cultures throughout the world with emphasis on the North American Plains Indians. All of the artifacts are historical, dating from the 1700-1800's.

The museum's emphasis is primarily on the aesthetic appreciation rather than the ethnological interpretation of these art objects. However, a guide-interpreter is expected to be provided for visitor information this winter. Shoshone and Arapahoe Indians served as parks aids in explaining the art exhibits to visitors last summer. Audio-chairs recounting Indian legends will be installed soon to aid in both the appreciation and interpretation of the exhibits.

To accentuate the beauty of the art objects themselves, they are tastefully and artistically displayed, frequently in designs significant to Indian culture. Cultural demonstrations and sales of Indian crafts in the museum are presently conducted by the Wind River Native Crafts, Crowheart, Wyoming. The impressive museum dedication



One of many displays depicting the Plains Indians at the Indian Arts Museum at Colter Bay Visitor Center, Grand Teton National Park.

ceremony in June, 1972, included Indian songs, prayers and dances by members of the Shoshone and Arapahoe tribes.

The museum will be open to visitors from 10:00 to 4:00, Saturdays and Sundays during December and January with an extended opening on December 28 and 29. For the months of February, March, and April it will be open 10-4, Friday through Monday. Regular hours will resume in the summer.

There is much that our over-industrialized and technological society can learn from the simpler Indian way of life if we will only listen. With our single-minded concentration

on material things and the purchasing power of the dollar, we neglect the spiritual well-being that was so basic to the Indian life and is still reflected in his art. That close religious harmony with Nature which was the hallmark of the Indian culture is nowhere to be found in our modern society, estranged as it is from all such values.

Nevertheless, there is still, and always will be, a profound need for these values. That is one reason why the art of a people once closely attuned to Nature and her spiritual and aesthetic inspiration is so highly valued by present day Americans.

Photos by National Park Service



Herman St. Clair, tribal elder of the Eastern Shoshones, participated in the dedication ceremony for the Indian Arts Museum at Colter Bay Visitor Center.

Purity Is Amazing

According to a recent report by the U.S. Geological Survey, the waters of the world's largest river — the Amazon — are purer than "most of the tap water in the United States." "The Amazon's flow," about 10 times that of the Mississippi, "accounts for about 15% of all the fresh water discharged into the oceans by all the rivers of the world," says George F. Smoot, survey hydrologist.

What accounts for this phenomenal purity in a river 3,900 miles long, fed by 200 tributaries, with a drainage basin almost $\frac{1}{4}$ the size of the contiguous United States? One reason is the leaching of the soil's impure mineral content by heavy rainfall (50-120 inches a year) — for a period of perhaps millions of years.

Ironically, the same source of the river's purity has become an inadvertent cause of land degradation in the Amazon basin. This leaching process has made the Amazon basin soil unfit for agricultural production. Unwise attempts at agricultural development in this luxuriant rain forest area have resulted in the land's sterilization.

Having cleared the land, farmers were dismayed when the exposed earth baked into a brick-like mineral deposit known as laterite. It was discovered too late that the lush growth was fertilized not by the soil's (leached) mineral content, but by self-stored humus now irretrievably lost.